

# New York State Department of Environmental Conservation

## Division of Environmental Permits - Region 8

6274 East Avon-Lima Road, Avon, New York 14414-9516

Phone: (585) 226-5400 FAX: (585) 226-2830

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

April 28, 2014

Mr. Mark Hansen  
Safety-Kleen Corp.  
6741 VIP Parkway  
Syracuse, NY 13211

RE: Safety-Kleen RCRA Permit Renewal RE-ISSUANCE  
DEC Application #8-2420-00020/00001  
Town of Avon, Livingston County

Attached is a re-issuance of the permit correcting the renewal dates for the above referenced RCRA permit. Please note that this re-issuance has a new effective date of 04/23/2014 and a new expiration date of 04/22/2024. It is being sent to you to replace, in its entirety, the permit forwarded previously on March 24, 2014. All other information and attachments contained in that cover letter remain applicable.

If you have any questions on this re-issuance, you may contact me at 585-226-5402 or at [mtbinder@gw.dec.state.ny.us](mailto:mtbinder@gw.dec.state.ny.us).

Sincerely,

Mary Binder  
Environmental Analyst

Enclosure

Cc (cover letter and permit):

Chief Executive Officer, Town of Avon  
Safety-Kleen Systems Inc., Richardson Texas  
A. Everett, USEPA Region II

Ecc (cover letter and permit):

M. Khalil, DEC DER RCRA R8  
K. Johnson, DEC DER RCRA Albany  
S. Foti, R8 DMM  
T. Killeen, Environmental Remediation, Central Office  
M. Cruden, Environmental Remediation, Central Office  
D. O'Brien, Environmental Remediation, Central Office



## PERMIT

### Under the Environmental Conservation Law (ECL)

#### Permittee and Facility Information

**Permit Issued To:**

SAFETY-KLEEN SYSTEMS INC  
2600 N CENTRAL EXPWY STE 400  
RICHARDSON, TX 75080  
(972) 265-2000

**Facility:**

SAFETY KLEEN CORP  
1525 W HENRIETTA RD  
AVON, NY 14414

**Facility Application Contact:**

MARK HANSEN  
SAFETY-KLEEN CORP  
6741 VIP PKWY  
SYRACUSE, NY 13211  
(315) 455-8638

**Facility Location:** in AVON in LIVINGSTON COUNTY

**Facility Principal Reference Point:** NYTM-E: 279.209 NYTM-N: 4754.903  
Latitude: 42°54'53.3" Longitude: 77°42'18.0"

**Project Location:** 1525 W Henrietta Rd

**Authorized Activity:** Safety Kleen Systems, Inc. is an international service-oriented company whose customers are primarily engaged in automotive repair, industrial maintenance, manufacturing, photoprocessing and dry cleaning. The company offers spent solvent collection and reclamation. Storage of hazardous waste solvents in (1) 12,000 gallon aboveground storage tank, (2) 15-truck storage of containers prior to unloading into the tank, (3) operation of the Return and Fill Station/drum washer in containment area (RF#1), (4) 2160 gallons in a container storage area (RF#2) and (5) 400 gallons in RF#1. Storage of hazardous waste oil in (1) 12,000 gallon aboveground tank which shares secondary containment with the hazardous storage tank. Reorganization and updates to Modules I-IV and Attachments A-L have been done.

#### Permit Authorizations

**Resource Conservation and Recovery Act - Under Article 27, Title 9**

Permit ID 8-2420-00020/00001

(RCRA ID NYD980753784)

Renewal

Effective Date: 4/28/2014

Expiration Date: 4/22/2024



**NYSDEC Approval**

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KIMBERLY A MERCHANT, Deputy Regional Permit Administrator  
Address: NYSDEC REGION 8 HEADQUARTERS  
6274 E AVON-LIMA RD  
AVON, NY 14414

Authorized Signature: Kimberly A. Merchant Date 4/28/2014

**Distribution List**

MARK HANSEN  
KENT JOHNSON  
THOMAS J KILLEEN  
MIKE I KHALIL  
DAVID O'BRIEN  
Plant Manager-Avon Facility  
US EPA Region II

**Permit Components**

RESOURCE CONSERVATION AND RECOVERY ACT PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS



## RESOURCE CONSERVATION AND RECOVERY ACT PERMIT CONDITIONS

### 1. SPECIAL CONDITIONS

#### Complete and Accurate Submission

The permit is based on the information submitted in the permit application submitted by Safety-Kleen on June 18, 2013 and subsequent updates through December 18, 2013. The permit is based on the assumption that the information submitted by Safety-Kleen in the above documents are complete and accurate and the corrective action obligations will be operated as specified in the above application. Any inaccuracies or incompleteness found in the information may be grounds for the termination or modification of this permit and potential enforcement action.

### 2. Quality Control/Assurance Program

The Permittee is responsible for verifying that the Quality Control/Assurance Program (QA/QC) followed by laboratories used by the Permittee to carry out analysis of the waste streams, conform to the QA/QC procedures approved in the permit and thus ensure the validity of the analytical data provided by the laboratories.

### 3. List of Modules and Attachments

The Permittee must operate the facility in strict accordance with the modules to this permit and the sections of permit application as specified below:

#### MODULES

- Module I - General Conditions
- Schedule I of Module I
- Module II - Corrective Action Requirements
- Module III - Use and Management of Containers
- Module IV - Tank Systems

#### ATTACHMENTS

- Attachment A - Facility Information and Part A Application
- Attachment B - Security and Inspection Plan
- Attachment C - Waste Analysis Plan
- Attachment D - Management of Waste in Tanks and Containers
- Attachment E - Corrective Action Requirements
- Attachment F - Preparedness and Prevention Plan
- Attachment G - Contingency Plan
- Attachment H - Personnel Training Plan
- Attachment I - Closure Plan
- Attachment J - Air Emissions Standard for Equipment Leaks Plan
- Attachment K - Permit Modification Log
- Attachment L - CD Containing Applicable Regulations





#### 4. Comply with Terms and Conditions

The permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 6 NYCRR (Parts 370 through 373-2, 376, 621 and 624). The permittee must inform DEC of any deviation form or changes in the information contained in the application which would affect the permittee's ability to comply with the regulations or permit conditions.

#### 5. ELAP Laboratory

As required by ECL 03-0119, any laboratory (Permittee or contract) used by the Permittee to perform analysis pursuant to this Permit must be certified by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) in the appropriate categories of analysis, if ELAP issues certifications in such categories. If the Permittee uses a contract laboratory in writing that it must operate under the waste analysis and quality assurance provisions of this Permit.

#### 6. Waste Storage

The permittee converted the previously permitted container storage area at the facility to permit exempt storage areas and manage the storage of containers for up to 10 days or less in storage areas as provided in 6 NYCRR Part 373-1.1(d) (xv). Under this provision Safety-Kleen is allowed to store, exempt from this permit, manifested shipments of hazardous waste in containers in storage area designated in the warehouse. The wastes shall be stored in secondary containments built in accordance with 6 NYCRR part 373-2.9. The permittee was allowed to convert the permitted storage areas to exempt storage area without Part 373 closure of these units and to close the units at the time of the final closure of the facility. Until such time the Permittee must maintain a closure plan and financial assurance pursuant to 6 NYCRR part 373-2.7 and 373-2.8 for the following storage areas (listed in Attachment I – Closure Plan): a) Tank Storage and truck loading/unloading area; b) Container Management Area in the Service Center warehouse; c) Container storage areas in the Accumulation Center and d) Return and Fill station and the adjacent new container storage area.

#### 7. Waste Profile Sheet

The Permit requires that Safety-Kleen obtain a waste profile sheet from all its customers that identify the screening parameters for waste pick up as described in the Waste Analysis Plan (Attachment C of the Permit) for waste acceptance.

#### 8. Contingency Plan

Within 30 days of the effective date of the permit, arrangements must be made with the police department, fire department and local emergency teams to familiarize them with the layout of the Avon Service Center, the properties of the hazardous materials handled and associated hazard, locations where Service Center employees normally work, entrances to and roads inside the Service Center, and planned evacuation routes. A copy of the Contingency Plan (Attachment G) must be sent to the agencies listed below:



Police Department;  
Fire Department;  
Hospital; and  
Cleanup Contractor.

Copies of the transmittal letters must be maintained at the facility.

#### 9. Responsible Persons Resume

The resume of the persons responsible for directing the conduct and the evaluation of the adequacy of the training at the facility, must be submitted to the Department to demonstrate that the training program is directed and managed by personnel trained in the hazardous waste management procedure. This document must also be maintained in the operating records of the facility until the person(s) cease to direct or evaluate the adequacy of the training program. NYSDEC must be notified within 15 days of any changes to the document and provided with a copy of the modified/replaced resume. The resume is not part of the permit and does not require a permit modification for any changes to the document.

#### 10. Authorized Activities

All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application. Such approved plans were prepared by Safety-Kleen Systems, Inc. on June 18, 2013.

<b>GENERAL CONDITIONS - Apply to ALL Authorized Permits:</b>
--

**1. Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**2. Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.



**3. Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator  
NYSDEC REGION 8 HEADQUARTERS  
6274 E AVON-LIMA RD  
AVON, NY 14414

**4. Submission of Renewal Application** The permittee must submit a renewal application at least 180 days before permit expiration for the following permit authorizations: Resource Conservation and Recovery Act.

**5. Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**6. Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.



## NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

### **Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

### **Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

### **Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

### **Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

## PART 373 PERMIT

### MODULE I – GENERAL CONDITIONS

**The Permittee is hereby authorized to operate only the hazardous waste units identified in Schedule 1 of Module I of this Permit. This Permit does not authorize the use of any other units to operate other than those identified in Schedule 1 of Module I.** If this Permit conflicts with any regulations which are in effect on the date of final issuance of this Permit, the more stringent requirement applies.

#### A. EFFECT OF PART 373 PERMIT

1. This Permit consists of the general and special conditions contained in this and the attached Modules, including **Schedule 1 of Module I**; the Department-approved Permit Application, including the Attachments and documents incorporated by reference; and the applicable requirements of the New York State Environmental Conservation Law (ECL) Article 27, Title 9, Section 27-0900 et seq., and the following regulations:
  - 6 NYCRR 370 - Hazardous Waste Management System-General;
  - 6 NYCRR 371 - Identification and Listing of Hazardous Wastes;
  - 6 NYCRR 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities;
  - 6 NYCRR 373 - Hazardous Waste Management Facilities;
  - 6 NYCRR 374 - Management of Specific Hazardous Waste;
  - 6 NYCRR 376 - Land Disposal Restrictions;
  - 6 NYCRR 621 - Uniform Procedures; and,
  - 6 NYCRR 624 - Permit Hearing Procedures.
2. The Permittee must comply with the applicable Remediation Guidance and Policy Documents found at <http://www.dec.ny.gov/regulations/2393.html>.
3. The Permittee must comply with the applicable Commissioner Policies found at <http://www.dec.ny.gov/regulations/64558.html>.
4. The applicable regulations or requirements are those which are in effect on the date of final issuance of this Permit. However, the Permittee must also comply with the following requirements:
  - a. requirements which become effective by statute, including amendments thereto;
  - b. requirements of 6 NYCRR 376, as modified (land disposal restrictions);

- c. requirements of 6 NYCRR 373-3.27, 373-3.28, and 373-3.29, as modified (air emission standards); and,
  - d. other requirements specified in 6 NYCRR 373-1.6(e) (permit conditions).
- 5. The Permittee is authorized to manage hazardous waste in the permitted units identified in **Schedule 1 of Module I** in accordance with the conditions of this Permit. Any storage, treatment or disposal of hazardous waste not authorized by this Permit is prohibited unless exempt under 6 NYCRR Part 373-1.1(d). Issuance of this Permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of federal, State or local laws or regulations.
- 6. All plans, reports, specifications and schedules required by the terms of this Permit and all subsequent amendments to those documents are incorporated by reference into this Permit when specifically noted in any written approval issued by the Department pursuant to 6 NYCRR 621.13. Upon incorporation, the provisions of each such document will be binding upon the Permittee and have the same legal force and effect as the requirements of this Permit.
- 7. The Permittee must submit plans, reports, specifications, implementation schedules and any subsequent amendments to those documents required by this Permit to the Department for review and comment. Following its review of a document, if the document requires formal Department approval (as determined by the Department), the Department may either approve the document as submitted or issue comments on the submittal. If the Department issues comments on the document, subsequent activities for the document must proceed in accordance with the following schedule:
  - a. Meeting between the Permittee and the Department to discuss the document comments, if requested by the Permittee or deemed necessary by the Department; and,
  - b. Submission of a revised document to the Department for approval within thirty (30) calendar days of the above-described meeting. (If the above referenced meeting is determined not to be necessary, the Permittee must submit a revised document for Department approval, according to a schedule specified by the Department, not to exceed forty-five (45) calendar days of the Permittee's receipt of comments from the Department).
  - c. If the submission is not revised to the Department's satisfaction, the Department may revise the document and send the Permittee a notice of intent to modify the Permit to incorporate the revised document into the Permit, pursuant to 6 NYCRR 621.13.
- 8. The documents listed in **Condition B of Schedule 1 of Module I** are made part of this Permit, are binding upon the Permittee and have the same legal force and effect as the requirements of this Permit.

9. Informal advice, guidance, suggestion, or comment by the Department must not be construed as relieving the Permittee of the Permittee's obligation to obtain such formal approvals as may be required by this Permit. In the event of a conflict between the requirements within this Permit or between the terms of this Permit and any plans, reports, specifications and schedules submitted pursuant to this Permit, the more stringent requirement shall always control. The Permittee consents to and agrees not to contest the authority and jurisdiction of the Department to enter into or enforce this Permit.
10. The Permittee must also comply with the following:
  - 6 NYCRR 373-1.1(f) – Uniform Procedures
  - 6 NYCRR 373-1.1(g) – Enforcement
  - 6 NYCRR 373-1.1(h) – Severability
11. The Permittee must maintain a current and complete paper copy of this Permit, including all Modules, Attachments and documents incorporated by reference, in at least one location at the Facility for review by the Department upon request.
12. For any Environmental Monitor(s) assigned to the Facility, the Permittee must maintain a complete set of paper copies of all submittals required by this Permit in the office of the Environmental Monitor or as otherwise directed by the Environmental Monitor(s).

B. DEFINITIONS

1. For the purposes of this Permit, the terms used herein shall have the same meanings as those provided in 6 NYCRR 370 through 376, and the terms defined in **Condition B.2** of this Module, unless this Permit specifically states otherwise. Where the terms are not otherwise defined, the meanings associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industry meaning of the term.
2. The following additional terms used in this Permit are defined as such:
  - a. Action Levels. For the purposes of this Permit, “action levels” are hazardous constituent concentrations for a specific environmental medium which if exceeded indicate a potential threat to human health or the environment. The exceedence of action levels may trigger further investigations, studies and corrective measures. Where available, action levels are based on appropriate promulgated standards established for a specific environmental medium. When promulgated standards are not available, action levels can be media-specific hazardous constituent concentrations derived from non-promulgated human health risk data or environmental risk data with the latter levels being protective of aquatic life or wildlife. An action level may be set at the background level for a hazardous constituent for which data are inadequate to set a human health or

environmental health-based level. The action levels for groundwater are the more stringent of the following for each compound or constituent: 6 NYCRR 703.5, New York State Department of Health's Drinking Water Standards and the United States Environmental Protection Agency's Maximum Contaminant Levels (MCLs).

- b. Areas of Concern (AOC). Pursuant to the authority granted by 6 NYCRR 373-1.6(c)(2), an "area of concern" has been defined for purposes of this Permit to mean an area at the facility, or an off-site area, which is not at this time known to be a solid waste management unit (SWMU), where hazardous waste and/or hazardous constituents are present, or are suspected to be present, as a result of a release from the facility. The term shall include areas of potential or suspected contamination as well as actual contamination. Such area(s) may require study and a determination of what, if any, corrective action may be necessary. All Permit references to and conditions for SWMUs shall apply to areas of concern.
- c. Corrective Action. For the purposes of this Permit, "corrective action" is a process that includes all activities related to the investigation, characterization and cleanup of a release of hazardous/mixed wastes or hazardous constituents from a solid waste management unit (SWMU) at a permitted or interim status treatment, storage and disposal facility (TSDF) to any environmental medium, including groundwater. Module II of this Permit contains a more detailed discussion of the corrective action process.
- d. Environment. Pursuant to ECL Article 27, Title 9, Section 27-0901, "environment" means any water; water vapor; land, including land surface or subsurface; air; and, fish, wildlife, biota and all other natural resources.
- e. Hazardous Constituents. For the purposes of this Permit, "hazardous constituents" are those constituents listed in Appendix 23 of 6 NYCRR 371 or any constituent listed in Appendix 33 of 6 NYCRR 373-2.
- f. Permittee. For the purposes of this Permit, "Permittee" herein refers to the party(ies) subject to this Permit. In addition, refer to **Conditions R.2 and R.3** of this Module.
- g. Priority Pollutant. Pursuant to 6 NYCRR 750-1.2(a)(67), "priority pollutant" means those pollutants listed in 40 CFR 122, Appendix D (see 6 NYCRR 750-1.24) as Organic Toxic Pollutants (volatiles, acid compounds, base/neutral compounds and pesticides), Metals, Cyanide and Total Phenols.
- h. Release. For purposes of this Permit, "release" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment of any hazardous waste, including hazardous constituents, unless expressly authorized under the terms of this Permit or otherwise permitted under law (e.g., SPDES permitted discharges).



- i. Solid Waste Management Unit (SWMU). For purposes of this Permit, a “solid waste management unit” includes any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of hazardous or solid wastes. Such units include any area at the facility at which solid wastes have been routinely and systematically released. These units include certain areas associated with production processes that have become contaminated as a result of routine and systematic releases.

C. GENERAL PERMIT CONDITIONS [6 NYCRR 373-1.6]

1. 6 NYCRR 373-1.6 provides conditions applicable to all Part 373 Permits which are therefore incorporated into this Permit. The provisions are incorporated into, and made enforceable under this Permit.
2. Oral Reports: The Permittee must orally report any noncompliance that may endanger health or the environment immediately from the time the Permittee becomes aware of the circumstances. The oral reports must be made to the Department using the New York State 24-hour oil and hazardous material spill notification number (800) 457-7362 and the National Response Center using its 24-hour number (800) 424-8802, or any designated telephone numbers which may subsequently replace those listed above. The Permittee must also provide such oral reports to Department staff that are on-site at the time of, or subsequent to, a reportable incident. The information reported must include that listed at 6 NYCRR 373-2.4(g)(4)(ii).
3. Entry Upon Facility:
  - a. The Permittee must allow, pursuant to 6 NYCRR 373-1.6(a)(9), entry upon the Facility (or areas in the vicinity of the Facility which may be under the control of the Permittee) at reasonable times by any duly designated officer or employee of the United States Environmental Protection Agency (USEPA), the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Permit, and by any agent, consultant, contractor or other person so authorized by the Department, upon presenting identification, for inspecting, sampling, copying records that must be maintained by this Permit, testing, and any other activities necessary to evaluate the Permittee’s compliance with this Permit.
  - b. Upon request, the Permittee must: (i) provide the Department with suitable work space at the Facility, including access to a telephone, to the extent available; and, (ii) allow the Department full access to all records relating to matters addressed by this Permit. Raw data must be provided to the Department upon request.
  - c. In the event the Permittee is not the owner of the Facility property and is unable to obtain any authorization from third-party property owners necessary to provide access, the Permittee must immediately notify the Department and provide any requested assistance in obtaining such authorizations.

- d. The Department shall have the right to take its own photographs, samples and scientific measurements and to obtain split samples, duplicate samples or both. The Department shall make the results available to the Permittee in accordance with Department policy.

D. PERMIT MODIFICATION AND PERMIT TRANSFER [6 NYCRR 373-1.7 and 621]

1. Proposed modifications to this Permit, including modifications to the Attachments and documents incorporated by reference into this Permit, must be addressed in accordance with 6 NYCRR 373-1.7 and 621.
2. The Permittee must contact the Department (or its representative) with respect to any and all proposed permit modifications requested by the Permittee. The Department shall make the determination as to whether a proposed permit modification is a minor or major modification in accordance with 6 NYCRR 373-1.7. For the purposes of this Permit, as described in **Condition D.2.a** of this Module, the Department will entertain proposed administrative modifications to this Permit that would not otherwise be required to follow the requirements of **Conditions D.2.b and/or D.2.c** of this Module. Administrative changes generally include in-kind replacements or minor updates to plans attached to this Permit or incorporated by reference. **However, the Department must determine whether any and all changes are administrative modifications to this Permit.**
  - a. For modifications determined by the Department to be administrative, the Permittee shall make the change in the Permittee's copy of all affected Attachment(s) and/or document(s) incorporated by reference. Submittal to the Department of a change that the Department has determined is administrative in nature is not necessary. However, at the time of Permit renewal, the Permittee must incorporate all administrative changes into this Permit. The Permittee must record all administrative changes in the Permit Modification Log provided as Attachment M of this Permit in accordance with **Condition D.3** of this Module. Note: The Department reserves the right to have its project manager, environmental monitor and/or permit writer request proposed administrative changes in writing by the Permittee's submission of a cover letter, written description of the proposed administrative modification and a clean copy of the modified affected pages for the Department's review and approval.
  - b. For modifications determined by the Department to be minor pursuant to 6 NYCRR 373-1.7(c) and 40 CFR 270.42(a), the Permittee must receive written approval from the Department before implementing the modification into this Permit, and subsequently follow the requirements of 6 NYCRR 373-1.7(e) and Department guidance for minor modifications.
  - c. For modifications determined by the Department to be major, the Permittee must treat the modification as a new application in accordance with 6 NYCRR 621.11 and follow the applicable requirements of 6 NYCRR 621.

3. The Permittee must maintain a log of all modifications requested and made to this Permit, including modifications made to the Attachments and documents incorporated by reference into this Permit. The log must conform to the Department-approved format presented in Attachment K of this Permit and must be submitted with each modification request. The log must be filled out in its entirety, except for the issuance date. Upon issuance of each Permit modification, the Permittee must place the updated log in Attachment K of this Permit along with a copy of the Department's approval letters, when applicable, and replace all affected pages in the Modules, Attachments and/or documents incorporated by reference with the modified pages.
4. The Department may at any time, at its discretion, modify this Permit under the terms of 6 NYCRR 621.13 in accordance with the requirements contained therein.
5. Permit Transfer: The Permittee must process all changes in Facility ownership and/or operational control in accordance with the requirements of 6 NYCRR 373-1.7(a), including the timeframes specified therein. Prior to undertaking a change in Facility ownership and/or operational control, the Permittee must provide written notification to the Department and receive written approval from the Department to allow transfer of this Permit. The Permittee must demonstrate to the Department's satisfaction that the prospective transferee will be able to comply with all applicable laws and regulations, Permit conditions, financial assurance and other requirements to which the Permittee is subject. The written notification must include the identity of the transferee and of the nature and proposed date of the conveyance, and must notify the transferee in writing, with a copy to the Department, of the applicability of this Permit including the corrective action program, as appropriate. The Department will determine whether transfer of this Permit is acceptable and will require either a minor or major modification.

E. EXPIRATION AND CONTINUATION OF PERMITS [6 NYCRR 373-1.8]

1. Requests for continuation of this Permit must be submitted in accordance with 6 NYCRR 373-1.8 and 621.11.
2. No sooner than one (1) year and no later than 180 days before the expiration of this Permit, the Permittee must provide the Department with a report regarding the matters identified in ECL 27-0913(3) occurring within two years of the date of the report. The report must include any such matters involving the permitted Facility, all other facilities owned or operated by the Permittee and any duly incorporated parent or subsidiary managing hazardous wastes within the United States. The Permittee must supply such documents and pertinent details regarding the matters in the report as may be requested by the Department.
3. The Permittee must schedule a "Pre-Application" meeting with the Department at least 270 days prior to the expiration date of this Permit. Renewal applications with a significant change (as defined at 6 NYCRR 373-1.10(a)(1)) are subject to the requirements of 6 NYCRR 373-1.10.

4. Complete applications for permit renewal must be submitted at least 180 days before the expiration date of this Permit pursuant to 6 NYCRR 373-1.8(b).
5. At any time during the review of the renewal application, the Department may request that the Permittee submit any additional information in writing which is necessary for determining the completeness of the application. Failure to provide such information by the date specified in the request may be grounds for denial of the application and the extension allowed pursuant to Section 401(2) of the State Administrative Procedures Act.

F. TERMINATION OF PERMIT ACTIVITIES

1. Should the Permittee cease the hazardous waste management activities allowed by this Permit prior to the expiration of this Permit, then, pursuant to 6 NYCRR 373-1.6(d), the Permittee must continue to comply with the applicable closure, post-closure and corrective action conditions and requirements stipulated in this Permit.
2. If the Permittee certifies closure of all hazardous waste management units at the Facility, and the Department accepts these closure certifications during the term of this Permit, and post-closure care or corrective action is determined to be necessary by the Department, the Department will make a determination whether a permit or other enforceable commitment document is appropriate, pursuant to Environmental Conservation Law (ECL) Section 71-2727(3). Based on that determination, the Permittee must enter into the appropriate enforceable commitment prior to the expiration of this Permit.

G. FACILITY OPERATION

1. In accordance with 6 NYCRR 373-2.3(b), the facility must be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste(s) or hazardous waste constituents to air, soil, surface water or groundwater that could threaten human health or the environment.
2. The Permittee must at all times construct, operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee as designed in accordance with this Permit including **Schedule 1 of Module I**.
3. The Permittee must inspect the Facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of hazardous waste(s) or hazardous waste constituents to the environment, or a threat to human health pursuant to 6 NYCRR 373-2.2(g).

H. COMPLIANCE SCHEDULE

1. The Permittee must complete any activities referenced in **Condition C of Schedule 1 of Module I** within the timeframes set forth therein and in accordance with 6 NYCRR 373-1.6(d).
2. The Permittee must submit reports in a Department-approved format no later than 14 days following each interim and the final compliance date that summarize the status of each of the activities listed in **Condition C of Schedule 1 of Module I**.

I. WASTE ANALYSIS [6 NYCRR 373-2.2(e)]

1. The Permittee must perform general waste analysis in accordance with the requirements of 6 NYCRR 373-2.2(e) and this Permit, including the Department-approved Waste Analysis Plan incorporated by reference into this Permit by **Schedule 1 of Module I**.
2. All laboratories utilized for the analysis of any closure, post-closure and/or corrective action samples must be certified under the New York State Department of Health's Environmental Laboratory Approval Program (ELAP). Any laboratory tests or sample analyses for which the commissioner of the New York State Department of Health (NYSDOH) issues certificates of approval must be performed by a laboratory certified to perform such tests or analyses pursuant to the NYSDOH Environmental Laboratory Approval Program.

J. PERSONNEL TRAINING PROGRAM [6 NYCRR 373-2.2(h)]

1. The Permittee must conduct personnel training in accordance with 6 NYCRR 373-2.2(h)(1), (2) and (3), and this Permit, including the Department-approved Personnel Training Program Plan incorporated by reference into this Permit by **Schedule 1 of Module I**.
2. The Permittee must maintain training documents in accordance with 6 NYCRR 373-2.2(h)(4) and (5), and this Permit, including the Department-approved Personnel Training Program Plan incorporated by reference into this Permit by **Schedule 1 of Module I**.

K. PREPAREDNESS AND PREVENTION, CONTINGENCY PLAN AND EMERGENCY PROCEDURES [6 NYCRR 373-2.3 and 2.4]

1. The Permittee must comply with the preparedness and prevention requirements in accordance with 6 NYCRR 373-2.3 and this Permit.
2. The Permittee must comply with contingency plan and emergency procedure requirements in accordance with 6 NYCRR 373-2.4 and this Permit, including the Department-approved Integrated Contingency Plan incorporated by reference into this Permit by **Schedule 1 of Module I**.

L. WASTE REDUCTION REQUIREMENTS

1. The Permittee must comply with the requirements of Article 27, Title 9, Section 27-0908 of the ECL and 6 NYCRR 373-2.5(c)(ix) relative to waste reduction requirements.

M. REQUIREMENTS FOR RECORDING AND REPORTING OF MONITORING RESULTS [6 NYCRR 373-1.6(b)]

1. The Permittee must comply with the recording, reporting and monitoring requirements listed in this Permit.
2. The Permittee must install, use and maintain monitoring equipment, utilize the approved methods, and report monitoring results as specified in this Permit, including **Schedule 1 of Module I** and 6 NYCRR 373-2.

N. DATA AND DOCUMENT STANDARDS

1. All analytical data required by this Permit, as well as all analytical data requested by the Department, must be submitted to the Department in the standardized format in accordance with the Department's Electronic Data Deliverable guidance within 30 days of receipt from the laboratory (see <http://www.dec.ny.gov/chemical/62440.html>). The Permittee must have all closure, post-closure and corrective action data validated by a third party prior to submission to the Department. The individual performing the third-party validation must prepare a Data Usability Summary Report (DUSR) in accordance with the requirements of the Department's DER-10. The DUSR must be submitted with the report containing the data in accordance with **Condition N.2** of this Module. The data deliverable submitted to the Department must include the results of the data validation.
2. The Permittee must deliver to the Department preliminary or final reports, specifications or drawings prepared pursuant to this Permit in an electronic format that complies with the Department's Electronic Document Standards (EDS) or as otherwise directed by the Department. All final documents are to be submitted in an electronic format that complies with the most recent DER EDS. Until such time as the Department establishes an EDS, final documents are to be submitted as a PDF document (see <http://www.dec.ny.gov/regulations/2586.html>). Also, the Permittee must, at the request of the Department, provide electronic versions of technical documents in MS Word and/or MS Excel, and plan drawings and/or other site drawings in AutoCAD, or other format suitable to the Department.
3. In addition to electronic copies, the Permittee must provide paper copies of any document (e.g., reports, plans, data, specifications, drawings, etc.) requested by the Department in paper format or as may be specified in paper format in **Schedule 1 of Module I**.

O. FINANCIAL ASSURANCE

1. The Permittee must comply with all of the applicable requirements of 6 NYCRR 373-2.8 and this Permit. The definitions contained in 6 NYCRR 373-2.8(b) are applicable to the financial requirements within this Permit.
2. The Permittee must comply with this Permit and 6 NYCRR 373-2.6(l) for meeting the financial assurance requirements for corrective action for releases from any solid waste management unit located at the Facility, regardless of the time the waste was placed in the unit.
3. The Permittee must adjust for inflation all cost estimates required by 6 NYCRR 373-2.6(l), 373-2.8 and this Permit annually, and provide additional financial assurance for this adjustment in accordance with 6 NYCRR 373-2.8. These adjustments must be independent of any requests to decrease cost estimates, unless the Department has previously approved such a decrease (i.e., the inflationary adjustment must be made separately from any unapproved request for a decrease in the cost estimate). In addition, the total amount of any post-closure cost estimate must be established and maintained throughout the life of this Permit in at least the amount derived by multiplying the annual post-closure cost estimate by a minimum of 30 years unless the Department has approved a decrease in the post-closure care period for a unit or the Facility in accordance with 6 NYCRR 373-2.7(g)(1)(ii).
4. The Department-approved closure, post-closure and corrective action cost estimates are incorporated by reference into this Permit by **Condition B of Schedule 1 of Module I** of this Permit. These cost estimates must be adjusted annually for inflation in accordance with **Condition O.3** of this Module.
5. The Permittee must obtain approval in writing from the Department prior to any reduction in the approved cost estimates and for any changes to the instrument(s) and/or mechanism(s) (e.g., type of instrument(s) and/or mechanism(s), the issuing company(ies)/institution(s) and/or a reduction in the dollar amount(s)).
6. **Corrective Action Cost Estimates:** For any and all corrective actions required under the authority of this Permit for any newly identified Solid Waste Management Units, both final and interim, the Permittee must submit for the Department's approval, written estimates, in current dollars, which reflect all costs involved in implementing corrective action through Department-approved completion. Such estimates must reflect the cost of hiring a third party to perform the corrective action in accordance with 6 NYCRR 373-2.8(e)(1)(i). For the final corrective measure(s), the Permittee must provide such estimates with the submission of the Corrective Measures Implementation (CMI) work plan. For Interim Corrective Measures (ICM) requiring work plans, the Permittee must provide such estimates with the submission of each ICM work plan required by this Permit.
7. **Short-Term Corrective Measures:** For financial assurance of final or interim corrective measures for any newly identified Solid Waste Management Units required

by Department-approved work plans where the implementation schedule in the approved work plan(s) indicates anticipated completion of said action(s) within one (1) year, the Permittee must provide the Department with a letter certifying that the Permittee has sufficient liquid financial resources to perform and complete the approved corrective measure(s) based on the Department-approved cost estimate(s) required by **Condition O.6** of this Module. This letter must include a certification in accordance with 6 NYCRR 373-1.4(a)(5) and must be provided for the Department's acceptance with the Permittee's submission of a final or interim corrective measures work plan(s). If the Department notifies the Permittee that the certification is not acceptable, the Permittee must establish financial assurance for corrective measures in accordance with the requirements of financial assurance for Long-Term Corrective Measures as specified in **Condition O.8** of this Module within sixty (60) days of said notification. If the corrective action(s) are not completed within one year of the initial certification, the Permittee may request and the Department, at its discretion, may approve up to a one (1) year extension of the certification. If the corrective action(s) has not been completed to the Department's satisfaction at the end of the first year or a Department-approved extension, the Permittee must, within sixty (60) days, provide financial assurance in accordance with the requirements of financial assurance for Long-Term Corrective Measures as specified in **Condition O.8** of this Module.

8. Long-Term Corrective Measures: For final or interim corrective measures required for any newly identified Solid Waste Management Units by a Department-approved work plan(s) where the implementation schedule in the approved work plan(s) indicates that the anticipated completion of the final or interim corrective action(s) will take longer than one (1) year, the Permittee must establish and maintain a Department-approved financial assurance instrument(s) in accordance with 6 NYCRR 373-2.8(f). This financial assurance must be equal to the current dollar amount of the most recent Department-approved final or interim corrective measures cost estimate(s) required by **Condition O.6** of this Module. The Department-approved financial assurance must be one, or a combination, of the financial assurance instruments, specified in 6 NYCRR 373-2.8(f)(1) through (4) and these instruments must be issued by an entity, or entities, that are legally and fiscally separate and distinct from the Permittee and any parent or subsidiary thereof. If the Permittee chooses to use either 6 NYCRR 373-2.8(f)(2) or (3) (or a combination thereof), the Permittee must revise or establish a Standby Trust Fund in accordance with said regulations. The Permittee must submit the instrument(s), for the Department's approval, no later than sixty (60) days after the Department's approval of corrective measures work plan(s), or as required by the requirements of financial assurance for Short-Term Corrective Measures as specified in **Condition O.7** of this Module .
9. For any Permit modification request pertaining to the Closure Plan or Post-Closure Plan provided as Attachment I of this Permit involving an increase in the cost of closure or post-closure, the Permittee must also submit a revised cost estimate, in current dollars, which includes the increase in these costs with appropriate third party justification. For any new or modified corrective measure required by this Permit and submitted by the Permittee subsequent to the issuance of this Permit which involves



an increase in the cost of corrective action, the Permittee must also submit for Department approval, a revised cost estimate, in current dollars, which includes the cost increase associated with implementing the corrective measure with appropriate third party justification.

10. Within sixty (60) days of a modification of this Permit or Department approval of a new or modified corrective measure involving an increase in a cost estimate, the Permittee must establish additional financial assurance to cover the amount of the increase in the cost estimate in accordance with the requirements of 6 NYCRR 373-2.8.
11. The Permittee must maintain the Department-approved financial assurance instruments for closure, post-closure and corrective action, which shall be those provided as Attachment I of this Permit, and any Department-approved revisions thereof, or Department-approved replacements for these financial instruments selected by the Permittee from the instrument types previously specified in this condition. Changes in existing financial assurance instruments or replacement of existing financial assurance instruments must be approved by the Department. The Permittee must provide annual evidence to the Department within thirty (30) days prior to the anniversary on which the initial approved financial assurance instrument was established, that all instruments provided as Attachment I of this Permit including any approved revisions or replacements thereof, have been maintained and not allowed to lapse.
12. Within sixty (60) days after any increase in the approved cost estimate, the Permittee must, in accordance with 6 NYCRR 373-2.8, either:
  - a. Revise one or more of the Department approved financial assurance instrument(s) for closure to increase the instrument(s) amount by at least the amount of the increase in the approved cost estimate and submit the revised instrument(s) for Department approval; or
  - b. Submit an additional financial assurance instrument, or instruments from the instrument types specified in 6 NYCRR 373-2.8 with an amount equal to at least the amount of the increase in the approved cost estimate and submit the additional instrument(s) for Department approval.
13. If the Permittee elects to replace any of the instruments provided as Attachment I of this Permit for financial assurance, with new financial assurance instrument(s) as specified by 6 NYCRR 373-2.8, the new instruments must be issued by an entity, or entities, that are legally and fiscally separate and distinct from the Permittee and any parent or subsidiary thereof. Also, if applicable, any replacement instruments pertaining to post-closure and corrective action must be worded in accordance with 6 NYCRR 373-2.8(j) except that the words “post-closure and corrective action” must be substituted for the words “post-closure” in any such replacement instrument.

P. COMMUNICATIONS

1. The Permittee must transmit all communications pursuant to this Permit to the Department via electronic delivery to the recipients specified in **Schedule 1 of Module I** of this Permit. All deliverables must be transmitted in a Department-approved format as specified in **Condition N** of this Module.
2. If requested by the Department in lieu of or in addition to an electronic deliverable, the Permittee must transmit the requested written communications pursuant to this Permit to the Department by United States Postal Service, by private courier service or by hand delivery to the following address:

Chief, RCRA Permitting Section  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway, 12th Floor  
Albany, NY 12233-7017

3. The Permittee must submit additional copies of the specific deliverables identified in **Schedule 1 of Module I** to the addresses and agencies listed therein.

Q. PENALTIES

1. Permittee's Obligations
  - a. The Permittee's failure to comply with any term of this Permit constitutes a violation of this Permit and the ECL. Nothing herein abridges the Permittee's right to contest any allegation that it has failed to comply with this Permit.
  - b. Payment of any penalties must not in any way alter the Permittee's obligations under this Permit.

R. MISCELLANEOUS

1. The paragraph headings set forth in this Permit are included for convenience of reference only and must be disregarded in the construction and interpretation of any provisions of this Permit.
2. If there are multiple parties subject to this Permit, the term "Permittee" must be read in the plural, the obligations of each such party under this Permit are joint and several, and the insolvency of or failure by any Permittee to implement any obligations under this Permit must not affect the obligations of the remaining Permittee(s) under this Permit.
3. If the Permittee is a partnership, the obligations of all general partners (including limited partners who act as general partners) under this Permit are joint and several and the insolvency or failure of any general partner to implement any obligations

under this Permit must not affect the obligations of the remaining partner(s) under this Permit.

4. In any administrative or judicial action to enforce a condition of this Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Permit.
5. Whenever materials or equipment are specified or described in this Permit using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, quality, performance and design criteria required. In all cases, unless the name is followed by words indicating that “no ‘or equal’ or substitution is allowed” or similar language, materials or equipment of other suppliers may be accepted by the Department if sufficient information is submitted by the Permittee to allow the Department to determine that the material or equipment proposed is equivalent or equal to that named. Requests for review of “or equal” or substitute items of material and equipment will not be accepted by the Department from anyone other than the Permittee. If the Permittee wishes to furnish or use an “or equal” or substitute item of material or equipment, the Permittee must make written application to the Department for acceptance thereof, certifying that the proposed “or equal” or substitute will perform the same functions and achieve the same results called for by the general design, be similar and of equal substance and quality to that specified, and be suited to the same use as that specified.
6. The Permittee may submit a written request to the Department for a clarification on compliance with any condition in this Permit. Any such request must be submitted at least 30 days prior to the date on which the Permittee must comply with the condition identified in the clarification request. In response, the Department will provide the Permittee with a written clarification, detailing what constitutes compliance with the identified Permit condition. This clarification process shall in no way relieve the Permittee from the obligation to comply with all the terms and conditions of this Permit.
7. Special Conditions Concerning Future State and/or Federal Laws or Regulations
  - a. In the event that any State statutory or regulatory requirements are enacted, adopted or promulgated which are applicable to the Permittee’s Facility and address the need for and/or the nature and extent of post-closure care and/or corrective action, and such statutory or regulatory requirements are deemed by the Department to be more stringent than the post-closure care and/or corrective action requirements stipulated in this Permit, such statutory and regulatory requirements shall supersede the pertinent requirements of this Permit.
  - b. In the event that any federal statutory or regulatory requirements are enacted, adopted or promulgated which are applicable to the Permittee’s Facility and address the need for and/or the nature and extent of post-closure care and/or corrective action, such statutory or regulatory requirements shall supersede the pertinent requirements of this Permit to the extent that it is determined by the

Department that such statutory or regulatory requirements afford equal or greater protection to continuing post-closure care and/or corrective action as is afforded by this Permit.

PART 373 PERMIT

SCHEDULE 1 OF MODULE I  
GENERAL CONDITIONS

-----

**DEC Facility Name:**           **Safety-Kleen Systems, Inc.**  
DER Facility No.:           826015  
EPA RCRA ID No.:   NYD980753784

**Facility Address:**           1525 West Henrietta Road  
Avon, New York 14414  
Livingston County  
Hereinafter referred to as "Facility" or "Site"

-----

A.    PERMITTED ACTIVITIES

The following hazardous waste management units, activities and types and quantities of hazardous waste to be managed are authorized by this Permit:

Units	Capacity (Gallons)	Waste Description	EPA Hazardous Waste Code No.	Secondary Containment Volume (Gallons)
Part Washer Storage Tank	12,000	Safety Kleen Part Washer Solvents (Hydrocarbon- and Aqueous- Based	D001, D004- D011, D018, D019, D021- D030, D032, - D043, Nonhazardous spent part washer solvents	13,488 gallons
Container Storage R/F Area #2	2160 gallons**	same as above	same as above	1134 gallons

Return and Fill Station R/F Area #1	400 gallons (hazardous & nonhazardous, including product 2000)	same as above	same as above	1297 gallons
Non-hazardous Used Oil	12,000 Gallons	Used Oil	None	13,488 gallons
Truck storage	15 trucks (not to exceed the remaining volume available in the storage tank for unloading)	same as above	same as above	Secondary containment is inbuilt in the truck.

\* Volume of one truck

\*\* Total volume of part washer solvents and other liquids stored inside the secondary containment must not exceed 4000 gallons

## B. PERMIT APPLICATION DOCUMENTS

The following Modules, Attachments and documents incorporated by reference are considered part of this Permit:

### Modules:

- I General Conditions  
Schedule 1 of Module I
- II Corrective Action Requirements
- III Use and Management of Containers
- IV Storage/Treatment in Tank Systems

### Attachments:

- A Facility Description and Part A Application
- B Security and Inspection Plan
- C Waste Analysis Plan
- D Containers & Tanks
- E Corrective Action for Specific Units
- F Preparedness & Prevention
- G Contingency Plan
- H Personnel Training Plan

- I Closure Plans
- J Air Emissions Plan
- K Major / Minor Modifications
- L Applicable Regulations

Incorporated by Reference:

“RCRA Permit Renewal Application, Avon, NY”, June 2013

Footnotes:

1. Each document referenced by this footnote includes the above dated original submission and any subsequent Department approved document revisions.
2. Each document referenced by this footnote includes the referenced document and any subsequent Department approved replacement.

C. COMPLIANCE SCHEDULE

The Permittee must complete the following activities within the scheduled timeframes indicated in the following table:

Item	Description	Compliance Date
None.		

D. FINANCIAL ASSURANCE

Financial assurance will be provided in the amount of \$ 400,514 via the following instrument: Indian Harbor Insurance policy, for facility closure. In addition, third party liability coverage for sudden accidental occurrences for the amount of \$ 1,000,000 for each occurrence and \$ 2,000,000 annually by Greenwich Insurance Company shall remain in place.

E. FACILITY-SPECIFIC REQUIREMENTS THAT SUPPLEMENT THE STANDARD MODULES

Reserved

## PART 373 PERMIT

### MODULE II – CORRECTIVE ACTION REQUIREMENTS

#### A. APPLICABILITY

1. Statute and Regulations: Article 27, Title 9, Section 27-0913, and 6 NYCRR 373-2.6(l) requires corrective action, including corrective action beyond the Facility boundary where necessary to protect human health and the environment, for all releases of hazardous wastes, including hazardous constituents, from any solid waste management unit (SWMU) regardless of the time at which waste was placed in such unit. Pursuant to 6 NYCRR 373-1.6(c)(2), the Department may impose Permit conditions as the Department determines necessary to protect human health and the environment (such as areas of concern (AOCs) as defined in **Module I** of this Permit).
2. Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs): The Permittee must initiate and complete the corrective action process for all SWMUs and AOCs at the Facility. The conditions of this Module apply to:
  - a. All known SWMUs and AOCs as identified in **Schedule 1 of Module I** that have not completed the corrective action process; and
  - b. Any newly-identified SWMUs and AOCs identified during the course of groundwater monitoring, field investigations, environmental audits or other means including, but not necessarily limited to, those identified pursuant to **Condition C** of this Module.

#### B. STANDARD CONDITIONS FOR CORRECTIVE ACTION

1. The Permittee must perform any and all corrective action specified in **Condition A.2** of this Module.
2. The Permittee must follow the requirements for Groundwater Protection as specified in **Schedule 1 of Module I** of this Permit, including any groundwater sampling and analysis plan which may be required therein.
3. The Permittee and its consultants/contractors performing corrective action activities must demonstrate completion of appropriate training in accordance with the Department-approved Personnel Training Program Plan incorporated by reference into this Permit by **Schedule 1 of Module I** and follow all applicable health and safety plans.
4. Compliance with Governmental Requirements: During investigative activities, interim corrective measures and final corrective measures (including, but not limited to, equipment decommissioning, excavation and unit demolition) required by this Module, the Permittee must ensure that the transportation, treatment, storage,



discharge, and disposal of all contaminated materials generated as a result of such activities (including, but not limited to, soil, sediments, liquids, tanks, pipes, pumps, rubble, debris and structural materials) are performed in an environmentally sound manner pursuant to all applicable federal, State and local requirements, and in a way that is protective of human health and the environment. Nothing in this Module shall be construed to require the Permittee to proceed in a manner which is in violation of any such requirements.

5. Notifications:

- a. Groundwater Contamination: If at any time the Permittee discovers that hazardous constituents in groundwater released from the Facility have migrated beyond the Facility boundary in concentrations that exceed an action level, the Permittee must, within fifteen (15) calendar days of discovery, provide written notice to the Department.
- b. Air Contamination: If at any time the Permittee discovers that hazardous constituents in air have been released from a SWMU or AOC at the Facility, and have or are migrating to areas beyond the Facility boundary in concentrations that exceed action levels in the Department's DAR-1 ("Guidelines for the Control of Toxic Ambient Air Contaminants"), and that residences or other places at which continuous, long-term human exposure to such constituents might occur are located within such areas, the Permittee must immediately initiate all appropriate actions necessary to mitigate the release to concentrations below the action levels or cease operation immediately. In addition, the Permittee must:
  - i. Provide written notification to the Department within fifteen (15) calendar days of such discovery; and
  - ii. Immediately initiate any actions that might be necessary to provide notice to all individuals who have been or may become exposed to the released constituents.
- c. Residual Contamination: If hazardous wastes or hazardous constituents are located within or have been released from SWMUs or AOCs and will remain in or on the land, including groundwater, after the term of this Permit has expired, the Permittee must record, in accordance with State law, a notation in the deed to the Facility property or in some other instrument acceptable to the Department which is normally examined during title search that will, in perpetuity, notify any potential purchaser of the property, of the types, concentrations and locations of such hazardous wastes or hazardous constituents.
- d. Newly Discovered SWMUs and AOCs: The Permittee must notify the Department, in writing, of any additional SWMUs and AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits or other means within fifteen (15) days of discovery. Thereafter, the Permittee

must proceed with the assessment, investigation, evaluation and remediation of the SWMU and/or AOC as set forth in **Condition C** of this Module.

- e. Newly Discovered Releases: The Permittee must notify the Department, in writing, of any release(s) of hazardous wastes, including hazardous constituents, discovered during the course of groundwater monitoring, field investigations, environmental audits, or other activities no later than fifteen (15) calendar days of discovery. Such newly-discovered release(s) may be from newly-identified unit(s)/area(s), from unit(s)/area(s) for which, based on the findings of the RCRA Facility Assessment (RFA), the Department had previously determined that no further investigation was necessary, or from unit(s)/area(s) investigated as part of a RCRA Facility Investigation (RFI). Based on the information provided in the notification, the Department shall determine the need for further investigation of the release(s). If the Department determines that such investigations are needed, the Department shall, by written notification, require the Permittee to prepare an RFI Work Plan in accordance with **Condition D** of this Module. The Department may, at its discretion, also require the Permittee to prepare an Interim Corrective Measures (ICM) Work Plan.

6. Determination of No Further Action:

- a. Based on the results of a RFA or a RFI for a particular SWMU or AOC, or combination of SWMUs and/or AOCs, and any other relevant information, the Permittee may submit an application to the Department for a permit modification under 6 NYCRR 373-1.7(b) and 621.13 to terminate the subsequent corrective action requirements of this Module and **Schedule 1 of Module I** for the subject SWMU(s) or AOC(s). The permit modification application must contain information demonstrating that no release(s) of hazardous wastes, including hazardous constituents, have occurred from the subject SWMU(s) and/or AOC(s), or that such releases do not and will not pose a threat to human health or the environment. The permit modification application must also include the information required in 6 NYCRR 373-1, 373-2 and 621.4(n).
- b. If, based upon review of the Permittee's request for a permit modification, the results of the RFI, and other information, including comments received during the forty-five (45) calendar day public comment period required for major permit modifications, the Department determines that the release(s) or the suspected release(s) investigated are either non-existent or do not pose a threat to human health or the environment, the Department may grant the requested modification.
- c. A determination of no further action shall not preclude the Department from modifying this Permit in accordance with 6 NYCRR 621.13 in order to implement the following actions:
  - i. Require the Permittee to perform such investigations as necessary to comply with the requirements of this Module and **Schedule 1 of Module I** if new information or subsequent analysis indicates that there are, or are likely to be,

releases from SWMUs/AOCs that may pose a threat to human health or the environment; and/or,

- ii. Require continual or periodic monitoring of air, soil, groundwater, surface water, sediment or subsurface gas, if necessary, to protect human health and the environment, when site-specific circumstances indicate the release(s) of hazardous waste(s), including hazardous constituents, are likely to occur from any SWMU(s) and/or AOC(s).

C. SCHEDULE FOR ASSESSMENT OF NEWLY IDENTIFIED SWMUs AND AOCs

1. Notification of Assessment: The Permittee must notify the Department, in writing, of any additional SWMU(s) and/or AOC(s) not listed in **Schedule 1 of Module I**, which are identified during the course of groundwater monitoring, field investigations, environmental audits, or other means within fifteen (15) calendar days of discovery.
2. SWMU/AOC Assessment Report: Within thirty (30) calendar days of notifying the Department, the Permittee must submit a SWMU/AOC Assessment Report. This report must provide, at a minimum, the following information for each newly identified SWMU/AOC:
  - a. Type of unit/area;
  - b. Location of each unit/area on a topographic map of appropriate scale;
  - c. Dimensions, capacities, and structural descriptions of the unit/area (supply available engineering drawings);
  - d. Function of unit/area;
  - e. Dates that the unit/area was operated;
  - f. Description of the wastes that were placed or spilled at the unit/area;
  - g. Description of any known releases from the unit/area (to include groundwater data, soil analyses, air monitoring data, and/or surface water/sediment data);
  - h. The results of any sampling and analysis required for the purpose of determining whether releases of hazardous wastes, including hazardous constituents, have occurred, are occurring, or are likely to occur from the unit/area; and
  - i. Whether this unit/area, individually or in combination with other units/areas described in **Schedule 1 of Module I**, is a significant source of contaminant release.
3. SWMU/AOC Sampling and Analysis Plan: If prior to or after submission of the SWMU/AOC Assessment Report required in **Condition C.2** of this Module the Department determines and notifies the Permittee that sampling and analysis is

required, the Permittee must, within thirty (30) calendar days of such notification, submit to the Department for approval a plan prepared in accordance with **Condition D** of this Module, for sampling and analysis of specific environmental media including, but not limited to, groundwater, land surface and subsurface strata, surface water/sediment or air, as necessary to determine whether a release of hazardous waste, including hazardous constituents, from such unit(s) and/or area(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU/AOC Sampling and Analysis Plan must demonstrate that the sampling and analyses program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste, including hazardous constituents, from the newly-discovered SWMU(s) and/or AOC(s) to the environment.

4. Subsequent Assessment Actions: Following submission of the SWMU/AOC Assessment Sampling and Analysis Plan set forth in **Condition C.3** of this Module, the Department may either approve the Plan as submitted or issue comments on the Plan. If approved, the Permittee must implement sampling in accordance with the Plan within thirty (30) calendar days of receipt of the Department's approval. If the Department issues comments on the Plan, subsequent activities for the Plan must proceed in accordance with **Condition A.7 of Module I** of this Permit.
5. SWMU/AOC Sampling and Analysis Report: Within thirty (30) calendar days of receipt by the Permittee of validated analytical data generated under the approved SWMU/AOC Sampling and Analysis Plan, the Permittee must follow reporting requirements in the approved Plan and submit a SWMU/AOC Sampling and Analysis Report to the Department. The Report must describe all results obtained from the implementation of the approved Plan.
6. Assessment Conclusions: Based on the results of the SWMU/AOC Sampling and Analysis Report, the Department shall determine the need for further investigations at the specific unit(s) covered in the SWMU/AOC Assessment Report. If the Department determines that such investigations are needed, the Department shall, by written notification, require the Permittee to prepare and submit for approval a RFI Work Plan. In addition, the Department may, at its discretion, require the Permittee to submit an Interim Corrective Measures (ICM) Work Plan if an ICM is deemed necessary by the Department to safeguard human health and the environment. Any additional activities required by the Department must be undertaken in accordance with **Condition D** of this Module.

D. DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION PROGRAM

For the purposes of this Permit, the technical and administrative requirements of "DER-10 – Technical Guidance for Site Investigation and Remediation" are applicable where corrective action has been determined by the Department to be necessary. Since DER-10 uses State Superfund nomenclature, the following table provides a cross-reference between Resource Conservation and Recovery Act (RCRA) and State

Superfund nomenclature when using “DER-10 – Technical Guidance for Site Investigation and Remediation”:

<b><u>RCRA Program Element</u></b>	<b><u>Equivalent Superfund Program Element</u></b>
RCRA Facility Assessment (RFA) (including Preliminary Review [PR], Visual Site Inspection [VSI] and Sampling Visit [SV])	Site Characterization (SC)
RCRA Facility Investigation (RFI)	Remedial Investigation (RI)
Corrective Measures Study (CMS)	Feasibility Study (FS)
Interim Corrective Measure (ICM)	Interim Remedial Measure (IRM)
Statement of Basis (SOB)	Record of Decision (ROD)
Corrective Measures Implementation (CMI) (design)	Remedial Design (RD)
CMI (construction)	Remedial Action (RA)
Post-Closure / Effectiveness Evaluations	Site Management (SM)

Accordingly, when the Department, as part of this Permit, requires the Permittee to prepare any component (e.g., work plan, report, study, design, remedy, etc.) of a specific RCRA Program element identified in the above table, the Permittee must utilize DER-10 - Technical Guidance for Site Investigation and Remediation for the preparation of the appropriate analog RCRA Program element component. The required component shall be captioned with the appropriate RCRA program element title. This is the required approach unless specific alternative direction is otherwise provided by the Department in writing.

#### 1. Work Plan Development

- a. The Permittee must submit a corrective action work plan to the Department within thirty (30) days of notification by the Department that such work plan is necessary.
- b. All corrective action activities at the Facility must be conducted pursuant to one or more Department-approved work plans. The work plan(s) prepared pursuant to this Permit must address both on-site and off-site contamination consistent with the provisions of Department guidance entitled “DER-10 - Technical Guidance for Site Investigation and Remediation.”
- c. All work plans must be developed consistent with Department guidance entitled “DER-10 - Technical Guidance for Site Investigation and Remediation.” Work plans prepared to address corrective action at active units or units under post-

closure care must also incorporate the applicable requirements of 6 NYCRR 373-2.6 and 373-2.7.

- d. All Department-approved work plans will be incorporated into this Permit when specifically noted in such approvals, pursuant to 6 NYCRR 621.13, and become enforceable under this Permit.
- e. The Department may, at its discretion, direct the Permittee to prepare “supplemental” work plans, studies and/or designs as it determines necessary to ensure protection of human health and the environment.
- f. The Permittee may opt to propose one or more supplemental work plans (including one or more IRM Work Plans) at any time, which the Department shall review for appropriateness and technical sufficiency.
- g. Any proposed work plan must be submitted for the Department’s review and approval, and must include, at a minimum, a chronological description of the anticipated activities, a schedule for performance of those activities, and sufficient detail to allow the Department to evaluate that work plan. The requirements for submittal review are specified in **Condition D.4** of this Module.
- h. Within twenty (20) days of the Department’s request for a work plan, the Permittee must submit for review and approval a written citizen participation plan prepared in accordance with applicable Department guidance. Upon approval, the citizen participation plan shall be incorporated by reference into this Permit.
- i. All work plans prepared pursuant to this Module must be certified in accordance with 6 NYCRR 373-1.4(a)(5), and by a Professional Engineer or other qualified environmental professional as the Department may find acceptable using the language provided in DER-10.

## 2. Work Plan Implementation

- a. Upon approval of a work plan by the Department, the Permittee must implement such work plan in accordance with the schedule contained therein.
- b. The Department must be notified at least 7 days in advance of, and be allowed to attend, any field activities to be conducted under a Department-approved work plan, as well as any pre-bid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.
- c. During all field activities conducted under a Department-approved work plan, the Permittee must have, on-site, a representative who is qualified to supervise the activities undertaken. Such representative may be an employee or a consultant retained to perform such supervision.
- d. The Permittee must follow the notification requirements of **Condition B.5** of this Module during work plan implementation.

- e. All corrective action activities must be conducted in accordance with **Condition B.4** of this Module.
- f. In accordance with the schedule contained in a Department-approved work plan, the Permittee must submit a final report (e.g., RFI report, etc.) that meets the requirements set forth in “DER-10 - Technical Guidance for Site Investigation and Remediation”, summarizes all data generated during implementation of the work plan, and includes a complete description of all assessments and evaluations required by the work plan.
- g. Any final report or final engineering report that includes construction activities must include “as built” drawings showing any changes made to the remedial design or the IRM.
- h. All final reports and final engineering reports must be submitted for the Department’s review and approval. The requirements for submittal review are specified in **Condition D.4** of this Module.
- i. All final reports and final engineering reports must be certified in accordance with 6 NYCRR 373-1.4(a)(5), and by a Professional Engineer or other qualified environmental professional as the Department may find acceptable using the language provided in DER-10.

### 3. Remedy Selection

- a. The Department shall select a proposed remedy in accordance with DER-10 following receipt of the Corrective Measures Study (CMS) or Feasibility Study (FS). The proposed remedy shall be set forth in a draft Statement of Basis (SOB) prepared by the Department for the Facility. The selected remedy in the final SOB shall be incorporated by reference into this Permit by modification pursuant to 6 NYCRR 621.13.
- b. Once the SOB has been incorporated into this Permit, the Permittee must submit a Corrective Measures Implementation (CMI) Work Plan or Remedial Design/ Remedial Action (RD/RA) Work Plan that provides for the development and implementation of final plans and specifications for implementing the remedial alternative set forth in this Permit (i.e., in the SOB). This work plan must, unless otherwise provided in writing by the Department, be submitted within one hundred twenty (120) days of the effective date of the Permit modification. The Permittee must commence implementation of the CMI Work Plan or RD/RA Work Plan within thirty (30) days of the Department’s approval of such work plan.
- c. The Permittee must submit a Site Management Plan (SMP) or an update to an existing SMP, as necessary, in accordance with the schedule set forth in the approved CMI Work Plan or RD/RA Work Plan, or in accordance with a request from the Department. The Permittee must commence implementation of the Site

Management Plan within thirty (30) days of the Department's approval of such plan.

- d. The Permittee must submit an initial periodic review report (PRR) in accordance with the schedule in the SMP and thereafter annually, unless the Department approves an alternate frequency in writing. The periodic review report must include the information specified in DER-10 and other applicable NYSDEC guidance, and must also include, but not be limited to, documentation of the performance of any required groundwater compliance inspections, operation and maintenance inspections, groundwater comprehensive monitoring evaluations, and any required corrective measures effectiveness evaluations related to the remedy(ies) in place at the Facility, as well as a description and results summary for any investigation or corrective action activity that occurred at the Facility during the period. The PRR must be certified in accordance with 6 NYCRR 373-1.4(a)(5), and by a Professional Engineer or other qualified environmental professional as the Department may find acceptable using the language provided in DER-10.
  - e. As part of the periodic review report submission, the Permittee must provide an annual certification of institutional and engineering controls until such time that the Department notifies the Permittee in writing that this certification is no longer needed. Therefore, the PRR must: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and, (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the SMP unless otherwise approved by the Department. The Permittee must submit a written certification in accordance with 6 NYCRR 373-1.4(a)(5) and DER-10 - Technical Guidance for Site Investigation and Remediation.
  - f. The Permittee must continue operation of the selected remedy until such time that the remedial objectives have been achieved and the Department determines that continued operation is technically impracticable or not feasible.
4. Review of Submittals
- a. The Department shall review and respond in writing to each submittal (e.g., plans, studies, reports, schedules, written submittals, etc.) the Permittee makes pursuant to this Permit, unless the Department determines that a response is not necessary. The Department's response shall include an approval, modification request, or disapproval of the submittal, in whole or in part. Failure of the Permittee to act in accordance with the requirements of this Condition is a violation of this Permit.
  - b. Following its review of a submittal, the Department may either approve the submittal or issue comments. If approved, the Permittee must implement the submittal or initiate the next step in the program in accordance with the schedule



contained in the submittal or the Department's approval letter. If the Department issues comments on the submittal, subsequent activities for the submittal must proceed in accordance with **Condition A.7 of Module I** of this Permit.

- c. In the event the Department provides conditional approval of a submittal, within thirty (30) days of the Department's conditional approval the Permittee must modify the submittal in accordance with any Department comments and resubmit the document, including all required supporting data and documents in an electronic format acceptable to the Department in accordance with the requirements of **Condition N of Module I**. All resubmissions must be certified in accordance with 6 NYCRR 373-1.4(a)(5), and by a Professional Engineer or other qualified environmental professional as the Department may find acceptable using the language provided in DER-10.
- d. Upon approval, the submittal will be incorporated into this Permit when specifically noted by the Department in such approval, pursuant to 6 NYCRR 621.13. If directed by the Department, the Permittee must place the submittal within the Facility's document repository within fifteen (15) days of receipt of the Department's approval.
- e. In the event that the Permittee and the Department cannot resolve the Department's comments, the Department shall, pursuant to 6 NYCRR 621.13 and within 45 days of notice of disapproval or required modifications, send to the Permittee a notice of intent to modify this Permit with regard to all unresolved issues in order to safeguard human health and the environment.

E. OTHER REQUIREMENTS

1. Reservation of Rights

- a. Nothing contained in this Permit shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further investigations and/or response action(s), and/or to exercise any summary abatement powers with respect to any person, including the Permittee.
- b. Except as otherwise provided in this Permit, the Permittee specifically reserves all rights and defenses under applicable law, and further reserves all rights respecting the enforcement of this Permit, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Permit or the Permittee's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by the Permittee, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party.

## 2. Environmental Easement

- a. If a Statement of Basis (SOB), or other approved work plan, for the Facility relies upon one or more institutional and/or engineering controls, the Permittee (or the owner of the Facility) must submit to the Department for approval an environmental easement and/or restrictive covenant to run with the land in favor of the State which must be:
  - i. created and recorded pursuant to ECL Article 71, Title 36;
  - ii. in a form and manner as prescribed by the Department;
  - iii. in compliance with General Obligations Law (GOL) 5-703(1) and ECL 71-3605(2); and,
  - iv. recordable pursuant to Real Property Law (RPL) 291.
- b. Upon acceptance of the environmental easement and/or restrictive covenant by the State, the Permittee must comply with the requirements of **Condition E.2** of this Module.
- c. Agents, employees or other representatives of the State may enter and inspect the property burdened by an environmental easement with reasonable prior notice to the property owner, to assure compliance with the restrictions identified by the environmental easement.
- d. If the SOB provides for no action other than implementation of one or more institutional controls, the Permittee must cause an environmental easement to be recorded under the provisions of **Condition E.2.a** of this Module.
- e. If the Permittee does not cause such environmental easement to be recorded in accordance with **Condition E.2.a** of this Module, the Department may file an Environmental Notice on the Facility.

## 3. Progress Reports

- a. The Permittee must submit a written progress report of its actions under this Permit to the parties identified in **Schedule 1 of Module I** by the 10th day of each month commencing with the month subsequent to the approval of the first work plan and ending with the completion of a work item requiring reporting as specified in this Permit or a Department-approved work plan.

## 4. Dispute Resolution

- a. The Permittee must submit any dispute related to the Department's comments to the designated individual in writing no more than 15 days after it knew or should have known of the facts which are the basis of the dispute. The designated individual shall render a written decision and furnish a copy thereof to the

Permittee, which shall be the final Department determination, unless the Permittee files a written appeal of that decision with the designated appeal individual within 20 days of receipt of that decision.

- i. Upon receipt of the written appeal pursuant to **Condition E.4.a** of this Module, the designated appeal individual, will review the record and decision. The designated appeal individual will take one of the following actions, with written notice to the Permittee:
  - ‘a’) remand the matter to the program staff for further negotiation or information if it is determined that the matter is not ripe for review;
  - ‘b’) determine that there is no need for further action, and that the determination of the designated individual is confirmed; or,
  - ‘c’) make a determination on the record as it exists.
- ii. The decision of the designated appeal individual shall be the final Department decision unless, within 20 days of receipt of the decision, the Permittee requests that the Department proceed in accordance with **Condition E.4.b** of this Module.
- iii. The designated individual to:
  - ‘a’) hear disputes is a bureau director in the Department’s Division of Environmental Remediation; and,
  - ‘b’) to review dispute decisions is the assistant director of the Department’s Division of Environmental Remediation.
- b. In the event that the Department issues comments that cannot be resolved with the Permittee, the Department shall, pursuant to 6 NYCRR 621.13, send to the Permittee a notice of intent to modify this Permit with regard to all unresolved issues in order to safeguard human health and the environment.
- c. Upon receipt of a notice of intent from the Department, the Permittee must act in accordance with 6 NYCRR 621.13(d) or the Department’s action will become effective on the date specified in the notice of intent. In the event that the Permittee acts in accordance with 6 NYCRR 621.13(d) within the specified timeframe, the procedure for dispute resolution will continue in accordance with 6 NYCRR 621.13.

## F. MISCELLANEOUS

### 1. Required Authorizations

- a. The Permittee must use best efforts to obtain all Facility access, permits, easements, approvals, institutional controls, and/or authorizations necessary to

perform the Permittee's obligations under this Permit, including all Department-approved work plans and the schedules contained therein. If, despite the Permittee's best efforts, any access, permits, easements, approvals, institutional controls, or authorizations cannot be obtained, the Permittee must promptly notify the Department and include a summary of the steps taken. The Department may, as it deems appropriate and within its authority, assist the Permittee in obtaining same.

- b. If an interest in property is needed to implement an institutional control required by a work plan and such interest cannot be obtained, the Department may require the Permittee to modify the work plan to reflect changes necessitated by the Permittee's inability to obtain such interest. Within 15 days of receipt of such notice, the Permittee must elect in writing to either: a) modify the work plan as requested by the Department, or accept a Department modified work plan, within 30 days of receipt of the written notice; or, b) invoke dispute resolution in accordance with **Condition E.4** of this Module.

## PART 373 PERMIT

### MODULE III – USE AND MANAGEMENT OF CONTAINERS

#### A. AUTHORIZED STORAGE AREA, WASTE TYPES AND STORAGE VOLUME

1. The Permittee is authorized to manage and/or store hazardous wastes subject to the terms of this Permit as described in **Schedule 1 of Module I**. **Schedule 1 of Module I** provides information regarding the number, location, configuration and type of hazardous wastes in containers that may be stored in each permitted container storage area. The Permittee must not manage and/or store any hazardous wastes in excess of the maximum capacities for each individual area identified in **Schedule 1 of Module I** of this Permit. This Permit is applicable to containerized hazardous wastes in accordance with 6 NYCRR 373-2.9(a), with exceptions noted in, and in compliance with, 6 NYCRR 371.1(h), 371.4 (d)(3), 373-1.1(d)(1)(iii), 373-1.1(d)(1)(xiv) and 373-2.1(a).

#### B. CONDITION OF CONTAINERS [6 NYCRR 373-2.9(b)]

1. The Permittee must manage and maintain any and all containers holding hazardous wastes authorized by this Permit in accordance with the requirements of 6 NYCRR 373-2.9(b) and this Permit.

#### C. COMPATIBILITY OF WASTE WITH CONTAINERS [6 NYCRR 373-2.9(c)]

1. The Permittee must use a container made of, or lined with, materials which will not react with, and is otherwise compatible with, the hazardous wastes authorized by this Permit to be stored, so that the ability of the container to contain the waste is not impaired in accordance with 6 NYCRR 373-2.9(c) and this Permit.

#### D. MANAGEMENT OF CONTAINERS [6 NYCRR 373-2.9(d)]

1. The Permittee must manage containers holding hazardous waste authorized by this Permit in accordance with 6 NYCRR 373-2.9(d) and this Permit including **Schedule 1 of Module I**.
2. Any containers with nonhazardous wastes and other materials stored in an area designated for hazardous waste containers will be subject to all the terms and conditions of this Permit and 6 NYCRR 360-1.1(b). Any other materials stored in these designated areas must be compatible with the waste in accordance with **Condition H** of this Module.
3. The Permittee must maintain aisle space in accordance with 6 NYCRR 373-2.3(f) and this Permit including **Schedule 1 of Module I**. Drums must be stored in rows no greater than 2 drums wide. The aisle space between the rows must be a minimum of 2 feet wide, or wider as required by **Schedule 1 of Module I** of this Permit. Drums must not be stacked greater than 2 high or as required by **Schedule 1 of Module I** of

this Permit. For aisle space and stacking requirements for other container types, refer to **Schedule 1 of Module I** of this Permit. All container storage areas must comply with the applicable sections of the New York State Fire Code and the National Fire Protection Association (NFPA) 30 - "Flammable and Combustible Liquids Code." The Permittee must demonstrate compliance with the applicable portions of the New York State Fire Code and the NFPA 30 to the satisfaction of the Department.

E. INSPECTIONS [6 NYCRR 373-2.9(e)] AND REPAIR/REMEDIAL ACTION [6 NYCRR 373-2.2(g)(3)]

1. The Permittee must inspect areas where containers are stored as authorized by this Permit in accordance with 6 NYCRR 373-2.2(g), 373-2.9(e) and this Permit including the Department-approved Facility Inspection Plan found in **Attachment F**.
2. Loading and unloading areas must be inspected daily when in use in accordance with 6 NYCRR 373-2.2(g)(2)(iv) and this Permit.
3. For each occurrence where hazardous wastes are stored in a container that is not in good condition or that is leaking, or if defects are identified in the secondary containment for containers, the Permittee must record the occurrence in the inspection log and maintain the log as part of the operating record required by 6 NYCRR 373-2.5(c). The Permittee must indicate in the facility's operating record the date the defect was identified, the date repairs were completed and a brief description of said repairs.
4. If any leaking container threatens human health or the environment, the Permittee must immediately report the situation as specified in **Condition C.2 of Module I** (i.e., Oral Reports) and implement the Department-approved Integrated Contingency Plan incorporated by reference into this Permit as necessary.
5. For any container of hazardous wastes that is found to be not in good condition (e.g., severe rust, apparent structural deformity, etc.) or leaking, the Permittee must take immediate action to stop or prevent the leak, take steps in accordance with 6 NYCRR 373-2.9(b) and clean up any leaked or spilled material as required by 6 NYCRR 373-2.9(f)(1)(v) in accordance with the procedures contained in the Department-approved Integrated Contingency Plan incorporated by reference into this Permit.
6. The Permittee must repair all defects or other deficiencies identified with the secondary containment system for containers during the Permittee's regular inspections or as a result of independent assessments in accordance with 6 NYCRR 373-2.2(g)(3) and **Condition E.8** of this Module. The Permittee must maintain the secondary containment system for containers free of cracks or gaps and sufficiently impervious to contain leaks, spills and accumulated precipitation.
7. If the secondary containment system for containers is found to be breached or in such a deteriorated condition that it is obviously incapable of containing a release, the Permittee must: a) take immediate action to stop or prevent any release from the area; b) take steps in accordance with 6 NYCRR 373-2.9(f)(1)(v) and the Department-

approved Integrated Contingency Plan incorporated by reference into this Permit to clean up any leaked or spilled material; and, c) immediately cease operation of the area and relocate any containers located therein until the defect is repaired to the satisfaction of the Department.

8. For any identified deterioration or malfunction of equipment or structures associated with a hazardous waste management unit which does not result in a release or create the potential for a release of hazardous wastes from the unit's primary containment (i.e., defects other than those described in **Condition E.5** of this Module), except for specific defects where other Permit conditions or the regulations require repairs within other specified time periods, the Permittee must either:
  - a. Schedule and complete repairs to the defect within thirty (30) days from the date the defect was first identified;
  - b. Submit a proposed schedule for Department approval within seven (7) days from the date the defect was first identified, if it is anticipated that it will take longer than 30 days to complete repairs. The proposed schedule must include the date for completing the repairs which must be within six (6) months from the date when the defect was identified; or
  - c. The Permittee may request, and the Department may approve, extensions to the schedule provided the Permittee has adequately demonstrated that the extension is needed due to unforeseen circumstances or circumstances beyond the Permittee's control and that the delay will not lead to an environmental or human health hazard.

F. CONTAINMENT [6 NYCRR 373-2.9(f)]

1. Container storage areas authorized by this Permit for the storage of containerized liquids must have a containment system that is designed and operated in accordance with 6 NYCRR 373-2.9(f)(1) and this Permit including **Schedule 1 of Module I**. Container storage areas authorized by this Permit for only the storage of containerized solids with no free liquids must, at a minimum, meet the requirements of 6 NYCRR 373-2.9(f)(2) and this Permit including **Schedule 1 of Module I**.

G. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE [6 NYCRR 373-2.9(g)]

1. The Permittee must manage all ignitable or reactive waste placed in containers and authorized by this Permit in accordance with 6 NYCRR 373-2.9(g) and this Permit.

H. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE [6 NYCRR 373-2.9(h)]

1. The Permittee must adhere to the special requirements for the management of incompatible wastes in containers authorized by this Permit in accordance with 6 NYCRR 373-2.9(h) and this Permit.

2. The Permittee must demonstrate the compatibility of all hazardous wastes authorized by this Permit with other wastes and materials, and with the containers utilized to store the waste in accordance with this Permit including **Schedule 1 of Module I** and the Department-approved Waste Analysis Plan incorporated by reference into this Permit.

I. CLOSURE [6 NYCRR 373-2.9(i)]

1. At closure, the Permittee must comply with the closure requirements in accordance with 6 NYCRR 373-2.9(i), 6 NYCRR 373-2.7 and this Permit, including the Department-approved Closure Plan provided as Attachment C of this Permit.

J. AIR EMISSION STANDARDS [6 NYCRR 373-2.9(j)]

1. The Permittee must manage all hazardous wastes in containers authorized by this Permit in accordance with 6 NYCRR 373-2.27, 373-2.28 and 373-2.29 as applicable and **Schedule 1 of Module I** of this Permit.

K. OTHER REQUIREMENTS

1. Independent Secondary Containment Assessment of Container Storage Areas: For container storage areas that require secondary containment pursuant to this Permit, the Permittee must conduct an independent assessment of each secondary containment area. The independent secondary containment assessment must be conducted triennially for indoor areas not exposed to the weather and annually for all other areas, unless otherwise specified in **Schedule 1 of Module I**. The assessment must identify any deficiencies in each containment area including, but not limited to, cracks, gaps, sealant/coating defects or other defects that would inhibit the ability of the containment system to contain leaks or spills of containerized liquids, in accordance with the requirements of 6 NYCRR 373-2.9(f)(1). The assessment must be performed by an independent, qualified Professional Engineer licensed in New York State or a qualified inspector working under the Professional Engineer. All containers, equipment and miscellaneous debris must be removed so that all surfaces of the containment system are completely exposed for inspection. Any defects identified during the assessment must be documented in an assessment report. Once any defects have been repaired, the secondary containment area(s) must be re-inspected by the engineer/inspector to evaluate the adequacy of the repairs and to confirm that the secondary containment area(s) meets the requirements of 6 NYCRR 373-2.9(f)(1)(i) and **Condition F** of this Module. The assessment report must document the results of such re-inspections and confirm that the secondary containment area(s) meets the cited requirements. Copies of each assessment report must be retained by the Permittee in accordance with 6 NYCRR 373-1.6(a)(10) and made available for review upon Department request. The Permittee may also be required to submit the assessment report to the Department if so specified in **Schedule 1 of Module I**.



2. Precautions in Flammable & Oxidizer Waste Storage Areas: Machinery and equipment must not be permitted in flammable and oxidizer waste storage areas or any process area where a flammable atmosphere may exist unless it has been fitted with appropriate safeguard devices approved by Underwriters Laboratories (UL) to render the machinery/equipment intrinsically safe. Only non-sparking tools shall be used in these storage areas.
3. The Permittee must remove all liquid precipitation and other accumulated liquids from any hazardous waste secondary containment structure within 24 hours.

## PART 373 PERMIT

### MODULE IV - TANK SYSTEMS

#### A. AUTHORIZED TANK SYSTEMS AND WASTES

1. The Permittee is authorized to use the tank systems for the storage and/or treatment of hazardous wastes subject to the terms of this Permit as described in **Schedule 1 of Module I. Schedule 1 of Module I** provides information regarding the location, capacity and type of waste stored for each permitted tank system. This Permit is applicable to wastes stored or treated in accordance with 6 NYCRR 373-2.10(a), with exceptions noted in, and in compliance with, 6 NYCRR 373-1.1(d)(1)(iii) and 373-2.1(a).
2. The Permittee must operate and maintain the tank systems in accordance with this Permit and with 6 NYCRR 373-2.10.
3. For tank systems used to store or treat materials that are newly defined as hazardous waste in the future, the Permittee must comply with 6 NYCRR 373-2.10 and 373-1.7(g).

#### B. DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS [6 NYCRR 373-2.10(c)]

1. For new hazardous waste tank systems or components (such as the secondary containment system) not authorized by this Permit, which the Permittee proposes to construct in the future, the Permittee must, prior to construction for a new or replacement tank system and prior to operation of a repurposed or modified tank system, submit to the Department an application to modify this Permit including design plans, specifications and a written assessment of the tank systems' structural integrity, as required by 6 NYCRR 373-2.10(c) and obtain a permit modification.
2. The term "new hazardous waste tank system(s)" includes new tank system(s), replacement tank system(s), repurposed tank system(s) and modified tank system(s).
3. Upon completion of construction and prior to commencing operation, the Permittee must obtain and keep on file certifications of construction in accordance with 6 NYCRR 373-2.10(c)(7).
4. The Permittee may not use any tank until:
  - a. The Permittee has submitted to the Department by Certified Mail or hand delivery a letter signed by the Permittee and a New York registered Professional Engineer stating that the tank has been constructed or modified in compliance with this Permit;

- b. A Department representative has inspected the newly constructed or modified tank and has found it is in compliance with the conditions of this Permit; or
- c. If, within 15 days of the date of submission of the letter specified in **Condition B.4.a** of this Module the Permittee has not received notice from the Department of its intent to inspect, the inspection requirement specified in **Condition B.4.b** of this Module is waived and the Permittee may use the tank, per 6 NYCRR 373-1.6(a)(12)(ii)(‘b’)(‘2’).

C. CONTAINMENT AND DETECTION OF RELEASES [6 NYCRR 373-2.10(d)]

1. In order to prevent the release of hazardous waste or hazardous constituents to the environment, tank system(s) secondary containment must be provided and operated in a manner that meets the requirements of 6 NYCRR 373-2.10(d) and this Permit, including **Schedule 1 of Module I**, except for ancillary equipment meeting the requirements of 6 NYCRR 373-2.10(d)(6).

D. GENERAL OPERATING REQUIREMENTS [6 NYCRR 373-2.10(e)]

1. The Permittee must operate hazardous waste tank systems and components authorized by this Permit in accordance with 6 NYCRR 373-2.10(e) and this Permit including **Schedule 1 of Module I**.

E. INSPECTIONS [6 NYCRR 373-2.10(f)] AND REPAIR/REMEDIAL ACTION [6 NYCRR 373-2.2(g)(3)]

1. The Permittee must inspect tank systems and components authorized by this Permit in accordance with 6 NYCRR 373-2.2(g), 373-2.10(f) and this Permit, including the Department-approved Inspection Plan found in **Attachment F** and **Schedule 1 of Module I**.
2. Loading and unloading areas must be inspected daily when in use in accordance with 6 NYCRR 373-2.2(g)(2)(iv) and this Permit.
3. For any leak, overflow, defect, deterioration, malfunction or other problem found as a result of the inspection or assessment of any tank system, including secondary containment and ancillary equipment, the Permittee must record the occurrence in the inspection log and maintain the log as part of the operating record required by 6 NYCRR 373-2.5(c). The Permittee must indicate in the facility’s operating record the date the defect was identified, the date repairs were completed and a brief description of said repairs.
4. If leaks (except minor drips) or overflows are discovered associated with any hazardous waste tank system (including ancillary equipment), the Permittee must immediately report the situation as specified in **Condition C.2 of Module I** (i.e., Oral Reports) and implement the Department-approved Integrated Contingency Plan incorporated by reference into this Permit as necessary.

5. For any identified leak (including minor drips) or defect which creates the potential for leakage from a tank or from a tank's ancillary equipment (e.g., piping, pump, valve, etc.) containing hazardous waste, the Permittee must take immediate action to stop or prevent the leak, take steps in accordance with 6 NYCRR 373-2.10(g) and clean up any leaked or spilled material as required by 6 NYCRR 373-2.10(g)(2) in accordance with the procedures contained in the Department-approved Integrated Contingency Plan incorporated by reference into this Permit.
6. The Permittee must take action in response to any of the aforementioned tank system deficiencies in accordance with 6 NYCRR 373-2.2(g)(3), **Condition E.8** of this Module and, if applicable, **Condition F** of this Module. The Permittee must maintain the secondary containment system for tanks free of cracks or gaps and sufficiently impervious to contain leaks, spills and accumulated precipitation. The Permittee must remove all liquid precipitation and other accumulated liquids from any hazardous waste secondary containment structure within 24 hours.
7. If a tank system secondary containment is found to be breached or in such a deteriorated condition that it is obviously incapable of containing a release, the Permittee must: a) take immediate action to stop or prevent any release from the system; b) take steps in accordance with the Department-approved Integrated Contingency Plan incorporated by reference into this Permit to clean up any leaked or spilled material; and, c) immediately cease operation of the system and relocate any material stored within the system until the defect is repaired to the satisfaction of the Department.
8. For any identified deterioration or malfunction of equipment or structures associated with a hazardous waste management unit which do not result in a release or create the potential for a release of hazardous waste from the unit's primary containment (i.e., defects other than those described in **Condition E.5** of this Module) or for situations where the waste has been removed from the primary containment unit in accordance with **Conditions E.7 or F** of this Module, except for specific defects where other Permit conditions or the regulations require repairs within other specified time periods, the Permittee must unless otherwise addressed in an alternate schedule approved by the Department, either:
  - a. Schedule and complete repairs to the defect within thirty (30) days from the date the defect was first identified;
  - b. Submit a proposed schedule for Department approval within seven (7) days from the date the defect was first identified, if it is anticipated that it will take longer than 30 days to complete repairs. The proposed schedule must include the date for completing the repairs which must be within six (6) months from the date when the defect was identified; or
  - c. The Permittee may request, and the Department may approve, extensions to the schedule provided the Permittee has adequately demonstrated that the extension is needed due to unforeseen circumstances or circumstances beyond the Permittee's

control and that the delay will not lead to an environmental or human health hazard.

F. RESPONSE TO LEAKS OR SPILLS AND DISPOSITION OF LEAKING OR UNFIT-FOR-USE HAZARDOUS WASTE TANK SYSTEMS [6 NYCRR 373-2.10(g)]

1. A tank system or secondary containment system authorized by this Permit from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately and the Permittee must take all action required in accordance with 6 NYCRR 373-2.10(g) and this Permit.
2. With respect to notifications of releases to the environment, reporting must be in accordance with 6 NYCRR 373-2.10(g)(4) and **Module I** of this Permit.

G. CLOSURE AND POST-CLOSURE CARE [6 NYCRR 373-2.10(h)]

1. At closure of a tank system authorized by this Permit, the Permittee must comply with the closure requirements in accordance with 6 NYCRR 373-2.10(h), 6 NYCRR 373-2.7 and this Permit, including the Department-approved Closure Plan provided as Attachment C of this Permit. For tank systems where the Department accepts the Permittee's demonstration in accordance with 6 NYCRR 373-2.10(h)(2), the Permittee must meet the closure and post-closure requirements of 6 NYCRR 373-2.14(g), 6 NYCRR 373-2.7(g) through (j), and this Permit, including a Department-approved modified Closure Plan and new or modified Post-Closure Plan provided as Attachment C of this Permit.

H. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES [6 NYCRR 373-2.10(i)]

1. The Permittee must manage all ignitable or reactive waste placed in tank systems authorized by this Permit in accordance with 6 NYCRR 373-2.10(i) and this Permit.

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES [6 NYCRR 373-2.10(j)]

1. The Permittee must adhere to the special requirements for the management of incompatible waste in tank systems authorized by this Permit in accordance with 6 NYCRR 373-2.10(j) and this Permit.

J. AIR EMISSION STANDARDS [6 NYCRR 373-2.10(k)]

1. The Permittee must manage all hazardous wastes placed in tank systems authorized by this Permit in accordance with 6 NYCRR 373-2.27, 373-2.28 and 373-2.29 as applicable and this Permit.

K. OTHER REQUIREMENTS

1. Tank System Process and Instrumentation Diagrams: The Permittee must operate and maintain all tank systems in accordance with the Department-approved Process & Instrumentation Diagrams (PIDs) provided in Attachment A of this Permit. The Permittee may replace tank system ancillary equipment (e.g., pipes, pumps, valves, etc.) without modification of this Permit or the above referenced PIDs, provided that the materials/components used are identical to the materials/components depicted on the referenced PIDs (e.g., 4-inch HDPE pipe to be replaced with 4-inch HDPE pipe, etc.). To replace tank system ancillary equipment with materials/components that are not identical to the materials/components depicted on the referenced PIDs (e.g., 4-inch HDPE pipe to be replaced with 4-inch steel pipe, etc.), the Permittee must submit the revised PID(s) along with information to support the equivalency of the replacement materials/components, and obtain Department approval of the revisions prior to implementing the replacement. At its discretion, the Department may review the revised PID(s) and grant verbal approval for such proposed replacements to allow implementation, which will be followed by a written approval. Revisions to PIDs that only involve replacement of existing tank system ancillary equipment, do not require modification of this Permit, unless the Department determines that a Permit modification is needed due to the nature and/or extent of the revisions. For revisions to PIDs that involve new, modified or replacement tanks or new additional ancillary equipment not depicted on the referenced PIDs, the Permittee must comply with all requirements specified by **Condition B** of this Module.
2. Electronically Operated Ancillary Equipment: The Permittee must perform annual testing of any electronically operated tank system interconnection and overflow prevention controls, and leak detection equipment, including but not limited to the following:
  - tank high level sensors and alarms;
  - interconnected tank valves and alarms;
  - pump disabling switches tied to tank high level sensors;
  - pump disabling switches tied to interconnected tank valves; and
  - leak detection sensors and alarms.

The testing must be conducted by manually simulating the condition each device is designed to detect, and observing to see if the designed reaction occurs. The Permittee must record the results of this testing in the operating record required by 6 NYCRR 373-2.5(c). If any device or its associated electronic system fails to function as designed, the Permittee must make all necessary repairs in accordance with 6 NYCRR 373-2.2(g)(3) and **Condition E** of this Module, and re-test the repaired system.

### 3. Independent Assessment of Tank Systems

- a. In addition to the inspections required by **Condition E** of this Module, the Permittee must have each tank system assessed by an independent, qualified, Professional Engineer registered in New York, or alternatively, by an independent, qualified inspector working under a registered New York State Professional Engineer. Each tank system must be independently assessed at a minimum of once every five (5) years as measured from the end of the calendar year of the tank system's most recent assessment, or as otherwise specified in **Schedule 1 of Module I** of this Permit. Each time a tank system is assessed, its next assessment shall be required to occur with five (5) calendar years of its most recent assessment.
- b. Each tank system assessment must entail an inspection of all visible tank system components including but not necessarily limited to the tank exterior, tank supports, piping, pumps, valves and any overflow prevention controls (tank system secondary containment must be inspected in accordance with **Condition E and K.4** of this Module). The tank system assessment also requires a visual inspection of the tank's interior for any tank(s) identified in **Schedule 1 of Module I** as requiring such additional assessment. Any tank(s) requiring an internal inspection must be completely emptied and cleaned to expose all internal tank surfaces for examination by the engineer/inspector. The engineer/inspector must identify and record all observed cracks, leaks, corrosion, interior coating defects (where applicable) and any other areas of deterioration that could affect the integrity of the tank system. For steel tanks, the engineer/inspector must also obtain ultrasonic thickness measurements of all accessible tank surfaces to determine the integrity of the tank shell.
- c. After each assessment, the engineer/inspector must report to the Permittee as specified in the schedule provided in **Schedule 1 of Module I** of this Permit any and all tank system defects identified during the assessment along with repair recommendations. The Permittee must repair all identified defects in accordance with the engineer's/inspector's recommendations and have the engineer/inspector verify the adequacy of the repairs. Any tank system that is found to be leaking or unfit for use by the engineer/inspector must be immediately removed from service and must not be returned to service until the Permittee obtains a certification of major repairs in accordance with 6 NYCRR 373-2.10(g) and this Permit.
- d. The engineer/inspector must prepare a detailed report for all tank systems that are assessed. For each tank system, the report must include a description of observations made during the visual inspection, the result of any ultrasonic thickness measurements taken of the tank shell and the engineer's/inspector's evaluation of these measurements, a description of any defects identified, and an evaluation of all repairs made by the Permittee. Each annual report must also include a statement from the engineer/inspector which certifies that all repairs were made in accordance with the engineer's/inspector's recommendations and that all in-service tank systems assessed are capable of handling hazardous wastes

without release for the intended life of the system. This annual report must be submitted to the Department within 90 days of the assessment, unless the Department approves an extension of no greater than 30 days or as otherwise specified in **Schedule 1 of Module I**.

4. Independent Assessment of Tank Systems Secondary Containment

- a. For the tank systems authorized by this Permit with secondary containment designed in accordance with 6 NYCRR 373-2.10(d)(4)(i) or (ii), independent assessments must be conducted triennially for indoor containment areas not exposed to the weather and annually for all other containment areas, unless otherwise specified in **Schedule 1 of Module I**. The assessment must identify any deficiencies in each containment area, including but not limited to cracks, gaps or defects in the impermeable surface coatings or other defects that would inhibit the ability of the containment system to contain leaks or overflows in accordance with the requirements of 6 NYCRR 373-2.10(d). The assessment must be performed by an independent, qualified Professional Engineer licensed in New York State or a qualified inspector working under the Professional Engineer. Any equipment and miscellaneous debris must be removed from the containment system so that all surfaces are completely exposed for inspection. Any defects identified during the assessment must be documented by the engineer/inspector in an assessment report. Once any defects have been repaired, the secondary containment area(s) must be re-inspected by the engineer/inspector to evaluate the adequacy of the repairs and to confirm that the secondary containment area(s) meets the requirements of 6 NYCRR 373-2.10(d) and **Condition C** of this Module. The assessment report must document the results of such re-inspections and confirm that the secondary containment area(s) meets the cited requirements. Copies of each assessment report must be retained by the Permittee in accordance with 6 NYCRR 373-1.6(a)(10) and made available for review upon Department request. The Permittee may also be required to submit the assessment report to the Department if so specified in **Schedule 1 of Module I**.

5. Precautions in Flammable & Oxidizer Waste Storage Areas: Machinery and equipment must not be permitted in flammable and oxidizer waste storage areas or any process area where a flammable atmosphere may exist unless it has been fitted with appropriate safeguard devices approved by Underwriters Laboratories (UL) to render the machinery/equipment intrinsically safe. Only non-sparking tools shall be used in these storage areas.



**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**INTRODUCTION**

**CORPORATE HEADQUARTERS:** Safety-Kleen Systems, Inc.  
2600 North Central Expressway Suite 400  
Richardson, TX 75080

**FACILITY ADDRESS:** Safety-Kleen Systems, Inc.  
1525 West Henrietta Road  
Avon, New York 14414

**TELEPHONE NUMBER:** 585/226-2411

**USEPA I.D. NUMBER:** NYD 980753784

**GEOGRAPHIC LOCATION:** 42° 54' 41" N  
077° 42' 20" W

**OWNER:** Safety-Kleen Systems, Inc.

**DESCRIPTION OF ACTIVITIES:**

The Avon Service Center manages a variety of hazardous and non-hazardous waste. Much of this waste are handled on a 10-day transfer basis in accordance with applicable United States Department of Transportation (USDOT) and New York DEC regulations. Hydrocarbon and aqueous parts washer solvents are managed for storage at the facility. These materials are be stored in two permitted container storage areas in the Return & Fill building and in one 12,000-gallon storage tank. Non-hazardous used oil is stored in a separate 12,000-gallon storage tank.

Waste storage is in an aboveground tank (S02) and container storage areas (S01). No waste is treated or disposed on site.

## PROPERTY DESCRIPTION:

Approximately 4 acres with the following structures:

- a. Two separate buildings - the front building has offices, permitted container storage, and return and fill operations. The rear building is used for exempt transfer waste operations.
- b. A tank farm containing one 12000-gallon tank for parts washer solvent waste, and one 12,000-gallon non-hazardous used oil tank. A tank for unused solvents is also located here.
- c. An enclosed solvent return and fill station, with two drum dumpster units, equipped with loading docks,
- d. Two container storage areas with a maximum storage of 2,560 gallons of waste parts washer solutions.
- e. Exempt 10-day transfer operations where various hazardous and non-hazardous wastes are temporarily stored before transfer off-site.

Waste Description	Facility Capacity in Gallons	Permitted Waste Codes	Estimated Annual Amount (1000s of Gallons)
Aqueous and Non-Aqueous Safety-Kleen Parts Washer Solvents (hazardous and non-hazardous)	12,000 Gallons in an AST	D001, D004-D011, D018, D019, D021-D030, D032-D042, D043, and non-hazardous	162
	400 Gallons of containerized waste in the Container storage Area R/F # 1		
	2,160 gallons of containerized waste in the Container storage Area R/F # 2		
Non-Hazardous Used Oil	12,000-gallons in an AST	none	150

## **INTRODUCTION**

### **1.0 Description of Business Activity**

The Avon Service Center is an accumulation point for spent solvents, dry cleaning wastes, paint-related wastes, automotive wastes and various other spent industrial and automotive materials. Most of these wastes are handled on a 10-day permit exempt transfer basis. Only the hydrocarbon and aqueous parts washer solvents are terminated. They are temporarily stored in containers before transfer to the bulk tank..

The two container storage areas are located in the Return & Fill building. RF#2 is located adjacent to the return and fill station (RFS) on a bermed concrete pad. The maximum waste container storage volume is 2,160 gallons. The secondary containment capacity is 1134 gallons. R/F #1 is located on a steel grate also above secondary containment, and is permitted for a 400 gallons of waste. Unused solvents are also stored here. The total quantity of waste and product is limited to 2,000 gallons.

Containerized parts washer solvents are emptied into a return & fill dumpster piped to the 12,000- gallon aboveground hazardous waste storage tank. Accumulated wastes are ultimately transported off-site to a Safety-Kleen Recycle/Process Center or a contract reclaimer.

Non-hazardous used oil is collected in bulk from customers with tanker trucks. These trucks load oil directly into the used oil tank. Used oil in drums is not added to this tank.

The Avon facility also provides service to waste generators for the proper transport and management of other wastes. These materials are handled in containers and are managed by the service center on a 10-day exempt transfer basis in accordance with relevant USDOT and New York DEC regulations.

The exempt container transfer areas are described in this permit for informational purposes only. These areas are identified as transfer area C inside the warehouse located at the rear of the property. This area has a transfer/storage capacity of 42,912 gallons, and a secondary containment capacity of about 4,500 gallons. Two drum transfer areas A and B are inside the office building. They have a storage capacity of 6912 gallons and secondary containment of 1930 gallons [see drawings: 202801-7000 and 202802-7002B ].

Wastes managed by the Avon facility are transported from the Service Center to one of Safety-Kleen's Recycle/Process Centers or to contract reclaimer and, in many instances, the recovered materials are returned to customers as usable product. A unique feature of Safety-Kleen's parts washer solvent service is that Safety-Kleen provides the customer with the solvents and also manages the spent solvents. This system allows Safety-Kleen to maintain control of the solvents except while they are in use at the customer's place of business.

## **1.1 Parts Washer Service**

The original service offered by Safety-Kleen in 1968 was the Parts Washer Service and it remains the primary business activity. This service involves the leasing of a small parts washer unit consisting of a sink affixed to a container holding Safety-Kleen parts washer solvent. Safety-Kleen also provides this service for users who own their own parts washer machines. The parts washer solvents are may be either hydrocarbon or aqueous solvents used for parts cleaning. Both the hydrocarbon and aqueous parts washer solvents are used and managed similarly. On a regularly scheduled basis, a Safety-Kleen sales representative cleans and inspects the parts washer machine and replaces the container of used solvent with one of clean product. Each sales representative performs about fifteen of these services per day.

When returned to the facility, the parts washer solvents are transferred from the containers to a hazardous waste storage tank, and containers of product are prepared for the next day's services. Transfer and filling operations occur at the return and fill station shown on Figure - 1. The return and fill warehouse includes two permitted container storage areas to accommodate drum storage. Periodically, a tanker truck is dispatched from one of the Recycle/Process Centers to deliver a load of clean product and collect the spent solvent at the Service Center. The spent solvent is transported to a Safety-Kleen Recycle/Process Center. In the event of a breakdown or malfunction at a nearby Safety-Kleen branch facility, the Avon facility may receive spent parts washer solutions from other Safety-Kleen facilities.

## **1.2 On-Site Generated Wastes**

As a result of operating and maintaining the facility, waste is generated at the Service Center. This material includes but is not limited to, waste from the tank, contaminated operational materials and waste from the return and fill station. As the generator, the Avon facility possesses sufficient knowledge to properly handle and store this waste prior to shipping it off-site. This facility-generated hazardous waste will be stored in an exempt secondarily contained area and shipped off-site within 90 days.

## **1.3 Transfer Waste Management Waste Service (for information only)**

The Avon Service Center offers a service to collect and process other wastes from its industrial and automotive customers. These wastes are not Safety-Kleen supplied solvents. These wastes are generated from a variety of processes and vary from customer to customer. These containerized wastes are managed at the facility as 10-day storage exempt wastes on a USDOT transfer basis and are exempt from RCRA permitting requirements. They are temporally stored in the transfer container management areas of the facility.

The wastes managed on a transfer basis may be ignitable and may display USEPA toxicity characteristics, may be listed wastes, or may be non-hazardous. These wastes are collected and transported in appropriate containers and are stored in the transfer

container management areas of the facility. These wastes remain at the facility for a maximum of 10 days.

## **2.0 DESCRIPTION OF THE FACILITY**

Safety-Kleen has operated the Service Center at the Avon, New York location since February 1982. The hazardous waste storage units at the facility consist of:

- A tank farm area which includes a 12,000 gallon aboveground, fixed-roof, storage tank, with secondary containment;
- A return and fill station used for emptying containers into the waste solvent storage tank. This station contains a loading dock, two 375-gallon dumpster units and associated pumps.
- Two Container Storage Areas (R/F #1 and RF#2) in the Return & Fill building with a maximum storage of 2,160 gallons of waste parts washer waste.

The Avon service center typically operates Monday through Friday. Storage areas are secured by fencing and security lighting. In addition, warning signs are posted at entrances, locks are on entrances, and remote controls for site access are located inside the office.

### **2.1 Regional Description**

The Avon Service Center is located in Livingston County, in the town of Avon. The facility is positioned in a rural setting. This area is zoned for general business and light industrial use. To the best of Safety-Kleen's knowledge, no easements or title, deed or zoning restrictions exist which may be in conflict with the operations at this site. A zoning map is included as Figure 2.

The topography of the Avon site is relatively flat (see Figure 3). The difference in surface elevations within the general operational area of the facility is approximately two feet. A majority of the surface water run-off flows in a northeasterly direction towards a clay lined drainage ditch. (see Figure 6).

No oil or gas wells exist within a quarter mile of the Service Center. The site is not in or near a critical habitat and no schools or parks currently exist within a quarter mile of the facility. Furthermore, the site is not within a one hundred year floodplain (see Figure 5) and the facility and surrounding area are serviced by public water. Because this facility is an existing Service Center, the seismic standard does not apply.

The entrance to the facility is on West Henrietta Road or Route 15, which is the major access road to the facility. The access road was designed in accordance with engineering criteria appropriate for sustaining the traffic volume and loading for the light commercial and industrial activities in this area. Access to the site is controlled by fencing and gates. The non-building areas of the facility are landscaped or are paved

with asphalt or concrete. The majority of the loading/unloading operations occur at and near the docks and these areas are paved.

There are trucks based at this facility which travel the routes between the Service Center and Safety-Kleen customers. These trucks use the two-lane approach driveway and are parked atop a firm working surface of asphalt or concrete at night. The trucks dispatched from the recycle center deliver and pick up fresh and used solvents and waste material at the aboveground tank area and at the overhanging doors of the container storage areas.

These tanker trucks enter the facility about once every 10 days to 2 weeks. They hold approximately 6,500 gallons. Additionally, a box-trailer enters the facility on a twice a week basis. The paving at the facility can support at least 80,000 pounds (the approximate weight of a full tanker truck). Historically, Safety-Kleen has never encountered problems regarding the load bearing capacity of the roads within the facility.

## **2.2 Waste Management Practices**

The Avon site is designed to facilitate safe handling and storage of the wastes resulting from the services offered by Safety-Kleen. The container storage area, aboveground storage tanks, and the return fill station have secondary containment, and the Service Center has the equipment necessary for employees to safely manage wastes. Layouts of the facility delineating the storage tank area and the return and fill station are provided in the drawings.

Hazardous and non-hazardous, hydrocarbon and aqueous parts washer wastes are received in containers from various generators. These containers are temporarily stored in transport vehicles prior to unloading onto the container storage area located in the return and fill building as specified in Attachment VIII item 1.1. These spent parts washer solution containers are inspected for accuracy of paperwork and labels prior to being emptied into a 12,000-gallon, aboveground storage tank via the return and fill station. Five-gallon, sixteen-gallon and 30-gallon containers holding approximately five, 12 and 23 gallons of spent solvent, respectively, are poured into the dumpsters in the return and fill station and material in the dumpster is pumped into the spent solvent storage tank. The return and fill station has secondary containment with a 4-inch high concrete berm coated with an impervious coating compatible with the waste handled.

The return and fill station is also used to refill the solvent containers with fresh solvent. The emptied solvent containers are cleaned with used solvent and then refilled with fresh, hydrocarbon-based, parts washer solvent using low pressure hose dispensers with automatic shut-off valves, similar to those used at automotive service stations. Solvent is obtained from either an existing 12,000 gallon bulk storage tank or from a separate 12,000 gallon storage tank.

The aboveground waste storage tanks are designed in accordance with UL specifications and National Fire Prevention Association (NFPA) standards and are

constructed of carbon steel and is painted white. The tanks are complete with secondary containment systems. Additionally, the tanks are equipped with a high level alarms.



**Drawings**

**Forms**

**Photos**

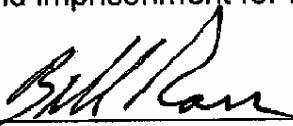
**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NEW YORK**

**HAZARDOUS WASTE  
TREATMENT, STORAGE AND DISPOSAL FACILITY PERMIT**

**ARTICLE 27, TITLE 9 - 6 NYCRR PART 373  
HAZARDOUS WASTE MANAGEMENT**

**CERTIFICATION STATEMENT**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

  
\_\_\_\_\_  
Billy R. Ross P.E., VP of EHS – North American Branches

5-22-13  
Date

# ENGINEER'S CERTIFICATION

Safety-Kleen Systems, Inc.  
Avon Facility  
EPA ID No. NYD980753784

The undersigned, being a licensed Professional Engineer in the State of New York, state that I am the Engineer of Record for this permit renewal application and supporting documentation. I have personally reviewed the information contained herein and state that, to the best of my knowledge and belief, it is true, accurate, and complies with the appropriate provisions of 6 NYCRR and the requirements of Section 7209 of the Education Law.

 (signed)

6/5/13 (dated)



United States Environmental Protection Agency															
HARDOUS WASTE PERMIT INFORMATION FORM															
1. Facility Permit Contact	First Name:								MI:		Last Name:				
	Contact Title:														
	Phone:								Ext.:			Email:			
2. Facility Permit Contact Mailing Address	Street or P.O. Box:														
	City, Town, or Village:														
	State:														
	Country:										Zip Code:				
3. Operator Mailing Address and Telephone Number	Street or P.O. Box:														
	City, Town, or Village:														
	State:										Phone:				
	Country:										Zip Code:				
4. Facility Existence Date	Facility Existence Date (mm/dd/yyyy):														
5. Other Environmental Permits															
A. Facility Type (Enter code)		B. Permit Number										C. Description			
6. Nature of Business:															

**7. Process Codes and Design Capacities – Enter information in the Section on Form Page 3**

**A. PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at the facility. If more lines are needed, attach a separate sheet of paper with the additional information. For “other” processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 8.

**B. PROCESS DESIGN CAPACITY** – For each code entered in Item 7.A; enter the capacity of the process.

1. **AMOUNT** – Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.

2. **UNIT OF MEASURE** – For each amount entered in Item 7.B(1), enter the code in Item 7.B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

**C. PROCESS TOTAL NUMBER OF UNITS** – Enter the total number of units for each corresponding process code.

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity	Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
<b>Disposal</b>			<b>Treatment (Continued) (for T81 – T94)</b>		
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; Liters Per Hour; Kilograms Per Hour; or Million BTU Per Hour
D80	Landfill	Acre-feet; Hectares-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure Listed Below	T86	Blast Furnace	
<b>Storage</b>			T87	Smelting, Melting, or Refining Furnace	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnace	
S04	Surface Impoundment	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Device Used in the Recovery of Sulfur Values from Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed in 40 CFR 260.10	
S99	Other Storage	Any Unit of Measure Listed Below	T94	Containment Building Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTU Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million BTU Per Hour
<b>Treatment</b>			<b>Miscellaneous (Subpart X)</b>		
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
T02	Surface Impoundment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Day; Metric Tons Per Hour; or Million BTU Per Hour
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Metric Tons Per Hour; or Million BTU Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; or Million BTU Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Short Tons Per Day; BTUs Per Hour; Gallons Per Day; Liters Per Hour; or Million BTU Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; BTUs Per Hour; or Million BTU Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code
Gallons.....	G	Short Tons Per Hour.....	D	Cubic Yards.....	Y
Gallons Per Hour.....	E	Short Tons Per Day.....	N	Cubic Meters.....	C
Gallons Per Day.....	U	Metric Tons Per Hour.....	W	Acres.....	B
Liters.....	L	Metric Tons Per Day.....	S	Acre-feet.....	A
Liters Per Hour.....	H	Pounds Per Hour.....	J	Hectares.....	Q
Liters Per Day.....	V	Kilograms Per Hour.....	X	Hectare-meter.....	F
		Million BTU Per Hour.....	X	BTU Per Hour.....	I

**EXAMPLE FOR COMPLETING Item 7 (shown in line number X-1 below):** A facility has a storage tank, which can hold 533.788 gallons.

**Note:** If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the line sequentially, taking into account any lines that will be used for "other" process (i.e., D99, S99, T04, and X99) in Item 8.

[illegible]

**9. Description of Hazardous Wastes - Enter Information in the Sections on Form Page 5**

- A. EPA HAZARDOUS WASTE NUMBER** – Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** – For each listed waste entered in Item 9.A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Item 9.A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** – For each quantity entered in Item 9.B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES****1. PROCESS CODES:**

**For listed hazardous waste:** For each listed hazardous waste entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all listed hazardous wastes.

**For non-listed waste:** For each characteristic or toxic contaminant entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

**NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:**

- Enter the first two as described above.
- Enter "000" in the extreme right box of Item 9.D(1).
- Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 9.E.

**2. PROCESS DESCRIPTION:** If code is not listed for a process that will be used, describe the process in Item 9.D(2) or in Item 9.E(2).

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in Item 9.A. On the same line complete Items 9.B, 9.C, and 9.D by estimating the total annual quantity of the waste and describing all the processes to be used to store, treat, and/or dispose of the waste.
- In Item 9.A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Item 9.D.2 on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING Item 9** (shown in line numbers X-1, X-2, X-3, and X-4 below) – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
								(1) PROCESS CODES (Enter Code)							(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))		
X	1	K	0	5	4	900	P	T	0	3	D	8	0				
X	2	D	0	0	2	400	P	T	0	3	D	8	0				
X	3	D	0	0	1	100	P	T	0	3	D	8	0				
X	4	D	0	0	2												Included With Above

**9. Description of Hazardous Wastes (Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)**

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Qty of Waste		C. Unit of Measure (Enter code)		D. PROCESSES											
										(1) PROCESS CODES (Enter Code)								(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))			
	1																				
	2																				
	3																				
	4																				
	5																				
	6																				
	7																				
	8																				
	9																				
1	0																				
1	1																				
1	2																				
1	3																				
1	4																				
1	5																				
1	6																				
1	7																				
1	8																				
1	9																				
2	0																				
2	1																				
2	2																				
2	3																				
2	4																				
2	5																				
2	6																				
2	7																				
2	8																				
2	9																				
3	0																				
3	1																				
3	2																				
3	3																				
3	4																				
3	5																				
3	6																				



[illegible]

**10. Map**

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.


**11. Facility Drawing**

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

**12. Photographs**

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas (see instructions for more detail).

**13. Comments**

<b>SEND COMPLETED FORM TO:</b> The Appropriate State or Regional Office.	<b>United States Environmental Protection Agency</b> <b>RCRA SUBTITLE C SITE IDENTIFICATION FORM</b>		
<b>1. Reason for Submittal</b>  MARK ALL BOX(ES) THAT APPLY	<b>Reason for Submittal:</b> <input type="checkbox"/> To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location) <input checked="" type="checkbox"/> To provide a Subsequent Notification (to update site identification information for this location) <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application <input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____) <input type="checkbox"/> As a component of the Hazardous Waste Report (If marked, see sub-bullet below) <input type="checkbox"/> Site was a TSD facility and/or generator of $\geq 1,000$ kg of hazardous waste, $>1$ kg of acute hazardous waste, or $>100$ kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)		
<b>2. Site EPA ID Number</b>	<b>EPA ID Number</b>   N   Y   D   9   8   0   7   5   3   7   8   4		
<b>3. Site Name</b>	<b>Name:</b> Safety-Kleen Systems, Inc.		
<b>4. Site Location Information</b>	<b>Street Address:</b> 1525 West Henrietta Rd.		
	<b>City, Town, or Village:</b> Avon		<b>County:</b> Livingston
	<b>State:</b> NY	<b>Country:</b> US	<b>Zip Code:</b> 14414
<b>5. Site Land Type</b>	<input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
<b>6. NAICS Code(s) for the Site (at least 5-digit codes)</b>	<b>A.</b>   5   3   2   4   9   0		<b>C.</b>   4   8   4   2   2   0
	<b>B.</b>   5   6   2   1   1   2		<b>D.</b>
<b>7. Site Mailing Address</b>	<b>Street or P.O. Box:</b> same as above		
	<b>City, Town, or Village:</b>		
	<b>State:</b>	<b>Country:</b>	<b>Zip Code:</b>
<b>8. Site Contact Person</b>	<b>First Name:</b> Mark Hansen		<b>MI:</b> E
	<b>Last:</b> Hansen		
	<b>Title:</b> EHS Manager		
	<b>Street or P.O. Box:</b> 6741 VIP Parkway		
	<b>City, Town or Village:</b> Syracuse		
	<b>State:</b> NY	<b>Country:</b> US	<b>Zip Code:</b> 13211
	<b>Email:</b> mark.hansen@safety-kleen.com		
	<b>Phone:</b> 315-455-8638	<b>Ext.:</b>	<b>Fax:</b> 315-454-3217
<b>9. Legal Owner and Operator of the Site</b>	<b>A. Name of Site's Legal Owner:</b> Safety-Kleen Systems, Inc.		<b>Date Became Owner:</b> 12/30/86
	<b>Owner Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
	<b>Street or P.O. Box:</b> 2600 North Central Expressway Suite 400		
	<b>City, Town, or Village:</b> Richardson		<b>Phone:</b> 972-265-2000
	<b>State:</b> TX	<b>Country:</b> US	<b>Zip Code:</b> 75080
	<b>B. Name of Site's Operator:</b> Safety-Kleen Systems, Inc.		<b>Date Became Operator:</b> 2/1/82
	<b>Operator Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		



**10. Type of Regulated Waste Activity (at your site)**Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.**A. Hazardous Waste Activities; Complete all parts 1-10.**Y ☒ N ☐**1. Generator of Hazardous Waste**

If "Yes", mark only one of the following – a, b, or c.

- ☒ a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs./mo.) or more of hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs./mo) of acute hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 100 kg/mo (220 lbs./mo) of acute hazardous spill cleanup material.

- ☐ b. SQG: 100 to 1,000 kg/mo (220 – 2,200 lbs./mo) of non-acute hazardous waste.

- ☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo) of non-acute hazardous waste.

If "Yes" above, indicate other generator activities in 2-4.

Y ☐ N ☒

- 2. Short-Term Generator** (generate from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.

Y ☐ N ☒

- 3. United States Importer of Hazardous Waste**

Y ☐ N ☒

- 4. Mixed Waste (hazardous and radioactive) Generator**

Y ☒ N ☐**5. Transporter of Hazardous Waste**

If "Yes", mark all that apply.

- ☒ a. Transporter  
☒ b. Transfer Facility (at your site)

Y ☒ N ☐

- 6. Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste Part B permit is required for these activities.

Y ☐ N ☒**7. Recycler of Hazardous Waste**Y ☐ N ☒**8. Exempt Boiler and/or Industrial Furnace** If "Yes", mark all that apply.

- ☐ a. Small Quantity On-site Burner Exemption  
☐ b. Smelting, Melting, and Refining Furnace Exemption

Y ☐ N ☒**9. Underground Injection Control**Y ☒ N ☐**10. Receives Hazardous Waste from Off-site****B. Universal Waste Activities; Complete all parts 1-2.**Y ☐ N ☒

- 1. Large Quantity Handler of Universal Waste** (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes", mark all that apply.

- a. Batteries ☐  
b. Pesticides ☐  
c. Mercury containing equipment ☐  
d. Lamps ☐  
e. Other (specify) \_\_\_\_\_ ☐  
f. Other (specify) \_\_\_\_\_ ☐  
g. Other (specify) \_\_\_\_\_ ☐

Y ☐ N ☒**2. Destination Facility for Universal Waste**

Note: A hazardous waste permit may be required for this activity.

**C. Used Oil Activities; Complete all parts 1-4.**Y ☒ N ☐**1. Used Oil Transporter** If "Yes", mark all that apply.

- ☒ a. Transporter  
☒ b. Transfer Facility (at your site)

Y ☐ N ☒**2. Used Oil Processor and/or Re-refiner** If "Yes", mark all that apply.

- ☐ a. Processor  
☐ b. Re-refiner

Y ☐ N ☒**3. Off-Specification Used Oil Burner**Y ☐ N ☒**4. Used Oil Fuel Marketer** If "Yes", mark all that apply.

- ☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner  
☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

**D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K**❖ You can **ONLY** Opt into Subpart K if:

- you are at least one of the following: a college or university; a teaching hospital that is owned by or has a formal affiliation agreement with a college or university; or a non-profit research institute that is owned by or has a formal affiliation agreement with a college or university; AND
- you have checked with your State to determine if 40 CFR Part 262 Subpart K is effective in your state

Y ☐ N ☒ 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories  
**See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:**

- ☐ a. College or University
- ☐ b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university
- ☐ c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Y ☐ N ☐ 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories**11. Description of Hazardous Waste****A. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001	D018	D028	D038			
D004	D019	D029	D039			
D005	D021	D030	D040			
D006	D022	D032	D041			
D007	D023	D033	D042			
D008	D024	D034	D043			
D009	D025	D035				
D010	D026	D036				
D011	D027	D037				

**B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes.** Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.



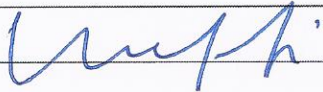

## 12. Notification of Hazardous Secondary Material (HSM) Activity

Y ☐ N ☒ Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

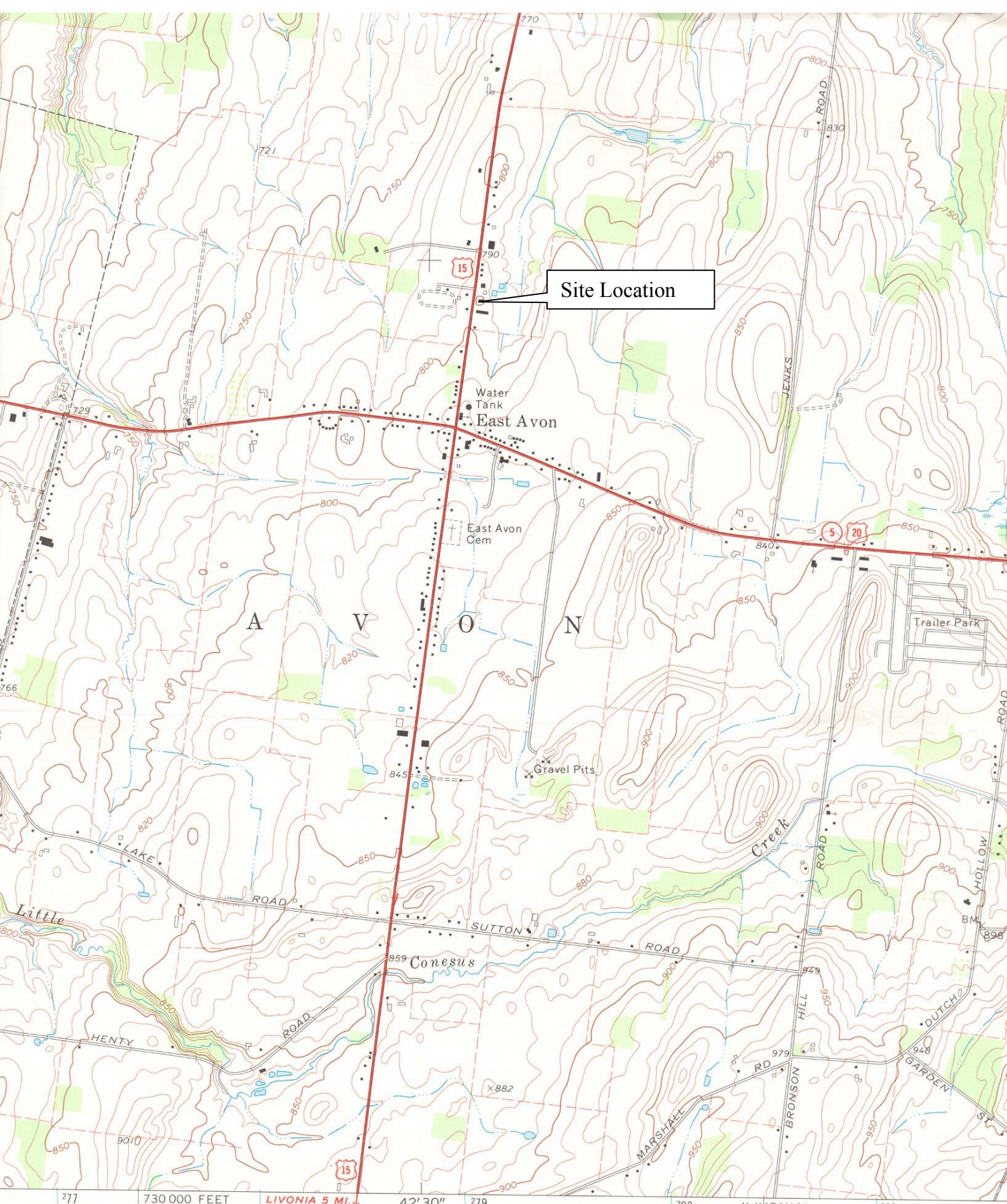
If "Yes", you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

## 13. Comments

14. **Certification.** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

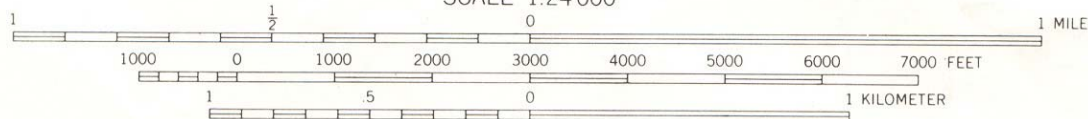
Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	Virgil W Duffie III	08/09/2012
	SVP/Assistant Secretary	





Site Location

SCALE 1:24 000



CONTOUR INTERVAL 10 FEET  
DATUM IS MEAN SEA LEVEL





Upper Left View of detached warehouse for  
container transfer (RCRA exempt  
storage)

Lower Left Warehouse loading docks

Upper Right Warehouse loading docks





Upper Left Return and fill dock with drum storage

Upper Right Overhead door to drum storage and return and fill dock

Lower Left Return and fill dock with view of overhead door



Upper Left      Return and fill dock

Lower Left      Return and fill dock  
showing wet dumpster

Above      View of the drum storage  
area adjacent to the return  
and fill dock

Left	View of tank farm, loading pad, and secondary containment system
Middle	Used solvent tank
Right	Loading pad and protective roof







Upper Left	Warehouse and office building and tank farm roof
Upper Right	View of tank farm
Lower Left	left tank – used oil
	Middle tank - spent solvent
	Right tank – unused solvent



Views of container transfer areas in the detached warehouse (RCRA exempt)

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT B  
SECURITY And  
INSPECTION  
PLAN**

## **SECURITY**

### **PLAN**

#### **ABSTRACT**

Purpose: Safety-Kleen's Avon, New York facility employs a variety of measures to prevent on-site hazards. One such measure is the implementation and maintenance of a sound security program. The purpose of this plan is to describe the engineered and procedural controls in place that enhance the overall security of the facility and that prevent the unknowing and/or unauthorized entry of persons or livestock onto the active portion of the facility.

## **ATTACHMENT B - SECURITY PLAN**

### **1.0 SECURITY SYSTEMS**

The facility is secured with a five-foot high chain link fence topped by three strands of barbed wire. Access gates remain closed at all times. They are opened only for the entry and exit of vehicles and personnel. Warning signs stating "Danger - Unauthorized Personnel Keep Out" are visible from twenty-five feet, and are posted at the entrances. In addition, outdoor lighting is on during non-daylight hours.

The office/warehouse building is secure with locks on doors, and warning signs are posted at entrances to waste management areas.

The hazardous waste tank is inaccessible to the public. Material cannot be added or removed without activating the pumps - the controls for which are inside the warehouse. The pumps are not activated unless solvent is added to the tank by Safety-Kleen personnel. In addition, warning signs are posted on the return and fill station.

SECURITY MEASURES--The site is secured as follows:

- There is a chain link fence with barbed wire around the facility.
- Warning signs are posted at entrances.
- Locks are on entrances to the warehouse.
- Remote controls for tank operations are inside the warehouse.
- There is outdoor lighting on during non-daylight hours.



## **INSPECTION**

### **PLAN**

#### **ABSTRACT**

Purpose: To provide a safe and compliant operation, the Avon facility will conduct a series of site-specific inspections. The purpose of this plan is to define the type and frequency of these site-specific inspections.

## ATTACHMENT B - INSPECTION PLAN

### 1.0 INSPECTION PROGRAM

The branch (i.e., Service Center) manager or his designate is responsible for carrying out and documenting the facility inspection on a daily operating basis. He will note any repairs that are needed and assure that they are completed. If the repairs cannot be done by facility personnel Safety-Kleen's Corporate headquarters will be notified for assistance. Completion of repairs will also be noted on the facility inspection record.

Inspection of the container storage area and the 12,000-gallon hazardous waste storage tank and 12,000 gallon used oil tank will take place each operating day. Inspection of the safety and security equipment will be conducted weekly. Attached are example records used to document these inspections (see Appendix II - A). The format of these records may change or be modified as necessary; changes in content will require a permit modification.

An inspection record file for the hazardous waste management unit and safety/security equipment will be maintained at the Service Center for a period of at least 3 years. The inspection record file will be reviewed on a quarterly basis to ensure that the inspections are properly completed and that any necessary repairs have been completed.

The facility inspection will include the following:

- a. Tank Inspections - At a minimum, the tanks holding the spent parts washer solvents and used oil will be inspected each operating day. The inspection will include checks of the high level alarms, any releases, and of the volume held in the tank. Sudden deviations in waste volume will be investigated and their cause determined. If necessary, repairs will be initiated immediately. When the tanks are 85% full, a pickup will be scheduled. The fluid level will not exceed 95% of the tank volume at any time or an alarm will sound.

The secondary containment for the tanks will be checked for cracks or other deterioration. Any damage to the tanks (such as rust or loose fixtures) or secondary containment system will be noted and repairs initiated.

- b. Solvent Dispensing Equipment Inspections -The solvent dispensing hoses, connections and valves will be inspected for damage (such as cracks or leaks) and proper functioning. The pumps, pipes and fittings will also be checked for damage and proper functioning. Any damage to the solvent dispensing equipment will be noted and repaired.
- c. Drum Storage Area - The drum storage area is inspected daily and the number and condition of the drums noted. The total volume of the spent part washer solvent and other bulk liquids drums held in the drum storage area must not exceed ten times the amount that can be collected in the secondary containment. The drums must be properly labeled and marked in accordance with U.S.DOT and NYSDEC hazardous waste regulations. The secondary containment must be inspected for deterioration of coating, cracks and failures. If cracks or failure is noted, they must be repaired immediately.
- d. Return and Fill Station Drum/Washer Inspection - The wet dumpsters in the return and fill station will be inspected daily for leaks and sediment buildup. Any leaks will be noted and repaired promptly and excess sediment will be removed from the dumpsters. Check the condition of the seals and brush seals.

- e. Safety Equipment Inspections -The fire extinguishers will be checked to ensure that the units are charged and accessible. In addition, the operation of the eyewash units will be confirmed and the first aid kit, sorbents and decontamination equipment will be inspected for adequate content and accessibility. The communications system, consisting of the branch telephones (with loudspeakers), is used every day and is known to be in working condition.
- f. Security Inspection -The operation of each gate and lock will be inspected. In addition, the fence will be inspected for deterioration on a weekly basis.
- g. Safety Equipment Inspections -The fire extinguishers will be checked to ensure that the units are charged and accessible. In addition, the operation of the eyewash units will be confirmed and the first aid kit, sorbents and decontamination equipment will be inspected for adequate content and accessibility. The communications system, consisting of the branch telephones (with loudspeakers), is used every day and is known to be in working condition.
- h. Container Inspections - At a minimum, the parts washer containers stored at the facility in the permitted container storage areas of the warehouse will be inspected each operating day. The inspections include checks of the storage capacity, integrity of containers, integrity of secondary containment, and aisle space.

The drum storage area is inspected daily and the number and condition of containers is noted. The total volume of the spent parts washer solvent and other bulk liquid drums held in the storage area will not exceed ten times the amount that can be collected in the secondary containment, The drums will be properly labeled and marked in accordance with US DOT and NYSDEC hazardous waste regulations. The drums may be stacked provided they are stored on pallets in the permitted storage areas. The secondary containment is inspected for deterioration of coating, cracks, and failures. If cracks or failures are noted, they are repaired immediately.

## **APPENDIX II - A**

### Inspection Forms

**INSPECTION LOG SHEET FOR:  
WEEKLY INSPECTION OF SAFETY AND EMERGENCY EQUIPMENT, SECURITY DEVICES AND MISCELLANEOUS EQUIPMENT**

**INSPECTOR'S NAME/TITLE** \_\_\_\_\_

**Date** \_\_\_\_\_

**Time** \_\_\_\_\_

**SAFETY AND EMERGENCY EQUIPMENT**

**Fire Extinguishers:** A N

If "N", circle appropriate problem: overdue inspection, inadequately charged, access blocked, other: \_\_\_\_\_

**Eyewash and Shower:** A N

If "N", circle appropriate problem: disconnected or malfunctioning, inadequate pressure, access blocked, not clean, leaking, fluid not changed quarterly, other: \_\_\_\_\_

**First Aid Kits:** A N

If "N", circle appropriate problem: not stocked, not clean, access blocked, other: \_\_\_\_\_

**Spill Kits (check stock in each kit):** A N

If "N", circle appropriate problem: sorbent pads, sorbent boom, vermiculite or speedy dry, shovel, broom, other: \_\_\_\_\_

**Personal Protection Equipment  
(check supply in stock):** A N

If "N", circle appropriate problem: aprons, gloves, safety glasses, earplugs, alcohol swabs, other: \_\_\_\_\_

**Communication Devices:** A N

If "N", circle appropriate problem: inadequate supply of telephones, malfunctioning telephone(s), malfunctioning intercom, emergency alarm does not work, telephones are not located where needed, other: \_\_\_\_\_

**SECURITY DEVICES**

**Gates and Locks:** A N

If "N", circle appropriate problem: won't close, corrosion, lack of warning signs, other: \_\_\_\_\_

**Fence:** A N

If "N", circle appropriate problem, broken ties, corrosion, holes or gaps, distortion, other: \_\_\_\_\_

**MISCELLANEOUS EQUIPMENT**

**Trash Dumpster:** A N

If "N", circle appropriate problem: corrosion, damage, any materials other than normal trash, liquids in unit, other: \_\_\_\_\_

**Emergency Exits:** A N

If "N", circle appropriate problem: lights not functional, doors blocked, other: \_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS "NOT ACCEPTABLE".

DESCRIBE CORRECTIVE ACTION.

---

---

---

**INSPECTION LOG SHEETS FOR DAILY INSPECTION OF 12,000 GALLON USED OIL TANK**

Weekday	Monday	Tuesday	Wednesday	Thursday	Friday
Name					
Date					
Time					
Volume in Tank					

Mon.                      Tue.                      Wed.                      Thurs.                      Fri.

**Tank Exterior:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N" circle appropriate problem; corrosion, loose anchoring, ground strap, paint failure, leaks or wet spots, distortion, other: \_\_\_\_\_

**High Level Alarm:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: malfunctioning, malfunctioning siren/strobe light, other \_\_\_\_\_

**Volume Gauge:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: disconnected, sticking, condensation, other \_\_\_\_\_

**Tank Signs:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: missing, illegible, deteriorated, other \_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS "NOT ACCEPTABLE". DESCRIBE CORRECTIVE ACTIONS

---



---



---

# INSPECTION LOG SHEETS FOR DAILY INSPECTION OF 12,000 GALLON SPENT SOLVENT TANK

Weekday	Monday	Tuesday	Wednesday	Thursday	Friday
Name					
Date					
Time					
Volume in Tank					

Mon.                      Tue.                      Wed.                      Thurs.                      Fri.

**Tank Exterior:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N" circle appropriate problem; corrosion, loose anchors, grounding strap, paint failure, leaks or wet spots, distortion, other: \_\_\_\_\_

**High Level Alarm:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: malfunctioning, malfunctioning siren/strobe light, other \_\_\_\_\_

**Volume Gauge:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: disconnected, sticking, condensation, other \_\_\_\_\_

**Tank Signs:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: missing, illegible, deteriorated, other \_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS "NOT ACCEPTABLE". DESCRIBE ANY CORRECTIVE ACTIONS.

---



---



---

# INSPECTION LOG SHEETS FOR RETURN AND FILL EQUIPMENT

Weekday	Monday	Tuesday	Wednesday	Thursday	Friday
Name					
Date					
Time					

## TRANSFER PUMPS AND HOSES

**Pump Seals:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: leaks, other \_\_\_\_\_

**Motors:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: overheating, other \_\_\_\_\_

**Fittings:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: leaks, other : \_\_\_\_\_

**Valves:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: leaks, sticking, other \_\_\_\_\_

### **Hose Connections and Fittings:**

                  A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: cracked, loose, leaks, other \_\_\_\_\_

**Hose Body:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: crushed, thin spots, leaks, other \_\_\_\_\_

## RETURN AND FILL STATION

**Wet Dumpsters:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle appropriate problem: sediment buildup, leaks, rust, seams. Door seals, liquid level, door switch, other \_\_\_\_\_

**Ventilation Fan:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N" circle appropriate problem: inoperative, shutters jammed, other \_\_\_\_\_

**Containment:**                    A    N                    A    N                    A    N                    A    N                    A    N

If "N" circle problem: spills, leaks, deterioration, debris, other \_\_\_\_\_

**Satellite Accumulation** A    N                    A    N                    A    N                    A    N                    A    N

If "N", circle problem: labels, closure, other \_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS "NOT ACCEPTABLE". DESCRIBE ANY CORRECTIVE ACTIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



TANK DIKE and TRUCK TRANSFER PAD

**IMPORTANT! Any material which spills, leaks, or accumulates in the dike, including rainwater, and any accumulated dirt must be completely removed within 24 hours of discovery.**

Weekday	Monday	Tuesday	Wednesday	Thursday	Friday
Name					
Date					
Time					

**Floor, Walls**

A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem; cracks, debris in dike, open drums in dike, accumulated liquid, stains, corrosion, deterioration, leaks, other:\_\_\_\_\_

**Rigid Piping and Supports**

A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: distortion, corrosion, paint failure, leaks, other:\_\_\_\_\_

**Valve Access Box**

A   N                      A   N                      A   N                      A   N                      A   N

If "N", describe appropriate problem: missing camlock caps, dirty sorbents, spills, leaks, other\_\_\_\_\_

**Truck Pad**

A   N                      A   N                      A   N                      A   N

A   N

If "N", circle appropriate problem: liquid or debris in trench, cracks, spills, other\_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS "NOT ACCEPTABLE". DESCRIBE ANY CORRECTIVE ACTIONS.

---

---

---

---

**Check for leaks, missing tags, and damage.**

Weekday	Monday	Tuesday	Wednesday	Thursday	Friday
Name					
Date					
Time					

Pump, Flange, or Valve #	<u>MONDAY</u>	<u>TUESDAY</u>	<u>WEDNESDAY</u>	<u>THURSDAY</u>	<u>FRIDAY</u>
1. Cam Lock	A N	A N	A N	A N	A N
2. Gate Valve	A N	A N	A N	A N	A N
3. Check Valve	A N	A N	A N	A N	A N
4. Flange	A N	A N	A N	A N	A N
5. Gate Valve	A N	A N	A N	A N	A N
6. Emergency Valve	A N	A N	A N	A N	A N
7. Emergency Valve	A N	A N	A N	A N	A N
9. Cam Lock	A N	A N	A N	A N	A N
10. Check Valve	A N	A N	A N	A N	A N
11. Solvent Pump	A N	A N	A N	A N	A N
12. Strainer Assembly	A N	A N	A N	A N	A N
13. Spring Valve	A N	A N	A N	A N	A N
14. Gate Valve	A N	A N	A N	A N	A N
15. Ball Valve	A N	A N	A N	A N	A N
16. Ball Valve	A N	A N	A N	A N	A N
17. Recirculating Pump	A N	A N	A N	A N	A N

Pump, Flange, or Valve #	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
18. Ball Valve	A N	A N	A N	A N	A N
19. Gate Value	A N	A N	A N	A N	A N
20. Ball Valve	A N	A N	A N	A N	A N
21. Ball Valve	A N	A N	A N	A N	A N
22. Recirculating Pump	A N	A N	A N	A N	A N
51. Vent Assembly*	A N	A N	A N	A N	A N
52. Conservation Vent*	A N	A N	A N	A N	A N
53. High Level Alarm Assembly*	A N	A N	A N	A N	A N
54. Loose Bolt Manway*	A N	A N	A N	A N	A N
55. High Level Gauge Assembly*	A N	A N	A N	A N	A N
56. Fill Port Assembly	A N	A N	A N	A N	A N
57. Flange	A N	A N	A N	A N	A N
58. Plug	A N	A N	A N	A N	A N
59. Manway	A N	A N	A N	A N	A N
60. Plug	A N	A N	A N	A N	A N
61. Plug	A N	A N	A N	A N	A N

\* Not subject to Subpart BB

**A NUMBERED TAG MUST BE ATTACHED TO EACH PIECE OF EQUIPMENT (except those marked with an asterisk)**

**For all leaks and potential leaks, the *Leak Detection and Repair Record* must be completed (file # 1220.2).**

Describe any problems and corrective actions taken: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**R/F #1 INSPECTION LOG SHEETS (dock)**

Total capacity 400 gallons waste, 2000 gallons combined product and waste (assume all containers are full)

Weekday	Monday		Tuesday		Wednesday		Thursday		Friday	
Name										
Date										
Time										
5-gallon	Number	Gallons	Number	Gallons	Number	Gallons	Number	Gallons	Number	Gallons
waste										
product										
<b>16-gallon</b>										
waste										
product										
<b>30-gallon</b>										
waste										
product										
<b>TOTAL (gallons)</b>										

Mon.                      Tue.                      Wed.                      Thurs.                      Fri.

**Condition of Containers:**

A   N                      A   N                      A   N                      A   N                      A   N

If "N" circle appropriate problem: improper closure (lids), missing, incorrect or incomplete labels, rust, leaks, distortion, other \_\_\_\_\_

**Stacking/Placement/Aisle Space:**

A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: 2' of aisle space, unstable drum stacks, other \_\_\_\_\_

**CONTAINMENT**
**Curbing, Floor, and Sump(s):**

A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: spills, cracks, gaps, chips, leaks, bad caulk, other \_\_\_\_\_

**Loading/Unloading Areas:**

A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: cracks, deterioration, spills, other: \_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS NOT ACCEPTABLE. DESCRIBE CORRECTIVE ACTION

**R/F #2 INSPECTION LOG SHEETS (Concrete Pad)** Total capacity 2,160 gallons waste of PWS only

Weekday	Monday		Tuesday		Wednesday		Thursday		Friday	
Name										
Date										
Time										
	Number	Gallons	Number	Gallons	Number	Gallons	Number	Gallons	Number	Gallons
5-gallon										
16-gallon										
30-gallon										
TOTAL (gallons)										

Mon.                      Tue.                      Wed.                      Thurs.                      Fri.

**Condition of Containers:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N" circle appropriate problem: improper closure (lids), missing, incorrect or incomplete labels, rust, leaks, distortion, other\_\_\_\_\_

**Stacking/Placement/Aisle Space:**    A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: 2' of aisle space, unstable drum stacks, other\_\_\_\_\_

**CONTAINMENT**

**Curbing, Floor, and Sump(s):**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: spills, cracks, gaps, chips, leaks, bad caulk, other\_\_\_\_\_

**Loading/Unloading Areas:**                      A   N                      A   N                      A   N                      A   N                      A   N

If "N", circle appropriate problem: cracks, deterioration, spills, other:\_\_\_\_\_

OBSERVATIONS, COMMENTS, DATE AND NATURE OF REPAIRS OF ANY ITEMS INDICATED AS NOT ACCEPTABLE. DESCRIBE CORRECTIVE ACTION

---



---



---

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER  
EPA ID No. NYD 980753784**

**ATTACHMENT C  
WASTE ANALYSIS PLAN**

**ATTACHMENT C**

**WASTE ANALYSIS PLAN**

**ABSTRACT**

The Avon Service Center will manage a variety of regulated and non-regulated waste. The majority of this waste is handled on a transfer basis in accordance with applicable USDOT and New York regulations. Hydrocarbon and aqueous parts washer solvents are managed for storage at the facility. These materials will be stored in a permitted 12,000-gallon, bulk storage tank and in container storage areas with a maximum waste storage capacity of 2,560 gallons. The primary focus of this plan is on how the Avon facility will obtain data to ensure that the parts washer solvents destined for on-site commingling and storage are properly characterized and safely managed. Information is also provided on the general characteristics and practices employed for the management of transfer and on-site generated material.

<b>Waste Description</b>	<b>Typical Waste Codes</b>	<b>Facility Capacity in gallons</b>	<b>Permitted Waste Codes</b>	<b>Estimated Annual Amount in 1000s of gallons</b>
Safety-Kleen Solvent hydrocarbon and aqueous based)	D001, D006, D008, D018, D027, D039, D040, & non-hazardous	12,000 gallons (tank)	D001, D004-D011, D018, D019, D021-D030, D032-D042, D043 non-hazardous	160
		2,160 gallon container storage on the concrete pad RF#2		
		400 gallons container storage on R/F #1		

<b>Waste Description</b>	<b>Typical Waste Codes</b>	<b>Facility Capacity in gallons</b>	<b>Permitted Waste Codes</b>	<b>Estimated Annual Amount in 1000s of gallons</b>
Non-hazardous used oil	none	20,000 gallons in a tank permitted under Part 360, 12,000 gallons in a tank permitted under Part 373	none	1,000



## ATTACHMENT C - WASTE ANALYSIS PLAN

### 1.0 INTRODUCTION

This Waste Analysis Plan has been prepared for the Avon Service Center. The facility will function as a permitted storage area for the management of hydrocarbon and aqueous based parts washer solvents. These materials will be stored in permitted container storage areas with a maximum storage capacity of 2560 gallons, and are commingled in a 12,000-gallon bulk storage tank. Additionally, portions of the facility will be used for the management of on-site generated materials as less than 90-day storage exempt generator waste and containerized waste with active shipping papers on a 10 day transfer basis. The transfer material is handled in accordance with applicable USDOT and New York regulations.

The facility will also manage used non-hazardous oil in two tanks. One of these tanks is permitted under Part 360 and the other is permitted under Part 373 (this permit). Hazardous waste oil is not managed in either of these tanks. The used oil in both tanks is managed in accordance with Part 374-2. The approved used oil quality control plan in Safety-Kleen's Part 360 permit for this facility is followed for the oil managed in both of these tanks.

The following plan includes information on hazardous wastes and non-hazardous wastes that are handled at the Service Center. The primary emphasis of this plan is how the facility will obtain sufficient information to evaluate whether the waste hydrocarbon and aqueous based parts washer solvents can be received and safely handled at the Service Center.

Because the remaining containerized waste material handled at the Service Center is physically separated from the parts washer solvent handling areas; is not terminated at the facility; and remains in transit while managed at the Service Center (or is generated by the facility), no regulatory-specific waste acceptance criteria for these wastes is required.

### 2.0 DESCRIPTION OF BUSINESS ACTIVITY

The Avon Service Center is an accumulation point for spent solvents, dry cleaning wastes, paint related wastes, automotive wastes and various other spent industrial and automotive materials. A majority of these wastes are handled on a USDOT transfer basis. Only the hydrocarbon and aqueous- based parts washer solvents are terminated for storage. Wastes are ultimately transported off-site to a Safety-Kleen Recycle/Process Center or a contract reclaimer.

Safety-Kleen is an international service-oriented company whose customers are primarily engaged in automotive repair, industrial maintenance, manufacturing, photo processing and dry cleaning. The company has been operating since 1968 offering waste collection and reclamation services for its 400,000 customers, more than 95 percent of whom generate less than 1,000 kilograms (2,200 pounds) of waste per month. Safety-Kleen's facility provides waste management and recycling services to approximately 4,000 businesses, the majority of which are small businesses and small quantity generators.

Wastes managed by the facility are transported from the Service Center to one of Safety-Kleen's Recycle/Process Centers and in many instances the recovered materials are returned to customers as usable product. A unique feature of Safety-Kleen's solvent service is that Safety-Kleen provides the customer with the solvents, recycles the spent solvents, and returns them to the customer for re-use. This system allows Safety-Kleen to maintain control of the solvents except while they are in use at the customer's place of business. In addition, Safety-Kleen may accept spent parts

washer solvent from new customers at the time of first service. Such solvent will meet Safety-Kleen acceptance criteria as if it is Safety-Kleen's distributed solvent provided the generator demonstrates that it is similar based on information sources such as material safety data sheets. The facility also provides assistance to waste generators for the proper transport and management of a variety of spent automotive and industrial materials. These materials are handled in containers and managed by the service center on a transfer basis in accordance with relevant USDOT and New York regulations. A description of the waste management service provided by the facility is detailed below. Information relative to the on-site generated wastes and the transfer waste management services offered by the facility is also included.

## **2.1 Parts Washer Service**

The original service offered by Safety-Kleen in 1968 was the Parts Washer Service and it remains the primary business activity. This service involves the leasing of a parts washer unit containing Safety-Kleen parts washer solvent. Safety-Kleen also provides this service for users who own their own parts washer machines. The parts washer solvents are typically hydrocarbon based solvents (i.e. mineral spirits) used for parts cleaning. Safety-Kleen also offers an aqueous based solvent for use in parts cleaning. Both the hydrocarbon and aqueous based parts washer solvents are used and managed in the same fashion. On a regularly scheduled basis, a Safety-Kleen sales representative cleans and inspects the parts washer machine and replaces the used solvent with clean product. Each sales representative performs about fifteen of these services per day, collecting the containers of used solvent on a route van.

When returned to the facility, the hazardous and non-hazardous, hydrocarbon and aqueous based parts washer solvents are transferred from the containers to a permitted, hazardous waste storage tank and containers of product are prepared for the next services. Periodically, a tanker truck is dispatched from one of the Recycle/Process Centers to deliver a load of clean product and collect the spent solvents at the Service Center. The spent solvents are transported to a Safety-Kleen Recycle/Process Center.

## **2.2 On-Site Generated Wastes**

As a result of operating and maintaining the facility, waste is generated on site. The facility possesses sufficient knowledge to properly handle and store this waste prior to shipping it off-site. Additional information regarding the on-site generated wastes is provided elsewhere in this document.

## **2.3 Transfer Waste Management Waste Service (for information only)**

The Avon Service Center offers a service to collect and process various organic and inorganic solvents and chemical wastes from its industrial and automotive customers. These wastes are not generated from Safety-Kleen supplied solvents. They are generated from a variety of processes and vary from customer to customer. These containerized wastes are managed at the facility as 10-day storage exempt wastes incidental to transport. They are temporally stored in the transfer container areas of the warehouse.

The wastes managed on a transfer basis may be ignitable and may display USEPA toxic characteristics, may be listed wastes or may be non-hazardous. These wastes are collected and transported in appropriate DOT specification containers, and are stored in the transfer container

management areas in the warehouse. The wastes are packaged in accordance with applicable USDOT regulations on packaging, and are classified and segregated in accordance with 49 CFR 173.2(a) and 177.848. Labpacks are packaged in accordance with 49 CFR 173.12(b). These transfer wastes are transported from the Service Center to a Safety-Kleen Recycle/Process Center or contract reclaimer within 10 days of receipt.

### **3.0 WASTE DESCRIPTIONS**

Various types of wastes are handled by the Service Center. Parts washer solvents and solutions are managed in both tanks and containers. All wastes are assumed to contain free liquids, so the bulk storage tank, transfer container management areas and the return and fill station are provided with secondary containment systems. This Section provides descriptions of the waste streams terminated and stored at the Service Center and their associated hazardous characteristics and/or constituents. For informational purposes, similar data is provided for on-site generated wastes and for wastes that will be managed on a 10-day transfer basis.

The only type of hazardous and non-hazardous wastes accepted for bulking and storage from off-site generators at the Service Center are listed below:

- Spent Safety-Kleen hydrocarbon based parts washer solvents
- Spent aqueous parts washer solutions
- Non-hazardous used oil

Spent parts washer solvents and solutions may be either hazardous or non-hazardous.

In addition to the above listed materials, several types of waste material are generated on-site as a result of operations. These wastes include but are not limited to the following:

- Wastes From Tanks,
- Contaminated Gloves, Rags, Paper, Absorbent, etc.,
- Wastes from The Return and Fill Station.
- Aqueous container cleaning material and residual dike water (rain water and spills collected in the regulated secondary containment dikes). These wastes may be transferred into the spent solvent storage tank.

An overview of the general characteristics and types of waste destined for management at the facility follows.

### **3.1 Permitted Storage Wastes**

#### **3.1.1 Parts Washer Service Wastes**

##### **3.1.1.1 Hydrocarbon Based Parts Washer Solvent**

Safety-Kleen offers high-flash mineral spirits based solvents for the parts washer machines. The high flash solvents (i.e., with flash points greater than 140° F) provided to the customer may be returned as hazardous or non-hazardous, depending on the customer's use of the parts washer machine.

Hazardous and non-hazardous mineral spirits parts washer solvents from parts washer machines are commingled and accumulated in a 12,000-gallon, aboveground hazardous waste storage tank through the return and fill station. Containers holding hazardous and non-hazardous parts washer solvents are poured into the drum washer/dumpster unit at the return and fill station and then pumped into the tank.

Reviews of Safety-Kleen waste sampling and annual re-characterization studies reveal a great deal about the spent hydrocarbon based parts washer solvents. Analyses of spent hydrocarbon solvents typically show low concentrations of total organic halogens ranging from 0.01 to 0.10 percent. Detectable levels of metals and non-halogenated volatiles are also present but are below TC levels.

The recycled parts washer solvents delivered to a customer typically possess a clear or green color, which degrades to a brown or blackish color as it is used depending on the use of the solvent. Virgin (non-recycled) parts washer solvent may be clear. The spent parts washer solvent generally retains the characteristic odor of the recycled parts washer solvent delivered to the customer.

Historically, the hazardous, hydrocarbon-based parts washer solvents typically have had a flash point ranging between 102 and 140 F. However, Safety-Kleen has discontinued the use of lower flash point mineral spirits. As expected, the flash point of spent solvents does not differ significantly from the flash point of the unused material (i.e. 148° F). The specific gravity of spent hydrocarbon-based parts washer solvent typically ranges from 0.7 to 0.9. The spent mineral spirits are not corrosive (D002) and are not reactive (D003).

#### 3.1.1.2

#### Aqueous Based Parts Washer Solutions

The aqueous-based parts washer solution is approximately 95% water and 5% active ingredients (surfactants) instead of hydrocarbon based solvents. It has been developed as an alternative for those customers that do not want to use mineral spirits solvents. The Clean Air Act, health and safety concerns, and waste minimization are possible reasons for a customer to use an aqueous parts washer. The aqueous solutions are typically used in the same manner and application as the mineral spirits.

Organic analyses indicate that depending on use, spent aqueous solution may be either hazardous or non-hazardous. Constituents present in the aqueous-based parts washer waste may include low levels of metals and organics. These constituents may include perchloroethylene, trichloroethylene, barium, chromium, and lead. Review of Safety-Kleen's analytical data indicates that only perchloroethylene has exceeded established regulatory thresholds.

As expected, the flash point for the aqueous material is well above the regulatory limit. Data indicates the flash point consistently exceeds 200 F. Additional analytical data indicates that the specific gravity of the material ranges from 0.95 to 1.08.

Hazardous and non-hazardous aqueous based parts washer solutions from parts washer machines are commingled and accumulated in the 12,000-gallon, aboveground hazardous waste storage tank. (These solvents are commingled with the hydrocarbon-based material. The resulting material is managed as hazardous waste). Containers holding aqueous parts washer solution are poured into the drum washer/dumpster unit at the return and fill station and then pumped into the tank.

The commingled solvent and solution is removed from the hazardous waste storage tank by a tanker truck on a regularly scheduled basis. Approximately 6,000-7,000 gallons are removed from the storage tank every two or three weeks. Based on the most recent analysis this material carries the D001, D018, D039, and D040 waste codes.

#### 3.1.1.3 Used Oil

Non-hazardous used oil is collected from generators and unloaded into two bulk storage tanks. Halogen screening is performed on each load of used oil before it is unloaded. If the screening indicates that the halogen content is below 1,000 ppm, the oil may be unloaded in the tanks. Oil that contains more than 1,000 ppm total halogens is not unloaded unless the presumption is successfully rebutted. Complete details on used oil quality control may be found in the facility Used Oil Quality Control plan which is part of the facility Part 360 permit.

### 3.2 On-Site Generated Wastes

#### 3.2.1 Tank Waste

Periodically, it may be necessary to remove the spent parts washer solvent tank bottom sediment, consisting of free water and other heavy materials such as grit and metal filings that may accumulate in the spent parts washer solvents, from the bottom of the hazardous waste storage tank. A vacuum truck is used for this purpose. This waste may be ignitable (D001) and may exhibit several of the toxicity characteristics. This waste is generated on-site by Safety-Kleen and is not a waste accepted from an off-site generator.

#### 3.2.2 Contaminated Gloves, Rags, Paper, Absorbent, etc.

Contaminated gloves, rags, paper, absorbent and other miscellaneous material such as personal protective equipment is generated by the facility as a result of the management of hazardous wastes. Each operating day this material is placed into containers. This waste may be ignitable (D001) and may exhibit several toxicity characteristics. This waste stream is generated on-site by Safety-Kleen and is not a waste accepted from an off-site generator.

#### 3.2.3 Drum Washer/Dumpster Waste

Sediment also accumulates at the bottom of the drum washer/dumpster units in the return and fill station. Periodically this sediment is manually removed and placed into containers. The chemical composition and hazardous characteristics of this waste are similar to that of the spent parts washer solvents tank bottom sediment and may have the same hazardous waste codes. Like the tank bottom sediment described above, this waste is generated on-site by Safety-Kleen.

### **3.3 Transfer Waste Management Service (for information only)**

A variety of hazardous and non-hazardous wastes are accepted as 10-day storage exempt wastes and managed on a USDOT transfer basis under this program. These wastes will be collected and transported in appropriately approved containers and placed in one of the transfer container management areas at the facility. These wastes will be transported from the Service Center to a Safety-Kleen Recycle/Process Center or contract reclaimer within the regulatory required time frame(s).

## **4.0 WASTE ACCEPTANCE CRITERIA**

Hydrocarbon and aqueous based parts washer solvents and used oil are the only waste materials that the facility accepts for storage from off-site generators. Other materials handled by the facility will either be generated on-site or managed as 10-day storage exempt wastes on a USDOT transfer basis in accordance with pertinent USDOT and New York regulations. Given these management practices, procedures have been established to provide that the waste materials accepted for storage (i.e., parts washer solvents) are adequately characterized. The following sections describe the acceptance criteria for the parts washer wastes destined for bulking and storage at the Service Center. For informational purposes, similar data is also provided on the other wastes managed by the facility.

### **4.1 Acceptance Criteria**

#### **4.1.1 Parts Washer Solvents**

The waste acceptance criteria for the Service Center incorporate Safety-Kleen's historical knowledge of the parts washer solvents managed by the company, and its understanding of the closed loop system. Based on this background, the facility has developed a plan that uses qualitative and quantitative acceptance criteria for these solvents. This approach incorporates an assessment of how the generator will use the solvents (i.e., generator/customer audit) and a series of evaluations consisting of visual screening, specific gravity, and material observations to evaluate whether the parts washer solvent wastes meet certain acceptance criteria before it is picked up.

The parts washer solvents acceptance criteria is designed to identify the presence of significant and unusual contamination that is not expected, based upon the normal manner in which the parts washer wastes are generated. These criteria center on evaluating the acceptability of the waste at the point of generation (i.e., prior to transport). Experience has shown that the acceptance criteria detailed below provide an efficient way to evaluate the parts washer solvents and to identify customers that are not utilizing the solvent in the manner that it was intended.

##### **4.1.1.1 Customer/Generator Profile and Audits**

To evaluate the nature, the variability of the waste and the potential for unacceptable contamination, Safety-Kleen will establish a Customer/Generator Profile/Audit (profile) for parts washer solvent customers prior to the initial acceptance of the solvent. This profile includes the information necessary to characterize the solvent for acceptance. Specifically, this will include generator information regarding the process that generated the waste, possibilities of cross contamination by other wastes and baseline information pertaining to color, odor, consistency, specific gravity, and appearance. This information is used to determine acceptability of future waste

pickups. Copies of the profiles are kept on file for at least 5 years.

The waste profiles will be completed by the facility and the on-site audit will be done by a Safety-Kleen representative together with the facility representative for each industrial-based customer prior to the initiation of service (i.e., when the customer signs up for Safety-Kleen's parts washer service) and annually thereafter. For non-industrial based operations (i.e., those primarily engaged in the automotive business) a profile and on-site audit will be completed only at the initiation of the parts washer service. No parts washer wastes will be accepted from a customer until the profile is complete. The profile includes:

- general facility information
- USEPA generator status
- waste information
- process data
- information on other waste streams
- generator certifications

The intent of the profile is also to evaluate the potential contaminants that may be introduced into the parts washer solvents. Particular attention is focused on identifying sources of adverse contamination. This adverse contamination may come from pesticides, herbicides or strong oxidizers. Should such a possibility exist, the process will be reviewed with the customer to provide that the parts washer solvents are not adversely impacted.

The profile form includes a certification to be signed by the generator and a Safety-Kleen representative. A copy of the profile form is provided in Appendix I-A. The format of this form may change without requiring prior approval from NYDEC. However, any change in the content of the audit document would require approval through the permit modification process from NYDEC.

#### 4.1.1.2 Screening Tests for Waste Acceptance

Safety-Kleen will test the specific gravity and visually inspect each container of parts washer waste when it is collected at the customer's location. Based on its historical knowledge and understanding of the parts washer solvents' typical waste characteristics and information provided on the profile, Safety-Kleen has established the specific acceptance criteria set forth below, to be used by Safety-Kleen personnel for waste acceptance. These acceptance criteria allow Safety-Kleen to check and ensure that every container of the parts washer waste picked up is not adversely contaminated (i.e., misused and/or inadvertent disposal of unacceptable wastes) and is the same as described in the profile.

As stated in section 3.1.1.1, the specific gravity of spent solvent typically ranges from 0.7 to 0.9 for mineral spirits and from 0.95 to 1.08 for aqueous solutions. In view of the narrow range of these specific gravities, this is considered an important waste acceptance parameter for evaluating the waste prior to pick up.

The visual inspection criteria for evaluating spent parts washer solvents are volume, appearance (i.e., color and consistency) and odor. The container type, size and color are also used as inspection tools. Parts washer solvent is typically distributed by Safety-Kleen in 30, 16, and five-gallon containers holding approximately 23, 12 and five gallons, respectively. Thus, when the waste solvent is collected, and if no additional material has been added to the waste, these containers should hold approximately 23, 12 and five gallons, respectively. Prior to acceptance, the sales

representative measures the contents of the container and checks the specific gravity to provide that the volume requirement is appropriate. If the volume guideline or specific gravity range is not consistent with the generator's profile, the service representative will not transport the waste back to the facility until an investigation is completed and it is determined that the waste is acceptable for receipt at the facility.

The parts washer waste is also visually inspected for its color. Unused parts washer solvent has a clear or greenish tint. Typically, as the solvent is used, it turns brown in color. The more it is used, the darker brown it becomes, until it is almost black. However, in certain applications, such as the cleaning of printing inks, the solvent takes on a color unique to its application. If the spent solvent does not appear to be the color identified on the profile, Safety-Kleen will question the generator to assess the cause of the color variation. If a plausible explanation is not given, the waste is not accepted at the facility.

The parts washer solvents have a distinctive odor. If the waste is contaminated, the sales representative may notice a difference in the odor identified on the profile. For health and safety reasons, sales representatives are instructed not to purposely sniff any waste materials. However, if unusual or uncharacteristic odors are noticed during the routine handling of these materials, this information is not to be ignored and will be utilized as part of the waste acceptance procedure.

Together with specific gravity, volume, appearance and odor, the type, size and color of the parts washer solvent container are also used as an integral part of the acceptance criteria. The facility will utilize containers of specific size and design for the management of parts washer solvent. These containers are easily recognized. Hydrocarbon-based solvents are managed in steel, 16- and 30- gallon, open-topped containers. These containers are identified by USDOT as UN 1A2 units. The hydrocarbon-based parts washer solvent containers are also color-coded. The 16- and 30- gallon, UN 1A2 containers are green or red.

Aqueous-based solvent is also managed in 16 and 30- gallon, USDOT specified UN 1A2 and 1H2, open-topped containers. These containers are readily identified based on the blue or black color.

In addition to these containers, a 5-gallon, closed-head, plastic unit is used for hydrocarbon and aqueous parts washer solvents. The uniquely shaped containers (USDOT specified UN 3H1) are further distinguished by color - black for hydrocarbon solvents and blue for aqueous solutions. Table I - 1 summarizes the type, size and color of the parts washer solvent containers used by the Service Center.



**TABLE I-1**  
**Summary of Parts Washer Solvent Containers -**  
**Container Color and Type**

Safety-Kleen Systems, Inc.  
Avon, New York

WASTE TYPE	TYPICAL WASTE CODES	DRUM TYPES	SIZE OF EACH DRUM	DRUM COLOR
SK Solvents (Hydrocarbon and Aqueous)	D001, D006, D008, D018, D027, D039, D040 & Non-hazardous.	UN 1A2 (Steel)	16, 30 16, 30	Red Green
		UN 1A2 (Steel)	16, 30	Blue
		UN1H2 (plastic)	16,30	Black Black
		UN 3H1 (Plastic)	5	Blue

The container identification criteria are supported by a waste label that identifies the contents. Each container of parts washer solvent; regardless of container type, size or color; will have a waste label identifying the contents. It identifies the waste as hazardous or non-hazardous, lists generator information, and contains tracking information. This descriptive identification labels, specific container size, type, and color will ensure that the spent parts washer solvents will not be contaminated by inadvertent commingling with other transfer waste managed at the facility while bulking the solvents into the storage tank.

The specific containers that Safety-Kleen uses for parts washer solvents are not used for other wastes and are not supplied to customers for uses other than parts washer service. Containers of parts washer solvents are readily distinguished from other wastes. They are only managed in containers of specified color, size, and type. They are further distinguished by the labels described in this WAP.

Transfer wastes in drums that are not distinguishable from permitted waste drums as described above will not be transported along with the permitted wastes in the same transport vehicles, handled in the loading/unloading docks, or stored in the same areas where permitted wastes are managed or stored.

Thus, the visual screening and material observations conducted for each waste pick up prior the collection of waste includes the following:

- Specific gravity
- volume of solvent,
- color of solvent,
- incidental odor,
- type/design of container,
- size of container,

- color of container, and
- descriptive label.

Table I-2 summarizes the qualitative acceptance criteria for the parts washer solvents. If these qualitative acceptance criteria are met, the sales representative will accept the waste. Acceptance will be documented on the service document or on a qualitative acceptance criteria checklist form (see Appendix I - A). This information is summarized to document the inspection process at each customer location. The format of the qualitative acceptance criteria checklist may change without requiring prior approval from NYDEC. However, any change in the content of the checklist would require approval from NYDEC through the permit modification process. The checklist is maintained in the respective customer file for at least five years.

If the waste does not meet the qualitative acceptance criteria, the customer will be interviewed to evaluate whether an acceptable reason exists for the non-conforming criteria. If an acceptable reason is not provided, the Safety-Kleen service representative will either (1) quantitatively evaluate the waste by sampling the waste for testing at an ELAP laboratory to evaluate whether the waste has been contaminated; or (2) reject the container of waste. In either event, the waste container will be left at the customer's location.

**TABLE I-2**  
**Summary of Acceptance Parameters and Criteria**

<b>Waste Description</b>	<b>Acceptance Parameter</b>	<b>Acceptance Criteria *</b>
Spent Parts Washer Solvent	Waste Profile	Prior to initiation of service
	Volume	No greater than amount supplied
	Color	As specified in profile
	Incidental odor <sup>1</sup>	No unusual or uncharacteristic odor
	Container type, size, and color	16/30 gallon UN1A2 steel in red, green, or blue 5 gallon UN 3H1 plastic in blue or black
	Container Labeling	Waste label
	Specific gravity	Range specified in profile
Transfer Waste	Container Labels	Properly completed
	Container condition	Good conditions with no bulging, leaks, significant corrosion, etc.
<p>* Based on the generator's waste profile.</p> <p><sup>1</sup> For health and safety reasons service personnel are instructed not to sniff waste materials. However, if unusual or uncharacteristic odors are noticed during routine handling of these materials, this information will be utilized as part of the waste acceptance procedure.</p>		
Labpacks will be packaged in accordance with 49 CFR 173.12(b).		

If the parts washer waste is sampled for further analysis, a trained technician will take a sample of the waste and then seal the container and label it as hazardous waste. The drum will remain with the customer pending the results of the laboratory analysis. Sampling will be performed using the methods specified in Table I - 3. The laboratory analysis will involve analyzing the suspect waste for flashpoint, specific gravity, pH and the presence of halogenated volatile organic compounds ( see Table I - 4 for specific laboratory procedures).

**TABLE I-3.**

**Methods Used To Sample Hazardous Wastes**

**Safety-Kleen Systems, Inc.  
Avon, New York**

<b><u>Waste</u></b>	<b><u>Reference for Sampling</u></b>	<b><u>Description of Sampling Method</u></b>
Spent Safety-Kleen Solvent In Tank	Sampling a tank <sup>1</sup> "Samples & Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018	Test Methods Evaluation of Solid Waste/Physical/Chemical Methods, SW846, Current Edition Chapter 9
Drum Washer Sediment, Spent S-K Parts Washer Solvent	Sampling a drum <sup>1,2</sup> "Samples & Sampling Procedures for Hazardous Waste Streams" EPA-600/	Test Methods Evaluation of Solid Waste/Physical/Chemical Methods, SW846, Current Edition2-80-018 Chapter 9

---

<sup>1</sup>Sampler: Representative sample using a Coliwasa tube or other appropriate means.

<sup>2</sup>Sampler: Representative sample using a sample jar, stainless steel trowel, auger, shovel, or other appropriate means.

Note: The EPA Guidance Manual, Waste Analysis At Facilities That Generate, Treat or Store and Dispose of Hazardous Wastes, PB94-963603, OSWER 9938.4-03, April 1994, is also utilized as a reference.

**TABLE I-4**

**Quantitative Waste Analysis Parameters**

**Safety-Kleen Systems, Inc.  
Avon, New York**

<b>Waste Description</b>	<b>Parameter</b>	<b>Test Method<sup>1</sup></b>
Spent Parts Washer Solvents	Halogenated Volatile Organic Analysis	SK 9209 or SW-846 8260
	Specific Gravity	SK 9903
	Flash Point	SK 9401 or SW-846 1010 or 1020
	pH	SK 9906 or SW-846 9040 or 9045
NOTES: <sup>1</sup> Safety-Kleen methods are adopted from SW-846 Methods. SOPs for SK Methods are provided in Appendix I-B.		

If the laboratory analysis reveals that the sampled waste is not contaminated with unacceptable constituents, Safety-Kleen will accept the waste from the customer. If the laboratory confirms that the waste is adversely contaminated, the generator will be responsible for securing an alternate means of disposal.

Empirical data indicates that the acceptance criteria detailed above are effective in providing that the parts washer solvents from off-site generators are adequately screened so that wastes containing significant or unusual contamination are not accepted.

**4.1.2 On-Site Generated Wastes**

The spent parts washer solvents tank bottom sediment, gloves, absorbents, paper, dumpster sediment and other miscellaneous materials are generated as a result of operating and maintaining the facility. As the generator, the facility possesses sufficient knowledge regarding the wastes to properly handle and store it prior to sending in off-site. Therefore, no specific acceptance parameters are considered necessary for these waste streams.

**4.1.3 Transfer Waste Management Service (for information only)**

The qualitative acceptance parameters for evaluating whether transfer wastes are acceptable will be container labeling and container condition. The sales representative will visually inspect the transfer waste container label and compare it to the shipping paper to assess whether it matches. The sales representative will also inspect the integrity of the container to ensure it is in good condition and is not bulging, corroded, etc. If these acceptance criteria are met, the sales representative will transport the waste. If these criteria are not met, the container will not be managed by the sales representative until the issue(s) is corrected and the inspection criteria are satisfied.

## **4.2 Frequency Of Analysis**

Table I - 5 details the frequency for performing qualitative and quantitative analyses for the parts washer solvents and transfer wastes.

## **4.3 Annual Analytical Re-characterization**

Safety-Kleen conducts adequate routine analysis for each consignment of closed loop waste streams (parts washer solvents) accepted at the recycle centers from the facility to confirm the identity and characteristics of the waste. Therefore, the annual analysis is substituted by an annual process description and on site audit of the generator as described in Table 1.5. The results of the above referenced routine analysis and generator audit/profile forms is entered into the operating record. In addition, the Avon facility participates in Safety-Kleen's annual analytical re-characterization program. This program is designed to further the company's knowledge and understanding of the spent parts washer solvents by documenting the typical waste characteristics of the parts washer wastes. Essentially, the program consists analysis of random parts washer waste samples collected from Safety-Kleen customers. The waste streams and the annual re-characterization analytical parameters for the Avon facility are included in Table 1-6.

The spent hydrocarbon and aqueous parts washer solvents may exhibit toxicity characteristics for constituents with waste numbers D004-D011, D018, D019, D021- D030 and D032-D043. To document typical characteristics, a toxicity characteristic leaching procedure (TCLP) analysis, (corrosivity), flash point (ignitability) and specific gravity are performed as part of the annual analytical re-characterization.

The information garnered from the combined analytical re-characterization program is statistically evaluated. The resulting database serves as the foundation for defining the typical waste codes for the parts washer solvents. The annual re-characterization data is provided to customers who may use it to supplement their "generator knowledge" of the spent Safety-Kleen parts washer solvent generated at their locations.

**TABLE I-5****Waste Analysis Frequencies**

<b>Waste Description</b>	<b>Parameter</b>	<b>Frequency<sup>1</sup></b>
Spent Parts Washer Solvents Industrial Customers	Profile	At initiation of service to customer
	Volume, Appearance, Incidental Odor, drum type/color, labels	Every container at the point of service.
	Specific Gravity	Every container at the point of service.
	Flash Point, pH, Specific Gravity, HVOCs	If waste fails acceptance criteria.
	Annual Re-characterization	Once per year, random customer sampling.
Spent Parts Washer Solvents Non-Industrial Customers	Profile	At initiation of service to customer. One time only.
	Volume, Appearance, Incidental Odor, drum type/color, labels	Every container at the point of service.
	Specific gravity	Every container at the point of service.
	Flash Point, pH, Specific Gravity, HVOCs	If waste fails acceptance criteria.
	Annual Recharacterization	Once per year, random customer sampling.
Transfer Waste Management Service	Waste Container Appearance	Every container at the point of service.
	Waste Container marks and labels.	Every container at the point of service.
<b>NOTES:</b> <sup>1</sup> In accordance with 6NYCRR Section 373-2.2(e), Safety-Kleen will also perform physical and chemical analysis of a waste stream when it is notified or has reason to believe that the process or operation generating the waste has changed, or when the result of inspection indicates that the waste to be collected does not match the waste designated.		

**TABLE 1-6**

**Annual Analytical Re-Characterization Parameters**

**Safety-Kleen Systems, Inc.**

**Avon, New York**

<b>Waste Description</b>	<b>Parameter<sup>1</sup></b>
Spent Hydrocarbon-Based Parts Washer Solvents	TCLP, pH, Flash Point and Specific Gravity.
Spent Aqueous-Based Parts Washer Solvents	TCLP, Flash Point, pH and Specific Gravity.
<sup>1</sup> TCLP waste numbers: D004-D011, D018, D019, D021-D030, D032-D043	

#### **4.4 PCB ANALYSIS OF USED OIL**

Safety-Kleen performs PCB analysis on used oil before shipping it off site to prevent inadvertent transportation of PCBs in commerce. When the used oil tank is full, a representative grab sample of used oil is obtained from the sampling port on the tank. This sample is analyzed for PCB at a NYSDOH ELAP certified lab. While the sample is being analyzed, no additional oil will be added to the tank. If analysis shows that the oil in the tank does not contain PCBs > 2 ppm, the oil will be released for shipment off site.

If the oil does contain PCB > 2 ppm; Safety-Kleen will perform additional analyses of generator retain samples to determine if the originating source of the PCBs is TSCA regulated and a NYS listed hazardous waste (i.e.  $\geq 50$  ppm). If it is determined that the oil is TSCA regulated or a NYS listed hazardous waste, Safety-Kleen will submit an unmanifested waste report to the NYSDEC manifest section and the NYSDEC and EPA Regional Administrators within 15 days of this determination. This information may be submitted by email or by letter.

TSCA regulated or NYS listed hazardous waste oil will be manifested off site to a properly permitted facility for disposal. Prior to returning the tank to service Safety-Kleen will clean the tank using the self- implementing decontamination procedures found in 40 CFR 761.79 (c).

#### **5.0 WASTE TRACKING PROCEDURE**

The used, hydrocarbon-based parts washer solvents are the primary feed stocks for the generation of Safety-Kleen solvent products. As a result, quality control of the spent solvents is necessary to ensure that reclamation occurs in the safest and most efficient manner possible. The precautions in place at the facility (i.e., qualitative acceptance parameters - audits and visual screening/material observations) serve as a foundation to ensure the bulk loads of solvent transported to the Recycle/Process facility can be safely and efficiently processed. Additional steps are also typically undertaken at the Recycle/Process Center to further assess the quality of the bulk solvent loads. Each bulk load tanker truck containing spent parts washer solvent is sampled at the



Recycling/Process facility and analyzed for total volatile halogenated organics and for flashpoint. Sampling and analysis are conducted in accordance with the Recycle/Process center's operating permit. The analytical results must be within the receiving facility's acceptance criteria.

Bulk loads originating from the Avon facility are screened at the receiving facility in the manner described above. The Avon facility will receive the analytical data on the bulk loads it sends off-site. The bulk load analytical results will be sent back to the Service Center within 45 days from the date of accepting the waste at the Recycle/Process facility. The analytical results for each bulk load shipment of solvent will be maintained in the operating record of the Service Center. If a load is rejected, information as to why, and the alternate mode of management will be provided to the facility.

For further assurance of quality control, Safety-Kleen requires physical and chemical analysis of a parts washer waste stream when it is notified, or has reason to believe that the process or operation generating the waste has changed, or when the result of inspection indicates that the waste collected does not match that designated in accordance with 6NYCRR Section 373-2.2 (e). Only laboratories certified by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) will be used if analysis is performed.

## **6.0 WASTE ANALYSIS REQUIREMENTS FOR LAND DISPOSAL RESTRICTIONS**

In accordance with the requirements of 40 CFR Part 268.7, Safety-Kleen will obtain notification/certification from the generator for accepted wastes that are prohibited from land disposal. While Safety-Kleen will not accept the responsibility for making generator required determinations, Safety-Kleen will provide information to help educate the generators and to assist them in fulfilling their obligation to notify Safety-Kleen of Land Disposal Restriction Information. These notices will be maintained on file at the receiving facility for three years.

## **7.0 WASTE ANALYSIS PLAN UPDATE**

This waste analysis plan will be modified through a permit modification when a new waste product is approved for storage or when current waste acceptance criteria and material management methods change. Changes may be made to the Waste Analysis Plan only with approval from the NYDEC.

## **APPENDIX I - A**

Generator Audit/Profile

Solvent Checklist

Flow Chart

# SAFETY- KLEEN SYSTEMS, INC.

## CUSTOMER/GENERATOR AUDIT & PARTS WASHER SOLVENT PROFILE

**Instructions:** Please complete all information. Do not leave any blank spaces. If the information requested is not applicable enter N/A in the space provided. This form must be completed and signed by an authorized representative of the generator before spent solvent is removed from the generator's site. This form must be amended any time the generator status changes or the chemical contaminants in the spent parts washer solvent managed by Safety-Kleen changes. This form may be used only for parts washer solvents supplied by Safety-Kleen.

1. Company Name:\_\_\_\_\_Phone:\_\_\_\_\_

Address:\_\_\_\_\_

EPA ID No. (If applicable):\_\_\_\_\_

Company Contact:\_\_\_\_\_

2. Describe the principal product(s) and/or service(s) performed at this facility:

\_\_\_\_\_

3. Describe the type of parts cleaned and describe the dirt or material cleaned from the parts and identify the contaminants likely to be present in the solvent as a result of use:

Type of Parts Cleaned:\_\_\_\_\_

Dirt and Contaminants in the Spent Solvent:\_\_\_\_\_

4. For each parts washer machine, check the type of solvent used, the quantity of solvent in the machine and whether the spent solvent is a hazardous waste.

<u>105 solvent</u>	<u>150 solvent</u>	<u>aqueous solvent</u>	<u>hazardous</u>	<u>non-hazardous</u>	<u>quantity (gals)</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

5. Indicate each information source used to determine whether the spent parts washer solvent is a hazardous or non-hazardous waste:

- ☐ Safety-Kleen annual re-characterization analysis
- ☐ Generator knowledge of the chemicals used in their facility
- ☐ Laboratory analysis (please attach a copy if applicable)
- ☐ Other (describe)\_\_\_\_\_

6. Additional Waste Products

Other than the Safety-Kleen parts washer solvent described in section 4, describe any other waste materials that are generated or stored in the immediate vicinity of the parts washer machines that could potentially cause a contamination of the parts washer solvent if improperly managed:

\_\_\_\_\_

If there are any materials described above, indicate the precautions the facility takes to prevent contamination of the Safety-Kleen solvent:

_____ Employee Training	_____ Separation of Stored Materials
_____ Warning Signs	_____ Other

7. Indicate the generator status of this site by checking the appropriate box. This information will be used to ensure the correct paperwork is used when the parts washer solvent is removed from the customer's facility. Note that parts washer solvent is considered waste (or generated) when it is removed from the machine at the time of service.

- ☐ CESQG The maximum amount of all hazardous waste generated in any 1 calendar month is less than 220 lbs or 2.2 lbs of acutely hazardous (P-listed) waste. The maximum quantity of all hazardous waste stored on site at any 1 time is less than 2,200 lbs or less than 2.2 lbs of acutely hazardous waste.
- ☐ SQG The maximum quantity of all hazardous waste generated in any 1 calendar month is less than 2,200 lbs. The maximum quantity of hazardous waste in storage is 13,200 lbs.
- ☐ LQG More than 2,200 lbs or more than 2.2 lbs of acutely (P-listed) hazardous waste is generated in any 1 calendar month. More than 13,200 lbs are stored during any 1 month.

#### B – SPENT PARTS WASHER SOLVENT PROFILE

Specific Gravity: ☐ 0.7 - 0.9 (mineral spirits) ☐ 0.95 - 1.08 (aqueous) ☐ Other (specify)\_\_\_\_\_

Color: ☐ black/brown ☐ Other (specify)\_\_\_\_\_

Odor: ☐ Typical of Solvent Supplied ☐ Other (describe)\_\_\_\_\_

#### Customer/Generator Certification

Customer/Generator certifies that the Spent parts Washer Solvent Profile information provided above is true and accurate to the best of its knowledge.

Customer further certifies that it will not introduce any substance into the solvent or aqueous cleaning solution, including without limitation any hazardous waste or hazardous waste constituent, except to the extent such introduction is incidental to the normal use of the machine. Customer further agrees that it will not clean parts that have been contaminated with or otherwise introduce polychlorinated biphenyls (PCBs), herbicides, pesticides, dioxins, reactives, oxidizers, peroxide formers, or listed hazardous wastes into the solvent or aqueous cleaning solution. I certify that this information is true and accurate to the best of my knowledge.

Generator Name:_____	Title:_____
Generator Signature:_____	Date:_____
Safety-Kleen name_____	Title_____
Safety-Kleen Signature_____	Date_____

Safety-Kleen recommends that the customer keep a copy of this document on file.

# PARTS WASHER SOLVENT ACCEPTANCE CRITERIA CHECKLIST

THIS FORM MUST BE COMPLETED FOR EACH PICK UP OF PARTS WASHER SOLVENT.  
RECORD THE INFORMATION FOR EACH PARTS WASHER MACHINE SERVICED.

CUSTOMER SK ID. NO. \_\_\_\_\_

DATE OF COLLECTION \_\_\_\_\_

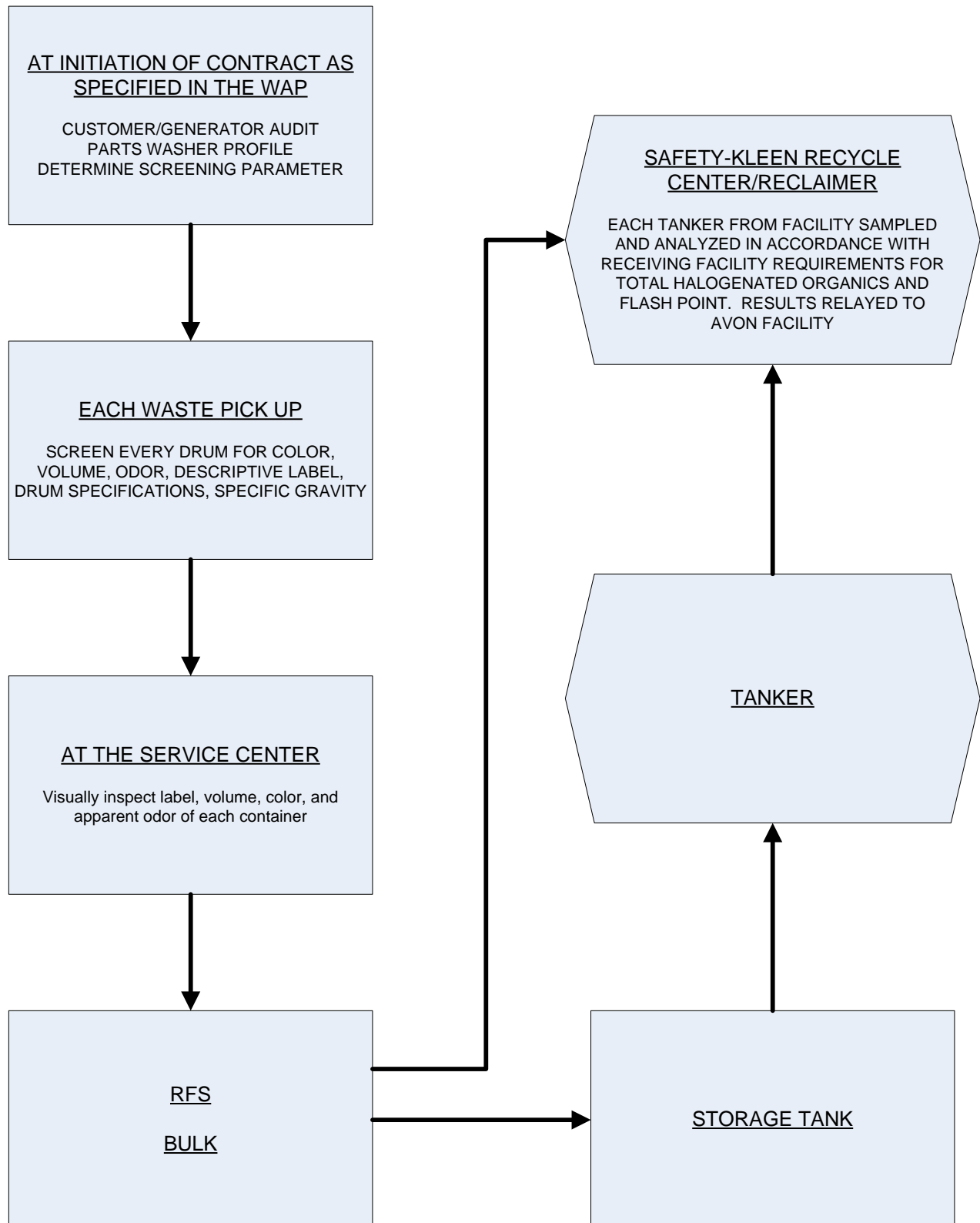
MANIFEST NUMBER (IF APPLICABLE) \_\_\_\_\_

SPECIFIC GRAVITY <sup>1</sup>	VOLUME (gals)	SOLVENT COLOR	PROPER DRUM SIZE, TYPE, COLOR?		UNUSUAL ODOR?	
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N
			Y	N	Y	N

<sup>1</sup> Should be between 0.7-0.9 for mineral spirits and 0.95-1.08 for aqueous

The solvent descriptions here must be the same as described on the customer's profile. If the waste does not meet the above acceptance criteria, or if unusual odors or incorrect volume is noted, LEAVE THE WASTE AT THE CUSTOMER'S LOCATION. A Safety-Kleen representative will contact the customer to provide further guidance.

## WASTE ACCEPTANCE PROCEDURE FOR PARTS WASHER WASTES



**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT D  
CONTAINER  
MANAGEMENT &  
MANAGEMENT OF WASTES  
IN TANKS**

## ATTACHMENT D

### CONTAINERS MANAGEMENT

#### ABSTRACT

**Purpose:** The Avon Service Center will be permitted for the management of parts washer spent solvent waste in a container storage area at the facility. Containerized spent parts washer solvent routed to the facility will remain on the transport vehicles for a limited time, unloaded from transport vehicles and stored in the permitted portion of the return and fill building as shown in the drawing 202801-7000. Containers are inspected for accuracy of paperwork and labels prior to being transferred into the permitted storage tank through the return and fill station. As needed, spent parts washer containers will also be stored in the additional, permitted container storage area located adjacent to the return and fill dock as shown in the drawing. Containerized materials destined for (manifested to) other facilities are also be managed at the Avon Service Center as 10-day storage exempt wastes. These transfer storage areas are identified in drawings 202801-700 and 202802-7002B. The purpose of this plan is to describe the operational practices associated with the management of these containerized materials.



## **ATTACHMENT D**

### **MANAGEMENT OF WASTE IN CONTAINERS PLAN**

#### **1.0 MANAGEMENT PRACTICES**

The Avon facility will accept from off-site generators containerized, spent parts washer solvent for management. The spent parts washer solvents will be transported to the facility in containers. This material will be removed from the transport vehicles, transferred to the container staging/storage area prior to bulking the solvent into the bulk waste solvent storage tank through the drum washer/return and fill station. The containers will be stored in trucks for a limited period of time as provided for in this permit prior to unloading into the permitted container storage areas located on the Return & Fill dock. A drum layout is shown in drawing 202801-7000. These containers will be inspected for accuracy of paperwork and labels prior to being emptied into return and fill, drum washer units for conveyance into the storage tank.

The permitted container storage area, located in the Return & Fill building, is comprised of the dock area (R/F #1) and an adjacent concrete pad (R/F #2) utilized for the staging/storage of waste containers. The total volume of waste parts washer solutions stored on the concrete pad (RF#2) will not exceed 2,160 gallons. The total volume of solvent product, waste and other liquids stored on the dock (R/F #1) is limited to 2,000 gallons. The total volume of wastes stored on the dock will not exceed 400 gallons.

If by reasons beyond the control of Safety Kleen, more drums need to be stored than the permitted quantity, Safety Kleen will obtain prior approval from the Department to store the excess quantity within the Return & Fill building. This is subject to the available secondary containment volume

The concrete pad next to the return & fill dock has a storage area of 450 square feet. Drawing 202801-7000 shows the location and secondary containment calculations for this area. The container storage area will be managed in accordance with 6 NYCRR Part 373-2.9.

The return and fill station platform (RF#1) has secondary containment in the form of a monolithic concrete slab with a 4"x 4" concrete curb on all sides which provides a secondary containment of 1297 gallons. The concrete pad (RF#2) adjacent to the return and fill station has a waste storage capacity of 2,160 gallons. This area is also a monolithic concrete slab surrounded by a 4"x 4" concrete curb, which provides a secondary containment of 1134 gallons. The total permitted container storage capacity will be 2,160 gallons (or 72 - 30-gallon drums) which is equivalent to the total average volume of part washer wastes received at the facility for one day.

The concrete secondary containment is coated with an impervious coating compatible with the waste stored. Semstone 140 epoxy coating was used under the R/F dock and Corro-Flor epoxy was used on the adjacent concrete pad. The coating specifications are included in Appendix VIII-1. The containers stored in the concrete pad container storage area will be stored on pallets, however containers stored on the return

and fill platform do not need to be on pallets. Accumulated liquid in the containment area is promptly emptied or pumped out to prevent overflows. All materials collected from spills and from the secondary containment trench will be treated as hazardous waste unless Safety-Kleen has sufficient knowledge to determine otherwise. When waste containers are moved, a potential exists for the drums to tip over. To minimize the potential for spillage of solvents, all containers will be maintained in an upright position and remain tightly covered while in storage or in transit. A 2' aisle space will be maintained for waste drums. A layout of container storage with available aisle space is shown in drawing 202801-7000.

The soil below all containment structures at the facility is compacted to bear a load of 3,000 pounds/square foot. The concrete above it will not show any signs of cracking from weight stress until the weight of 3,000 pounds/square foot is reached. Therefore, the load bearing capacity is 3,000 pounds/square foot. This is more than sufficient for the container storage areas.

### **1.1 Management of Truck Storage Of Containerized Spent Solvent Prior To Transfer To The Storage Tank**

Spent parts washer solvents will be transported to the facility in containers. The containers will remain on the transport vehicles until they can be removed and their contents transferred to the container storage area and emptied into the bulk tank through use of the return and fill station or temporarily stored in the container storage area. This truck storage will be regulated under the permit. On Mondays, Tuesdays, Wednesdays and Thursdays, the containers will be removed from the vehicles and either stored in the container storage area or the waste transferred to the tank within 16 hours of arrival at the facility. Vehicles arriving after work hours on Fridays or holidays will be off-loaded before 12 noon of the next working day.

Vehicle holding containers of spent parts washer solvent positioned at the facility will be staged in the Service Center's parking lot. The vehicles will be parked on designated paved areas that are at least 50 feet from the property boundary. The total number of vehicles temporarily staged at the Service Center waiting to be off-loaded will not exceed 15. The maximum volume of parts washer solvent waste stored on a vehicle will not exceed 2000 gallons. The total volume of parts washer wastes stored in trucks will not exceed the remaining volume available in the storage tank for transfer of the waste at any time. The vehicles will be equipped with a secondary containment system designed to capture any material released into the storage compartment of the vehicle. The system will be further augmented by the placement of absorbent booms around the interior walls of the storage compartment. These restrictions are not mandated for vehicles in which parts-washer solvent containers are unloaded in a timely manner. (i.e., within two hours). Waste transported to the facility on Safety-Kleen vehicles will be managed in accordance with applicable USDOT regulations. Hazardous materials will be loaded and segregated in accordance with the Segregation Table for Hazardous Materials in 49 CFR 177.848.

Spent parts washer solvents from customers will be transferred to the waste storage tank via the return and fill station, which consists of a dumpster, dumpster/barrel washer and pump. Each container will be manually emptied allowing the waste to flow into one of the dumpsters. After the waste is transferred into a dumpster, the container

will be placed on a barrel washer and sprayed with the spent solvent for washing. The washed container will then be kept on a stand, upside down for draining. The waste material in the dumpsters/barrel washer will be pumped to the tank.

A container-rinsing unit is installed immediately adjacent to one of the dumpsters/barrel washers. The rinsing unit provides a final rinse using Safety-Kleen's 150 grade premium solvent for some containers that are being reused to ship 150 grade clean premium solvent to customers. The containers for which this unit is utilized will be rinsed with clean solvent and drained upside down on a funnel-like device. The container-rinsing unit is hard-piped directly to the barrel washer that drains to the dumpster in order to minimize emissions and to minimize the chance of spills.

The parts washer solvent waste containers will be of a specific type size and color to distinguish them from containers accepted for 10-day exempt storage wastes at the facility. Safety-Kleen believes this management practice eliminates the need to conduct compatibility tests prior to bulking the parts washer solvent wastes. The parts washer containers will be easily recognized. Hydrocarbon-based solvents will be managed in steel, 16- and 30- gallon, open-topped containers. These containers are identified by USDOT as UN 1A2 units. The hydrocarbon-based parts washer solvent containers will also be color-coded. The 16- and 30- gallon, UN 1A2 containers will either be green or red.

Aqueous-based solvent will be managed in 16- and 30- gallon, USDOT specified UN 1A2 and 1H2, open-topped containers. These steel containers will be readily identified based on the blue color of the units.

In addition to the above-described steel containers, a 5-gallon, closed-head, plastic unit will be used for hydrocarbon and aqueous based parts washer solvents. The uniquely shaped containers (USDOT specified UN 3H1) will be further distinguished by color - black for hydrocarbon-based solvent and blue for aqueous-based material. Table VIII - 1 summarizes the type, size and color of the parts washer solvent containers that will be used by the Avon Service Center.

**TABLE VIII-1**

Summary of Parts Washer Solvent Containers -  
Container Color and Type

Waste Type	PERMITTED WASTE CODE	DRUM TYPES	SIZE OF EACH DRUM	DRUM COLOR
SK Solvents (Hydrocarbon and Aqueous)	D001, D004-D011, D018, D019, D021-D030, D032-D042, D043 and non-hazardous	UN 1A2(steel)	16,30...	Red
		UN 1A2(Steel)	16,30...	Green
		UN1H2 (plastic)	16,30...	Blue
		UN 3H1 (Plastic)	5...	Black Blue

A waste label will further support the container type, size and color criteria. Each container of parts washer solvent, regardless of container type, size or color will have a waste label affixed to it denoting its contents. This descriptive label, combined with the required USDOT identification mark placed on the container prior to transport, will further augment the container type, size and color acceptance criteria.

The specific container size, color and identification labels will ensure that the spent parts washer solvents will not be contaminated by commingling with other waste managed at the facility while bulking the solvents into the storage tank. Safety-Kleen therefore believes that there is no need to conduct any compatibility tests prior to bulking the waste into the tank.

## **1.2 Transfer Waste Management Service**

The Avon Service Center offers a service to collect and manage various hazardous and non-hazardous wastes from its industrial and automotive customers. The waste is generated from a variety of processes and varies from customer to customer. These containerized wastes will be managed at the facility under the 10-day storage exemption allowed in 6NYCRR Part 373, Section 373-1.1(d)(xv). It will be temporarily managed in the transfer container management areas of the warehouse. These exempt wastes will be managed in accordance with the following:

- a. The areas where the consolidation of loads takes place by moving containers from one transport vehicle to another or containers are removed from transport vehicles and managed prior to being reloaded will be designed to meet the secondary containment requirements stipulated in 6NYCRR Part 373, Section 373-2.9(f);
- b. Commingling of loads by repackaging, mixing or pumping from one container or transport vehicle to another is prohibited;

- c. Hazardous materials will be packaged in accordance with applicable USDOT regulations set forth in 49 CFR Parts 173, 178 and 179;
- d. Hazardous materials (including RCRA wastes) will be classified and segregated in accordance with 49 CFR 173.2(a) and 177.848 for transport and management at the facility;
- e. Lab-packs will be packaged in accordance with 49 CFR 173.12(b). The contents of labpacks are inspected by Safety-Kleen authorized and qualified personnel prior to transport to the facility.
- f. Wastes subject to Part 360 regulations are managed in accordance with 6NYCRR Part 360, Section 360-1.7(b)(7).
- g. Transfer wastes are stored on site for a maximum of 10 days.
- h. A current inventory of all transfer wastes on site is maintained at all times.
- i. Transfer waste containers are inspected each operating day.
- j. Storage areas where oxidizers, ignitable or reactive wastes are stored are designed and provided with fire suppression systems in accordance the the design specifications of NFPA and the Fire and Property Maintenance Code of New York State.
- k. Organic peroxides, water reactive, pyrophorics, unstable monomers, flammable metal powders, materials classified as DOT 6.1 Zone A, and strong oxidizers (example: NFPA Class 3 and 4) are banned from storage by Safety-Kleen. Most oxidizers have a 1% upper limit for acceptance. Wastes with the EPA waste code of D003 are also banned with the exception of some isocyanate based urethane adhesives.

Since containers are never opened while in storage the potential for reactions between incompatible materials remains low. However, a risk does exist in the event of leaks from multiple adjacent containers. To reduce this hazard, containers are segregated according to the USDOT segregation rules for hazardous materials in transportation (see 49 CFR 177.848). Materials that are prohibited from storage together on a transport vehicle are not stored together in the same room or area in the facility. Containers are stored on pallets to prevent possible contact with leaked material.

At the Avon facility, flammable transfer materials are stored in a separate building equipped with an active sprinkler system. This building is equipped with alarms, continuous mechanical ventilation, and a 3 hour rated fire door. All storage areas for transfer waste are secondarily contained and meet the storage area design requirements found in 6NYCRR Part 373-2.9(f).

High hazard wastes including explosives, radioactives, pyrophorics, and

infectious materials are not managed as transfer waste at the Avon facility. Prior to acceptance of a waste for management in the transfer waste program, wastes are evaluated using a defined Health and Safety Evaluation Model to establish a safe level of acceptance. This evaluation is performed within the Safety-Kleen Technical center by the Waste Review Panel. The purpose of this review is to determine safe handling limits for all compounds entering Safety-Kleen branches, transfer facilities, and recycling facilities. The model uses the following hierarchical approach:

- The most conservative OSHA or ACGIH occupational exposure limits;
- Animal toxicity data; and
- Chemical class and physical/chemical properties (e.g. vapor pressure, etc).

If the toxicity of a waste exceeds the protection provided by standard issue personal protective equipment (safety glasses, air purifying respirator with organic vapor/acid gas cartridges, saranax coated apron with sleeves, and nitrile gloves), the waste would not be approved for management as transfer waste at the Avon facility.

## **2.0 WASTE MANAGEMENT AREAS**

Hydrocarbon- and aqueous- based parts washer solvents will be stored in the permitted container storage areas located in the Return & Fill building with a maximum storage of 4,160 gallons. The container storage areas are equipped with containment.

Hydrocarbon- and aqueous - based parts washer solvents will be bulked at the facility and stored in a permitted 12,000-gallon bulk solvent storage tank. The tank is constructed of steel and is secondarily contained.

Spent parts washer solvent will be transferred into the tank through use of two wet dumpsters positioned atop a secondarily contained area commonly referred to as the return and fill station (R/F #1). The return and fill station is attached to the warehouse. Empty containers are also filled with product solvent on R/F#1. These full containers are temporarily stored on the steel grate before they are loaded onto the truck for delivery. Although these containers contain product (not waste), Safety Kleen will limit the quantity of product stored on the metal grate as described in Section 1 - Management Practices.

Containerized materials managed on a 10-day storage exempt basis and that generated from on-site operations will be positioned in one of three transfer waste management areas located in the warehouses. The three locations are designated as transfer areas A, B, and C. The location of these secondarily contained areas are shown in drawings 202802-7002B and 202801-7000.

**APPENDIX VIII – 1**

**Coating Specifications**

## TECHNICAL BULLETIN

August 1992

### DESCRIPTION AND USES:

SEMSTONE 140 is Sentry's primary epoxy topping system for concrete. Self-priming and semi-leveling, it will typically be aggregate filled and spray applied to yield an economical and highly serviceable floor for areas subject to harsh chemical exposure.

SEMSTONE 140 is a two component system that possesses the following characteristics in common with all members of Sentry's 140 family of products:

- excellent resistance to:
  - chemical attack;
  - thermal shock;
  - wear and impact.
- superior bonding qualities;
- high cohesive strength, coupled with the flexibility necessary to resist cracking;
- low permeability;
- low odor;
- 100% solids.

Example uses include:

Process slabs, tank farm floors, chemical loading and unloading areas, spill containment areas, waste proof coating for secondary containment systems.

### PACKAGING/COVERAGE:

SEMSTONE 140 is available in 1 gallon, 5 gallon, and 25 gallon units. Each unit consists of a premeasured Part A component and a premeasured Part B component. A bagged Part C thixotropic agent is available for work on vertical surfaces.

Application thickness may vary from 30 mils to 150 mils, depending on expected service conditions (i.e., chemical exposure, temperature, traffic load and other mechanical abuse, immersion service vs. splash-spill, etc.). Consult Sentry Polymers for specific thickness recommendations.

In addition, coverage rates will be effected by the condition of the surface being coated (degraded vs. smooth, steel vs. concrete, etc.).

To figure THEORETICAL coverage per gallon, divide desired mil thickness into 1,604. (For example, theoretical coverage for a 60 mil thickness is: 1,604 divided by 60 = 26.73 square feet per gallon.)

For practical coverage, make necessary allowances for condition of the substrate, working conditions, waste, spillage, etc.

## SEMSTONE® 140

### Sprayable Epoxy Topping



P. O. BOX 2076  
5500 E. HWY 332  
FREEPORT, TX 77541

409-233-0312  
800-231-2544



## TYPICAL PROPERTIES – WET

Is, by Volume \_\_\_\_\_ 100%  
Weight per Mixed Gallon \_\_\_\_\_ 9.3 lbs  
Pot Life @ 75°F \_\_\_\_\_ 45 - 60 minutes  
(significantly less at elevated temperatures)  
Cure Time @ 75°F:  
Foot Traffic \_\_\_\_\_ 12 hrs.  
Light Vehicular Traffic \_\_\_\_\_ 24 hrs.  
Chemical Service \_\_\_\_\_ 36 hrs.  
Primer \_\_\_\_\_ Not Required  
(SEMSTONE 110-P/S Primer Optional)  
Nonflammable

## TYPICAL PROPERTIES – CURED

Color \_\_\_\_\_ Light Gray (selected other colors available)  
Hardness \_\_\_\_\_ ASTM D - 2240 Shore D \_\_\_\_\_ 70 - 75  
Compressive Strength \_\_\_\_\_ ASTM C - 579 \_\_\_\_\_ 14,000 psi  
Tensile Strength \_\_\_\_\_ ASTM D - 638 \_\_\_\_\_ 5,000 psi  
Tensile Elongation \_\_\_\_\_ ASTM D - 638 \_\_\_\_\_ 8%  
Flexural Strength \_\_\_\_\_ ASTM D - 790 \_\_\_\_\_ 11,000 psi  
Flexural Modulus \_\_\_\_\_  
of Elasticity \_\_\_\_\_ ASTM C - 722 \_\_\_\_\_ Complies with Epoxy Type B  
Abrasion Resistance \_\_\_\_\_ ASTM D - 1044 \_\_\_\_\_ 56 mg  
(CS17 wheels)  
Vapor Transmission \_\_\_\_\_ ASTM E - 96  
WVT \_\_\_\_\_ 0.0120 grain per hr ft<sup>2</sup>  
Permeability \_\_\_\_\_ 0.0042 perm. -in.

## RELATED AND ANCILLARY PRODUCTS

EMSTONE 110-P/S Epoxy Primer  
EMSTONE 140-S Epoxy Coating and Lining  
EMSTONE 140-SL Epoxy Self-Leveling Coating  
EMSTONE 140-CT Epoxy Coating - Cold Temperature Formulation  
EMSTONE 300 Epoxy Polymer Concrete  
EM-CRETE Rapid Hardening Underlayment Mortar  
EMSTONE Scrim

Refer to separate technical bulletin on each product for uses, application instructions, etc.

## STORAGE AND SHELF LIFE

Keep SEMSTONE 140 components tightly sealed in their original containers until ready for use. Store at 50° - 75°F, away from direct sunlight. Properly stored, SEMSTONE 140 has a minimum shelf life of one year.

Refer to batch number on label for date of manufacture.

## CHEMICAL RESISTANCE

For chemical resistance information, refer to Sentry's Master Chemical Resistance Guide.

## APPLICATION GUIDELINES

### TEMPERATURE CONSIDERATIONS

1. The temperature of the surface to be coated, and the ambient air temperature should be at least 50° F while applying SEMSTONE 140 and while it cures. If the temperature is expected to drop below 50° F, use SEMSTONE 140-CT.
2. Halt application if the temperature falls within 5° F of the dew point.
3. Bubbles may appear in the SEMSTONE 140 coating if it is applied over concrete in direct sunlight, or when temperatures are rising. This is due to the expansion of air and/or moisture trapped in the concrete. It is especially true of air entrained concrete. For best results, shade the work area and apply SEMSTONE 140 when the temperature of the concrete (or other substrate) is falling. A surface thermometer should be used to frequently monitor the temperature of the substrate.
4. Twenty-four hours before application, all materials (components A and B, aggregate, etc.) should be stored at a 70° - 85°F, to facilitate handling.

### SURFACE PREPARATION - GENERAL

Surfaces must be dry and free of dirt, dust, oil, grease, chemicals and other contaminants immediately prior to applying each coat of SEMSTONE 140.

### SURFACE PREPARATION OF CONCRETE

1. New concrete generally should be cured a minimum of 28 days.

NOTE: Check with Sentry Polymers for recommendations regarding concrete cured less than 28 days.

2. Concrete must be structurally sound and must not contain any accelerators or curing compounds.
3. Remove all oil and grease.
4. Remove all surface laitance and expose sound concrete. We recommend abrasive blasting to do this. However, other methods, such as acid etching and neutralizing, may be used.

5. In general, any existing coating should be completely removed. In certain instances this may not be necessary, but consult with Sentry Polymers first.

Always remove coatings which have failed due to lack of adhesion or thermal shock.

6. Locate all expansion joints, control joints, floor drains, equipment base plates and mid-floor termination points. Handle them according to Sentry's Construction Details.
7. Degraded concrete on horizontal surfaces should be restored using SEMSTONE 300 Epoxy Polymer Concrete or SEM-CRETE.
8. Honeycombs or any form voids in vertical surfaces must be filled. Use a putty made by adding Part C thixotrope and sand to either SEMSTONE 110-P/S Epoxy Primer or SEMSTONE 140. (See supplemental guidelines.)

Alternately, use SEM-CRETE.

### SURFACE PREPARATION OF INCIDENTAL STEEL

Equipment base plates, etc. to be coated along with the concrete should be abrasive blasted to a near white metal finish with a 1 - 2 mil anchor profile. (Ref. SSPC-SP-10)

### MASKING

Mask surfaces that are not to be coated. This material is difficult to remove, once applied.

### APPLICATION EQUIPMENT

1. SEMSTONE 140 may be applied using a spray rig, notched trowel, brush or roller.
2. Spraying Aggregate Filled Material

We recommend the use of a Grover Model 973TSD-2-A modified 11:1 pump.

DO NOT use a plural component or a single component airless rig with aggregate filled material.



Set up the Grover Pump with a 3/4 inch ID, 15 foot long material line and a 3 foot pole spray gun.

Prewet the hoses by pumping a small amount of mixed SEMSTONE 140 (see paragraphs 1 and 2 under MIXING AND APPLICATION) without aggregate through the lines and pole gun; about 1/2 gallon should be sufficient.

### 3. Spraying Material Without Aggregate

We recommend the use of a plural component or single component airless rig when the material will be sprayed without aggregate.

Plural Component Airless Spray Equipment (Graco King Hydra-Cat or equal):

Set equipment at a 4 to 1 volumetric mix ratio. Use a Graco Silver Gun, or equivalent, equipped with a reversible, self-cleaning tip, orifice size .035 - .041 inch.

Single Component Airless Spray Equipment (Graco King 45 to 1 Hydro Spray Pump, or equal); set up as follows:

No screens, filters or surge tank.

Spray hose should be 3/8" or 1/2" ID, and a maximum of 50 feet in length.

Use Graco 220-961 Flex Gun, or equivalent, equipped with a reversible, self-cleaning tip, orifice size .035 - .041 inch.

Inlet air pressure should be a minimum of 100 psi. Recommended operating pressure is 60 - 100 psi.

Always use spray equipment in accordance with manufacturer's instructions.

### Care of Spray Rig Hoses

Take care to prevent the mixed material from setting up in your hoses. For best results, keep your hoses as short as possible, purge them immediately if work is interrupted, keep them out of direct sunlight and insulated from hot surfaces.

## MIXING AND APPLICATION

The components must be individually agitated immediately prior to use.

Part A - Blend each Part A component to a uniform consistency in its individual container, using a Jiffy type mixer.

Part B - Stir each Part B component to a uniform color in its individual container.

2. If using a plural component spray rig, skip this step. Otherwise:

Pour the entire contents of Part B into the container holding Part A, and mix thoroughly for two minutes using a Jiffy type mixer.

The pot life of the mixture will be approximately 45-60 minutes @ 75°F; significantly less time at elevated temperatures.

The longer the material is in the bucket after mixing, the shorter its pot life will be. Use it immediately.

3. SEMSTONE 140 may be extended by adding silica sand. This can provide a more economical floor topping and is also useful when coating rough or mildly eroded concrete.

- a. Use only clean, dry, bagged 20/40 mesh round silica sand.

- b. Pour half the mixed SEMSTONE 140 into another clean 5 gallon bucket.

- c. Slowly add sand to each bucket while blending with a jiffy type mixer. Do both buckets immediately.

- d. You may add up to 3 parts, by weight, of sand to 1 part, by weight, of SEMSTONE 140. At a 3 to 1 ratio you get a mixture of grout-like consistency. At a 2 to 1 ratio you will obtain a still fluid mixture and extend coverage by 100%. This is the optimum mixture for spray applications.

- e. The mixture may be sprayed or applied by notched trowel.

If spraying, work the pole gun in a circular motion to achieve an even coating thickness.

4. When working a large or congested area, it may be desirable for applicator to wear spiked shoes.



5. To obtain a nonskid surface, broadcast your grit media onto the coated surface before the coating gels.
6. SEMSTONE 140 is semi-leveling. When used on an area that has a pitch or slope, use a 2 to 1 silica sand mixture (see paragraph 3 above) in order to keep the material from sliding.
7. To coat vertical surfaces, use either SEMSTONE 140-S Epoxy Coating and Lining system, or SEMSTONE 140 with Part C added.  
  
If using SEMSTONE 140 with Part C, refer to Sentry's supplemental guidelines.
8. Prepare surfaces for intercoat adhesion as follows:
  - a. Allow SEMSTONE 140 to cure until gelled before recoating.
  - b. If the surface cures firm to the touch, but less than 24 hours, it must be washed with soap and water, rinsed and dried before recoating.
  - c. Surfaces cured beyond 24 hours must be washed with soap and water, rinsed, dried and lightly sanded or abrasive blasted.
9. If work is interrupted, or at the end of the day, terminate the coating in a straight line.
10. As it cures, SEMSTONE 140 will sometimes develop a thin, oily film on its surface. This film may be easily removed by washing with soap and water.

## CLEANUP

Before it gels, SEMSTONE 140 may be cleaned from tools and equipment using hot, soapy water.

After SEMSTONE 140 gels, xylene or MEK will be required. Chlorinated solvents may be used if flammable solvents are not allowed.

## SAFETY PRECAUTIONS

### FOR INDUSTRIAL USE ONLY.

Avoid contact with eyes and skin; do not ingest or inhale.

When working with SEMSTONE 140, always wear chemical goggles, rubber gloves, and appropriate work clothing.

When spraying in a confined area, also wear a fresh air hood and make provision for forced ventilation.

When spraying in an open area, a NIOSH approved respirator suitable for organic vapors can replace the fresh air hood.

Prolonged or repeated exposure to the unreacted Part A and Part B components of SEMSTONE 140 may cause skin irritation or allergic reactions.

Refer to material safety data sheets regarding individual components.

### 1 YEAR LIMITED WARRANTY

For one year following sale, SENTRY POLYMERS, INC., Freeport, Texas ("SENTRY") will replace any of its products that do not conform to its manufacturing standards or, at its sole discretion, refund the proportionate sales price applicable to the nonconforming goods. Replacement product will be supplied at no charge, and FOB SENTRY'S facilities.

Information and suggestions supplied by SENTRY, whether in its published literature or otherwise, including samples, are believed to be accurate and reliable and are furnished in good faith. Such information and suggestions are supplied without charge and their use, and the use of SENTRY products is beyond SENTRY'S control. SENTRY'S products, information and suggestions are intended for USERS possessing skill and know-how in the industry. USERS are responsible, at their sole discretion and risk, to satisfy themselves regarding the suitability of SENTRY'S products, information and suggestions for their particular circumstances.

SENTRY MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING ITS PRODUCTS, INFORMATION AND SUGGESTIONS AND DISCLAIMS ALL WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

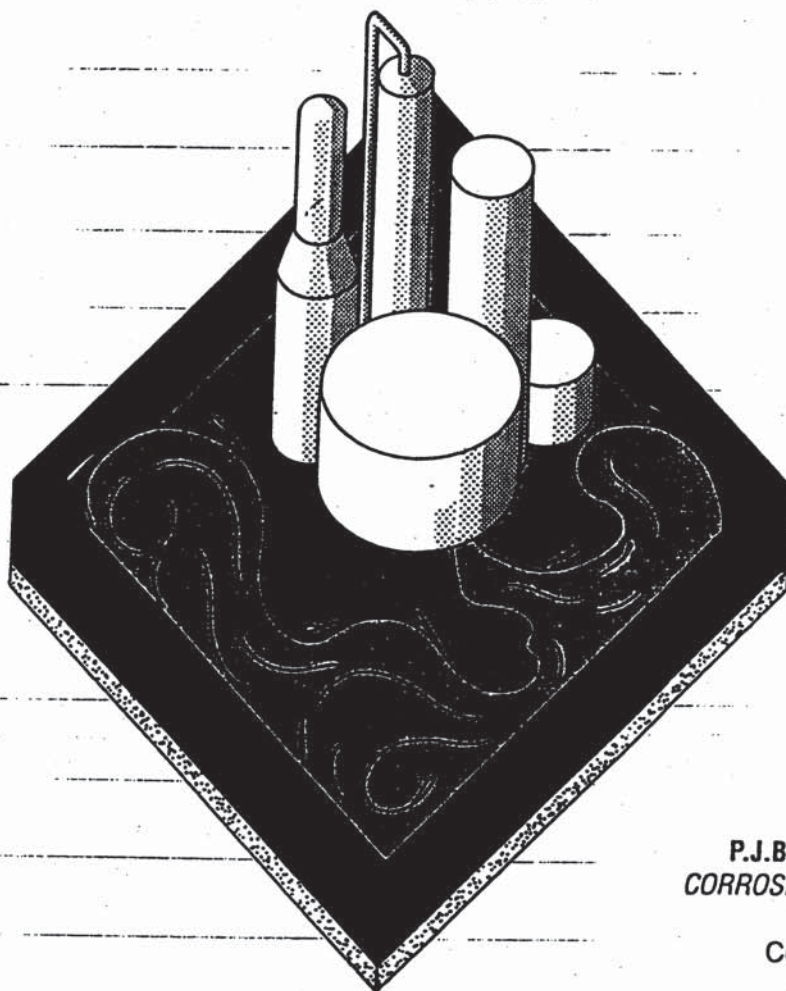
This limited warranty will be rendered null and void by any one or more of the following: SENTRY is not paid timely and in full at Freeport, Texas, for all goods and services sold by SENTRY for use on the applicable project; USER does not cooperate with SENTRY'S reasonable investigations regarding the alleged nonconforming product; the product has been misused, abused or improperly maintained.

The provisions of this warranty supersede any provisions to the contrary in any of USER'S forms or documents or otherwise unless such contrary provisions are specifically acknowledged and agreed to in writing by SENTRY after receipt by SENTRY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF PERSONAL INJURY, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.



# **SEMSTONE®**

## **Chemical Resistance Guide**



**P.J.B. PROCESS EQUIPMENT**  
**CORROSION RESISTANT PRODUCTS**  
P.O. Box 1471  
Coventry, RI 02816  
(401) 823-1256  
Fax: # (401) 823-1336



# Chemical Resistance Guide

This guide is intended as an aid in determining the potential usefulness of the listed SEMSTONE® products as coatings to protect concrete and incidental steel from chemical exposure.

The chemical resistance of a coating is influenced by several factors including the primary chemical exposure (which could be a mixture of chemicals), severity of the exposure, contaminants, housekeeping practices, and operating temperatures. Testing is recommended to confirm suitability.

Performance is also impacted by physical factors such as thermal cycling and thermal shock, the nature, design and condition of the substrate, traffic patterns and mechanical abuse. Users are urged to carefully evaluate each project according to its particular conditions and circumstances.

Some chemicals will stain or change the color of the coating. This does not necessarily mean chemical attack has occurred. This guide identifies many of the known staining chemicals, but this does not imply that others will not stain. If staining is a concern, the choice of coating color can be helpful in mitigating the problem.

Immersion test coupons are available to assist users in making a product selection. Contact Sentry for additional assistance.

SEMSTONE®	140	145	245	2010	870	805
ACETALDEHYDE	NR	3	T	2	3	T
ACETIC ACID, 10%	2	2	2	2	2	2
ACETIC ACID, 30%	3	3	2	1	1	3
ACETIC ACID, 50%	3	3	2	1	1	3
ACETIC ACID, GLACIAL	3	3	3	2	2	3
ACETIC ANHYDRIDE	T	T	3	2	2	NR
ACETONE	2	2	1	1	3	3
ACETYL BROMIDE	NR	NR	1	1	2	NR
ACETYL CHLORIDE	T	3	2	2	2	NR
ACRYLIC ACID	NR	3	2	1	2	T
ACRYLONITRILE	NR	NR	2	2	NR	NR
ALCOHOL	3	2	2	1	2	3
ALCOHOL CHLORIDE	T	T	2	2	3	T
ALUMINUM BROMIDE	1	1	1	1	1	2
ALUMINUM CHLORIDE	1	1	1	1	1	1
ALUMINUM FLUORIDE	1A	1A	1A	1A	1A	1A
ALUMINUM HYDROXIDE	1	1	1	1	1	2
ALUMINUM NITRATE	1	1	1	1	1	2
ALUMINUM POTASSIUM SULFATE	1	1	1	1	1	2
ALUMINUM SULFATE	1	1	1	1	1	1
AMMONIAC	2	2	2	2	2	2
AMMONIUM BISULFITE	1	1	1	1	1	2
AMMONIUM CHLORIDE	1	1	1	1	1	1
AMMONIUM FLUORIDE	1A	1A	1A	1A	1A	1A
AMMONIUM HYDROXIDE	1	1	1	1	1	2
AMMONIUM LAURYL SULFATE, 30%	1	1	1	1	1	1
AMMONIUM NITRATE	1	1	1	1	1	2
AMMONIUM PERSULFATE	1	1	1	1	1	1
AMMONIUM SULFATE	1	1	1	1	1	1
AMMONIUM SULFIDE	1	1	1	1	1	1
AMMONIUM SULFITE	1	1	1	1	1	1
AMYL ACETATE	3	2	1	1	2	3
AMYL ALCOHOL	3	2	1	1	2	3
ANILINE	3	2	1	1	3	3
ANILINE HYDROCHLORIDE	2	2	1	1	1	3
ANTIMONY CHLORIDE (TRI)	1	1	1	1	1	2
AQUA REGIA	NR	NR	T	T	NR	NR
ARSENIC ACID	3	2	T	T	2	T
ARSENIOUS ACID	2	2	T	T	1	T
BARIUM CHLORIDE	1	1	1	1	1	1
BARIUM HYDROXIDE	1	1	1	1	1	2
BARIUM SULFATE	1	1	1	1	1	1
BARIUM SULFIDE	1	1	1	1	1	1
BEER	1	1	1	1	1	2
BENZAL CHLORIDE	3	2	1	1	3	3
BENZALDEHYDE	T	T	2	2	3	NR
BENZENE	2	1	1	1	2	3
BENZENE SULFONIC ACID	1	1	1	1	1	2

SEMSTONE®	140	145	245	2010	870	805
BENZOIC ACID	1	1	1	1	1	2
BENZOYL CHLORIDE	2	2	1	1	1	2
BENZYL ALCOHOL	2	1	1	1	2	2
BENZYL CHLORIDE	2	1	1	1	2	2
BLACK LIQUOR (PAPER)	1	1	1	1	1	2
BLEACH	2C	2C	2C	2C	1C	2C
BORIC ACID	1	1	1	1	1	2
BRINE	1	1	1	1	1	1
BROMINE GAS (DRY & WET)	NR	NR	T	T	3	NR
BROMINE LIQUID	NR	NR	NR	NR	NR	NR
BROMINE WATER, 5%	3	3	T	T	1	T
BUTANOL	2	1	1	1	2	2
BUTYL ACETATE	2	1	1	1	2	2
BUTYL ACRYLATE	2	1	1	1	2	2
BUTYLAMINE	NR	NR	T	T	3	NR
BUTYL CARBITOL	2	2	1	1	2	2
BUTYL CARBITOL ACETATE	2	2	1	1	2	2
BUTYL CELLOSOLVE ACETATE	2	1	1	1	2	2
BUTYL CELLOSOLVE SOLVENT	2	1	1	1	2	2
BUTYL ETHER	1	1	1	1	1	T
BUTYL LEVULINE ACID	2	2	1	1	3	3
N-BUTYRIC ACID	3	3	2	1	1	NR
CADMIUM CHLORIDE	1	1	1	1	1	1
CADMIUM PLATING CYANIDE	1	1	1	1	1	2
CALCIUM BISULFITE	1	1	1	1	1	1
CALCIUM CHLORIDE	1	1	1	1	1	1
CALCIUM HYDROXIDE	1	1	1	1	1	2
CALCIUM HYPOCHLORITE	2C	2C	2C	2C	1C	2C
CALCIUM NITRATE	1	1	1	1	1	2
CALCIUM SULFATE	1	1	1	1	1	1
CALCIUM SULFITE	1	1	1	1	1	1
CAPROLACTAM	3	2	2	2	2	3
CAPRYLIC ACID	2	2	2	1	1	3
CARBOLIC ACID	NR	NR	2	2	NR	NR
CARBON DIOXIDE GAS	1	1	1	1	1	1
CARBON DISULFIDE	3	3	1	1	NR	3
CARBON TETRACHLORIDE	2	2	1	1	2	3
CASTOR OIL	1	1	1	1	1	1
CELLOSOLVE	2	1	1	1	2	2
CELLOSOLVE ACETATE	2	1	1	1	2	2
CHLORINE DIOXIDE	2	2	2	2	1	2
CHLORINE GAS (DRY & WET)	3	3	3	3	1	3
CHLORINE WATER SATURATED	1	1	1	1	1	2
CHLOROACETIC ACID	3	3	2	1	1	3
CHLOROBENZENE (MONO)	3	2	1	1	2	3
CHLOROBUTANE	1	1	1	1	1	2
CHLOROFORM	NR	3	1B	1B	NR	NR
CHLOROPHENOL	NR	3	2	2	NR	NR
CHLOROPYRIDINE (TETRA)	3	3	2	1	3	NR



SEMSTONE®	140	145	245	2010	870	805
CHLOROSULFONIC ACID	NR	NR	T	T	NR	NR
CHLOROTOLUENE	2	3	1	1	3	3
CHROMIC ACID, 10%	2	2	1	1	1	2
CHROMIC ACID, 50%	3	3	2	2	3	3
CHROMIC CHLORIDE	2	1	1	1	1	2
CITRIC ACID	1	1	1	1	1	2
COPPER CHLORIDE	1	1	1	1	1	1
COPPER CYANIDE	1	1	1	1	1	1
COPPER NITRATE	1	1	1	1	1	2
COPPER SULFATE	1	1	1	1	1	1
CORN OIL	1	1	1	1	1	1
COTTONSEED OIL	1	1	1	1	1	1
CRESOL	3	3	2	2	3	NR
CRESYLIC ACID	3	3	2	2	3	NR
CRUDE OIL, SOUR	1	1	1	1	1	2
CRUDE OIL, SWEET	1	1	1	1	1	2
CUMENE	2	1	1	1	2	2
CUPRIC AMMONIUM CHLORIDE	1	1	1	1	1	1
CYCLOHEXANE	2	1	1	1	1	2
CYCLOHEXANOL	2	2	1	1	2	2
CYCLOHEXANONE	2	2	2	2	1	2
CYMENE	2	1	1	1	2	2
DEXTROSE	1	1	1	1	1	2
DIBUTYL PHTHALATE	1	1	1	1	1	2
DICHLOROACETIC ACID	3	2	2	1	3	3
DICHLOROBENZENE	3	2	1	1	2	3
DIESEL FUEL	1	1	1	1	1	1
DIETHYLAMINE	T	T	2	2	T	T
DIETHYLBENZENE	2	1	1	1	2	2
DIETHYL KETONE	2	1	1	1	3	3
DIMETHYLAMINOPROPYLAMINE	3	3	2	2	3	3
DIMETHYL ANILINE	2	2	1	1	2	T
DIMETHYLFORMAMIDE	3	3	2	2	NR	NR
DINITROBENZENE	T	T	2	2	T	T
DINITRO BUTYLPHENOL	T	T	2	2	T	T
DINITROTOLUENE	T	T	2	2	T	T
DIVINYLBENZENE	3	2	1	1	2	NR
DODECYL ALCOHOL (LAURYL)	1	1	1	1	1	1
EPICHLOROHYDRIN	NR	3	1	1	NR	NR
ETHOXYETHANOL	2	1	1	1	2	2
ETHOXYLATED NONYL PHENOL	2	1	1	1	2	3
ETHYL ACETATE	2	2	1	1	2	2
ETHYL ACRYLATE	2	2	1	1	2	2
ETHYL ALCOHOL	1	1	1	1	2	2
ETHYLAMINE	T	T	2	2	NR	T
ETHYLBENZENE	2	1	1	1	2	3
ETHYL BROMIDE	NR	NR	2	2	NR	NR
ETHYL CHLORIDE	NR	NR	2	2	NR	NR
ETHYL CHLOROFORMATE	T	T	2	2	T	NR
ETHYLENEDICHLORIDE (EDC)	3	3	2	2	3	NR
ETHYLENE GLYCOL	1	1	1	1	1	2
ETHYLENEOXIDE	1	1	1	1	NR	NR
ETHYL ETHER	NR	NR	T	T	3	NR
ETHYLHEXYLACRYLATE	1	1	1	1	3	NR
ETHYL SULFATE	1	1	1	1	1	2
FATTY ACIDS	1	1	1	1	1	2
FERRIC CHLORIDE	1D	1D	1D	1D	1D	1D
FERRIC NITRATE	1	1	1	1	1	2
FERRIC SULFATE	1	1	1	1	1	1
FERRIC CHLORIDE	1	1	1	1	1	1
BORIC ACID	2A	1A	1A	1A	1A	2A
FLUOSILICIC ACID, 10%	1A	1A	1A	1A	1A	2A
FORMALDEHYDE	2	2	1	1	2	3
FORMIC ACID	NR	3	2	2	2	NR
FUEL OIL	1	1	1	1	1	1
FURFURAL	NR	T	2	2	NR	NR

SEMSTONE®	140	145	245	2010	870	805
FURFURYL ALCOHOL	2	2	1	1	3	T
GASOLINE	1	1	1	1	1	2
GLUCOSE	1	1	1	1	1	1
GLYCERINE	1	1	1	1	1	1
GLYCOLIC ACID	3	2	1	1	2	3
GOLD PLATING (CYANIDE)	1	1	1	1	2	2
GRAPE JUICE	1	1	1	1	1	2
GREEN LIQUOR	1	1	1	1	1	2
HEPTANE	1	1	1	1	1	2
HEXANE	1	1	1	1	1	2
HYDRAZINE, 35%	3	3	2	2	NR	NR
HYDRAZINE HYDRATE	3	3	2	2	NR	NR
HYDRIODIC ACID, 20%	3	3	1	1	1	T
HYDROBROMIC ACID, 20%	3	2	1	1	1	3
HYDROBROMIC ACID, 48%	3	2	2	2	1	3
HYDROCHLORIC ACID, 10%	1	1	1	1	1	2
HYDROCHLORIC ACID, 20%	2	1	1	1	1	2
HYDROCHLORIC ACID, 37%	2D	1D	1D	1D	1D	2D
HYDROFLUORIC ACID, 10%	1A	1A	1A	1A	1A	2A
HYDROFLUORIC ACID, 20%	2A	1A	1A	1A	1A	2A
HYDROFLUORIC ACID, 48%	3A	2A	2A	2A	2A	3A
HYDROFLUOSILICIC ACID, 10%	1A	1A	1A	1A	1A	2A
HYDROFLUOSILICIC ACID, 25%	2A	2A	T	T	1A	2A
HYDROGEN PEROXIDE	2	2	2	2	1	2
HYDROGEN SULFIDE GAS	1	1	1	1	1	1
HYPOCHLOROUS ACID	3	3	3	3	3	3
IODINE, CRYSTALS	3	3	2	2	1	3
ISOPHORONE	2	2	1	1	2	2
ISOPROPYL ACETATE	2	1	1	1	2	2
ISOPROPYL ALCOHOL	1	1	1	1	1	2
ISOPROPYL ETHER	2	1	1	1	2	2
JET FUEL	1	1	1	1	1	2
KEROSENE	1	1	1	1	1	2
KETCHUP	1	1	1	1	1	1
LACTIC ACID	2	2	2	1	1	2
LARD	1	1	1	1	1	1
LAURIC ACID	2	2	2	1	1	2
LAURYL CHLORIDE	1	1	1	1	1	1
LEAD ACETATE	2	2	1	1	1	1
LECITHIN	2	1	1	1	1	2
LEVULINIC ACID	2	2	2	1	1	2
LINSEED OIL	2	1	1	1	1	2
LITHIUM BROMIDE	1	1	1	1	1	2
LITHIUM CHLORIDE	1	1	1	1	1	1
LITHIUM HYDROXIDE	1	1	1	1	1	2
LITHIUM HYPOCHLORITE	2C	2C	2C	2C	1C	2C
MAGNESIUM BISULFITE	1	1	1	1	1	2
MAGNESIUM CARBONATE	1	1	1	1	1	2
MAGNESIUM CHLORIDE	1	1	1	1	1	1
MAGNESIUM HYDROXIDE	1	1	1	1	1	2
MAGNESIUM SULFATE	1	1	1	1	1	1
MALEIC ACID	3	3	2	2	1	3
MALIC ACID	2	1	1	1	1	2
MERCURIC CHLORIDE	1	1	1	1	1	1
MERCUROUS CHLORIDE	1	1	1	1	1	1
MERCURY	1	1	1	1	1	1
METHANOL	2	2	1	1	2	3
METHYLACRYLATE	3	2	2	2	3	3
METHYL ALCOHOL	2	2	1	1	2	3
METHYLBENZYL ALCOHOL	2	1	1	1	2	3
METHYL CHLORIDE	NR	3	2	2	NR	NR



SEMSTONE®	140	145	245	2010	870	805
METHYLENE CHLORIDE	NR	3	1B	1B	NR	NR
METHYL ETHYL KETONE	2	2	1	1	2	3
METHYL ISOBUTYL KETONE	2	1	1	1	2	3
METHYL METHACRYLATE	2	2	1	1	3	3
METHYL OLEATE	2	2	1	1	2	3
MILK	1	1	1	1	1	1
MINERAL SPIRITS	2	1	1	1	2	2
MOLASSES	1	1	1	1	1	1
MONOCHLOROACETIC ACID	3	2	2	1	1	3
MONOETHANOLAMINE	3	2	1	1	3	3
MURIATIC ACID	2	1	1	1	1	2
NAPHTHA	1	1	1	1	1	2
NAPHTHALENE	1	1	1	1	1	2
NAPHTHENIC ACID	2	2	1	1	1	2
NICKEL PLATING, BRIGHT	2	2	T	T	1	2
NITRIC ACID, 5%	2D	2D	2D	2D	1D	2D
NITRIC ACID, 10%	3D	3D	3D	2D	1D	3D
NITRIC ACID, 30%	NR	NR	3D	3D	1D	NR
NITRIC ACID, 50%	NR	NR	NR	3D	2D	NR
NITROBENZENE	2	2	1	1	2	3
OCTANOIC ACID	2	2	2	1	1	3
N-OCTYL ALCOHOL	1	1	1	1	1	2
OILS, ANIMAL	1	1	1	1	1	2
OILS, MINERAL	1	1	1	1	1	2
OILS, VEGETABLE	1	1	1	1	1	2
OLEIC ACID	NR	3	2	2	1	NR
OLEUM	NR	NR	3D	3D	NR	NR
OXALIC ACID	2	2	2	1	1	3
PENTACHLOROETHANE	NR	3	1	1	3	NR
PERCHLORIC ACID	3	3	2	2	1	NR
PERCHLOROETHYLENE	2	1	1	1	2	3
PHENOL, 5%	2	2	1	1	2	2
PHENOL, 85%	NR	NR	2	2	NR	NR
PHOSPHORIC ACID, 20%	1	1	1	1	1	2
PHOSPHORIC ACID, 50%	1	1	1	1	1	2

SEMSTONE®	140	145	245	2010	870	805
PHOSPHORIC ACID, 85%	2	2	1	1	1	2
PHOSPHORIC ACID, 100%	NR	3	2	2	1	NR
PHOSPHOROUS ACID	NR	3	2	2	2	NR
PHOSPHOROUS OXYCHLORIDE	3	2	2	2	3	NR
PHOSPHOROUS TRICHLORIDE	3	3	3	T	NR	NR
PHTHALIC ACID	2	2	1	1	1	2
PICRIC ACID, 10% IN ALCOHOL	3	3	T	T	2	NR
POLYACRYLIC ACID	3	3	2	1	2	3
POTASSIUM ACETATE	1	1	1	1	1	2
POTASSIUM BROMIDE	1	1	1	1	1	2
POTASSIUM CARBONATE, 10%	1	1	1	1	1	2
POTASSIUM CARBONATE, 25%	1	1	1	1	1	2
POTASSIUM CHLORATE	1	1	1	1	1	2
POTASSIUM CHLORIDE	1	1	1	1	1	1
POTASSIUM CYANIDE	2	2	1	1	1	2
POTASSIUM DICHROMATE	2	2	1	1	1	2
POTASSIUM FLUORIDE	1A	1A	1A	1A	1A	1A
POTASSIUM HYDROXIDE, 10%	1	1	1	1	1	1
POTASSIUM HYDROXIDE, 25%	1	1	1	1	1	2
POTASSIUM HYDROXIDE, 50%	1	1	1	1	1	2
POTASSIUM NITRATE	1	1	1	1	1	2
POTASSIUM PERMANGANATE	3	3	2	2	1	3
POTASSIUM PERSULFATE	1	1	1	1	1	2
POTASSIUM SULFATE	1	1	1	1	1	1
PROPANEDIOL	2	2	2	1	2	2
PROPIONIC ACID, 50%	3	3	2	1	1	NR
PROPIONIC ACID, 100%	NR	NR	3	2	2	NR
PROPYLENE GLYCOL	1	1	1	1	1	2
PYRIDINE	NR	NR	3	2	NR	NR
SALICYLIC ACID	1	1	1	1	1	2
SALT BRINE	1	1	1	1	1	1
SILVER NITRATE	1D	1D	1D	1D	1D	2D
SKYDROLL	1	1	1	1	2	2
SODIUM ACETATE	1	1	1	1	1	2
SODIUM BICARBONATE	1	1	1	1	1	1
SODIUM BISULFATE	1	1	1	1	1	1
SODIUM BISULFITE	1	1	1	1	1	1

#### KEY:

- 1 = Suitable for constant immersion, constant flow, and/or areas with frequent spills and/or poor drainage.
- 2 = Suitable for at least 72 hours of containment and for intermittent spills.
- 3 = Suitable for intermittent spills when good housekeeping practices are followed. Maintenance may be expected if spills are not cleaned up.
- T = Insufficient data available to provide rating. Testing is recommended. Consult Sentry.
- NR = Not recommended. May be suitable for limited exposure applications under certain conditions. Consult Sentry.
- A = This chemical will attack silica aggregate. Silica must be totally encapsulated. Consult Sentry for non-silica aggregate recommendations.
- B = For constant immersion service, coating must be postcured 12 hours at 150° F. Consult Sentry for alternate cure schedules.
- C = This chemical is unstable under some conditions, resulting in aggressive behavior. Consult Sentry.
- D = Coating may show some staining or color change when exposed to this chemical.

**NOTE:** Ratings are based on 135° F maximum exposure temperature. In many cases service temperature can be as high as 200° F, but consult Sentry for recommendations beyond the 135° F limit.



SEMSTONE®	140	145	245	2010	870	805
SODIUM BROMATE	1	1	1	1	1	2
SODIUM CARBONATE	1	1	1	1	1	1
SODIUM CHLORATE	2	2	2	2	1	2
SODIUM CHLORIDE	1	1	1	1	1	1
SODIUM CHLORITE	2	2	2	2	1	3
SODIUM CHROMATE	1	1	1	1	1	2
SODIUM CYANIDE	1	1	1	1	1	2
SODIUM DICHROMATE	1	1	1	1	1	2
SODIUM FLUORIDE	1A	1A	1A	1A	1A	2A
SODIUM HYDROSULFIDE	1	2	2	2	1	2
SODIUM HYDROXIDE, 10%	1	1	1	1	1	1
SODIUM HYDROXIDE, 50%	1	1	1	1	1	2
SODIUM HYPOCHLORITE, 5%	2C	2C	2C	2C	1C	2C
SODIUM HYPOCHLORITE, 18%	2C	2C	2C	2C	1C	2C
SODIUM LAURYL SULFATE, 20%	1	1	1	1	1	2
SODIUM OXALATE	1	1	1	1	1	2
SODIUM PEROXIDE	2C	2C	2C	2C	1C	2C
SODIUM PHOSPHATE (ACID)	1	1	1	1	1	2
SODIUM PHOSPHATE (TRI)	1	1	1	1	1	1
SODIUM SULFATE	1	1	1	1	1	1
SODIUM SULFIDE	1	1	1	1	1	1
SODIUM SULFITE	1	1	1	1	1	1
SODIUM TARTRATE	1	1	1	1	1	1
SODIUM THIOSULFATE	1	1	1	1	1	1
SOYBEAN OIL	1	1	1	1	1	2
TANNIC ACID	1	1	1	1	1	1
TARTARIC ACID	1	1	1	1	1	1
TETRAACID	2	2	1	1	2	3
TETRAFLUORENE	2	2	1	1	2	3
TETRAHYDROFURAN	NR	NR	NR	NR	NR	NR
TETRAHYDROFURFURYL ALCOHOL	3	3	2	2	3	NR
TITANIUM TETRACHLORIDE	2	1	1	1	2	2
TOLUENE	2	1	1	1	2	3
TOLUENE SULFONIC ACID	1	1	1	1	1	2
TOLUIDINE	NR	T	2	2	2	NR
TRICHLOROACETIC ACID	2	1	1	1	2	3
TRICHLOROBENZENE	2	1	1	1	2	3
TRICHLOROETHANE	2	1	1	1	2	3
TRICHLOROETHYLENE	3	2	1B	1B	NR	NR
TRIGLYCEROL PHOSPHATE	1	1	1	1	1	2
TRIETHYLAMINE	2	2	2	2	2	T
TRIETHYLENETETRAMINE	2	2	2	2	2	3
TRIETHYL PHOSPHITE	2	1	1	1	2	2
TRISODIUM PHOSPHATE	1	1	1	1	1	1
TURPENTINE	1	1	1	1	1	2
UREA	2	2	1	1	1	2
VINEGAR	2	2	1	1	1	2
VINYL CHLORIDE	NR	3	2	2	NR	NR
WATER, DEIONIZED	1	1	1	1	1	1
WATER, DEMINERALIZED	1	1	1	1	1	1
WATER, DISTILLED	1	1	1	1	1	1
WHITE LIQUOR (PAPER)	1	1	1	1	1	1
WINE	1	1	1	1	1	1
XYLENE	2	1	1	1	2	2
ZINC CHLORIDE	1	1	1	1	1	1
ZINC SULFATE	1	1	1	1	1	1

SEMSTONE®	140	145	245	2010	870	805
SODIUM BROMATE	1	1	1	1	1	2
SODIUM CARBONATE	1	1	1	1	1	1
SODIUM CHLORATE	2	2	2	2	1	2
SODIUM CHLORIDE	1	1	1	1	1	1
SODIUM CHLORITE	2	2	2	2	1	3
SODIUM CHROMATE	1	1	1	1	1	2
SODIUM CYANIDE	1	1	1	1	1	2
SODIUM DICHROMATE	1	1	1	1	1	2
SODIUM FLUORIDE	1A	1A	1A	1A	1A	2A
SODIUM HYDROSULFIDE	1	2	2	2	1	2
SODIUM HYDROXIDE, 10%	1	1	1	1	1	1
SODIUM HYDROXIDE, 50%	1	1	1	1	1	2
SODIUM HYPOCHLORITE, 5%	2C	2C	2C	2C	1C	2C
SODIUM HYPOCHLORITE, 18%	2C	2C	2C	2C	1C	2C
SODIUM LAURYL SULFATE, 20%	1	1	1	1	1	2
SODIUM OXALATE	1	1	1	1	1	2
SODIUM PEROXIDE	2C	2C	2C	2C	1C	2C
SODIUM PHOSPHATE (ACID)	1	1	1	1	1	2
SODIUM PHOSPHATE (TRI)	1	1	1	1	1	1
SODIUM SULFATE	1	1	1	1	1	1
SODIUM SULFIDE	1	1	1	1	1	1
SODIUM SULFITE	1	1	1	1	1	1
SODIUM TARTRATE	1	1	1	1	1	1
SODIUM THIOSULFATE	1	1	1	1	1	1
SOYBEAN OIL	1	1	1	1	1	2
TANNIC ACID	1	1	1	1	1	1
TARTARIC ACID	1	1	1	1	1	1
TETRAACID	2	2	1	1	2	3
TETRAFLUORENE	2	2	1	1	2	3
TETRAHYDROFURAN	NR	NR	NR	NR	NR	NR
TETRAHYDROFURFURYL ALCOHOL	3	3	2	2	3	NR
TITANIUM TETRACHLORIDE	2	1	1	1	2	2
TOLUENE	2	1	1	1	2	3
TOLUENE SULFONIC ACID	1	1	1	1	1	2
TOLUIDINE	NR	T	2	2	2	NR
TRICHLOROACETIC ACID	2	1	1	1	2	3
TRICHLOROBENZENE	2	1	1	1	2	3
TRICHLOROETHANE	2	1	1	1	2	3
TRICHLOROETHYLENE	3	2	1B	1B	NR	NR
TRIGLYCEROL PHOSPHATE	1	1	1	1	1	2
TRIETHYLAMINE	2	2	2	2	2	T
TRIETHYLENETETRAMINE	2	2	2	2	2	3
TRIETHYL PHOSPHITE	2	1	1	1	2	2
TRISODIUM PHOSPHATE	1	1	1	1	1	1
TURPENTINE	1	1	1	1	1	2
UREA	2	2	1	1	1	2
VINEGAR	2	2	1	1	1	2
VINYL CHLORIDE	NR	3	2	2	NR	NR
WATER, DEIONIZED	1	1	1	1	1	1
WATER, DEMINERALIZED	1	1	1	1	1	1
WATER, DISTILLED	1	1	1	1	1	1
WHITE LIQUOR (PAPER)	1	1	1	1	1	1
WINE	1	1	1	1	1	1
XYLENE	2	1	1	1	2	2
ZINC CHLORIDE	1	1	1	1	1	1
ZINC SULFATE	1	1	1	1	1	1

# KEY:

- 1 = Suitable for constant immersion, constant flow, and/or areas with frequent spills and/or poor drainage.
- 2 = Suitable for at least 72 hours of containment and for intermittent spills.
- 3 = Suitable for intermittent spills when good housekeeping practices are followed. Maintenance may be expected if spills are not cleaned up.
- T = Insufficient data available to provide rating. Testing is recommended. Consult Sentry.
- NR = Not recommended. May be suitable for limited exposure applications under certain conditions. Consult Sentry.
- A = This chemical will attack silica aggregate. Silica must be totally encapsulated. Consult Sentry for non-silica aggregate recommendations.
- B = For constant immersion service, coating must be postcured 12 hours at 150° F. Consult Sentry for alternate cure schedules.
- C = This chemical is unstable under some conditions, resulting in aggressive behavior. Consult Sentry.
- E = Coating may show some staining or color change when exposed to this chemical.

E: Ratings are based on 135° F maximum exposure temperature. In many cases service temperature can be as high as 200° F, but consult Sentry for recommendations beyond the 135° F limit.

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT D  
MANAGEMENT OF WASTE IN TANKS**

## **ATTACHMENT D**

### **MANAGEMENT OF WASTE IN TANKS PLAN**

#### **ABSTRACT**

Purpose: Spent parts washer solvents will be stored at the Avon facility in a 12,000-gallon, aboveground storage tank. Spent solvent generated from off-site locations is transported to the facility in containers. At the Service Center, the containers are emptied into a bulk solvent storage tank through use of an area designed for commingling and bulking. Handling of the spent solvents will adhere to specific practices.

Non-hazardous used oil is managed in a 12,000-gallon aboveground storage tank located within the same secondary containment dike as the hazardous waste storage tank.

This plan details these practices and provides data relative to the tanks used for storage.

## ATTACHMENT D - MANAGEMENT OF WASTE IN TANK PLAN

### 1.0 MANAGEMENT PRACTICE

The Avon Service Center will manage spent parts washer solvents and non-hazardous used oil in two 12,000-gallon, aboveground storage tanks. Table IX - 1 provides some data on the tanks. Additional information is provided in the text and in Appendix IX - A.

**TABLE IX - 1**

**Tank Specifications**

**Safety-Kleen Systems, Inc.  
Avon, New York**

	<b>Waste Description</b>	<b>Permitted Waste Codes</b>	<b>Tank Capacity in Gallons</b>	<b>Minimum Design Shell Thickness</b>
Hazardous Waste Tank	Safety-Kleen Parts Washer Solvents (Hydrocarbon and Aqueous Based)	D001, D004-D011, D018, D019, D021-D030, D032-D042, D043, Non-Hazardous	12,000	Top 2/3 @ 3/16" (4.76 mm) bottom 1/3 @ 0.25" (6.35mm) (Carbon Steel)
Non-hazardous used oil tank	Non-hazardous Used Oil	None	12,000	Top 2/3 @ 3/16" (4.76 mm) bottom 1/3 @ 0.25" (6.35mm) (Carbon Steel)

6 NYCRR 373-1.5(c)(1) The hazardous waste tank assessment by an independent, qualified, professional engineer registered in the State of New York is attached as Appendix IX - A.

6 NYCRR 373-1.5(c)(2). The 12,000-gallon aboveground, vertical tanks are approximately 10' 8" in diameter and 17' high. They are constructed of carbon steel and are painted white to reflect sunlight and inhibit corrosion.

6 NYCRR 373-1.5(c)(3). An emergency waste feed cut-off valve located adjacent to the wet dumpsters at the return and fill station will prevent the hazardous waste tank from being over-filled. In addition, both tanks are equipped with high level alarms which indicate when the tank is 95% full. The high level alarms are inspected each working day for proper functioning of electrical and mechanical components. The tank assessment report and engineering drawings provided in Appendix IX d provide additional information about the tanks and the high level alarms.



Both tanks are equipped with a pressure/vacuum vent, which operates at two ounces of pressure and one ounce of vacuum, and a loose bolt manway that acts as an emergency vent opening at a pressure of 0.5 psi. The tanks are further equipped with a dedicated, secondary containment system. The specific gravity of the hydrocarbon based parts washer solvents is approximately 0.8 and the vapor pressure is less than 2mm at 68 degrees F.

6 NYCRR 373-1.5(c)(4) The process flow diagrams are attached in Appendix IX - A. Other design drawings and diagrams are contained in drawings section.

The tanks are not subject to conditions that would result in severe external corrosion. No severe atmospheric conditions are anticipated that would result in external corrosion.

6 NYCRR 373-2.10(c)(1). An independent, professional engineer registered in New York has performed the hazardous waste tank installation assessment. The assessment is included in Appendix IX - A.

6 NYCRR 373-2.10(c)(1)(i). The tanks are constructed in accordance with Underwriters Laboratories Standard 142 and NFPA requirements. The net secondary containment for the tanks is approximately 13,488 gallons and consists of a monolithically poured slab and dike wall lined with stainless steel sheeting.

The tanks and secondary containment are inspected each operating day. Any leaks or signs of deterioration will be noted and promptly. If a leak cannot be promptly repaired, the tank contents may be transferred to another tank or tanker truck(s) and the tank will not be used again until its integrity is assured. If the tank cannot be repaired, it will be destroyed and replaced. The procedures to remove spilled or leaked material from the secondary containment system are described in the Contingency Plan. Spilled or leaked wastes will be removed promptly upon detection.

The secondary containment structure will be inspected each operating day for cracks, corrosion and other signs of deterioration. Any signs of deterioration must be noted and repaired promptly.

The concrete secondary containment system is lined with stainless steel sheets and is designed to collect liquids originating from the tank. Any accumulated liquids will be managed as described in this section and in the Contingency Plan.

The emergency waste feed cut-off valves located adjacent to the wet dumpsters will prevent the hazardous waste tank from being overfilled. The high level alarms indicate when the tanks are 95% full. The procedures described below will further ensure the safe loading and unloading of the tanks:

- (1) Park the tanker truck inside tanker containment area and secure it for material transfer. Set brakes, engage governor and hook up grounding equipment.
- (2) Check available tank volumes via gauges to verify that there is enough volume to transfer each load safely and prevent overfills. Leave hatches open on the tanker truck.

- (3) Make hose connections between storage tank and tanker truck in proper sequence (i.e. to empty vessel first). Double check to ensure connections are tight and locked.
- (4) Check the available tanker truck volume.
- (5) Engage pump to fill the tanker truck. Check for leaks along hose, piping and at connections. If a leak is noted, stop the operation immediately and make repairs or make arrangements for repairs.
- (6) Drain hoses before disconnecting to prevent spillage.
- (7) In the event of a spill, follow the emergency procedures outlined in the Contingency Plan.
- (8) Check paperwork; document proper quantities of material delivered and picked up. Ensure manifests, bills of lading and other related paperwork are in order.

In the event of a spill or leak, the procedures described in the Contingency Plan will be followed. An incidental spill will be handled as described in Section 4.5.1 and a major spill as described in Section 4.5.2. Free liquid will be pumped to the used solvent or used oil storage tank as appropriate. Spill residues from the cleanup will be containerized and will be properly characterized by generator knowledge or laboratory analysis. Equipment used will be decontaminated.

6 NYCRR 373-2.10(l) The ignitable waste is stored in such a way that it is protected from any material or conditions that may cause the waste to ignite. No hot work (i.e. welding) is done in the vicinity of the tanks unless proper precautions are taken to prevent ignition. A portion of the waste solvent tank and related piping is insulated and heat traced in order to prevent freezing and/or rupturing. The tank is also painted white to reflect sunlight.

Through use of a volume gauge, tank capacity is monitored to ensure sufficient capacity is maintained.

## **2.0 Spent Solvent Management Operations**

Spent parts washer solvents is transported to the facility in containers. The containers will remain on the transport vehicles until they can be removed and processed in the return and fill station or stored in the container storage area provided in the Return & Fill Station as described in Attachment VIII. On Mondays, Tuesdays, Wednesdays and Thursdays, the containers will be removed from the vehicles and the waste transferred to the tank within 16 hours of arrival at the facility. Vehicles arriving after work hours on Fridays or holidays are off-loaded before 12 noon of the next working day. Vehicles holding containers of spent parts washer solvent positioned at the facility will be equipped with secondary containment systems designed to capture material released into the storage compartment of the vehicles. The vehicles with ignitable wastes will be parked 50 feet from property line.

Waste transported to the facility on Safety-Kleen vehicles is managed in accordance with applicable USDOT regulations. Hazardous materials will be loaded and segregated in accordance with the Segregation Table for Hazardous Materials in 49 CFR 177.848.

Spent parts washer solvents from customers will be transferred to the waste storage tank via the return and fill station, which consists of a dumpster, dumpster/barrel washer and pump. Each container will be manually emptied allowing the waste to flow into one of the dumpsters. The personnel are required to wear personnel protective equipments including dedicated properly fit tested respirators, gloves, safety goggles/face shield and plastic aprons while pouring containerized wastes into the return and fill station. After the waste is transferred into a dumpster, the container will be placed on a barrel washer and sprayed with the spent solvent for washing. The washed container is kept on a stand, upside down for draining. The waste material in the dumpsters/barrel washer is pumped to the tank.

A drum-rinsing unit is installed immediately adjacent to one of the dumpsters/barrel washer. This unit provides a final rinse of drums with Safety-Kleen's 150 grade premium solvent for containers that are being reused. The containers are rinsed with clean solvent and are placed upside down on a funnel-like device to drain. The container-rinsing unit is piped directly to the dumpster to minimize emissions spills.

## **2.5 Used Oil Management Operations**

Used oil is transported to the facility in bulk. Small tanker trucks collect used oil from customers. After performing the used oil quality control checks described in the facility Part 360 permit, trucks park on the truck transfer pad and connect a flexible hose from the truck to the used oil tank. The pump on the truck is used to transfer used oil into the tank. The ultrasonic high level alarm and the Moorman level gauge on the tank prevent overfill spills (see drawings ADPB400A, ADPD101A, and ADPB102A). This is the same overfill protection as is installed on the hazardous waste storage tank. The used oil tank is never filled to more than 95% of capacity.

Tanker trucks are used to remove used oil from the tank for shipment off site to other Safety-Kleen facilities for processing and recycling. Used oil is managed in accordance with Part 374-2. These trucks also park on the transfer pad and connect to the tank with a flexible hose. The pump on the truck pumps oil from the tank to the truck. There is no dedicated oil transfer pump on the tank itself. The piping configuration for the used oil tank is shown in drawing 7048-4100-300.

Containers (e.g. drums) of used oil are not managed at the Avon facility.

(Used Oil and Spent Solvent Tanks)

GENERAL NOTES	
<p><b>PROPRIETARY STATEMENT</b></p> <p>This document and its contents are the property of Project Solutions Corporation and are not to be reproduced, copied, or distributed in any form without the written permission of Project Solutions Corporation. The information contained herein is for informational purposes only and is not to be used for any other purpose. The information contained herein is not to be used for any other purpose. The information contained herein is not to be used for any other purpose.</p>	
<p><b>Project Solutions Corporation</b></p> <p>10000 Green Industrial Drive - Suite 200 - Houston, TX 77066          • Phone (281) 440-7500 • Fax (281) 440-7501</p>	
<p><b>LONG-BOLTED MANWAY RETROFITS</b></p>	
<p><b>Safety-Kleen Corp.</b>          10000 Green Industrial Drive - Suite 200 - Houston, TX 77066</p>	
NAME OF PROJECT	DATE
OWNER/ENGINEER/ARCHITECT	DATE
DESIGNER/ENGINEER/ARCHITECT	DATE
LOCATION	DATE
PROJECT NO.	DATE



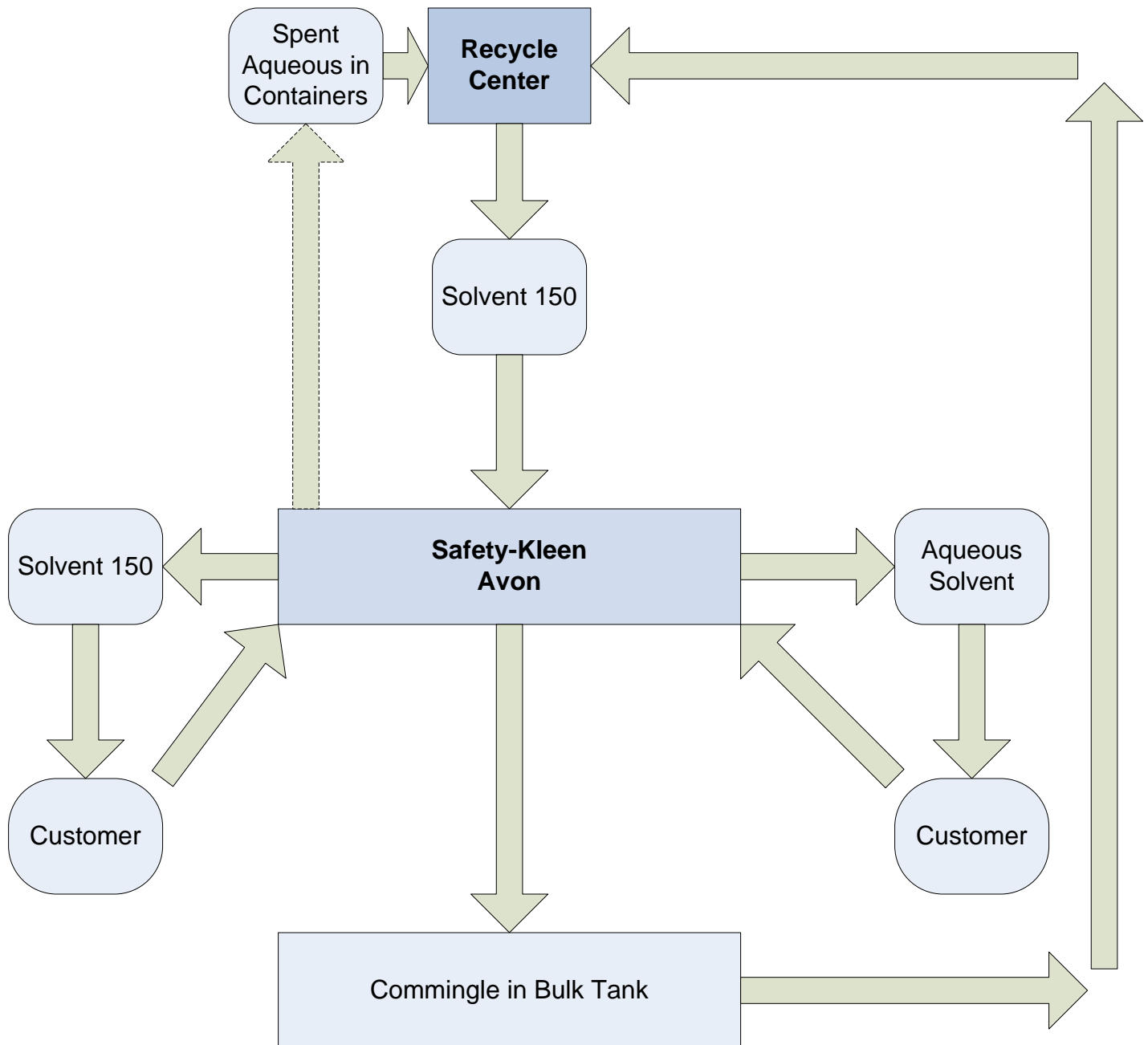
## **APPENDIX IX-A**

### Process Flow Diagram

Hazardous Waste Tank Integrity Assessment (1989)

Stainless Steel Liner Assessment and Containment Calculations

**SAFETY-KLEEN  
SOLVENT  
WASTE  
MANAGEMENT**



**CERTIFICATION REPORT  
ASSESSING THE INTEGRITY OF ONE  
HAZARDOUS WASTE STORAGE TANK  
IN ACCORDANCE WITH  
FEDERAL REGULATIONS**

**SEPTEMBER 1989**

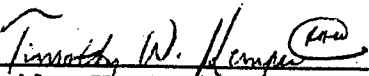
**Located at:**

**Safety-Kleen Corporation  
1525 West Henrietta Road  
Avon, New York 14414**

**Submitted by:**

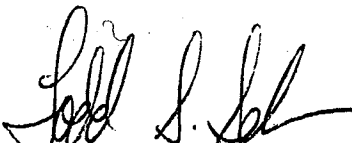
**GROUNDWATER TECHNOLOGY, INC.  
12 Walker Way  
Albany, New York**

**Prepared by:**

  
\_\_\_\_\_  
**Timothy W. Kemper**  
**Manager, Storage Systems**  
**Management Services**

  
\_\_\_\_\_  
**Bruce W. Ahrens**  
**Senior Engineer**

**Reviewed by:**

  
\_\_\_\_\_  
**Todd G. Schwendeman**  
**District Manager**

## TABLE OF CONTENTS

	<u>page</u>
1.0 PROFESSIONAL ENGINEER CERTIFICATION. . . . .	1
2.0 INTRODUCTION . . . . .	2
2.1 Description of Tank . . . . .	2
3.0 ASSESSMENT OF EXISTING TANK SYSTEM'S INTEGRITY. . . . .	3
3.1 Design Standards Check. . . . .	3
3.2 Hazardous Characteristics of the Waste. . . . .	4
3.3 Existing Corrosion Protection Measures. . . . .	4
3.4 Documented Age of the Tank System . . . . .	5
3.5 Results of Tank Integrity Examination . . . . .	5
4.0 CONCLUSIONS. . . . .	7

## APPENDICES

- A Federal Regulations (40 CFR Part 265.191)
- B Schematic Drawing of Hazardous Waste Storage Area
- C Waste Disposal Manifest, and Material Safety Data Sheet (MSDS)
- D Underwriters Laboratories Standard UL 142 -- Steel  
    Aboveground Tanks
- E Tank and Piping Inspection Forms
- F Photographs of Hazardous Waste Storage System

# 1.0 PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I have reviewed this Integrity Assessment Report and being familiar with Federal Regulation 40 CFR Part 265.191 do attest that the assessment has been conducted in accordance with good engineering practices.

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

ROBERT E. LUECK

Printed Name of Registered Profession Engineer

Robert E. Lueck

Signature of Registered Professional Engineer

Registration Number 040336

State NY

Date 11/30/89

307

## 2.0 INTRODUCTION

Groundwater Technology, Inc. (GTI) was requested by Safety-Kleen Corporation to assess the integrity of Safety-Kleen's existing aboveground hazardous waste storage tank system at the Avon, New York service center. On Wednesday, July 26, 1989, GTI performed this assessment in accordance with the Code of Federal Regulations (40 CFR Part 265.191). Refer to Appendix A for a copy of these regulations.

### 2.1 Description of Tank System

Safety-Kleen Corporation's Avon, New York facility contains one 2,000 gallon aboveground hazardous waste storage tank. The tank is approximately 10' - 6" in diameter and 19' - 0" in height. The tank contains used mineral spirits. The tank is supported on a grid of six inch deep by two inch wide box channels and is located within a reinforced concrete diked area.

A schematic diagram of the hazardous waste storage system is located in Appendix B.

### 3.0 ASSESSMENT OF EXISTING TANK SYSTEM'S INTEGRITY

The following aspects were evaluated during the integrity assessment of the existing tank system as outlined in the Federal Regulations (40 CFR 265.191):

- o Design Standards Check
- o Hazardous Characteristics of the Waste
- o Existing Corrosion Protection Measures
- o Documented Age of Storage System
- o Results of Tank Integrity Examination Test

#### 3.1 Design Standards Check

According to Safety-Kleen records, and the Buffalo Tank manufacturer's label affixed to the tank, the tank was constructed in accordance with Underwriter's Laboratories Standard UL 142 - Steel Aboveground Tanks for Flammable and Combustible Liquids. The UL 142 Standard is intended to prevent the collapse or rupture of tanks designed to that standard. Refer to Appendix D for appropriate portions of the UL 142 standard. The ancillary equipment consists of two liquid dumpsters, located inside an adjacent dock/loading facility, and galvanized steel pipe which runs between the tank area and the dumpsters. All the piping is located aboveground.

### 3.2 Hazardous Characteristics of the Waste

The used mineral spirits are considered a hazardous waste due to its characteristic of ignitability. The typical flashpoint of used mineral spirits is approximately 100 degrees Fahrenheit (°F) as verified by the Material Safety Data Sheets (MSDS) provided by Safety Kleen and is, therefore, considered an ignitable D001 waste (flashpoint less than 140°F). Refer to Appendix C for a copy of a Disposal Manifest and a MSDS for mineral spirits.

The characteristic of ignitability will not adversely affect the compatibility of the liquid waste with the carbon steel tank material. Mineral spirits used in accordance with Safety-Kleen's standard protocol is not considered corrosive to carbon steel; herefore, the waste material spirits stored should not threaten the integrity of the tank system.

### 3.3 Existing Corrosion Protection Measures

The aboveground tanks are painted white to reflect sunlight and to inhibit atmospheric corrosion. According to Safety Kleen records, there are two base coats of alkyd white enamel paint and one white oxide coat. The tanks are periodically repainted as required. Most recently, the tank was painted in 1983. In May, 1989 the tank was cleaned and placed on a galvanized steel grid of six inch deep by two inch wide deep box channels. New transfer piping was also installed at this time.



Because the tank is supported on the grid of box channels, the tank is not in direct contact with the concrete floor of the diked area, therefore, requires no galvanic/cathodic protection.

#### 3.4 Documented Age of Tank System

The tank was purchased and installed at the facility in 1982, according to Safety-Kleen records.

#### 3.5 Results of Tank Integrity Examination Test

GTI visually inspected the tank, piping, and ancillary equipment. The system appeared to be in good condition. In addition to visual inspection, ultrasonic wall-thickness testing was performed on the aboveground tank and piping, where accessible, to detect corrosion, manufacturing defects, erosion and/or general deterioration.

A Panametrics model #5230B ultrasonic thickness gauge was used to determine tank and piping wall thicknesses. Refer to the inspection forms found in Appendix E for thickness readings. Locations of the tank and piping thickness gaugings are indicated on the hazardous waste storage system schematic drawing located in Appendix B.

At each course of steel plate used to construct the tank, eight thickness readings were taken radially every 45° around the circumference of the tank. The results of the thickness tests indicate that the vertical tanks meet the minimum requirements set forth by Underwriter's Laboratories (UL 142) at each area tested.

The results of the thickness testing on the piping indicate that American National Standards Institute (ANSI) standard schedule 40 carbon steel piping was used to construct the piping system. An evaluation of the data collected indicates that the piping is in acceptable condition. Details of the piping thickness readings are also included in Appendix E.

Photographs of the hazardous waste storage system are included in Appendix F.

#### 4.0 CONCLUSIONS

The existing aboveground storage system at the Avon, New York service center was assessed in accordance with 40 CFR 265.191. An evaluation of the data collected indicates that the storage system is of acceptable integrity.

## **APPENDIX A**

### **Federal Regulations (40 CFR Part 265.191)**

**§ 265.191 Assessment of existing tank system's integrity.**

(a) For each existing tank system that does not have secondary containment meeting the requirements of § 265.193, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in paragraph (c) of this section, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified, registered professional engineer in accordance with § 270.11(d), that attests to the tank system's integrity by January 12, 1988.

(b) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

(1) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;

(2) Hazardous characteristics of the waste(s) that have been or will be handled;

(3) Existing corrosion protection measures;

(4) Documented age of the tank system, if available, (otherwise, an estimate of the age); and

(5) Results of a leak test, internal inspection, or other tank integrity examination such that:

(i) For non-enterable underground tanks, this assessment must consist of a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects,

(ii) For other than non-enterable underground tanks and for ancillary equipment, this assessment must be

either a leak test, as described above, or an internal inspection and/or other tank integrity examination certified by an independent, qualified, registered professional engineer in accordance with § 270.11(d) that addresses cracks, leaks, corrosion, and erosion.

[Note.—The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting the integrity examination of an other than non-enterable underground tank system.]

(c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1980 must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.

(d) If, as a result of the assessment conducted in accordance with paragraph (a) of this section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of § 265.196.

[Information collection requirements contained in paragraphs (a)–(d) were approved by the Office of Management and Budget under control number 2050-0050.]

## **APPENDIX B**

### **Schematic Drawing of Hazardous Waste Storage Area**

FIGURE 1

# SCHEMATIC OF HAZARDOUS WASTE STORAGE AREA

PROJECT: SAFETY-KLEEN/AVON

LOCATION: AVON, NY

PROJECT NO.: 110-021-1384

CHECK VALVE (125 WOG)

GATE VALVE

EMERGENCY FIRE SHUT-OFF VALVE

QUICK DISCONNECT WITH END CAP

PUMP

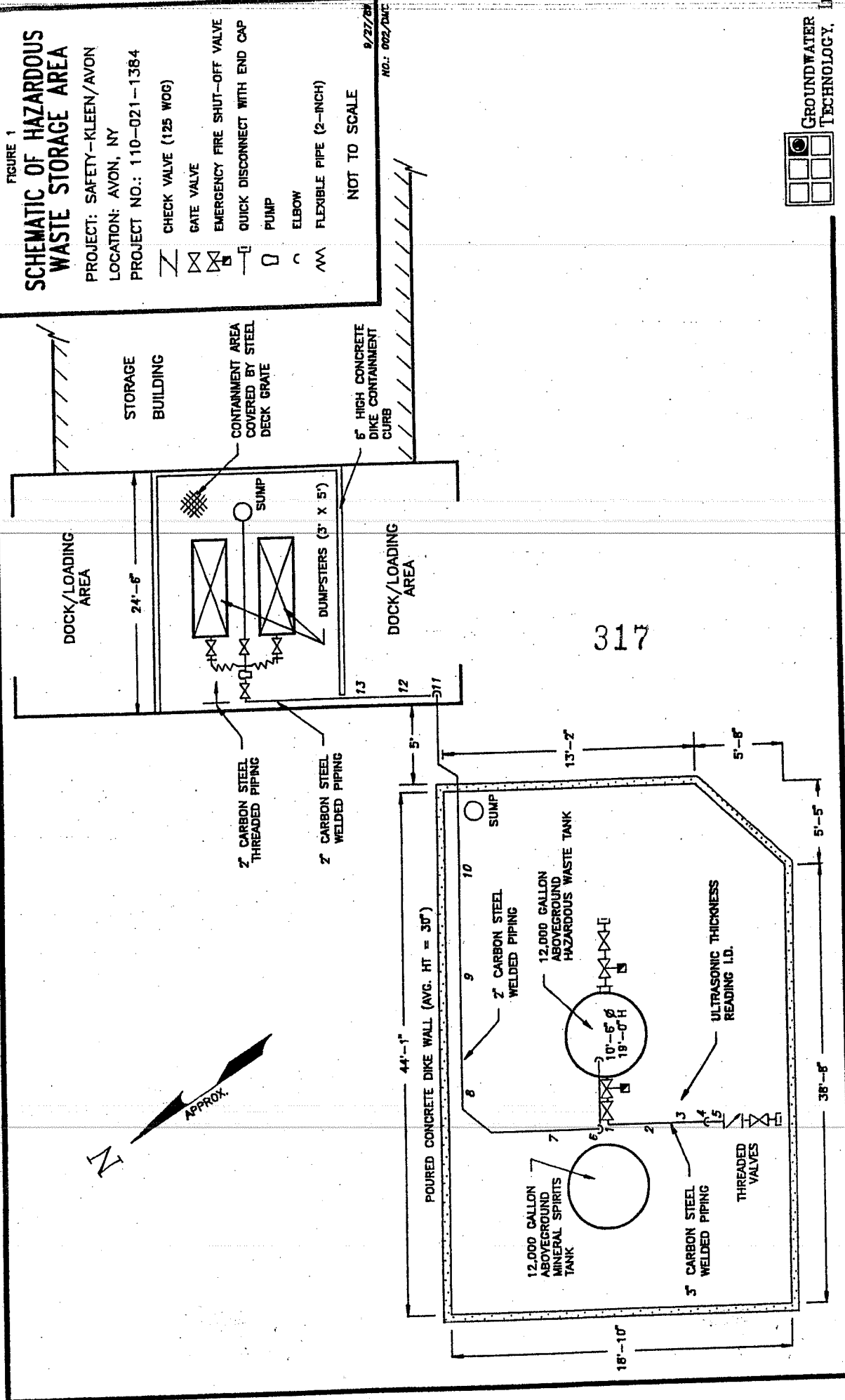
ELBOW

FLEXIBLE PIPE (2-INCH)

NOT TO SCALE

9/27/84

NO.: 002/DAC



GROUNDWATER  
TECHNOLOGY, INC.

## **APPENDIX C**

### **Waste Disposal Manifest, and Material Safety Data Sheet (MSDS)**

318





State of New Jersey  
Department of Environmental Protection  
Division of Hazardous Waste Management  
Manifest Section  
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039, Expires 8-30-86

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
Generator's Name and Address: SAFETY-KLEEN CORP PO BOX 97 AVON, NY 14414		NYD980753784	06943	A. State Manifest Document Number NJ A 0561864	
Generator's Phone: 714 236-2411		US EPA ID Number		C. State Generator's ID 1823 WEST HENRIETTA RD AVON, NY 14414	
Transporter 1 Company Name: SAFETY-KLEEN CORP		US EPA ID Number		D. Transporter's Phone: 609 881-2526	
Transporter 2 Company Name:		US EPA ID Number		E. State Trans. ID	
Designated Facility Name and Site Address: SAFETY-KLEEN CORP CENCO BLVD, ALMO IND PARK CLAYTON, NJ 08312		US EPA ID Number		F. Transporter's Phone: G. State Facility's ID: H. Facility's Phone:	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID-Number)		12. Containers		13. Total Quantity	14. Unit Wt/Vol
HM a. X b. c. d.		No. Type			
b. WASTE PETROLEUM NAPHTHA COMBUSTIBLE LIQUID, UN1255, (EPA, D001)		320 001TT		06980	0001
13. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above			
a. (A) 1, L, D001		b. TO4-SOLV. REC.			
15. Special Handling Instructions and Additional Information					
EMERGENCY RESPONSE 1(312)697-8460 OR 1(312)888-4660 24HR					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name		Signature		Month Day Year	
IRVING KENNEY		<i>Irving Kenney</i>		7 1 84	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Charles J. ...		<i>Charles J. ...</i>		7 1 84	
18. Transporter 2 Acknowledgement of Receipt of Material					
Printed/Typed Name		Signature		Month Day Year	
...		<i>...</i>		7 1 84	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous material, as shown by this manifest except as noted in item 19					
Printed/Typed Name		Signature		Month Day Year	
...		<i>...</i>		7 1 84	

319

# MATERIAL SAFETY DATA SHEET

GENIUM PUBLISHING CORPORATION  
1145 CATALYN STREET  
SCHENECTADY, NY 12303-1836 USA  
(518) 377-8855



NO. 134  
MINERAL SPIRITS  
TYPE I  
Revision B  
DATE July 1984

## SECTION I. MATERIAL IDENTIFICATION

**MATERIAL NAME:** MINERAL SPIRITS, TYPE I  
**DESCRIPTION:** Refined distillate of petroleum. Hydrocarbon mixture (see Sect II) with a controlled distillation range and a flash point >100 F.  
**OTHER DESIGNATIONS:** Stoddard Solvent; Petroleum Distillate, Naphtha or Spirits, (combustible); White Spirits; ASTM D235, Type I; GE Material D5B8; CAS #008 052 413; C<sub>9</sub>H<sub>20</sub>O.  
**MANUFACTURER:** Available from many suppliers.

## SECTION II. INGREDIENTS AND HAZARDS

	%	HAZARD DATA
Mineral Spirits, Type I		8-hr TWA 100 ppm* (or 525 mg/m <sup>3</sup> )
Typical composition:		
Paraffinic hydrocarbons	30-50	
Naphthenic hydrocarbons (Cycloparaffins)	30-40	
Aromatic and olefinic hydrocarbons	10-20	Eye, Human 470 ppm/15M (Irritation Effect)
*ACGIH (1983) TLV; STEL is 200 ppm. NIOSH has recommended a 10-hr TWA of 60 ppm or 350 mg/m <sup>3</sup> . The "action level" is also recommended to be 350 mg/m <sup>3</sup> . Current OSHA PEL for Stoddard Solvent is 500 ppm.		

## SECTION III. PHYSICAL DATA

Boiling point, 1 atm, deg F	300-407	Specific gravity 60/60 F	ca 0.79
Vapor pressure @ 25 C, mm Hg	ca 5	Volatiles, %	ca 100
Vapor density (Air=1) (average)	ca 4.8	Evaporation rate (BuAc=1)	ca 0.08
Solubility in water, 20C	Insoluble		

**Appearance & Odor:** Clear, colorless liquid with a kerosine-like odor that is usually perceptible to humans at about 1 ppm in air.

## SECTION IV. FIRE AND EXPLOSION DATA

Flash Point and Method	Autoignition Temp.	Flammability Limits in Air	Lower	Upper
100 F min. (TCC)	450-500 F	% by volume	0.8	~6

**Extinguishing media:** Foam, dry chemical, carbon dioxide, and water spray or fog. Use of a direct stream of water on burning liquid can scatter flames.

This liquid is near its lower flammability limit at room temperature (saturated air at 25 C contains about 0.5 volume % of Stoddard Solvent). In a fire situation or when heated or misted, it becomes a hazardous, highly flammable material.

Use self-contained breathing apparatus for respiratory protection in fighting fires in enclosures.

## SECTION V. REACTIVITY DATA

This material is stable in closed containers under its normal handling and storage conditions. It does not polymerize.

As a combustible hydrocarbon liquid (OSHA Class II), it can react violently with strong oxidizing agents such as chlorine, oxygen, or such strong oxidizing acids as nitric and sulfuric.

Thermal-oxidative degradation can produce carbon monoxide and partially oxidized hydrocarbons.

<b>SECTION VI. HEALTH HAZARD INFORMATION</b>	TLV 100 ppm (See Sect II)
<p>This material is a central nervous system depressant and a mucous membrane irritant. Symptoms of overexposure include dizziness, headache, intoxication with euphoria leading to unconsciousness. Nose and throat irritation may occur from inhalation. Prolonged or repeated skin contact will cause defatting, irritation and dermatitis. Eye contact with liquid can cause conjunctivitis. Eye irritation can also occur after 15 minutes exposure to vapors at 470 ppm. A fatal ingestion dosage for humans is estimated at 3-4 ounces. Aspiration into the lungs after ingestion can cause edema; and one ounce aspirated may be fatal.</p> <p><b>FIRST AID:</b></p> <p><u>Eye Contact:</u> Flush thoroughly with running water for 15 min., including under eyelids.</p> <p><u>Skin Contact:</u> Promptly remove solvent wet clothing and wash contact area with soap and water. Get medical help if irritation persists or if large body area contacted.</p> <p><u>Inhalation:</u> Remove to fresh air. Restore and/or support breathing as needed. (If breathing is difficult, give oxygen therapy.) Get medical help.</p> <p><u>Ingestion:</u> Contact physician! Aspiration a hazard! Give 3 oz of USP white mineral oil or edible vegetable oil to drink. Do not induce vomiting unless medical help is not available, the victim is alert, and &gt;1-2 oz has been ingested.</p>	
<b>SECTION VII. SPILL, LEAK, AND DISPOSAL PROCEDURES</b>	
<p>Notify safety personnel of large spills. Eliminate sources of heat or ignition. Provide adequate ventilation. Clean-up personnel need protection against skin contact and inhalation of vapors. Contain spill. Recover liquid when possible. Absorb small spills and residues with vermiculite, dry sand, or similar material. Pick up and place in suitable containers. Avoid discharging Mineral Spirits directly into a sewer or surface waters!</p> <p><u>DISPOSAL:</u> Absorbed material can be buried in an approved landfill, incinerated, or removed via a licensed solvent disposal company. Follow Federal, State and Local regulations.</p>	
<b>SECTION VIII. SPECIAL PROTECTION INFORMATION</b>	
<p>Provide general ventilation and, especially when heated or misted, local exhaust ventilation (explosion-proof) to meet TLV requirements. A chemical cartridge respirator with organic vapor cartridge and a full facepiece can be used below 1000 ppm. Self-contained breathing apparatus with a full facepiece has been recommended for use up to 5000 ppm. Approved protective gloves should be used to prevent prolonged or repeated skin contact. Chemical safety goggles and/or face shield should be used where splashing is possible. An eyewash station and washing facilities should be accessible. Remove contaminated clothing (fire and health hazard); thoroughly dry or launder before reuse. Preplacement and periodic medical exams should emphasize skin, liver, kidney, central nervous system, and respiratory diseases for those regularly exposed. Individuals with such problems may be at an increased risk from exposure.</p>	
<b>SECTION IX. SPECIAL PRECAUTIONS AND COMMENTS</b>	
<p>Store in a cool, clean, well-ventilated, fire resistant storage area away from oxidizing agents and sources of heat and ignition. Use a solvent storage room or cabinet that meets requirements for an OSHA Class II Combustible liquid. Store in closed metal drums or safety cans with identifying labels. Prevent physical damage to containers. Bond and ground containers for transfers of liquid to prevent static sparks. Use non-sparking tools and follow electrical codes in areas of use and storage. No smoking in areas of use or storage. Use with good ventilation. Avoid inhalation of mist or vapors. Prevent eye contact and repeated or prolonged skin contact.</p> <p>DOT Classification: PETROLEUM NAPHTHA I.D. No. UN1255 Label: (None) PETROLEUM DISTILLATE I.D. No. UN1268 Label: (None)</p> <p>DATA SOURCE(S) CODE: 2-7,9,11,12,14,16,27,31,38,47</p>	
<p>Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Genium Publishing Corporation extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.</p>	<p>APPROVALS: MIS/CRD <i>J. W. Nielsen</i> INDUST. HYGIENE/SAFETY <i>JW 7-23-84</i> MEDICAL REVIEW: 1 August 1984</p>

## **APPENDIX D**

### **Underwriters Laboratories Standard UL 142 -- Steel Aboveground Tanks**

UNDERWRITERS LABORATORIES

Standard UL 142

14. Metal Thickness

14.1 A vertical tank shall be fabricated from steel not thinner than specified in Table 14.1 for carbon steel, and Table 14.2 for stainless steel.

TABLE 14.1  
MINIMUM METAL THICKNESS — VERTICAL TANKS

Capacity U.S. Gallons <sup>b</sup>	Carbon Steel Sheet Thickness, Inches (mm)		
	Shell	Bottom	Top <sup>c</sup>
1100 or less	0.093 (2.36)	0.093 (2.36)	0.093 (2.36)
Over 1100	0.167 (4.24) <sup>a</sup>	0.240 (6.10)	0.123 (3.12)

<sup>a</sup>For a tank more than 25 feet (7.5 m) in height, all parts of the shell located more than 25 feet (7.5 m) below the top edge of the shell shall not be less than 1/4 inch (6.4 mm).

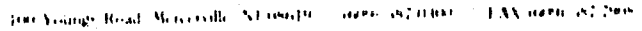
<sup>b</sup>For SI units 1 U.S. gallon = 3.78 L.

<sup>c</sup>See paragraph 15.4.

Table 14.1 revised July 6, 1984

## **APPENDIX E**

### **Tank and Piping Inspection Forms**



- ment: 1" RAIN WATER COLLECTED IN CONCRETE DIKE.
- NO SHEEN VISIBLE. SAFETY KLEEN-BUFFALO WILL PUMP SOON.
- TANK SUPPORTED ON C6x3 BOX CHANNELS, BOTTOM /UNDERSIDE OF TANK PAINTED WITH RED PRIMER.
- 1" BOLTS (4) SECURING TANK TO CONCRETE PAD.
- CONCRETE DIKE IN GOOD CONDITION. MINOR SURFACE CRACKS.

TANK NUMBER: DIRTY

LOCATION: SAFETY-KLEEN  
AVON, N.Y.

CONTENTS: SPENT  
MINERAL SPIRITS

MINIMUM PIPING DESIGN THICKNESS (MPDT): SCH 40

CORROSION ALLOWANCE: N/A

MATERIAL: GALV C.S.

$3" \phi \text{ sch. 40} = 0.216"$   
 $2" \phi \text{ sch. 40} = 0.154"$  }  $\pm 12.5\%$  MANUF. TOLERANCE

[illegible]

COMMENTS: • NO CORROSION APPARENT - GALV. PIPING  
• NO LEAKAGE OBSERVED  
• THREADED & WELDED JOINT CONSTRUCTION

BY: T. KEMPER  
B. AHRENS

DATE: 7/26/89

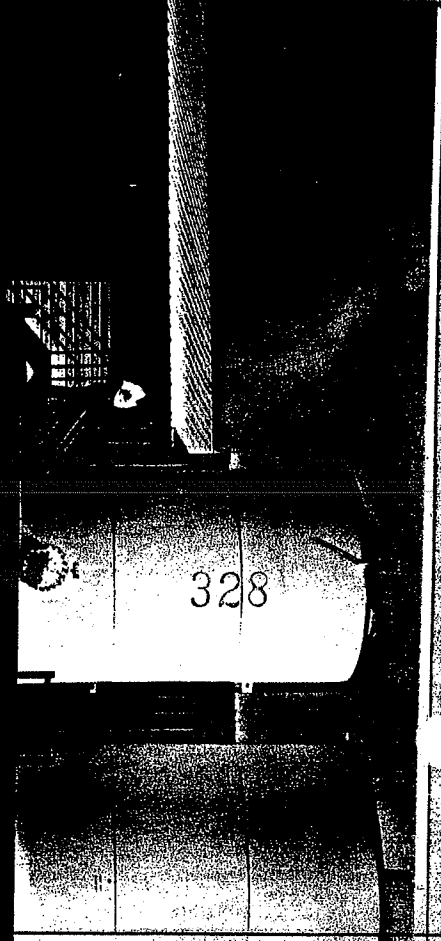
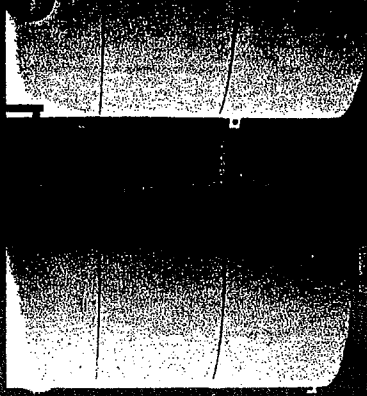
ACCEPTANCE STANDARD: AVERAGE THICKNESS > MINIMUM DESIGN THICKNESS

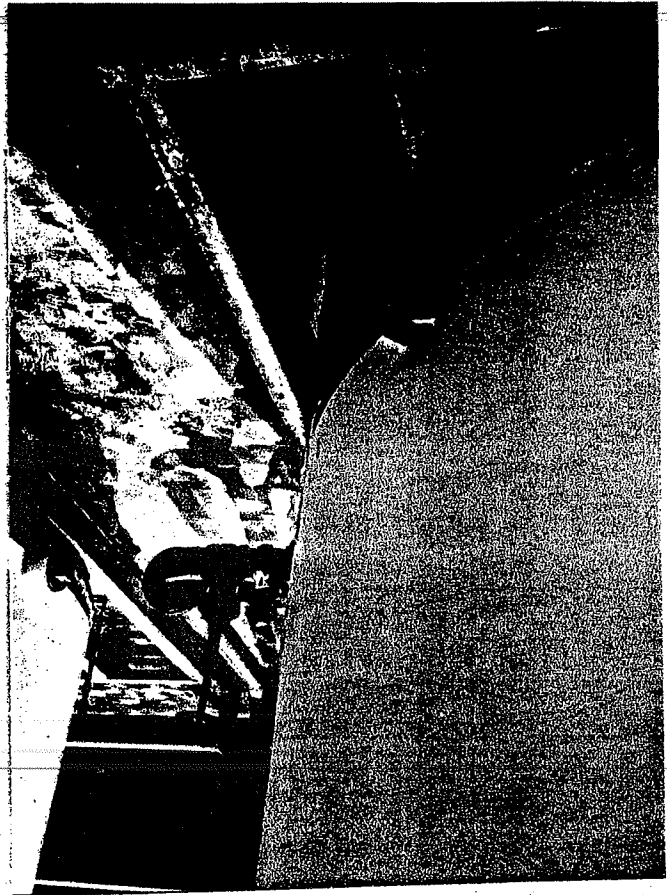
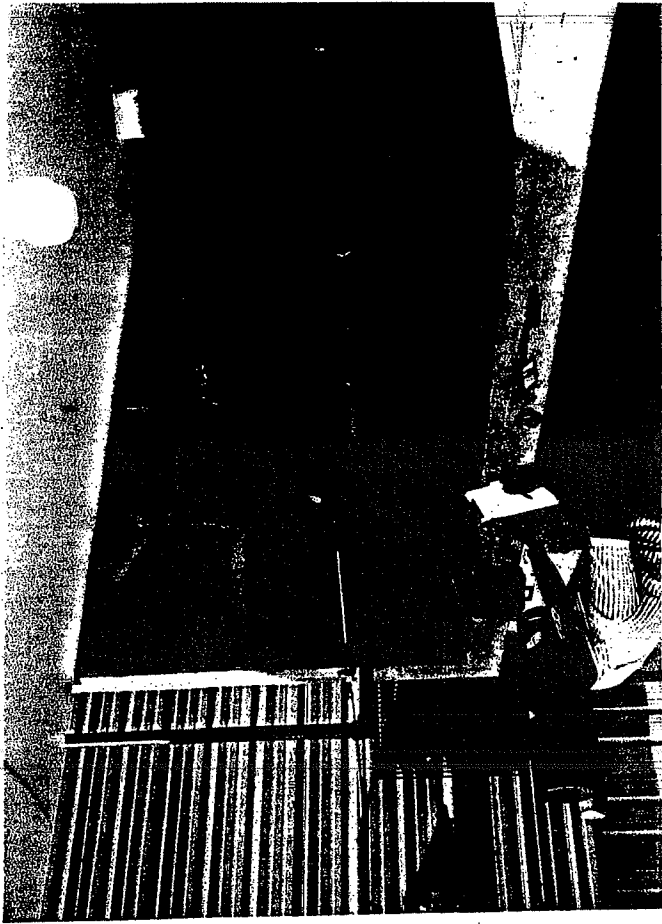
GROUNDWATER TECHNOLOGY, INC.  
220 NORWOOD PARK SOUTH  
NORWOOD, MA 02062



## **APPENDIX F**

### **Photographs of Hazardous Waste Storage System**





**INSPECTION OF STAINLESS  
STEEL DIKE LINER  
IN THE SAFETY-KLEEN BRANCH  
LOCATED AT AVON, NEW YORK**

**Prepared for:  
Safety-Kleen Corporation  
Avon, New York**

**Prepared by:  
Eryou Engineering  
2500 Airport Road South, Suite 210  
Naples, FL 34112-4883**

330

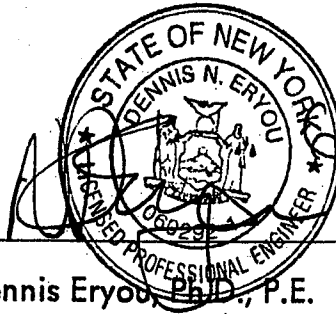
**May 20, 2005**

## CERTIFICATION

(40 CFR 265.192 & 40 CFR 265.193)

I hereby certify that I have reviewed this Hazardous Waste Dike Liner Installation Assessment Report and being familiar with Resource Conservation and Recovery (RCRA) regulations 40 CFR 265.192 and 40 CFR 265.193 do attest that the assessment has been conducted in accordance with good engineering practices.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.



N. Dennis Eryou, Ph.D., P.E.

New York Professional Engineer

License Number 060292-1

# **TABLE OF CONTENTS**

## **SECTION**

## **PAGE**

### **1.0 INTRODUCTION**

1

#### **1.1 Background**

1

#### **1.2 Objectives**

1

### **2.0 DISCUSSION OF RESULTS**

1

## **APPENDICES**

### **Appendix A - Photographs**

### **Appendix B - Tank Farm Layout**

## **1.0 INTRODUCTION**

### **1.1 Background**

The Safety-Kleen facility on West Henrietta Road, Avon, New York has been in operation since 1982.

The tank farm at the facility has containment for three (3) 12,000 aboveground vertical storage tanks. This containment is made of reinforced concrete that is typically 8" thick.

It has been determined that this dike should be fitted with a stainless steel liner to make sure that containment is assured should there be a rupture of a tank or other sudden release of liquids in the dike.

### **1.2 Objectives**

The purpose of this report is to determine if the dike liner has been modified to meet installation standards per drawings from Eryou Engineering dated 2/7/04. See photographs in Appendix A.

## **2.0 DISCUSSION OF RESULTS OF INSPECTION**

The following issues and recommendations are the result of the inspection that took place on June 17, 2004. After each concern, a statement of current conditions from the May, 2005 inspection is noted.

### **Concern**

- a. The most notable of the issues is the steel angle that is shown in the drawings going completely around the perimeter of the dike wall. The angle is actually installed only on the north and south walls of the dike.

The contractor needs to return and install the angle completely around the dike wall as per drawings.

333

### Current condition

- a(1) The contractor has installed angle iron completely around the edge of the dike wall as per drawings.

### Concern

- b. The next issue is the overlap of the stainless liner and the steel angle iron. The dike walls appear to be slightly wider than the design drawings show. Therefore, the two steel materials do not overlap as per drawing and there is a gap between the two of 1/4" to 1" ±. This gap allows rainwater and probably snow (due to the great height of the north side of the roof) to hit the top of the dike wall and run behind the stainless steel liner. If enough water accumulates behind the steel liner, when water temperatures go below freezing, the water will expand while freezing and possibly damage the dike.

There are at least two ways to fix the problem; weld an extra piece of stainless steel to the existing stainless to extend it under the steel angle bolted to the dike wall. Then caulk the gap to preclude all moisture.

Another way is to just caulk the gap between the two steel components. This may or may not work due to the different rates of expansion of the two steel components. The stainless steel is not even along the top of the dike wall creating a wavy appearance. This creates both vertical and horizontal gaps between the two steels.

### Current condition

- b(1) The contractor has filled all gaps between the steel members. The repair seems to be adequate to prevent moisture from getting behind the liner.



### Concern

- c. The new steel does measure to be 11 gauge (0.120") and it appears to have been welded to the existing stainless steel plates that were installed over ten years ago under the tanks. The new steel liner is 0.120" in thickness, but the furthest east existing plate is much thinner measuring through ultrasonic testing only 0.060". Although this is currently an adequate thickness for stainless steel, it does not meet the design specifications of the liner and may become an issue in the future. This area should be ultrasonically tested yearly.

### Current condition

- c(1) The stainless steel plates under the tanks has been thickness tested in random locations and still shows 0.060" thick. No appreciable change in thickness was noted. These areas should be ultrasonically tested yearly.

### Concern

- d. The solvent pump located at the west end of the dike is supported off the dike floor by three pieces of 1/2" threaded rod welded to the stainless liner. One of these pieces of rod has broken off at the weld leaving only two pieces supporting the pump. It is our opinion that the piping is truly supporting the weight of the pump not the threaded rod. We recommend a better system of support to be provided for the pump.

### Current condition

- d(1) The pump has been supported with a metal pump stand that appears to be properly installed.

Concern

- e. The 3" x 2" tubular steel supports are supposed to be welded on both sides of the bottom of the tube to the top face of the angle on top of the dike wall. They are actually only welded on the end of each tube, not the side.

Current condition

- e(1) The tubular steel has been welded to the angle as per drawings.

Concern

- f. The final notation of this inspection is the hold-downs of the tanks. Typical installation of tanks calls for an anchor bolt into the concrete. The existing hold-downs seem to be only welded to the stainless steel plates under the tanks. This method of tank anchoring may or may not be adequate and further study is necessary.

Current conditions

- f(1) No request for further anchor bolt study has been received by our office.

The drawings also call for a 2 foot 24 hour water test and vacuum box testing of the welds. The contractor has sent a letter to us stating that the welds were vacuum box tested, and that they completed a hydrostatic test as per specs. Both tests were reported to have passed.

The sump as shown in original dike construction drawings has been covered over by the stainless steel liner. The question of how precipitation is removed from the dike arises.

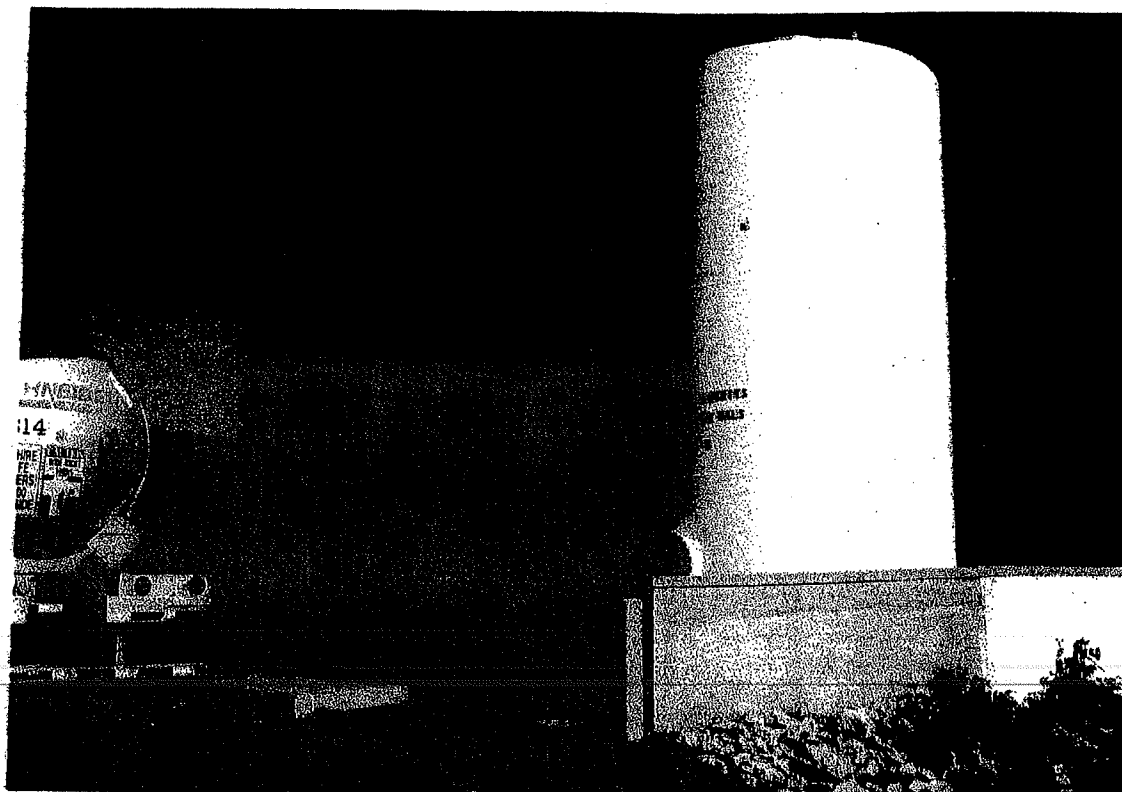
The basic structure of the dike liner appears to be sound and the unit can be approved on the condition that the tank hold down system won't damage the liner.

336

# **APPENDIX A**

## **PHOTOGRAPHS**

### **AVON, NEW YORK**



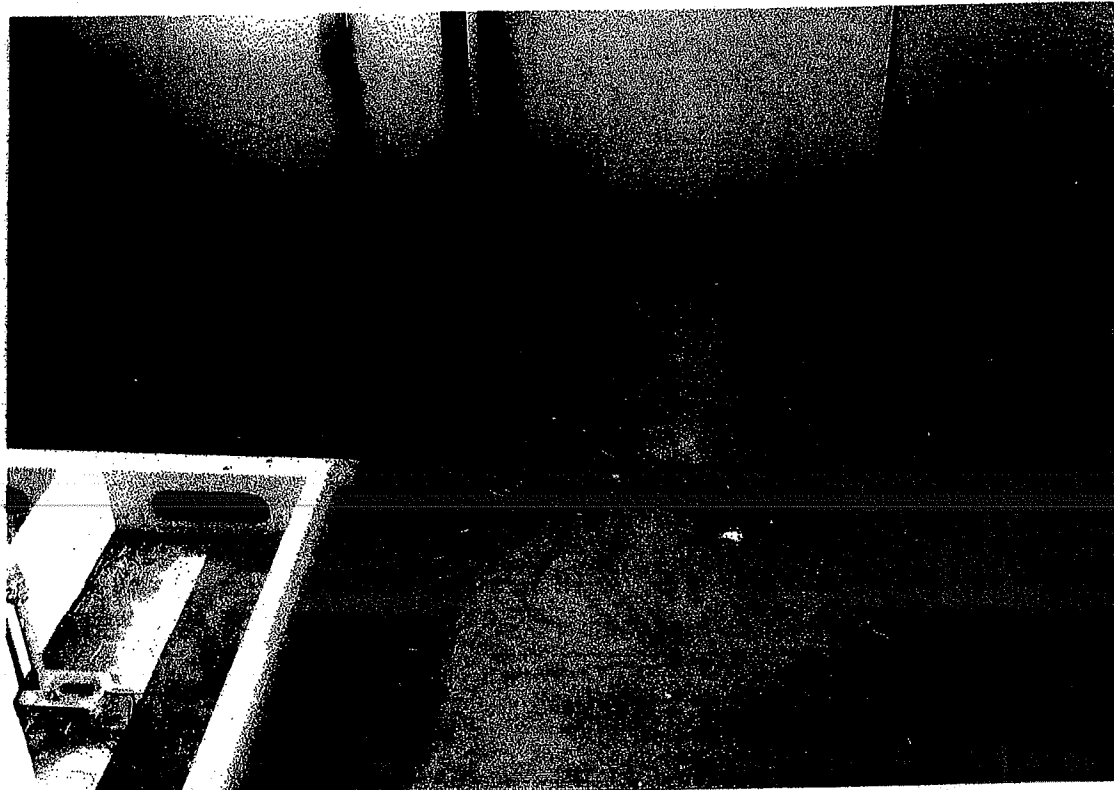
**PHOTOGRAPH #1**



**PHOTOGRAPH #2**



**PHOTOGRAPH #3**



**PHOTOGRAPH #4**



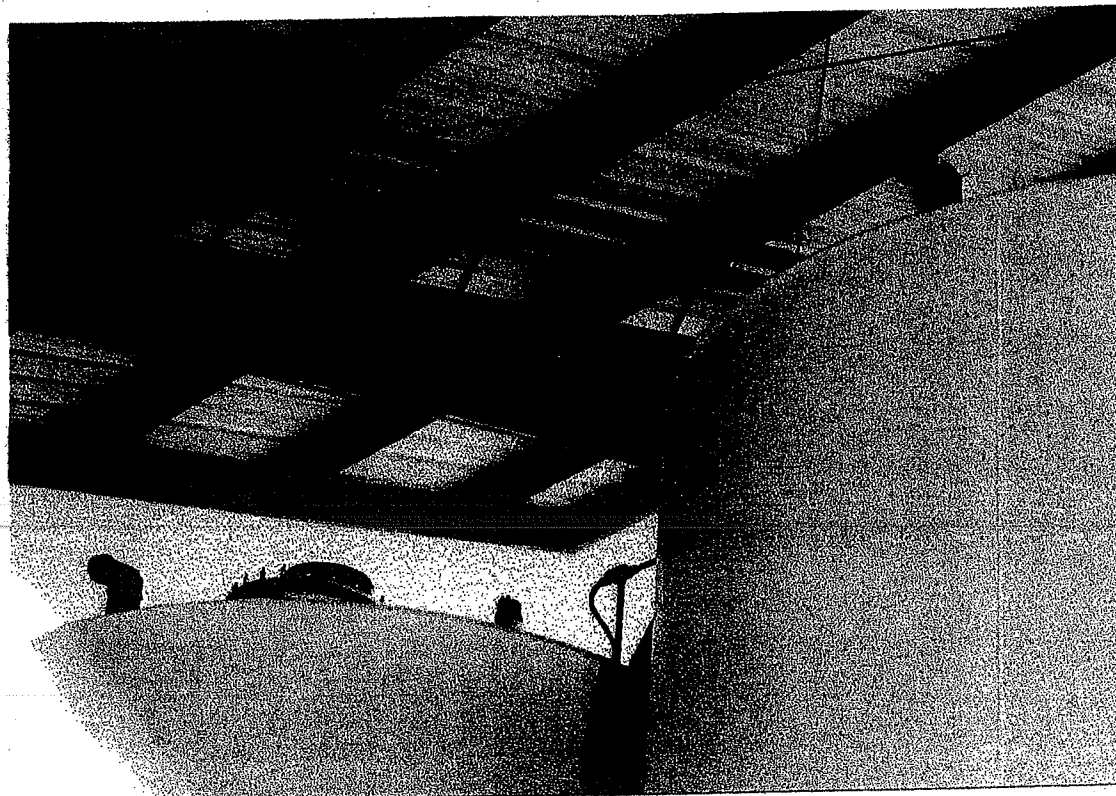
**PHOTOGRAPH #5**



**PHOTOGRAPH #6**



**PHOTOGRAPH #7**



**PHOTOGRAPH #8**

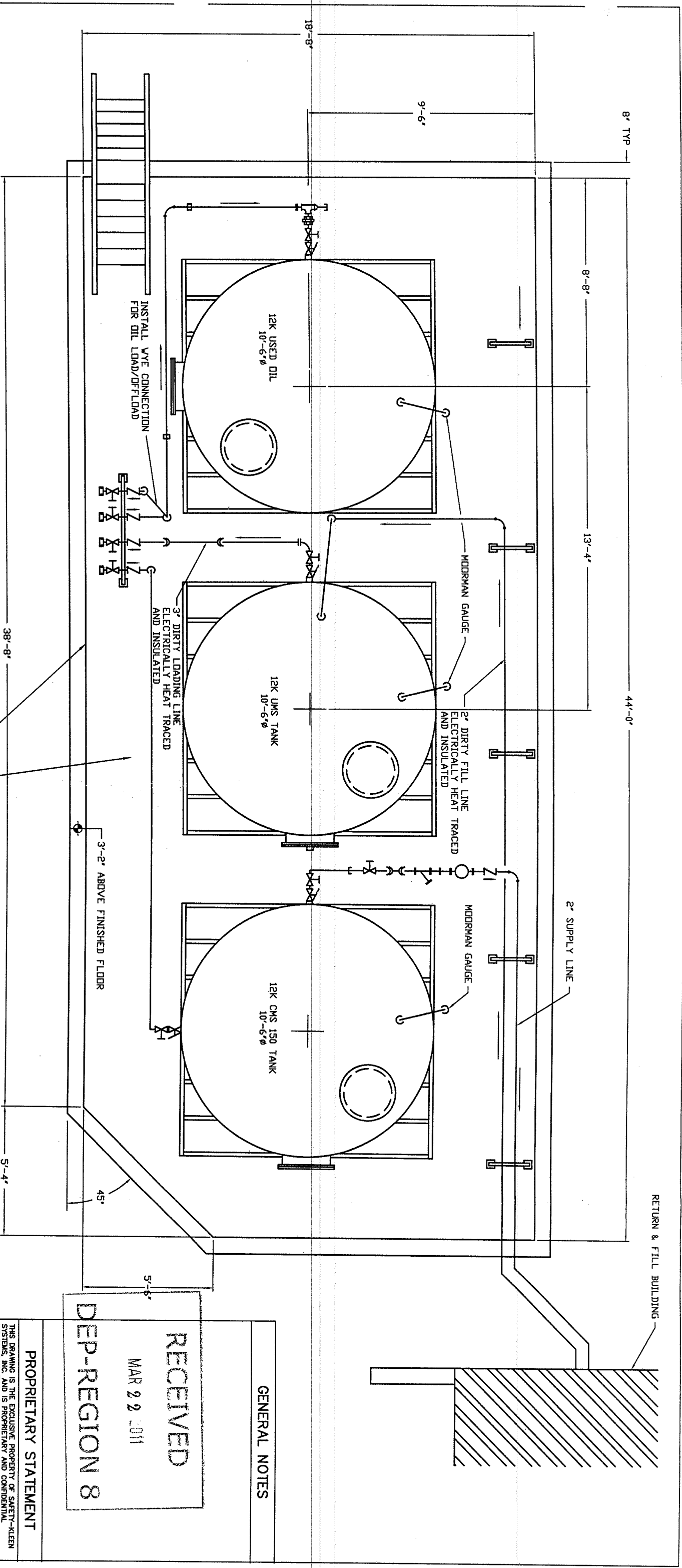
341

## **APPENDIX B**

### **TANK FARM LAYOUT**

**AVON, NEW YORK**



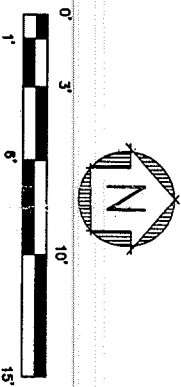


DIKE CONTAINMENT CALCULATION

CONTAINMENT OF TANK FARM (44' X 18.67')-1/2(5.33' X 5.5')	= 806.85 SQ.FT.
806.85 SQ. FT. X 3'-2" HIGH	= 2,555 CU. FT.
2,555 CU.FT. X 7.48 GAL./CU.FT.	= 19,111 GAL. (+)
GROSS CONTAINMENT CAPACITY	= 19,111 GAL.
DISPLACEMENT VOLUME (2 TANKS) (2)( $\pi$ 5.25') <sup>2</sup> (2'-8" HX)7.48 GAL./CU. FT.)	= 3,456 GAL. (-)
TANK SKID DISPLACEMENT	= 158 GAL. (-)
25 YR./24 HR. RAINFALL - 4" (.333')(806.85 SQ. FT. X 7.48 GAL./CU. FT.	= 2,011 GAL. (-)
NET CONTAINMENT CAPACITY	= 13,488 GAL.
REQUIRED CONTAINMENT CAPACITY	= 12,000 GAL.
EXCESS CONTAINMENT CAPACITY	= 1,488 GAL.

STAINLESS STEEL LINER

1. INSTALL 11 GAUGE TYPE 304 STAINLESS STEEL SHEETS ON DIKE FLOOR AND WALLS AS INDICATED ON SHEET 3.
2. ALL SEAMS TO BE CONTINUOUSLY WELDED AND NO SEAMS SHALL BE WITHIN 6' OF A CORNER 1 ORDER TO FACILITATE LEAK TESTING.
3. INSTALL REINFORCING ANGLE TO TOP OF DIKE WALL AS INDICATED AND INSTALL TIE RODS AS INDICATED BETWEEN SIDE WALLS.
4. UPON COMPLETION OF LINER INSTALLATION, TEST ALL SEAMS WITH A VACUUM BOX AND SUBJECT THE DIKE TO A 2' DEEP WATER LEVEL TEST FOR A PERIOD OF 24 HRS. A DROP OF 1/8" IN WATER LEVEL SHALL CONSTITUTE A TEST FAILURE
5. SEE SHEET 3 FOR DETAILS



REVISIONS				
NO.	DESCRIPTION	BY	CHK	APPR
D	REV RELEASE	M.D.C.		11/25/01
A	CHNG. 105 TO U-D TANK	J.E.K.	D.P.	08/16/10
B	REVISE PIPING/CALC'S	J.E.K.	H.H.	03/10/11
TITLE				
TANKFARM PLAN				
PIPING PLAN				
SAFETY-KLEEN SYSTEMS, INC.				
5300 LEECH DR. BLDG. 2 SUITE 100 PLANO, TX. 75024				
PHONE: 800-868-5740				
SCALE: 1/2" = 1'				
BY: M.D.C. CHNG. APPROVED: DATE: 11/25/01				
SERVICE CENTER LOCATION: AVON, NEW YORK				
SC-DWG NUMBER: 7046-4100-300				
REV. NO. B				

GENERAL NOTES

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN THAT AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

PROPRIETARY STATEMENT

RECEIVED  
MAR 22 2011  
DEP-REGION 8

**Project Solutions**

2005 West Broadway • Suite 210 • Columbia, MO 65203  
Phone: (673) 443-7100 • Fax: (673) 443-7101



**Industrial Age  
Contractors, Inc.**

P.O. Box 668 • Hamilton TX 76531  
Telephone: 254-386-9996 • FAX: 254-386-8886

Avon, NY – Dike Liner

Testing time: 7:30 A.M. to 10:30 A.M.

Testing date: May 21, 2004

100% testing on all welded seams was performed by spraying welds with soapy water then testing with Vaculite brand tester model # 3332.5A. Vacuum tested at 20 inHg.

Weather conditions at time of testing: partly cloudy, temperature 62 to 65 degrees.  
No leaks were found.

Hydrostatic test was performed the weekend of May 22<sup>nd</sup> and 23<sup>rd</sup> using approximately 24" of water. Water remained in tank farm for approximately 24 hours. After that time no noticeable reduction in water was observed.

Ronnie Ward

*Ronnie Ward*

May 26, 2004

344

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT E**

**CORRECTIVE ACTION REQUIREMENTS  
FOR SOLID WASTE MANAGEMENT UNITS AND  
AREAS OF CONCERN**

**ATTACHMENT E**  
**CORRECTIVE ACTION REQUIREMENTS**  
**FOR SOLID WASTE MANAGEMENT UNITS AND**  
**AREAS OF CONCERN**

**A. APPLICABILITY**

1. Statute and Regulations. Article 27, Title 9, Section 27-0913, and 6NYCRR 373-2.6(l) requires corrective action, including Corrective Action beyond the facility boundary where necessary to protect human health and the environment, for all releases of hazardous wastes, including hazardous constituents, from any solid waste management unit ("SWMU") at a storage, treatment or disposal facility seeking a 6NYCRR Part 373 permit, regardless of the time at which waste was placed in such unit. Pursuant to 6NYCRR 373-1.6(c)(2) the Commissioner may impose permit conditions as the Commissioner determines necessary to protect human health and the environment (i.e., Areas of Concern (AOC(s))).
2. Solid Waste Management Units and Areas of Concern. The conditions of this Module apply to:
  - (a) All the SWMUs and AOCs listed in this Module individually or in combinations;
  - (b) Any additional SWMU(s) and AOCs identified during the course of groundwater monitoring, field investigations, environmental audits or other means as described in Module Condition B. below; and
  - (c) The following known SWMUs and AOCs located on-site and/or off-site:

**TABLE III-1**

Solid Waste Management Units:

- 1) Warehouse/Office Building Container Storage Area
- 2) An accumulation center for drum storage
- 3) Spent Mineral Spirits above ground Storage Tank
- 4) Solvent Return and Fill Station and unloading areas
- 5) September 22, 1998 Fire Incident AOC

**B. CORRECTIVE ACTION REQUIREMENTS.**

1. No Action Requirement.

- (a) On the basis of the RCRA Facility Assessment-Preliminary Review Report dated June 1992, the November 1998 "September 22, 1998 Fire Incident AOC Assessment and Remediation Report" and the February 1999 "Confirmatory Sampling Report", the Commissioner has determined that there is no evidence at this time of the release(s) of hazardous waste(s) and/or constituent(s) that threaten human health or the environment from the following SWMU(s) and/or AOC(s) identified in Condition A.2:

Solid Waste Management Units:

- 1) Warehouse/Office Building Container Storage Area
  - 2) An accumulation center for drum storage
  - 3) Spent Mineral Spirits above ground Storage Tank
  - 4) Solvent Return and Fill Station and unloading areas
  - 5) September 22, 1998 Fire Incident AOC
- (b) The Permittee need not undertake corrective action at any aforementioned SWMU(s) and/or AOC(s) identified in Condition E.1.(a) as long as there is no evidence of the release(s) of hazardous waste(s) or constituent(s) from the SWMU(s) and/or AOC(s) threatening human health or the environment. This permit condition does not apply to any other stipulation specified in other Modules or Conditions of this Permit.
- (c) A determination of no further action shall not preclude the Commissioner from modifying this Permit at a later date to require further investigations, studies, monitoring, or corrective measures, if new information or subsequent analysis indicates the release(s) or likelihood of release(s) from SWMU(s) and/or AOC(s) identified in Condition E.1.(a) that could pose a threat to human health or the environment.

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT F**

**PREPAREDNESS AND PREVENTION PLAN**

**ABSTRACT**

Purpose: The Avon Service Center is designed, constructed, maintained and operated to minimize potential issues and concerns associated with the on-site management of waste materials. The purpose of this plan is to review and describe the above defined elements in place at the Avon facility that are directed toward minimizing the potential for the occurrence of a fire, explosion or any release of hazardous waste that could threaten human health or the environment.

## **ATTACHMENT F - PREPAREDNESS AND PREVENTION PLAN**

### **1.0 FACILITY DESIGN**

The Avon Service Center was designed to minimize the possibility of spills or fires and to minimize the effects of any accidents which may occur. Specifications for the storage facilities, secondary containment features and other security/safety equipment in place at the facility are in subsequent Attachments. Descriptions of the materials and equipment present on-site to assist the Avon facility in the preparation for, and prevention of, incidents are presented below.

#### **1.1 Tank Storage**

A complete description of the aboveground storage tank and secondary containment system is provided in Attachment IX, along with the tank installation engineering assessment engineer drawings. The inspection procedures in Attachment II will detect failure of the containment system or the presence of accumulated liquid within 24 hours.

The tank is equipped with an aural (siren) and visual (strobe light) high level alarm system that will alert employees when the tank is 95% full. In addition, the dumpsters are equipped with automatic shutoff systems to prevent overfilling of the tank.

#### **1.2 Solvent Return and Fill**

The return and fill station is a sheet steel structure. The dumpsters are tight-piped to the tank. The hazardous waste piping is aboveground and piping joints located outside of any engineered secondary containment systems are welded

The dumpsters are underlain by an engineered secondary containment system with greater than 100% of their total volume. In addition, a roof prevents precipitation from collecting.

#### **1.3 Vehicle Management**

Containerized spent parts washer solvents will be temporarily stored on-site in vehicles prior to unloading into the storage tank through the return and fill station. The individual vehicles will be equipped with secondary containment systems designed to capture liquid waste material released in the storage compartment of the vehicles.

#### **1.4 Container Storage**

The container storage areas are located in the return and fill area of the facility. The containers will be stored in Return and fill areas #1 and #2.. The secondary containment in these areas consists of concrete flooring and curbing with containment capacities of 1297 and 1134 gallons respectively. The concrete collection sumps, curbing, and flooring are coated with a sealant, which is compatible with the materials stored in the dumpster, washer, and solvent containers. Accumulated liquids in the containment area are removed to prevent overflow. All material collected from spill cleanups will be treated as hazardous waste unless proven otherwise. When a container is moved a potential exists for it to tip over. To minimize the potential for

spillage of solvent, all containers must be maintained in an upright position and remain tightly covered while in storage or in transit.

The Avon Service Center offers a service to collect and manage various solvents and other wastes from its industrial and automotive customers. These wastes are generated from a variety of processes and vary from customer to customer. The containerized wastes will be managed at the facility under the 10-day storage exemption allowed in 6NYCRR Part 373, Section 373-1.1(d)(xv). They are temporarily stored in the transfer container areas of the warehouse. These management areas have secondary containment designed in accordance with 6NYCRR Part 373, Section 373-2.9. Additionally, the exempt wastes will be packaged, segregated and managed in accordance with USDOT regulations.

## **2.0 PLANT OPERATIONS--POTENTIAL SPILL AND FIRE SOURCES AND CONTROL PROCEDURES**

Employees must perform their duties in the safest, most efficient manner possible and the Service Center has been equipped to facilitate these activities. Upon arrival at the Service Center, transport vehicles with containers of spent parts washer solvents may be temporarily staged in the parking lot. Next, the spent solvent containers are removed from the vehicles and stored in the authorized storage locations. These containers are inspected for accuracy of the paperwork, labels, and contents prior to being emptied into the storage tank through the return and fill dumpsters. These transfer operations occur at the secondarily contained return and fill station. Open containers of waste are not left unattended. Described below are situations which can result in accidents, and the precautions taken to prevent their occurrence.

### **2.1 Potential Incidental (Minor) Spill Sources**

The following is a list of activities that have the potential for an incidental spill (one that can be remediated without assistance from a clean-up contractor and does not require implementation of the Contingency Plan) incident:

#### **a. Pouring liquids into the dumpsters.**

As the parts washer solvents are poured into the dumpsters, material can splash out. Employee training emphasizes the importance of taking care in emptying the drums.

There is a metal pan in front of the return and fill (R/F) unit. It is located just under the steel grate in front of the R/F door. The pan is located over the R/F unit's secondary containment. The pan is sloped to a drainage point that is connected by a flexible hose to a 5 gallon closed metal container (the satellite accumulation container). Waste is not accumulated in the pan. The pan is designed to catch minor spills that could result from emptying drums into the R/F unit.

Spilled material would drain to the satellite accumulation container placed under the grate within the concrete secondary containment area. The main purpose of the pan is to help keep the concrete secondary containment free of any drips or minor spills. The volume of the satellite container is not included in the containment volume calculations and the satellite container could be removed for emptying without loss of any secondary containment capacity. At closure the pans will be scrapped. The entire area over which container emptying takes place is secondarily contained.



b. Filling containers with product.

A low pressure hose with an automatic shut-off valve, similar to those used at automotive service stations, is used to fill the containers with clean parts washer solvents. Leaking fittings, damaged hose or carelessness could lead to the release of solvent. Manual emergency shut-off valves are installed on each hose so the solvent flow can be shut off. In addition, employee training emphasizes the importance of inspection, maintenance and reporting of conditions with spill potential.

c. Moving containers.

When a container is moved, it can tip over. To minimize the potential for spillage of material, containers are kept in an upright position and remain tightly covered while in storage or in transit.

d. Delivery truck transfers.

The cargo is secured in the vehicle before transport. Individual containers can tip over or be dropped when moved on or off a delivery truck, so where possible, containers are moved with a handcart or forklift. However, some situations may require the manual movement of containers. In these instances, caution is exercised to ensure safe movement and employee safety.

If an incidental spill does occur, spilled material can be collected with sorbent or pads. If soil becomes contaminated, it will be removed. All spill residues and cleanup materials are properly characterized and shipped to a Safety-Kleen Recycle/Process Center or other properly permitted facility.

## **2.2 Potential Major Spill Sources**

The following activities have the potential for a major pollution incident (one for which remedial action will require implementation of the Contingency Plan):

a. Overfilling storage tanks.

Both product and used fluid tanks can be overfilled with a resulting discharge of fluid. The high level alarm, and daily checks of tank volume will prevent this type of incident.

b. Leaking pipelines.

The pipelines and other equipment present a potential for leaks and resultant pollution. Regular inspection of this equipment and the solvent inventory will detect any leaks.

## **2.3 Potential Fire Sources**

The following is a list of fire prevention and minimization measures:

- a. Wastes and products are kept away from ignitable sources. Personnel will confine smoking and open flames to remote areas, separate from any material

(e.g. outside the office door). The parts washer solvent handling area and the aboveground storage tanks are separated from the warehouse building area to minimize the potential for a fire to spread, or injury to personnel to occur. Labpack wastes may pose potential fire issues if the packing material is incompatible with the container's contents. To prevent this from occurring, labpack containers are packed by qualified and trained personnel.

- b. Ignitable wastes are handled so that they do not:
- Become subject to extreme heat or pressure, fire or explosion, or a violent reaction. The waste is stored in the tank or in containers are not near sources of extreme heat, fire, or potential explosion sources. They are not subject to violent reactions. The tanks are vented and kept at ambient temperature to minimize the potential for pressure build up.
  - Produce uncontrolled toxic mists, fumes, dust or gases in quantities sufficient to threaten human health. The vapor pressure of Safety-Kleen hydrocarbon based solvent is low (2mm), and it is only reactive with strong oxidizers. Toxic mists, fumes, dusts or gases will not form in quantities sufficient to threaten human health since strong oxidizers are not handled in solvent handling areas. Additionally, incompatible material in containers is segregated in accordance with USDOT regulations. The low vapor pressure of the solvent assures that vaporization will be minimal under normal working conditions.
  - Produce uncontrolled fires or gases in quantities sufficient to pose a risk of fire or explosion. See "a" above and "c" below.
  - Damage the structural integrity of the Safety-Kleen facility. The parts washer solvents will not cause deterioration of the tank, drums or other structural components of the facility.
- c. "No Smoking" signs are posted in areas where flammable/ignitable materials are handled or stored.
- d. Fire extinguishers will be checked once per month and tested by a fire extinguisher company once per year. In addition, the transfer area where ignitable wastes are managed is covered by an automatic water sprinkler system for fire suppression. It should be noted that Safety-Kleen has an automatic response system with the fire department operating 24 hours a day.

## **2.4 Tank Evaluation and Repair Plan**

The waste stored in the tank at this facility is hydrocarbon and aqueous parts washer solvents. These are compatible with the carbon steel tank structure. In fact, the hydrocarbon-based parts washer solvent is often used as a light hydrocarbon coating to prevent rusting of metal parts.

If corrosion is noted, it will be removed and the tank repaired. If the corrosion is significant and localized, the tank will be taken out of service and repaired, (e.g. a patch may be welded over the corroded area). Should the corrosion of the vessel be

extensive, or if the tank is found to be leaking and repair of the tank is not practicable, it will be taken out of service and replaced. If a tank spill leaks outside of the containment dike, the facility's contingency plan will be initiated to ensure the removal of any contaminated soil.

## **2.5 External Factors**

The design of the installation is such that a harmful spill is highly unlikely to occur from most external factors. The storage tanks are inaccessible to non-Safety-Kleen personnel and the pump switches are located inside the building. Also, the parts washer solvent handling area (i.e., return and fill) is in the warehouse building and is inaccessible to unauthorized personnel.

- a. Vandalism - Only extreme vandalism would result in a material spill or fire. Response to spills and fires are described in the contingency plan.
- b. Strikes - A strike would not result in a material spill or fire.
- c. Power failure - A power failure would not result in a spill or fire. Should a power failure occur, activities requiring electricity will cease. In addition, emergency lighting units are installed to aid personnel in evacuating the facility.
- d. Flooding - The site elevation is above the projected 100-year flood plain; therefore, a 100-year flood will not affect the facility.
- e. Storms or Cold Weather - The return and fill station is roofed to eliminate the possibility of rain or snow entering the dumpsters. No opportunity is foreseen to affect the facility with snow, cold weather or storm water.

## **3.0 INTERNAL AND EXTERNAL COMMUNICATIONS AND ALARM SYSTEMS**

Internal communication within the building and the return and fill area is accomplished by voice and intercom. Telephones can be used to report a spill or a fire, and to summon assistance from local and state emergency response agencies. Branch managers have emergency phone numbers of local and state emergency response teams posted by the phones located in the office. Included in these phone numbers is the 24-hour emergency telephone number used to contact the Environmental, Health and Safety Department.

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT G  
CONTINGENCY PLAN**

**ATTACHMENT G**  
**CONTINGENCY PLAN**

**ABSTRACT**

**PURPOSE:** This Contingency Plan describes the proper actions to take during a response incident at Safety-Kleen's Avon, New York hazardous waste management and USDOT transfer facility to prevent or minimize hazards to human health and the environment from fires, explosions or any other release of hazardous waste constituents to the air, soil, surface water or groundwater.

**RESPONSIBILITIES:** The emergency coordinator or his alternate(s) is responsible for implementing the Contingency Plan during an emergency.

**EMERGENCY COORDINATORS:** An employee qualified to act as an emergency coordinator capable of performing the emergency procedures listed in 373-2.4(g) and in the Contingency Plan is designated as the facility's primary emergency coordinator. The Service Center typically designates one or more alternate emergency coordinators. The names, addresses and telephone numbers of the primary and alternate emergency coordinator(s) are included in Table VI - 1.

**EMERGENCY NOTIFICATIONS:**

<b>AGENCY*</b>	<b>TELEPHONE*</b>
Safety-Kleen's 24-hr EHS Department	(800) 468-1760
East Avon Fire Department	(585) 226-8207 or 911
Livingston County Sheriff's Office	(585) 243-7100 or 911
Avon Police Department	911
Strong Memorial Hospital	(585) 275-4552
New York Department of Environmental Conservation Oil and Chemical Spills Hotline (24 hours)	(800) 457-7362 (In state) (518) 457-7362
National Emergency Response Center	(800) 424-8802

## **ATTACHMENT G - CONTINGENCY PLAN**

This Contingency Plan is prepared for the Safety-Kleen Systems, Inc. Service Center located at 1525 West Henrietta Rd, Avon New York. The facility functions as a permitted hazardous waste storage area and also manages containerized hazardous and non-hazardous wastes on a USDOT transfer basis. Hydrocarbon and aqueous based solvents are managed in two permitted container storage areas and in a 12,000 gallon storage tank. Used oil is managed in 2 aboveground storage tanks. A portion of the facility is also used for the temporary storage of containerized hazardous and non-hazardous wastes managed on a USDOT transfer basis. The facility manages containerized, non-hazardous waste in accordance with 6NYCRR Part 360, Section 360-1.7(b)(7).

The Contingency Plan describes the actions to be taken by the Service Center in the event of a major or incidental spill, fire or other response incident. It includes the information necessary to address response situations efficiently and in such a manner as to prevent or minimize hazards to human health and the environment due to fire, explosion or any other release of hazardous waste constituents to the air, soil, surface water or groundwater.

The Contingency Plan will be implemented whenever there is a major emergency or an incidental spill that could threaten human health or the environment. Implementing the procedures contained in this plan should effectively mitigate such threats. The emergency coordinator or the alternate emergency coordinator(s) are responsible for implementing the Contingency Plan during an emergency response event. However, employees must be familiar with the procedures in this plan to ensure proper implementation.

The plan shall be maintained and amended whenever there are significant changes. This ensures overall preparedness for potential contingencies related to waste management including both hazardous and non-hazardous wastes. Copies of the plan are maintained at the Service Center and are provided to the local police department, fire department, and hospital for use during an emergency.

### **1.0 GENERAL INFORMATION**

This Contingency Plan describes the actions taken at the Avon Service Center in the event of fires, explosions, or releases of hazardous waste constituents.

The address of the Service Center is:

Safety-Kleen Systems, Inc.  
1525 West Henrietta Rd.  
Avon, New York 14414

Thee operator of the Service Center is:

Safety-Kleen Systems, Inc.  
2600 North Central Expressway Suite 400

## **1.1 Description of Business Activity**

The Avon Service Center is an accumulation point for spent solvents, dry cleaning wastes, paint related wastes, automotive wastes, used oil and various other spent industrial and automotive materials. A majority of these wastes will be handled as 10-day storage exempt waste on a USDOT transfer basis. Only the hydrocarbon and aqueous based parts washer solvents and used oil will be terminated for storage. All wastes are transported off-site to a Safety-Kleen Recycle/Process Center or a contract reclaimer. No waste processing or disposal occurs on site

Safety-Kleen is an international service-oriented company whose customers are primarily engaged in automotive repair, industrial maintenance, manufacturing, photo processing and dry cleaning. The company has been operating since 1968 offering waste collection and reclamation services for its 400,000 customers, more than 95 percent of whom generate less than 1,000 kilograms (2,200 pounds) of waste per month. Safety-Kleen's Avon facility provides waste management and recycling services to approximately 4,000 businesses, the majority of which are small businesses and small quantity generators.

Wastes managed by the Avon facility are transported from the Service Center to one of Safety-Kleen's Recycle/Process Centers or to contract reclaimer and, in many instances, the recovered materials are returned to customers as usable product. The Avon facility also provides assistance to waste generators for the proper transport and management of a variety of spent automotive and industrial materials. These materials are handled in containers and are managed by the service center on a 10-day transfer basis in accordance with relevant USDOT and New York State regulations.

## **1.2 Waste Descriptions**

Various types of wastes result from servicing Safety-Kleen customers and maintenance of the Service Center. Wastes are handled and managed in both tanks and containers. Because all wastes in containers are assumed to contain free liquids, the waste management areas at the facility (i.e., the container storage areas, bulk storage tanks, transfer container management areas and the return and fill station) are provided with secondary containment systems. This Section provides descriptions of waste streams terminated and stored at the Service Center and their associated hazardous characteristics and/or constituents. Similar data is provided for on-site generated wastes and for wastes that will be managed on a temporary transfer basis.

The only types of hazardous and non-hazardous wastes that are accepted from off-site generators for permitted consolidation and storage at the service center are:

- Spent Safety-Kleen Parts Washer Solvents: Hydrocarbon based (mineral spirits), and aqueous based cleaning solutions, and
- Non-hazardous used oil.

In addition to the above listed materials, several types of waste material will be generated on-site as a result of operations. These wastes include but are not limited to the following:

- Tank Bottoms,
- Contaminated Gloves, Rags, Paper, absorbent, etc., and
- Wastes From The Return and Fill Station.

Other waste streams are also managed by the Avon facility and are handled on a temporary transfer basis in accordance with relevant USDOT and New York regulations. These wastes are received in containers. These containers are not opened and are stored for maximum of 10 days before they are shipped off site.

An overview of the general characteristics and types of waste destined for management at the facility follows.

### 1.2.1 Permitted Storage Wastes

#### 1.2.1.1 Parts Washer Service Wastes

The original service offered by Safety-Kleen in 1968 was the Parts Washer Service and it remains the primary business activity. This service involves the leasing of a small parts degreasing unit consisting of a sink affixed to a container holding Safety-Kleen parts washer solvent. The parts washer solvents are typically hydrocarbon-based solvents used for parts cleaning. Safety-Kleen also offers an aqueous-based solvent for use in parts cleaning. Both the hydrocarbon- and aqueous-based parts washer solvents are used and managed in the same fashion. On a regularly scheduled basis, a Safety-Kleen sales representative cleans and inspects the parts washer machine and replaces the container of used solvent with one of clean product. Each sales representative performs about fifteen of these services per day, collecting the containers of used solvent on a route van. The spent parts washer solvent is returned to the Avon facility in containers. The containers are emptied into the bulk solvent storage tank through use of two, drum washer/dumpster units on the return and fill station (see Figure VI - 1).

##### 1.2.1.1.1 Hydrocarbon Based Parts Washer Solvent

Safety-Kleen offers high-flash hydrocarbon based (mineral spirits) solvents for the parts washer machines. These high flash solvents (i.e., with flash points greater than 140 F) may be returned to the facility as hazardous waste when spent or they may be non-hazardous, depending on the customer's use of the parts washer machine.

Both hazardous and non-hazardous mineral spirits solvents are commingled and accumulated in a 12,000-gallon, aboveground hazardous waste storage tank through the return and fill station inside the warehouse. Only spent parts washer solvents and solutions are bulked into the hazardous waste storage tank. Containers of spent parts washer solvents are poured into one of two drum washer/dumpster units at the return



and fill station. The solvent in the dumpsters is then pumped into the tank. The location of the container storage areas, return and fill station, and the bulk solvent storage tank are shown on Figure VI - 1.

Review of Safety-Kleen waste sampling and analyses reveals a great deal about the spent hydrocarbon based parts washer solvents. Analyses of spent, hydrocarbon-based, parts washer solvents typically show low concentrations of total organic halogens that range from .01 – 0.10 %. Detectable levels of non-halogenated volatiles and metals are also present but are below TC levels. The flash point of spent bulk solvent ranges from 138-155° F.

#### 1.2.1.1.2 Aqueous Based Parts Washer Solvent

The aqueous-based parts washer is a service that uses a solution of approximately 95% water and 5% active ingredients (surfactants) instead of hydrocarbon solvents. It was developed as an alternative for those customers that do not want to use hydrocarbon solvents. The aqueous solution is typically used in the same manner and application as the hydrocarbon solvents.

Analyses suggest that several constituents may be present in the typical spent aqueous parts washer solutions. These constituents include low levels of benzene, perchloroethylene, methyl ethyl ketone, and metals. Review of Safety-Kleen's data indicates that most spent aqueous solutions are non-hazardous waste. One exception is the solution used in machines to exclusively clean automotive brakes where only perchloroethylene consistently exceeded established regulatory thresholds. As expected, the flash point exceeds 200°F. Spent aqueous solutions are neither corrosive (D002) nor reactive (D003).

Hazardous and non-hazardous, aqueous-based parts washer solvents from parts washer machines are commingled and accumulated in the 12,000-gallon aboveground hazardous waste storage tank through the return and fill station. (These solvents are commingled with the hydrocarbon-based material). Containers holding hazardous and non-hazardous aqueous-based parts washer solvents may be stored in the container storage areas prior to being poured into one of two drum washer/dumpster units at the return and fill station and then pumped into the tank (see Figure VI - 1).

The commingled hazardous, hydrocarbon- and aqueous- based parts washer solvent is removed from the hazardous waste storage tank by a tanker truck on a regularly scheduled basis. Approximately 6,000-7,000 gallons are removed from the storage tank every two weeks. This commingled waste may be ignitable (D001) and may exhibit toxicity characteristics using the toxicity characteristic leaching procedure (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 ).

#### 1.2.1.2 Used Oil

Non-hazardous used oil is collected by small tank trucks directly from customers and is unloaded into 2 tanks on site. One tank is a 12,000-gallon steel vertical

aboveground storage tank. The other tank is a 20,000-gallon horizontal steel aboveground storage tank. Both tanks are located in the tank farm as shown in the attached site plan. Note that only the 12,000-gallon tank is regulated under the facility's NY Part 373 hazardous waste permit. The 20,000-gallon tank is regulated under the facility's NY Part 360 permit. No processing of used oil occurs at this site. The used oil is periodically shipped off site to another facility for processing and recycling.

Used oil is a non-hazardous waste and is classified as a combustible liquid. No hazardous waste is stored in the used oil tanks.

### 1.2.2 On-Site Generated Wastes

As a result of normal facility operations, waste is generated at the Service Center. Containerized waste is stored in the container management area located in the warehouse (see Figure VI - 1).

#### 1.2.2.1 Wastes From the Tanks

Periodically, it is necessary to remove tank bottom sediment that accumulates in the tanks. This consists of free water, solvent or used oil, and other heavy materials such as grit and metal filings. A vacuum truck is typically used for this purpose. Sediment from the solvent tank may be ignitable (D001) and may exhibit toxicity characteristics using the toxicity characteristic leaching procedure (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).

The sediment removed from the used oil tanks is non-hazardous provided it is recycled for the used oil content.

These waste streams are generated on-site by Safety-Kleen and are not wastes accepted from off-site generators.

#### 1.2.2.2 Contaminated Gloves, Rags, Paper, Absorbent, etc.

Contaminated gloves, rags, paper, absorbent and other miscellaneous material such as personal protective equipment is generated by the facility as a result of the management of hazardous wastes. Each operating day this material is placed into containers. This waste may be ignitable (D001) and may exhibit toxicity characteristics using the toxicity characteristic leaching procedure (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 ). This waste stream is generated on-site by Safety-Kleen and is not a waste accepted from an off-site generator.

#### 1.2.2.3 Wastes From The Return And Fill Station

Sediment also accumulates at the bottom of the drum washer/dumpster units in the return and fill station. Periodically this sediment is manually removed and placed

into containers. The chemical composition and hazardous characteristics of this waste are similar to that of the spent parts washer solvents tank bottom sediment and may have the same hazardous waste numbers. Like the tank bottom sediment described above, this waste is generated on-site by Safety-Kleen.

### 1.2.3 Transfer Waste Management Service

The Avon Service Center offers a service to collect and temporarily store various other wastes from its industrial and automotive customers. These wastes are generated from a variety of processes and vary from customer to customer. These containerized wastes are managed at the facility as a 10-day storage exempt waste on a USDOT transfer basis. They are stored for ten days or less in the transfer container management areas of the facility. These containers are not opened while at the facility. These wastes will be under active shipping papers.

All USEPA and New York Department of Environmental Conservation (NYDEC) defined hazardous wastes are included in this program. This includes characteristic and F, P, U and K listed wastes. These wastes will be collected and transported in appropriately approved containers and placed in one of the transfer container management areas in the facility (see Figure VI - 1). The materials will be managed and segregated in accordance with 49 CFR 177.848. These wastes will be transported from the Avon Service Center to a Safety-Kleen Recycle/Process Center or contract reclaimer within the regulatory required time frame.

## 1.3 Waste Management Areas

Hydrocarbon and aqueous based parts washer solvents will be stored in containers in the permitted container storage areas located in the return and fill building. Waste containers will be stored on the dock and on the concrete pad located to the north of the dock. The floor of the north and dock container storage areas is constructed of reinforced concrete and operated with no cracks or gaps. The floor is coated with a chemical resistant coating.

Bulk parts washer solvents and bulk used oil will each be stored separately in 12,000-gallon storage tanks. The tanks are constructed of steel and are located within a stainless steel lined concrete containment dike. Figure VI - 1 details its location. A separate 20,000-gallon tank adjacent to the 12,000 gallon tanks is also used to store used oil. This horizontal steel aboveground tank sits within a separate steel spill containment box. This tank is not subject to the NY Part 373 permit.

Note that there is also a third 12,000-gallon tank in the concrete dike for unused mineral spirits (this tank is not subject to the NY Part 373 hazardous waste permit).

Parts washer solvent is transferred into the tank through use of two wet dumpsters inside the warehouse. These units are located atop a secondarily contained return and fill station. As shown in Figure VI - 1, the return and fill station is inside the warehouse.

Used oil is unloaded from small tank trucks directly into the 12,000-gallon tank (and into the 20,000-gallon tank which is not subject to the NY Part 373 permit). Used oil is not handled inside the warehouse building. All transfers occur outdoors in the tank farm. When oil is pumped into the tanks, or out of the tanks into tank trucks; the trucks park on a truck transfer pad designed to contain spills, if they occur. See Figure VI-1.

Containerized wastes managed as a 10-day storage exempt waste on a USDOT transfer basis and waste generated from on-site operations will be stored in one of the transfer waste management areas located at the facility. These storage areas are shown in Figure VI - 1.

## **2.0 EMERGENCY COORDINATORS**

The emergency coordinator and alternate emergency coordinator(s) for the Avon Service Center are trained to respond in the event of a response situation. The primary and alternate emergency coordinators, home addresses, phone numbers and pager numbers as well as the office phone number are listed in Table VI - 1. The emergency coordinator or the alternate emergency coordinators are authorized to commit the Service Center's resources, equipment and personnel, as necessary, to carry out this Contingency Plan.

At least one emergency coordinator or an alternate is at the Service Center or on call and capable of reaching the Service Center in time to effectively respond to emergency situations. Each emergency coordinator and alternate is familiar with this Contingency Plan, the operations and activities at the Service Center, the location and characteristics of wastes handled, the location of Service Center records, the Service Center layout, and the location and use of response and spill control equipment.

**TABLE VI - 1**  
**List of Emergency Coordinators**

**Safety-Kleen Systems, Inc.**  
**Avon, New York**

<b>Emergency Coordinator</b>	<b>Office Phone</b>	<b>Cell Phone</b>	<b>Home Phone</b>	<b>Home Address</b>
<b>Primary</b> Michael Roorda	585-226-2411	585-465-0963	585-436-7212	150 Winbourne Rd. Rochester, NY 14619
<b>Alternate</b> Norman Augello	585-226-2411	585-202-6548	585-757-2557	21 Church St. Elba, NY 14058
<b>Alternate</b> Blake Staton	585-226-2411	585-202-4448	585-288-3634	750 Helendale Rd Rochester, NY 14609

Whenever there is an imminent or actual response situation, notice will be given to the emergency coordinator and/or alternate(s). As is discussed in subsequent sections, it is the responsibility of the emergency coordinator or alternate (when the emergency coordinator is not available) to:

- Evaluate the situation and decide whether to implement the full Contingency Plan;
- Identify the character, exact source, amount and aerial extent of any materials whenever there is a release, fire or explosion;
- Assess possible hazards to human health or the environment;
- Supervise the response following the procedures in the Contingency Plan if implementation is warranted;
- Notify outside emergency, state and local agencies and Safety-Kleen's EHS Department;
- Order an evacuation (if warranted based on the severity of the incident) and supervise the evacuation;
- Act as liaison between emergency and state agencies and Service Center personnel;

- Supervise cleanup operations following the procedures in the Contingency Plan; and
- Perform follow-up emergency reporting procedures.

### **3.0 IMPLEMENTATION**

Response situations may occur at any time as a result of natural forces, trespassing, accidents, hazardous substance spills, or other situations that disrupt essential operations. The emergency coordinator and alternate(s) must be prepared to respond in an effective and efficient manner.

The decision to implement the Contingency Plan depends upon whether an imminent or actual incident such as a fire, explosion or release of hazardous waste or hazardous waste constituents could threaten human health or the environment. The emergency coordinator or alternate(s) will decide if the Contingency Plan should be implemented.

The full Contingency Plan will be implemented in response to the situations detailed below. However, the decision to implement the full plan or applicable sections of it will ultimately rest with the Emergency Coordinator.

#### **Fire or Explosion:**

- Fire that may cause the release of toxic fumes;
- Fire that may spread and ignite waste materials or cause an explosion;
- Fire that may spread off-site or cause personal injury;
- Use of water or chemical fire suppressants that may result in excessive runoff;
- An imminent danger exists that an explosion may occur;
- An explosion has occurred.

#### **Spill or Release:**

- Spill of a flammable liquid that presents an imminent danger of an explosion;
- A spill resulting in the release of toxic liquids or used oil from a secondary containment system;
- A spill that may cause potential ground water contamination;
- A spill that cannot be contained on-site;
- A spill of significant size or danger to threaten human health, contaminate the environment or cause personal injury;
- A spill outside of secondary containment if it exceeds the RQ value.

### **4.0 RESPONSE PROCEDURES**

#### **4.1 Response Classification**

Safety-Kleen has a classification system used to evaluate the severity of a given situation. Response activities and implementation procedures are dictated by how an

event is classified. The emergency coordinator or the alternate emergency coordinator classifies the event based on his or her assessment and judgment. Events are classified as either incidental situations or major emergencies. An incidental situation encompasses small spills or fires that can be effectively cleaned up or extinguished without outside assistance. Such an event would not require implementation of the Contingency Plan. A major emergency addresses any potential spill, fire or explosion involving wastes that could pose a serious threat to human health or the environment and could likely require outside assistance. A major emergency would require full implementation of the Contingency Plan.

#### 4.1.1 Incidental Event

An incidental event applies to minor fires or releases involving a waste that can be easily contained and effectively cleaned up. A small leak, spill or fire would fall under this classification. The chemical involved would be identifiable with its hazards known and the necessary emergency equipment available to facility personnel for response. Such an event would present only minimal potential for injury or property damage with essentially no potential for public exposure. The event would be controlled by Service Center personnel without outside assistance. Such events do not require full implementation of the Contingency Plan. Response actions can be performed by on-site personnel.

#### 4.1.2 Major Emergency

A major emergency warrants full implementation of the Contingency Plan to address waste emergencies that could seriously threaten human health or the environment. Emergencies in this category would likely require the assistance of outside emergency response organizations. Examples of major emergencies are:

- A non-containable, spreading fire or one that could potentially spread to other waste containers or cause an explosion;
- A non-containable release that threatens to enter storm sewers, municipal sewer or surface waters;
- A release of materials that pose significant hazards to human health or the environment; or
- Any explosion.

### 4.2 Identification of Wastes

Whenever there is a release, fire, or explosion, the emergency coordinator must identify the character, source, amount and extent of any released materials and obtain any other pertinent information related to the event as expeditiously as possible. This information can be readily obtained from the facility operating log. This log details on a daily basis the type, waste codes and volume of material in the bulk solvent storage tank and in the warehouse transfer waste management areas. The operating log is maintained at the facility and is updated each operating day.

### 4.3 Assessment

The emergency coordinator will assess the potential for a release or fire to get beyond the control of Service Center personnel. The assessment will take into account the magnitude of the event, the proximity to Service Center boundaries and surrounding neighbors, the potential for fires to spread or hazardous waste constituent releases to reach groundwater or surface water, and the progress made by Service Center personnel in controlling the release or fire. The assessment must also consider both direct and indirect effects of the release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that may be generated, or the effects of any hazardous runoff).

After identifying the nature of the event and the type of hazardous materials, the emergency coordinator will determine the appropriate response. If necessary, the emergency coordinator will check the current edition of the North American Emergency Response Guidebook (ERG) for information on specific hazards. This publication lists hazardous materials by chemical name as well as by USDOT UN numbers and details the procedures to respond to an incident involving specific hazardous materials. This reference provides response data on the hazardous materials managed by the facility.

Following the review of available information, the emergency coordinator will assess the severity of an event.

### 4.4 Notification

NYDEC will be informed within five business days of a release if the release is 10 pounds or more or above reportable quantity specified in 6NYCRR Part 596 which ever is less, and of any fires in the facility or implementation of the full Contingency Plan. Spills exceeding the reportable quantity that cannot be completely contained and remediated within 24 hours will be reported to the Department within 2 hours of discovery.

If the event is classified as incidental, then it will be handled by Service Center personnel implementing the applicable portions of the Contingency Plan.

If the event is a major emergency, the emergency coordinator will perform the following:

- Implement the Contingency Plan;
- Supervise the response following the procedures in the Contingency Plan;
- Notify Safety-Kleen's EHS Department, the New York Department of Environmental Conservation (NYDEC), and the National Emergency Response Center, if necessary; and
- Notify appropriate emergency, state and local agencies as detailed below:

Police Department; If there is imminent danger to human health.



Fire Department; If there is a potential for uncontrollable fire or the potential for toxic fumes

Hospital; If there are injuries or missing personnel.

NYDEC; If the full Contingency Plan is implemented.

Cleanup Contractor; To assist with remedial action after a release.

Table VI – 2 presents the state and local emergency agencies with their telephone numbers that may be notified in the event of a major emergency requiring outside assistance.

**TABLE VI – 2**

**Outside Notification of Major Emergencies**

**Safety-Kleen Systems, Inc.  
Avon, New York**

<b>AGENCY</b>	<b>TELEPHONE</b>
Safety-Kleen's 24-hr EHS Department	(800) 468-1760
East Avon Fire Department	911
Livingston County Sheriff's Department	(585) 243-7100 or 911
Avon Police Department	911
Strong Memorial Hospital	(585) 273-4552
Clean Harbors/Safety-Kleen (for outside assistance)	(800) 468-1760
New York State Department of Environmental Conservation Oil and Chemical Spill Hotline	(800) 457-7362 (in-state) (518) 457-7362
National Emergency Response Center	(800) 424-8802

**4.5 Control Procedures**

Response actions to be taken in specific situations are described in this Section. These remedial actions may be undertaken by Safety-Kleen or an outside contractor. Incidents such as a fire, explosion or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment will be expeditiously reported to the emergency coordinator who will then decide the extent to which the Contingency Plan should be implemented.

**4.5.1 Incidental Spills**

Responses to incidental spills of parts washer solvents and solutions or used oil do not require implementation of the full Contingency Plan. The following actions will be taken in response to such a situation. If a spill of parts washer solvent/solution or used oil is contained in secondary containment, actions will be taken promptly to remove the spilled material from the containment system. Should the spill occur outside containment, different actions will be taken depending on whether the spill occurs on a paved or unpaved area:

- If the material spills on a paved area, it must be collected with sorbent materials or by vacuuming free liquids. Free liquids and sorbent materials will be collected for proper disposal.
- If the material spills on an unpaved area, free liquids will be collected with sorbent material or by vacuuming. The free liquids, sorbent material, and any contaminated soil will be collected for proper disposal.

If a spill occurs while moving or delivering containers outside of the warehouse, the response actions described above will be followed. Spills inside the warehouse container transfer management area will be prevented from contaminating the environment by the concrete flooring and secondary containment systems.

Should a release of hazardous waste exceed ten (10) pounds or should it meet any other relevant reporting threshold that is less than 10 lbs, the emergency coordinator will properly report the event to NYSDEC. The emergency coordinator reporting a spill should be prepared to give his name, position, company name, address, telephone number, time and date. He should also describe the extent of injuries, material spilled, source and, if possible, an estimate of the amount, extent of any contamination and the containment status. More detailed reporting requirements are contained in Section 9.0.

Releases of used oil in excess of 5 gallons will be reported as described above. Releases of less than 5 gallons will also be reported if they are not cleaned up within 2 hours of the spill or if there is a release to surface water.

Remediation of incidental releases will be overseen by the emergency coordinator. At the conclusion of the remedial efforts, the emergency coordinator will visually inspect the spill area to assess whether the on-site response actions were successful in ameliorating impact to the environment.

#### 4.5.2 Major Spills

Any spill that cannot be completely remediated using the methods described above is a major spill. A major spill is usually the result of a vehicular accident, tank overfilling, equipment failure, inability to identify the chemical released, release of materials that pose significant health hazards, explosion or a fire. Major spills can include parts washer solvents/solutions and used oil. Spilled material, which escapes collection, could potentially contaminate soil, surface water, groundwater, sanitary sewer systems, and storm sewer systems. If a major spill occurs, personnel must notify the emergency coordinator as soon as practicable. Under the direction of the emergency coordinator and after identifying and assessing the situation, emergency response to this type of spill should be as follows:

- put on protective equipment including the appropriate respiratory protection equipment;
- assist any injured people;

- stop or slow the flow of material (i.e., defensive actions), if possible without being exposed;
- retain, contain, or slow the flow of the material if it cannot be stopped;
- contact Safety-Kleen's EHS Department, the fire department, the police department, the cleanup contractor, the NYDEC Oil and Chemical Spills Hotline, and if necessary the National Emergency Response Center; and
- employ a cleanup contractor to commence recovery operations.

Major emergencies will be promptly reported by the emergency coordinator or the EHS Department. The individual reporting such an event should be prepared to give his name, position, company name, address, telephone number, time and date. He should also describe the extent of injuries, material spilled, source and, if possible, an estimate of the amount, extent of any contamination, the containment status, and specify any equipment needed. More detailed reporting requirements are contained in Section 9.0.

Aggressive remedial actions will be expeditiously employed to minimize any impacts associated with a major emergency. Final response actions will be implemented following approval by NYDEC of a site-specific remediation plan. The plan will include procedures and protocols to ameliorate the affected area(s).

Contaminated material, resulting from remedial actions for major spills will be disposed of off-site at a properly permitted hazardous waste treatment or disposal facility. Contaminated soil, which results from a release, will also be removed as expeditiously as possible and transported off-site to a properly permitted hazardous waste facility.

#### 4.5.3 Fires and Explosions

If a small fire occurs, personnel must act quickly with a fire extinguisher to put out the fire before it spreads without undue threat to personal safety. Such a fire would be defined as incidental and would not require implementation of the Contingency Plan. If a fire cannot be extinguished immediately or an explosion occurs, implementation of the Contingency Plan will be required. The fire department will be promptly notified and the Service Center may be evacuated.

It should be noted that Safety-Kleen only responds to incidental fires; that is, those fires which can immediately be extinguished using a fire extinguisher. Any fire that cannot be brought under control immediately, or has the potential to become uncontrollable warrants implementation of the Contingency Plan. The emergency coordinator will determine if evacuation of the facility is warranted. Should such action be taken, the emergency coordinator will:

- Activate the internal facility communication system to notify Service Center personnel for evacuation;

- Notify Safety-Kleen's EHS Department, the New York Department of Environmental Conservation (NYDEC), and the National Emergency Response Center, if necessary; and
- Notify appropriate emergency, state and local agencies deemed necessary, such as police and fire departments.

Upon review of the fire or explosion incident, police and fire officials may initiate evacuation proceedings of the neighboring properties (based on guidance detailed in the ERG). Any fire or response actions undertaken by off-site emergency response personnel will be required to wear the appropriate personal protective equipment.

Fire response efforts will be assisted by the water-based sprinkler system installed in the waste transfer area. This system is further supported by a dry-chemical fire suppression system positioned in the return and fill area and in the hazardous waste storage tank area. Fires in these areas should be controlled by these engineered features.

The emergency coordinator reporting a fire or explosion should be prepared to give his name, position, company name, address, telephone number, time and date. He should also describe the type of incident, extent of injuries, material, source and, if possible, an estimate of the amount, extent of any contamination, the containment status, and specify any equipment needed. More detailed reporting requirements are contained in Section 9.0.

Contaminated material, resulting from remedial actions for fires or explosions will be disposed of off-site at a properly permitted hazardous waste treatment or disposal facility. Contaminated material, that results from a fire or explosion will be removed as expeditiously as possible.

#### **4.6 Prevention of Recurrence or Spread**

Quick response to a fire, explosion or release is the primary method by which recurrence or spread of fires, explosions or releases can be prevented. Specific actions to prevent the recurrence or spread of fires, explosions or releases include determining the source or cause of the incident; ceasing operations and turning off all feed lines, auxiliary fuel lines, and power supply to the affected area; cleaning up debris from the situations and maintaining good housekeeping; containing and collecting released waste; recovering and isolating affected containers; ensuring that a fire is completely extinguished; and decontaminating the affected area/equipment.

Examples of further measures to prevent the recurrence or spread of fires, explosions or releases include: prohibiting smoking except in designated areas; properly segregating wastes in accordance with USDOT regulation 49 CFR 177.848; and protecting the waste management/storage areas from open flames, cutting and welding activities, hot surfaces and frictional heat.

#### **4.7 Storage and Treatment of Released Material**

The Service Center maintains an adequate supply of containers to manage remediated material that may be generated as a result of response actions. This material will be managed in the same manner as on-site generated wastes and will be transported to a Safety-Kleen Recycle/Process Center or contract processor as soon as possible.

Leaking or damaged containers will be overpacked into appropriately sized recovery drums. The Avon facility maintains an adequate supply of these recovery drums.

#### **4.8 Incompatible Wastes**

No wastes that are incompatible with spilled or released material may be received by the Avon facility until the emergency coordinator determines that the hazards posed by the response event have been fully ameliorated.

#### **4.9 Post-Emergency Equipment Maintenance**

Following its use, non-disposable personal protective and response equipment owned by Safety-Kleen will be decontaminated with a soap and water solution and thoroughly rinsed. The emergency coordinator will visually inspect Safety-Kleen's response equipment after decontamination for residual contamination, damage, excessive wear, and proper operation. If equipment shows signs of residual contamination, the emergency coordinator may request that the equipment be decontaminated again or if these procedures fail to decontaminate the particular item, the emergency coordinator may choose to dispose of the item using the Service Center's handling, storing and disposing procedures. If an emergency equipment item is damaged and cannot be repaired, the emergency coordinator will instruct the post-emergency maintenance personnel not to decontaminate the item and to dispose of the item using the proper procedures. The emergency coordinator will order replacement equipment for any disposed equipment and make arrangements to repair any inoperable equipment as soon as practicable.

#### **4.10 Container Spills and Leakage**

Upon discovery of any spills or leaks, precautions to protect personnel in the immediate area will be taken. If necessary, the area will be isolated. Responding personnel will select and utilize the proper protective equipment and will attempt, if feasible, to stop the leak by plugging the hole or by changing the position of the container. Personnel will take precautions so as not to drive or walk into or through any vapors or spilled materials. Spills and leakage from containers holding waste will be collected and placed into a new container. Damaged containers will be placed in overpack containers, relabeled and marked accordingly. Cleanup in the warehouse container transfer management areas may include:

- use of sorbent material;
- dry sweeping;
- shoveling;
- pumping;

- damp mopping and wipe down;
- complete washdown; or
- a combination of the above.

Rupture of a container at the Service Center will elicit a response that is proportional to the seriousness of the release. Spilled liquid wastes will be stabilized with sorbent material. Solid wastes and sorbent material used to capture spilled residual liquids will be placed into new containers.

If a slow container leak is detected, the entire container will be overpacked into an appropriately sized recovery drum, relabeled and marked. The Service Center inspection procedures assure that adequate spill cleanup equipment is available for spill containment and cleanup. The specific actions to be taken in response to incidental or major spills or leaks are described in Section 4.5.1 and 4.5.2, respectively.

#### **4.11 Tank Spills and Leakage**

In the event of a release involving any portion of the waste parts washer bulking system, the operator will stop the flow of waste into the bulking system and notify the emergency coordinator. The system will then be inspected to determine the cause and extent of the release. Based on this inspection, additional measures may be necessary to prevent further migration of the release. The actions to be taken in response to an incidental release from the tank system are described in Section 4.5.1. Actions to be taken in response to a major release from the tank system are described in Section 4.5.2.

A release related to the storage tank system would most likely collect into the secondary containment systems of the tank transfer area, the tank or the return and fill station. Any released material in the secondary containment systems will be removed within 24 hours or as expeditiously as possible to prevent harm to human health or the environment. The secondary containment systems will prevent migration to soils and surface waters.

### **5.0 EQUIPMENT OR POWER FAILURE**

The Service Center is designed to be a passive waste management facility. Much of the material handled at the facility is contained in small containers and manually moved from storage to transport. The spent parts washer solvents that are unloaded into the dumpster/washer unit depend upon a pump for transfer to the storage tank. If the power or transfer equipment fail, this operation would be halted. If the operation could not be resumed within a short time period, deliveries may be rerouted to another Service Center.

### **6.0 EMERGENCY EQUIPMENT**

The following list of emergency equipment is in easily accessible locations throughout the Service Center. Figure VI - 2 shows the locations of the emergency equipment. Much of this equipment is inspected once per week.

Gloves – Neoprene or nitrile gloves are used when handling wastes. The gloves provide skin protection and chemical resistance when handling wastes.

Safety Goggles or Glasses/Face Shields - Whichever the worker prefers, is to be worn when loading or unloading solvents at the return and fill station.

Chemical Resistant Aprons - Available for the situations where wastes may get on the worker's clothing.

Eye Wash Stations - To provide quick flushing of eyes that have been exposed to injurious chemicals. The eye wash stations are located inside the Service Center and in the tank farm area and are easily accessible to employees.

Emergency Shower - To provide quick flushing of personnel that have been exposed to injurious chemicals. Emergency showers are located inside the Service Center and are easily accessible to employees.

Fire Extinguishers - The Service Center has 10-pound ABC extinguishers located throughout the facility. An ABC extinguisher is a universal system that may be used on paper, wood and electrical, as well as solvent fires. Additionally, the office and entire warehouse area and return and fill station are serviced by a water-based fire suppression system. The hazardous waste storage tank and return and fill station are supported by dry-chemical fire suppression systems.

Sorbent Material - An adequate supply of inert sorbent will be on hand to handle incidental spills. Located in the loading/unloading areas and in the container management areas.

Respiratory Protection Equipment - Respirators are selected and used on the basis of the hazards to which employees are potentially exposed. Dedicated and properly fit-tested respirators are provided to employees requiring their use.

Spill Cleanup Equipment - Shovels, sorbent materials and empty containers are readily available to collect spills and spill residues.

First Aid Kit - A First Aid Kit is centrally located in the Service Center. It contains disinfectant, bandages and other medical aids for minor injuries and health problems.

Hand-held Pump - At least one is available on-site to collect spills and transfer materials.

Communication Equipment - Telephones with loudspeaker/paging systems are available in the building for internal and external communications.

Personnel Alarms - Personnel alarms are located near the warehouse transfer container management areas and the storage tank area with an annunciator panel located in the front office.



Decontamination Equipment - Decontamination equipment consisting of brushes, detergent and wipes are kept on-site for decontamination of cleanup equipment.

## **7.0 COORDINATION AGREEMENTS**

Within 30 days of NYDEC approval of this plan, arrangements will be made with the police department, fire department and local emergency teams to familiarize them with the layout of the Avon Service Center, the properties of hazardous materials handled and associated hazards, locations where Service Center personnel normally work, entrances to and roads inside the Service Center, and possible evacuation routes. A copy of the Contingency Plan will be sent to the agencies listed below:

- Police Department;
- Fire Department;
- Hospital; and
- Cleanup Contractor.

Copies of the transmittal letters will be maintained at the facility.

## **8.0 EVACUATION PLAN**

The Avon Service Center exits are clearly marked and employees are aware of the potential escape routes. Posted in several locations at the facility is a figure showing available exits from the area and the direction to the personnel staging area. The emergency evacuation routes for the Service Center are included on Figure VI - 3.

In the event of a major emergency, the on-site emergency coordinator may signal personnel to evacuate the Service Center by sounding the alarm and verbally announcing the evacuation over the loudspeaker. Personnel will evacuate in an orderly fashion to the assembly area adjacent to the main access gate to the facility on Route 15 as shown in Figure VI-3. The police and fire departments will be informed of the evacuation from a safe, on-site location or from a neighboring facility. Everyone will remain at the staging area and await instructions from police and fire personnel or the on-site emergency coordinator.

If the emergency coordinator believes that a threat to human health or the environment outside the Service Center exists, he or she will notify the appropriate agencies. The emergency coordinator will be available to help the appropriate officials decide if evacuation of the neighboring properties is necessary. These evacuation proceedings will be initiated by the police department or the fire department.

## **9.0 REPORTING REQUIREMENTS**

In the event of an incidental release that exceeds the previously described thresholds, the emergency coordinator must notify Safety-Kleen's EHS Department. The EHS Department or emergency coordinator will notify NYDEC. For major emergencies, the emergency coordinator or EHS Department will notify the necessary and required parties listed in Table VI - 2.

When NYDEC is contacted, the reporting individual must be prepared to provide the following information:

- a. Name and telephone number of notifier;
- b. Name and address of the facility;
- c. Time and type of incident;
- d. Name and quantity of material(s) involved, to the extent known;
- e. Extent of injuries, if any; and
- f. The possible hazards to human health or the environment outside the facility.

The emergency coordinator must document the time, date and details of any incident that requires the implementation of the Contingency Plan. Within 5 days of the incident, a written report, detailing the circumstances of any incident that requires the implementation of the Contingency Plan will be submitted to the NYDEC. The report will include:

- a. Name, address and telephone number of the owner or operator;
- b. Name, address and telephone number of the facility;
- c. Date, time and type of incident;
- d. Name and quantity of material(s) involved;
- e. Extent of injuries, if any; and
- f. An assessment of actual or potential hazards to human health or the environment; and
- g. Estimated quantity and disposition of recovered materials that result from the incident.

Following response to a major emergency that requires implementation of the Contingency Plan, Safety-Kleen will notify the Regional DEC office that the Service Center is in compliance before operations are resumed in the affected areas of the facility. Additionally, training will be performed to minimize the potential for reoccurrence of the emergency. Also, emergency equipment will be inspected and operable prior to the resumption of operations.

## **10.0 POLLUTION INCIDENT HISTORY**

There are no records of a major pollution incident having occurred at this facility.

## **11.0 AVAILABILITY AND REVISION OF THE CONTINGENCY PLAN**

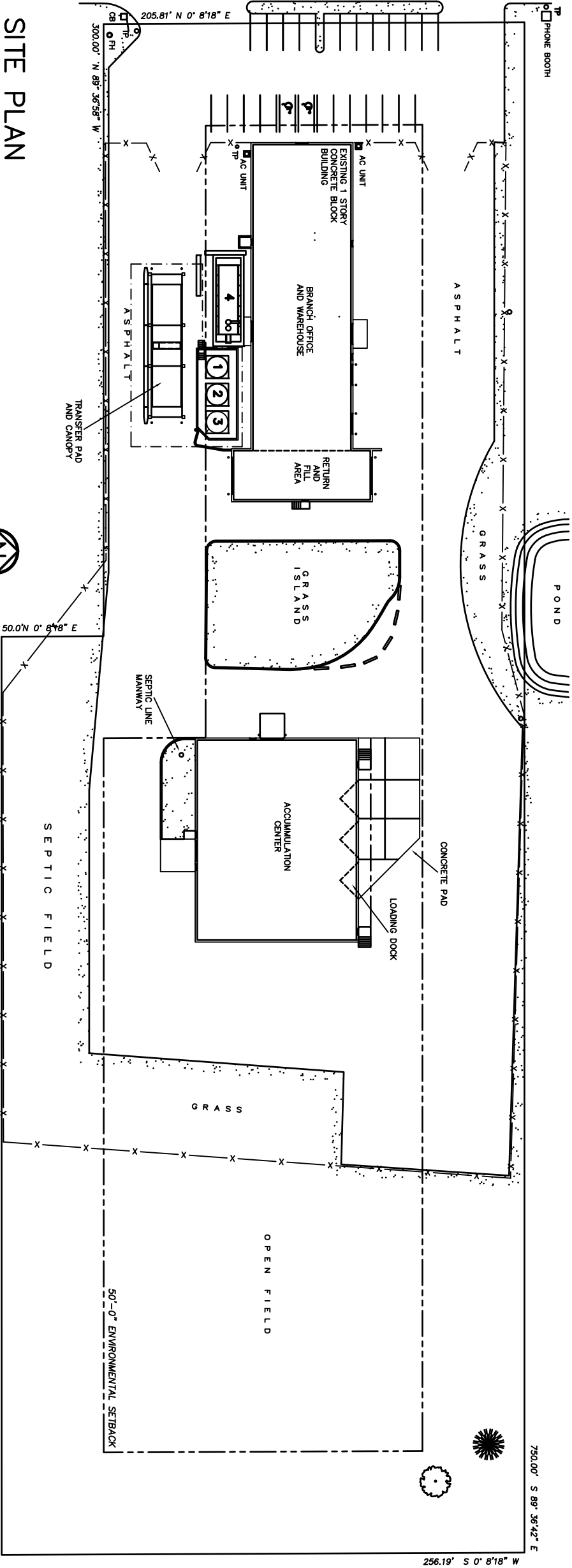
This Contingency Plan is kept at the Avon Service Center and is updated when there are changes to the facility that may affect the Plan. Copies of this document and all revisions are provided to local authorities and organizations listed in Section 7.0. In addition, this Contingency Plan, and revisions to this Contingency Plan, are made available to the manager, supervisors and emergency response personnel as well as employees working at the Service Center.

The Contingency Plan is reviewed and updated, if necessary, whenever:

- The Service Center's Permit is modified to allow new wastes to be stored or treated, or applicable regulations are revised;
- The list or location of emergency equipment changes;
- The Service Center changes in its design, construction, operation, maintenance, or other circumstances in a way that increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
- The names, addresses, or phone numbers of emergency coordinators change; or
- The Contingency Plan fails when implemented in an emergency.

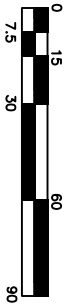
**FIGURE VI-1**

**SITE PLAN**



SCALE: 1" = 30'-0"

## SITE PLAN



### GENERAL NOTES

### PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED HEREIN ARE NOT TO BE REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN THAT AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.



2005 West Broadway • Suite 210 • Columbia, MO 65203  
Phone: (313) 443-7100 • Fax: (313) 443-7161 •

### EXISTING SITE PLAN

TITLE

TANK LEGEND			
TANK NO.	TANK VOLUME	TANK CONTENTS	REMARKS
1	12,000 USG	USED OIL	VERTICAL TANK
2	12,000 USG	USED MINERAL SPIRITS	VERTICAL TANK
3	12,000 USG	CLEAN MINERAL SPIRITS	VERTICAL TANK
4	20,000 USG	USED OIL	HORIZONTAL TANK

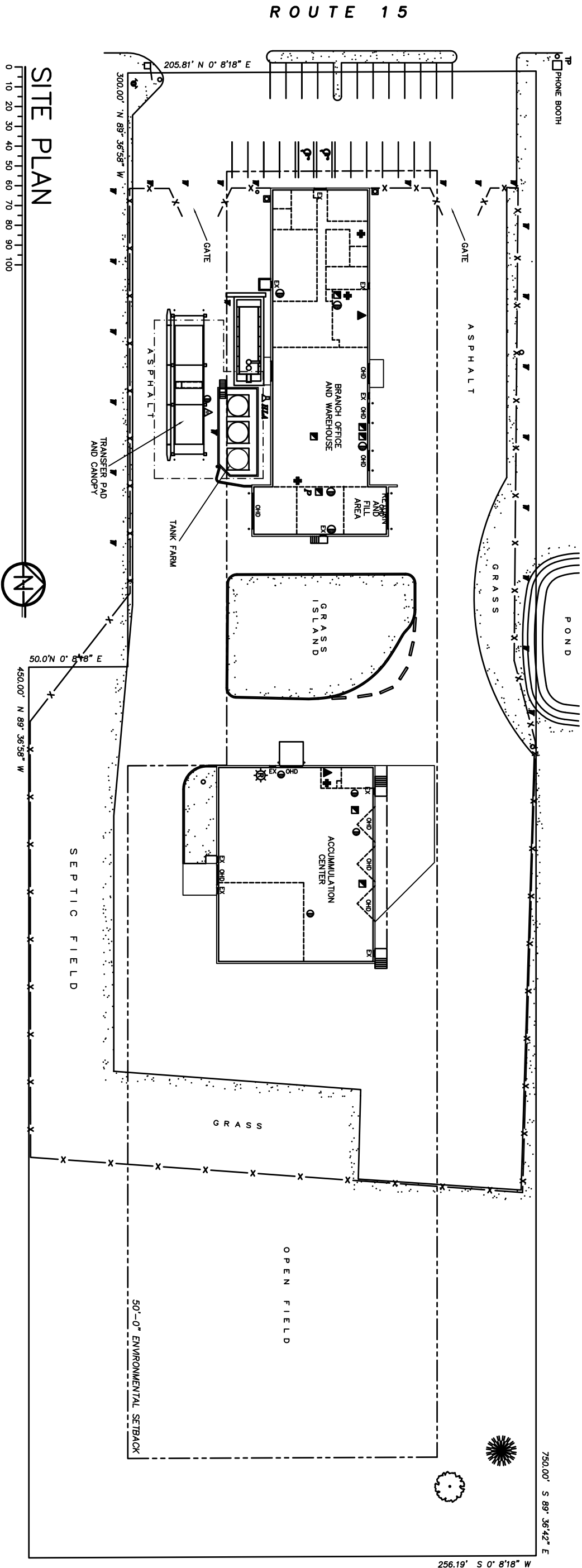
A	REVISE TANKS/ADD LEGEND	JEK	DDP	DDP	08/16/10
0	ISSUED FOR REVIEW	JEK	DDP	DDP	03/19/07
NO.	DESCRIPTION	BY	CHK	APPR	DATE
REVISIONS					



SCALE	BY	CHKD	APPR	DR	APPR	DATE
1"=30'-0"	JEK	DDP	DDP	DDP	DDP	5/10/09
SERVICE CENTER LOCATION	SC-DWG NUMBER					REV. NO.
AMON, N.Y.	7048-SP00-001					A

**FIGURE VI-2**

**EMERGENCY EQUIPMENT**

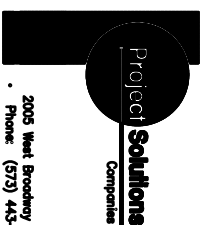


SITE PLAN

- LEGEND**
- DRY CHEMICAL FIRE EXTINGUISHER – HAND HELD TYPE (10 # ABC)
  - ✱ DRY CHEMICAL FIRE SUPPRESSION SYSTEM INSTALLED
  - FIRST-AID KIT
  - ▲ SAFETY SHOWER WITH EYE WASH FOUNTAIN
  - ▲ EYEWASH ONLY OR HANDSPRAY
  - SPILL BOX
  - ⊗ SPRINKLER ALARM
  - ⚡ ALERT (HORN)
  - ⚡ SPRINKLER RISER
  - ⚡ HYDRANT – WATER
  - ⚡ PULL STATION
  - P PANIC BUTTON
  - HLA HIGH LEVEL ALARM
  - ▼ WARNING SIGN
  - EX EMERGENCY EXIT SIGN
  - OHD OVER HEAD DOOR

PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.



2005 West Broadway, Suite 210, Columbia, MO 65203  
• Phone: (313) 445-7100 • Fax: (313) 445-7181 •

EMERGENCY EQUIPMENT  
LOCATION PLAN

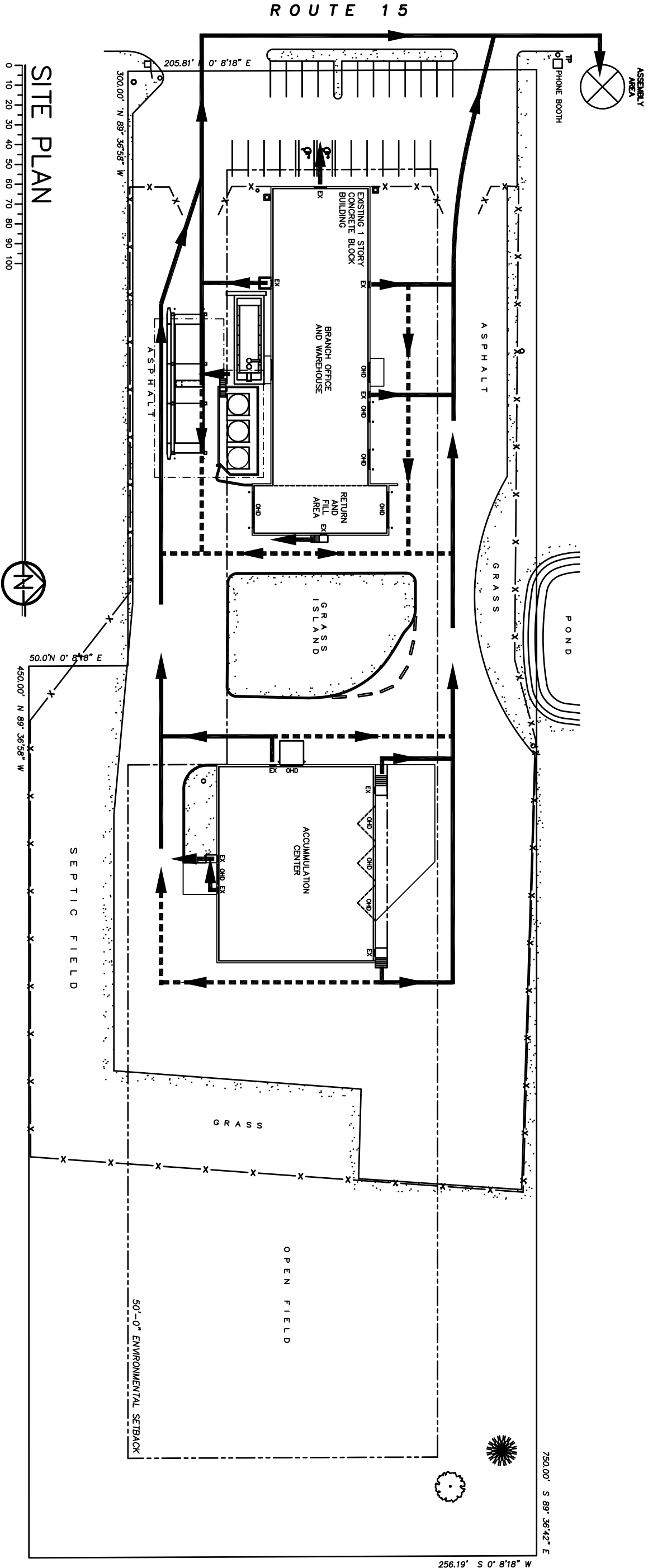
TITLE						
C		REVISE FOR PERMIT	JEK	MH	MH	05/28/13
B		CANOPY REVISION	NDE	NDE		10/05/93
A		RELEASED FOR PART "B" PERMIT	RBS	NDE		03/09/92
NO.		DESCRIPTION	BY	CHK	APPR	DATE
REVISIONS						
SCALE		BY	CHD	P.E. APPR	OR APPR	DATE
AS NOTED		RBS	NDE			3/5/93
SERVICE CENTER LOCATION		SC-DWG-REV NO.		SHEET NO.		
AVON, NEW YORK		7048-SP00-006		06		



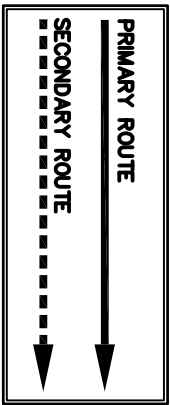
**FIGURE VI-3**

**EMERGENCY EVACUATION ROUTES**



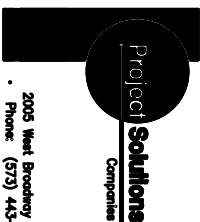


LEGEND



PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.



2005 West Broadway, Suite 210, Columbia, MO 65203  
• Phone: (313) 445-7100 • Fax: (313) 445-7181 •

EMERGENCY  
EVACUATION PLAN

TITLE						
C	REVISE FOR PERMIT	JEK	MH	MH	05/28/13	
B	CANOPY MODIFICATIONS	NDE	NDE		10/05/93	
A	RELEASED FOR PART "B" PERMIT	RBS	NDE		03/03/92	
NO.	DESCRIPTION	BY	CHK	APPR	DATE	
REVISIONS						
SAFETY-KLEEN SYSTEMS, INC.		BY	CHNO	P.E. APPR	OR. APPR	DATE
8600 N. CENT. EXPRESSWAY STE. 400 RICHMOND, TX. 75280		BY	RBS	NDE		3/5/93
PHONE: 800-665-5740		SCALE		AS NOTED		
SERVICE CENTER LOCATION		SC-DWG-REV NO.		SHEET NO.		
AYON, NEW YORK		7048-SF00-002		02		

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT H  
PERSONNEL TRAINING PLAN**

**ATTACHMENT H**  
**PERSONNEL TRAINING**  
**ABSTRACT**

**Purpose:** The purpose of training is to familiarize employees with environmental regulations, records and emergency procedures so they can perform their jobs in the safest and most efficient manner possible. The program for the Avon Service Center ensures that facility personnel are able to perform their respective job duties and to respond effectively to issues and emergencies at the Service Center.

**TIME OF TRAINING**

Job Title	Prior to Start Work	On the Job	Annually	Regulation Change
Branch Manager	X	X	X	X
Branch Secretary		X	X	
Sales Representative	X	X	X	X
Material Handlers	X	X	X	X

**ATTACHMENT H - PERSONNEL TRAINING PLAN**

**1.0 OUTLINE OF TRAINING PROGRAM**

The Avon Service Center will train its employees in accordance with the requirements detailed in 6NYCRR, Part 373, Section 373-2.2(h). Employees are trained to perform their respective job duties safely and efficiently and to understand hazards unique to their job assignment. New branch managers will complete an introductory training program before starting their jobs with an annual review and update thereafter. Sales representatives and material handlers (i.e., personnel who manage hazardous waste as a part of their job) will also receive initial training and annual reviews. No employee who manages or handles hazardous waste will work unsupervised until he or she completes the required training. An outline of the typical training programs given

both initially and annually to employees who manage or handle hazardous waste at this Service Center is provided in Appendix III - A.

## **2.0 ORGANIZATIONAL STRUCTURE AND JOB DESCRIPTION**

Environmental compliance and training of branch employees will be the responsibility of the branch manager. It will be the responsibility of his manager to ensure that the branch manager is trained and that he trains branch personnel. The Environmental, Health and Safety Department, in turn, provides an annual training program.

The job title for each position at the facility related to hazardous waste management, the associated job description and the name of the employee filling each job are maintained at the facility. A copy of the job description for each individual is kept in the employee's training file. The job descriptions include the requisite skill, education or other qualifications and the duties of the employee assigned to that position. The job descriptions will be updated as necessary to stay current with the branch positions and the duties of each position. Copies of the job descriptions for the branch manager, branch secretaries, sales representatives and material handlers (warehouse personnel) are included in Appendix III - B. These documents are included as part of the permit and will be revised through a minor modification when required.

## **3.0 TRAINING RESPONSIBILITIES**

### **3.1 Branch Manager**

The branch manager will be ultimately responsible for operations at the Service Center. The sales representatives, secretaries and material handlers report to him and he will provide the training and materials necessary for them to execute their duties. With respect to environmental compliance, he will:

- a. keep the Service Center clean and orderly;
- b. execute or designate an employee to execute the daily inspection, keep a written log and remediate any problems;
- c. know the potential hazards of the material and wastes handled on site;
- d. identify potential spill and fire sources and be able to execute the contingency plan;
- e. inform employees of their environmental responsibilities;
- f. notify the proper authorities during an emergency, remediate the situation to the best of his abilities, and submit necessary reports to the corporate office; and

- g. maintain environmental records (such as manifests, training records and spill reports) at the Service Center.
- h. Ensure that all Branch employees including Sales Representatives) are trained in accordance with Personnel Training Plan.

### **3.2 Regional Manager**

The regional manager, or designate, oversees the operations of several service centers in a geographic area. Branch managers report to him and he will verify that the branch managers are operating their facilities in compliance with environmental regulations as well as Safety-Kleen's internal standards. With respect to environmental compliance, he or his designee will:

- a. perform a periodic inspection of each branch in his region to review record keeping and maintenance practices;
- b. ensure that the branch manager is training branch employees;
- c. make certain that the contingency plan and remedial actions have been properly executed for any emergencies; and
- d. assume the responsibilities of the branch operations in the absence of the branch manager.
- e. ensures that annual training for branch employees has been executed.

### **3.3 Environmental, Health & Safety Department**

Safety-Kleen's Environmental, Health and Safety Department operate out of the corporate office in 2600 North Central Expressway, Suite 400 Richardson, TX 75080. Each EHS Manager is responsible for the training, permits and other compliance issues for the branches in a geographic area of the country. The Department will:

- a. execute training of personnel in accordance with environmental regulations and corporate policy;
- b. notify proper authorities, oversee remedial actions and submit a written report to the state after an emergency situation has occurred;
- c. assure that environmental permits are renewed and updated as required; and
- d. manage any environmental compliance issues which exceed the resources available at the branch or regional level.

The EHS Manager will visit the facility and make an evaluation of the adequacy of training imparted to the facility employees. If the employees are found to be inadequately trained, arrangements for additional training will be made with the branch

manager.

#### **4.0 DESCRIPTION OF THE TRAINING PROGRAM**

Employee training is accomplished using classroom, video, computer and on-the-job methods. Safety-Kleen prepares a training program for its managers and employees. The Service Center will provide documentation that the training has been executed.

An employee will be typically trained prior to starting or as soon as he or she begins working, (depending on his or her position), and annually thereafter. The initial training program outline that will be typically presented to new sales representatives and material handlers (warehouse personnel) is provided in Appendix III - A.

##### **4.1 Training of New Branch Managers**

New branch managers will be trained for several weeks before they begin their new position. This training is given both in situ and in classroom modes with video and computers. While being trained at a designated "training branch", the new branch manager reviews environmental records and learns the record keeping requirements for each. These records include manifests, personnel records, training records, facility inspection records, and spill reports.

The training culminates in training at their new branch, with at least one day devoted to environmental training with the EHS Manager. At least eight hours consists of an introduction to environmental law and a review of the Waste Analysis Plan, Preparedness and Prevention Plan, Contingency Plan, Training Plan and Closure Plan.

Additional time is spent reviewing past environmental compliance at the branch manager's Service Center and the regulations unique to the state are discussed as well.

The new branch manager does not work without supervision at the Service Center until the training program is complete. The training associated with a new branch manager is finalized and documented prior to their assuming unsupervised control of the facility.

##### **4.2 Training of New Branch Secretaries**

Branch secretaries will be trained in the proper record keeping procedures as soon as they begin working for Safety-Kleen (i.e., on-the-job training). While they are not usually responsible for preparing the documentation, they will check it for accuracy and completeness and then process or file it as required. Additional training will be overseen by the branch manager and will be done within six months of starting. It will include the items listed in the Initial Training Program Outline on hazard communication and USEPA/USDOT regulations and permit conditions. In addition, the contingency plan will be reviewed with the branch manager within the first two weeks of a secretary starting work.

### **4.3 Training of New Sales Representatives**

New sales representatives will be trained through the use of audio-visual equipment, classroom instruction and self-study courses. Initial training will focus on the topics presented in Appendix III - A. Annual training will also be provided following the guidance detailed in the Annual Training For Branch Employees form in Appendix III - A. Additional training will be provided in the form of classroom activities and a review of the Contingency Plan. The Contingency Plan will be reviewed with the branch manager before the sales representative formally begins their new position. Training will also include a review of the facility's Waste Analysis Plan, including the acceptance criteria checklist and USDOT regulations pertaining to the segregation of materials and packaging. A sales representative may also be trained as a designate for performing the facility inspection. Items listed in the Initial Training Program Outline will be explained within six months of starting. Additional training will be provided to all sales representatives in the form of classroom activities on the categories of hazardous waste generators and the hazardous waste requirements for each category of hazardous waste generator.

### **4.4 Training of New Material Handlers (Warehousemen)**

A material handler (warehouseman) will be trained to maintain the service center and assist the other branch employees in their tasks. Training will also include a review of USDOT regulations pertaining to the segregation of materials and packaging. He/she may be a designee for facility inspections and will be trained by the branch manager as such. Within two weeks of employment, the branch manager will review the contingency plan with him/her and within six months they will review the items listed in the Initial Training Program Outline.

### **4.5 Annual Training**

On an annual basis, employees will be trained using a program prepared and updated annually by the Corporate Environmental, Health, and Safety Department. It will include updates on environmental regulations, an in-depth review of the contingency plan, and a review of RCRA.

Branch employees will annually review the items listed in the Annual Training For Branch Employees form included in Appendix III - A. This review may take place in the classroom and may include review and discussion of the facility permit. In addition, periodic memoranda on changes in environmental regulations will be issued by the Environmental, Health, and Safety Department and will be read and discussed by branch personnel.

## **5.0 TRAINING RECORDS**

Training will be documented. The documentation will vary depending on the type of training provided. A record of personnel training will typically be used for recording the training provided for each individual employee in accordance with 40 CFR Part 264.16(d)(4). The employee will sign the training record each time training is provided. Signing of the training record indicates that the employee has been adequately trained

and questions have been satisfactorily answered. This creates an obligation on the part of the employee to comply with the rules and regulations applicable to his activities.

In accordance with 6NYCRR Part 373, Section 373-2.2(h)(5), training records of current personnel will be kept until closure of the facility; training records on former employees will be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the company.



## **APPENDIX III - A**

### **Typical Initial Training Program Outline**

**Safety-Kleen Systems, Inc.  
Avon, New York**

#### **SESSION ONE: ORIENTATION**

1. Safety-Kleen's Mission
2. Branch Tour
3. Branch Structure

#### **SESSION TWO: HAZARD COMMUNICATION**

1. General Safety Information
2. Right-To-Know Training
3. Personal Protective Equipment

#### **SESSION THREE: USEPA/USDOT REGULATIONS & PERMIT CONDITIONS**

1. Facility Permit Conditions
2. Inspections
3. Overview of Generator Regulations Pertaining To Material Handling
4. USDOT Requirements

#### **SESSION FOUR: SAFE DRIVING**

1. Safe Driving
2. USDOT Requirements

#### **SESSION FIVE: SAFE MATERIAL HANDLING**

1. Hazards Associated With Material Handling
2. Material Handling
3. Manifesting

4. Housekeeping/Decontamination
5. Material Transfer

#### **SESSION SIX: SAFETY HAZARDS**

1. Safe Lifting
2. Mechanical Methods of Moving Materials
3. Forklift Safety

#### **SESSION SEVEN: SAFETY PROCEDURES**

1. Contingency Plan
2. Fire Extinguisher Use

## **APPENDIX III - A**

### **Annual Training for Branch Employees**

**Safety-Kleen Systems, Inc.  
Avon, New York**

- A. Environmental Regulation Update
- B. Waste Analysis Plan
- C. Preparedness and Prevention Plan
- D. Contingency Plan and Emergency Procedures
- E. Manifesting
- F. Spill Reporting and Response Procedures

NOTE: Employees shall not work in unsupervised positions until they have received emergency response training (items D and F). Employees must be completely trained, in the items listed above, within six months of starting and annually thereafter.

## **APPENDIX III – B**

### **Job Descriptions**

## FIELD POSITION DESCRIPTION

Position title: **Branch General Manager**

Job code: **BGM**

**Reporting Relationship:** Reports to District Manager

**Qualifications:**

- College Degree or equivalent sales/management experience
- Must have five (5) years of progressively responsible branch sales and management experience
- Must possess leadership abilities, and have the capacity to interface effectively with Branch, District, Region, and Marketing personnel.

**Position Overview:** Overall responsibility for Branch operations including, but not limited to, Growth, Profit and Loss, EH&S compliance, Asset management, Employee turnover.

**Essential Job Functions and Responsibilities:**

- Profit and Loss
- Customer retention
- Reduce employee turnover
- Environmental, Health & Safety
- Personnel management with H-R assistance
- Assist with employee recruiting and training
- Fleet management
- Community relations
- Ensure ethical business practices
- Distribute and manage sales reports
- Monitor sales / service activities

## FIELD POSITION DESCRIPTION

**Position title:** **Lead Secretary**

**Job code:** **LSEC**

**Reporting Relationship:** Reports to Branch General Manager

**Qualifications:** Must be a high school graduate with good written and verbal communication skills, interpersonal skills and computer knowledge

**Position Overview:** Lead Secretary must possess the ability to interact efficiently with Branch General Manager, Customer Service Manager and Branch Sales Manager. Directs all paperwork flow and must exhibit a thorough knowledge of Hazardous Waste regulations, and all Safety-Kleen Corporate policies and procedures.

### **Essential Job Functions and Responsibilities:**

- Supervise Branch Secretaries.
- Verification of Sales and Hazardous Waste documents completed by Sales and Service Representatives.
- Act as escort for government inspectors through the facility in the absence of Branch General Manager, Lead Material Handler or Environmental Manager.
- Ensure proper completion of Facility Operating Log, and proper maintenance of Accounts Receivable, branch bank deposits, Manifests, and other key administrative areas.
- May act as primary or alternate Emergency Coordinator and assists management in incident response.
- Maintain the training database, and ensure all personnel are up to date and documented on all training as required by Safety-Kleen and applicable government agencies.
- Coordinate personnel requirements such as DOT physicals, employee physicals, State Transporter License Numbers (if applicable), start packs, Worker's Compensation claims, etc.
- Monitor contractors doing work on site.
- Provides corrections for annual reports.
- Obtains EPA ID number lists for state or region.
- Oversees FRS/Lab correspondence.
- Participate in the hiring and training of Admin. Staff.
- Maintain branch level Customer Service/Collection procedures.
- Perform other duties as assigned by BGM.

## FIELD POSITION DESCRIPTION

**Position title:** **Branch Secretary**

**Job code:** BSEC

**Reporting Relationship:** Reports to Lead Secretary

**Qualifications:** : Must be a high school graduate with good written and verbal communication skills, interpersonal skills and computer knowledge

**Position Overview:** Secretary must possess the ability to interact efficiently with Lead Secretary, Customer Service Manager and Branch Sales Manager. Directs paperwork flow and must exhibit a thorough knowledge of Hazardous Waste regulations, and all Safety-Kleen Corporate policies and procedures.

### **Essential Job Functions and Responsibilities:**

- Verification of Sales and Hazardous Waste documents completed by Sales and Service Representatives.
- Ensure proper maintenance of Accounts Receivable, branch bank deposits, Manifests, and other key administrative areas.
- Provides corrections for annual reports.
- Oversees FRS/Lab correspondence.
- Maintain branch level Customer Service/Collection procedures.
- Perform other duties as assigned by management.

## FIELD POSITION DESCRIPTION

Position title: **Material Handler, Lead**

Job code: **MHL**

**Reporting Relationship:** Reports to Branch General Manager

**Qualifications:**

- High school graduate
- Ability to pass CDL and other hiring requirements

**Position Overview:** Responsible for operation of Return and Fill, site E,H & S compliance and general warehouse/housekeeping

**Essential Job Functions and Responsibilities:**

- Oversee operation of Return and Fill.
- Assist in training Material Handlers (MHBs)
- Act as escort for government inspectors through the facility in the absence of Branch General Manager or Environmental Manager or Lead Secretary.
- Ensure proper completion of Facility Operating Log and compliance with site specific regulatory issues.
- May act as primary or alternate Emergency Coordinator and assists management in incident response.
- Monitor contractors doing work on site.
- Oversee facility housekeeping schedule.
- Other duties as directed by BGM.



## Field Position Description

Position title: **Material Handler, Branch**

**Job code: MHB**

**Reporting Relationship:** Reports to Lead Material Handler

**Qualifications:**

- High school graduate
- Ability to pass CDL and other hiring requirements

**Position Overview:** Operation of Return and Fill, site E,H & S compliance and general warehouse/housekeeping duties

**Essential Job Functions and Responsibilities:**

- Operation of Return and Fill.
- Facility housekeeping.
- Other duties as directed by Lead Material Handler.
- Facility EHS compliance.

## FIELD POSITION DESCRIPTION

**Position title:** **Customer Service Manager**

**Job code:** **CSM**

**Reporting Relationship:** Reports to the Branch General Manager

**Qualifications:**

- College Degree or equivalent sales/management experience
- Must have three (3) years of progressively responsible branch sales / service and management experience
- Must possess leadership abilities, and have the capacity to interface effectively with Branch, and District personnel.

**Position Overview:** Ensure optimum customer service leading to retention and expansion of branch business

**Essential Job Functions and Responsibilities:**

- Assure Customer satisfaction and retention
- Recruit / Train Customer Service Representatives
- Reduce employee turnover
- Maintain high On Time Performance
- Preprint / route management
- Manage Accounts receivable / DSO
- QA Sales and Service
- Fleet Management
- Environmental, Health and Safety

## FIELD POSITION DESCRIPTION

Position title: **Customer Service Technician, Sales and Service Representative**

Job code: **CST, SSR**

**Reporting Relationship:** Reports to Branch Customer Service Manager

Qualifications:

- High school graduate
- Ability to pass CDL and other hiring requirements
- Mechanical aptitude
- Ability to interface with Customers and branch personnel

**Position Overview:** Install, maintain, repair and refurbish equipment at customers locations.

**Essential Job Functions and Responsibilities:**

- Level Two equipment repair
- Assure Customer Satisfaction
- Technical installations
- QA – QC equipment prior to installation
- Refurbish equipment in the field
- Maintain appropriate certifications
- Assist branch in maintaining low DSO and high On time Performance
- EH & S compliance

## FIELD POSITION DESCRIPTION

Position title: **Senior Customer Service Representative**

Job code: **CSRS**

**Reporting Relationship:** Reports to the Branch Customer Service Manager

**Qualifications:**

- High school graduate
- Ability to pass CDL and other hiring requirements

**Position Overview:** Assist Branch Service Manager to ensure optimum customer service leading to retention and expansion of branch business

**Essential Job Functions and Responsibilities:**

- Service equipment at Customers
- Develop strong customer relations
- Maintain high branch On Time Performance
- Maintain low branch DSO
- Installation/Recovery of equipment
- Level One equipment repair
- EH&S Compliance
- Other duties as assigned by the Branch Service Manager

## FIELD POSITION DESCRIPTION

Position title: **Customer Service Representative, Oil**

Job code: **CSOIL**

**Reporting Relationship:** Reports to Branch Customer Service Manager

**Qualifications:**

- High school graduate
- Ability to pass CDL and other hiring requirements

**Position Overview:** Provide service at a level that meets or exceeds customer expectations.

**Essential Job Functions and Responsibilities:**

- develop strong customer relations
- Maintain high branch On Time Performance
- Maintain low branch DSO
- E,H&S Compliance
- Other duties as assigned by the Branch Service Manager

## FIELD POSITION DESCRIPTION

Position title: **Customer Service Representative, Vac**

Job code: **CSVAC**

**Reporting Relationship:** Reports to Branch Customer Service Manager

**Qualifications:**

- High school graduate
- Ability to pass CDL and other hiring requirements

**Position Overview:** Provide service at a level that meets or exceeds customer expectations.

**Essential Job Functions and Responsibilities:**

- Develop strong customer relations
- Maintain high branch On Time Performance
- Maintain low branch DSO
- EH&S Compliance
- Other duties as assigned by the Branch Service Manager

## FIELD POSITION DESCRIPTION

**Position title:** **Branch Sales Manager**

**Job code:** **BSM or MSS**

**Reporting Relationship:** Reports to Branch General Manager

**Qualifications:**

- College Degree or equivalent sales/management experience
- proven sales / management ability
- self motivated
- excellent communication and presentation skills

**Position Overview:** Manage sales to existing and new customers – supervise Branch Sales Specialists

**Essential Job Functions and Responsibilities:**

- Growth / Quota attainment
- Establish goals and monitor sales activity
- Recruit, train and develop Sales Specialists
- Customer retention / Accounts Receivable
- Key Account management
- Comply with Corporate Credit Policies
- Gather competitive information
- Collaborate with Branch Service Manager to ensure high level of Customer satisfaction / retention

## FIELD POSITION DESCRIPTION

Position title: **Senior Branch Sales Specialist**

Job code: **SBSS**

**Reporting Relationship:** Reports to Branch General Manager

**Qualifications:**

- high school graduate
- proven sales / management ability
- self-motivated
- excellent communication and presentation skills

**Position Overview:** Direct sales to existing and new customers -- supervise Branch Sales Specialist(s)

**Essential Job Functions and Responsibilities:**

- Growth / Quota attainment
- Establish goals and monitor sales activity
- Recruit, train and develop Sales Specialists
- Customer retention / Accounts Receivable
- Key Account management
- Comply with Corporate Credit Policies
- Gather competitive information
- Collaborate with Branch Service Manager to ensure high level of Customer satisfaction / retention



**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT I**

**CLOSURE PLAN**

## **ATTACHMENT I**

### **CLOSURE PLAN**

#### **ABSTRACT**

LOCATION ADDRESS: Safety-Kleen Systems, Inc.  
1525 West Henrietta Road  
Avon, New York 14414

EPA ID#: NYD980753784

#### **WASTE MANAGEMENT UNITS TO UNDERGO CLOSURE:**

- a. Tank Storage
  - 1- 12,000 gallon aboveground hazardous waste storage tank,
  - 1- 12,000 gallon aboveground non-hazardous used oil storage tank
- b. Return and Fill Station - one parts washer solvent management area. This area has a capacity of 750 gallons.
- c. Container Storage Areas - with a maximum waste storage of 2,560 gallons of parts washer solvents.
- d. Formerly permitted container storage areas that are converted into exempt 10-day transfer areas consisting of the 42,912 gallon capacity warehouse (area A) at the back, and the 6,912 gallon capacity areas (A and B) behind the office. These storage areas will be closed at the time of closure of the Avon facility. Safety-Kleen will maintain the financial assurance and the closure plan for these storage areas until closure of the facility.

#### **CLOSURE PERFORMANCE STANDARDS:**

Safety-Kleen will close the facility in a manner that:

- a. Minimizes the need for further maintenance;
- b. Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post closure escapes of hazardous waste, hazardous constituents, leachate, contaminated runoff or hazardous waste decomposition products to the ground or surface waters or to the atmosphere;

The closure performance standard will be accomplished by removing from the facility hazardous waste in Safety-Kleen's inventory at the time of closure, decontaminating equipment and containment systems and post closure sampling and analysis.

## **ATTACHMENT I - CLOSURE PLAN**

The Avon Service Center operates as a storage and USDOT transfer facility for hazardous and non-hazardous wastes, and it is required that it be closed in accordance with the closure requirements of 6NYCRR Section 373-2.7. Closure of the facility will be carried out in accordance with the steps outlined in this plan. Safety-Kleen will remove hazardous wastes and hazardous waste residuals from the facility. This manner of closure will eliminate the need for further maintenance and eliminate threats to human health and the environment due to post closure release of hazardous waste, constituents or contaminated rainfall to the ground or surface waters or to the environment.

### **1.0 ABOVEGROUND TANKS AND ASSOCIATED PIPING**

To safely clean and decommission the aboveground storage tanks:

- a. Remove the remaining material from the tanks and return the materials to a Recycle/Process Center for reclamation.
- b. Provide access to the tanks.
- c. Rinse, scrape and squeegee the tank interiors, removing residual waste material and rinsate. Decontamination of the hazardous waste tank will continue until analyses demonstrate that contaminants in the rinsate are below ground water standards.
- d. Disconnect and decontaminate appurtenant piping and pumping equipment.
- e. Remove tanks and appurtenant equipment and reuse or sell as scrap.
- f. Clean and raze the diking and slab.
- g. Backfill excavations with clean fill materials.
- h. Transport and dispose of waste material generated during the project.

#### **1.1 Removal of Waste Material and Opening of Tanks**

The contents of the tanks will be removed using a pump, vacuum or similar equipment and will then be shipped to a reclaimer. The manways will be used to gain access to the tanks. Depending on the type of opening and the condition of the equipment, a variety of tools may be used to open the manway. Care will be exercised to minimize spark generation when working on the tank. Equipment used to work on the tank will be spark proof.

Prior to entering the tanks, personnel will have appropriate respiratory protection and protective clothing. Once the tanks have been opened, they will be provided with positive ventilation. The tanks will then be inspected to determine the approximate quantity and physical conditions of any remaining waste material.

#### **1.2 Removal of Residual Waste and Cleaning Tanks**

Before removing any residual waste from the hazardous waste tank; piping and appurtenant equipment will be flushed with clean, hydrocarbon-based parts washer solvent followed by a detergent solution. For the used oil tank, only water and/or water with detergent solution will be used.

The method used to remove the residual waste materials from the tanks will depend on the physical properties and quantities of that material. Prior to any person entering the tanks, an effort will be made to remove as much liquid and sediment as possible.

Subsequent to vacuuming the majority of the material from the tanks, it may be necessary to use a high-pressure wash system using clean solvent and a detergent solution to rinse residual material from the walls, roof, and floor of the tank. The rinse water from the hazardous waste tank will be analyzed for the components in Table I - 1. Sample methods are in Table I – 2. The evacuated material and the rinse solution will be shipped to a reclaimer. However, the verification of decontamination of the hazardous waste tank will be based on NYDEC's regulatory clean-up standards at the time of closure. The quantity of wash fluid used will be kept to a minimum in order to limit the amount of waste material, but will be adequate to rinse the interior surfaces of the tank.

TABLE I - 1

Closure Analysis Parameters for the Hazardous Waste Tank  
Safety-Kleen Systems, Inc.  
Avon, New York

Analyte	Parameter
Residual and wash water	RCRA Characteristics as required by the receiving TSDF for treatment/disposal
Soil	TCL VOCs, TCL BN SVOCs, and TAL Metals.
Rinseate test for verification of decontamination (DEC sampling method)	As determined by DEC at time of closure based on the waste stored.
Sampling and analysis will be done in accordance with section 3 of this attachment.	

Storage tanks are considered permit required confined spaces (i.e. spaces open or closed having a limited means of egress in which poisonous gases or flammable vapors might accumulate or an oxygen deficiency might occur), and confined space entry requires special procedures consistent with OSHA requirements.

**TABLE I - 2****Methods Used To Sample During Closure****Safety-Kleen Systems, Inc.  
Avon, New York**

<b><u>Waste</u></b>	<b><u>Reference for Sampling</u></b>	<b><u>Description of Sampling Method</u></b>
Residuals and Rinsate	Sampling a tank <sup>1</sup> "Samples & Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018	Test Methods Evaluation of Solid Waste/Physical/ Chemical Methods, SW846, Current Edition Chapter 9
Rinsate	Sampling a drum <sup>1,2</sup> "Samples & Sampling Procedures for Hazardous Waste Streams" EPA-600/	Test Methods Evaluation of Solid Waste/Physical/ Chemical Methods, SW846, Current Edition 2-80-018 Chapter 9

---

<sup>1</sup>Sampler: Representative sample using a Coliwasa tube or other appropriate means.

<sup>2</sup>Sampler: Representative sample using a sample jar, stainless steel trowel, auger, shovel, or other appropriate means.

Note: The EPA Guidance Manual, Waste Analysis At Facilities That Generate, Treat or Store and Dispose of Hazardous Wastes, PB94-963603, OSWER 9938.4-03, April 1994, is also utilized as a reference.

**1.3 Removal of the Tanks**

To safely remove the tanks:

- Disconnect appurtenant piping.
- Disconnect appurtenant pumping equipment.
- The equipment and tanks may be removed and reused or cut up and sold as scrap.
- The diking and slab will be cleaned using a high-pressure wash system with detergent followed by clean rinse. Wash and rinse water will be analyzed for the solvent stored and reclaimed or properly disposed of. Sampling parameters and methods are in Tables VII - 1 and VII - 2, respectively. Raze the diking and slab and inspect the excavation. Examine soils using a photo ionization detector with a 10.6 eV lamp. If contamination is indicated, confirm with laboratory analyses, determine the extent of contamination with a soil study and over excavate soils down to clean soils.

- e. Backfill the excavation with clean fill materials and grade to level.

## **1.4 Tanker Loading/Unloading Area**

The tanker truck loading and unloading area located immediately adjacent to the tank, will be decontaminated. The concrete floor, containment berms and containment trench will be cleaned with a high-pressure wash system using a detergent solution followed by a clean rinse. The rinsate will be analyzed for the parameters listed on Table I - 1. The decontaminated area will be inspected with a photoionization detector with a 10.6 eV lamp to determine the completeness of cleaning. Any other wastes generated in the closure process will be reclaimed or properly disposed of.

## **1.5 Container Management Areas**

### **1.5.1 Permitted Drum Storage Area**

The container storage areas are located in the Return & Fill building with a maximum waste storage of 2,560 gallons (85-30 gallons drums). The container storage areas consist of the return and fill area and the adjacent concrete pad. At closure, all drums will be removed and transported to a solvent reclaimer. As described below, the concrete floor will be pressure washed using detergent solution followed up by a clean rinse. The rinsate will be analyzed for the solvent stored. The cleaned area will be inspected using a photoionization detector to determine the completeness of cleaning.

### **1.5.2 Formerly Permitted Container Transfer Areas**

Safety-Kleen converted the formerly permitted (existing) container storage areas at the Avon facility to exempt 10-day transfer areas. These areas include the 42,912 gallon capacity warehouse (area C) at the back of the Avon Service Center and the 6,912 gallon capacity storage areas (A and B) located behind the Office. However, the final closure of these areas may not be completed until final closure of the entire facility.

Safety-Kleen may apply for a permit modification to close this area earlier if needed. Since decontamination will be conducted at a later date, Safety-Kleen will include the closure cost and financial assurance for this area until completion of closure.

At final closure, the concrete floor and spill containment areas will be power washed with detergents followed by a clean rinse. The rinsate will be analyzed and disposed of accordingly. Parameters and methods of analyses will be determined based on the types of wastes stored. The verification of the effectiveness of decontamination will be determined as described in Item 4.0, Sampling and Analysis for Final Closure.

## **2.0 PARTS WASHER SOLVENT RETURN AND FILL STATION**

The return and fill station is used to collect and return the used Safety-Kleen solvents to the waste storage tank. Closure of the return and fill station will be made prior to the cleaning and removal of the storage tank. At closure, the sediment in the dumpsters will be removed and drummed, labeled, and manifested and then shipped to a reclaimer.

The dumpster and dock area will be pressure washed with a detergent solution and thoroughly rinsed. The wash water /rinsate will be discharged through the appurtenant piping system into the storage tank, which will be subjected to separate closure procedure as described earlier. The wash water will be analyzed for the parameters listed on Table I - 1 using the methods in Table I - 2. The clean dumpster and dock structure will be reused by Safety-Kleen or scrapped.

### **3.0 SAMPLING AND ANALYSIS FOR FINAL CLOSURE**

The final and specific choice of sampling points, number of samples, type of sampling performed and post closure cleaning analysis will be determined at the time of closure by NYDEC. These determinations will be based upon the past history of operating practices and types of wastes handled at the facility. The operating record, the records of spills, the types of waste released, location of spills in the facility and the condition of secondary containment systems (e.g., stains, cracks, etc.) will also provide data used in these determinations. The flexibility afforded by this approach will allow compliance with closure regulations and requirements that will be in effect at the time of closure. Different decontamination and sampling procedures may be considered at closure and the locations and the total number of sampling required will be determined based on the information gathered at the time of closure. The verification of decontamination will be based on NYDEC's regulatory clean-up standards at the time of closure.

### **4.0 FACILITY CLOSURE SCHEDULE AND CERTIFICATION**

This Service Center stores wastes and manages material in transit for a limited amount of time before they are removed to a recycling or processing center. At that time, more wastes are brought to the Service Center for management. This schedule of operation will not result in the facility reaching maximum storage capacity and ceasing operation. Safety-Kleen does not plan to close the facility in the foreseeable future. Therefore, the date of the closure will be sometime after the year 2025.

Within 90 days of receiving the final volume of hazardous waste, Safety-Kleen will remove hazardous wastes and used oil in the 12,000 gallon tank from the site in accordance with the approved closure plan. The New York State Department of Environmental Conservation may approve a longer period if Safety-Kleen demonstrates that the activities required to comply with the paragraph will, of necessity, take longer than 90 days to complete or the following requirements are met:

- a. The facility has the capacity to receive additional wastes;
- b. There is a likelihood that a person other than Safety-Kleen will commence operations of the site; and/or
- c. Closure of the facility is incompatible with continued operation of the site. In this case, Safety-Kleen will take steps necessary to prevent threats to human health and the environment.

Safety-Kleen will complete closure activities in accordance with the approved or modified closure plan and within 180 days after receiving the final volume of wastes. Periodic inspections will be made during closure procedures by an independent

registered professional engineer.

Safety-Kleen must notify the commissioner in writing at least 60 days prior to the date on which it expects to begin closure or partial closure of any hazardous waste management unit or the facility.

The estimated cost for conducting closure is summarized in Table I - 3.

When closure is completed, Safety-Kleen shall submit to the New York State Department of Environmental Conservation, certification, both by the operator and by the independent registered professional engineer registered in New York State, that the facility has been closed in accordance with the approved closure plan.



**TABLE I - 3**  
**Closure Costs Estimate**  
**Safety-Kleen Systems, Inc.**  
**Avon, New York**

A. Tank Closure - Open, remove contents of, clean, remove and dispose of one 12,000- gallon aboveground hazardous waste storage tank.

Phase I - Remove Contents and Clean

1. Ship contents (12,000 gallons of spent mineral spirits) to a reclaimer.

Crew:

2 Truck Divers. \$38.00/hr x 8 hour (loading)	\$608.00
Tank size - 12,000 gal - 6,000 gal/truck - 2 trucks	
2 Trucks x 330 miles x 6.00/mile	\$3,960.00
Reclamation costs (\$0.59/gal for mineral spirits)	\$7,080.00

2. Squeegee and Clean Tank

Crew:

1 Foreman \$42.00/hr x 24 hours	\$1,008.00
1 Laborer (\$31.00/hr & \$3.00/hr hazard pay) x 24 hours	\$816.00

3. Use of high pressure water for one day

\$400.00

4. Disposal and transportation of Wash Water  
(4,000 gallons @ \$0.45/gallon)

\$1,800.00

5. Transportation of wastewater  
(300 miles x \$6.00/mile)

\$1,800.00

A1. Tank Closure - Open, remove contents of, clean, remove and dispose of one 12,000-gallon aboveground used oil storage tank.

1. Ship contents (12,000 gallons of used oil) to a reclaimer.

Crew:

2 Truck Divers. \$38.00/hr x 8 hour (loading)	\$608.00
Tank size - 12,000 gal - 6,000 gal/truck - 2 trucks	
2 Trucks x 330 miles x 6.00/mile	\$3,960.00
Reclamation costs (\$0.00/gal for used oil)	\$0.00

2. Squeegee and Clean Tank

Crew:

1 Foreman \$42.00/hr x 24 hours	\$1,008.00
1 Laborer (\$31.00/hr & \$3.00/hr hazard pay) x 24 hours	\$816.00

3. Use of high pressure water for one day

\$400.00

- |   |          |
|---|----------|
| 4. Disposal and transportation of Wash Water<br>(1,000 gallons @ \$0.45/gallon) | \$450.00 |
| 5. Transportation of wastewater<br>(included with A above)                      | \$0.00   |

<b>Total - Phase I</b>	<b>\$ 24,714.00</b>
------------------------	---------------------

## Phase II - Remove and Dispose of Tank

- |   |           |
|---|-----------|
| 1. Disconnect and Remove Appurtenant Equipment<br>Crew: |           |
| 1 Foreman \$42.00/hr x 10 hours x 2                     | \$840.00  |
| 2 Laborers \$31.00/hr x 10 hours x 2                    | \$1240.00 |
| 2. Cut Tank<br>Crew:                                    |           |
| 1 Foreman \$42.00/hr x 10 hours x 2                     | \$840.00  |
| 1 Laborer \$31.00/hr x 10 hours x 2                     | \$620.00  |
| 3. Remove Tank<br><br>Crew:                             |           |
| 1 Foreman \$42.00/hr x 4 hours x 2                      | \$336.00  |
| 2 Laborers \$31.00/hr x 4 hours x 2                     | \$496.00  |
| 1 Backhoe \$38.50/hr x 4 hours x 2                      | \$308.00  |
| Equipment \$200 Lump Sum x 2                            | \$400.00  |

<b>Total - Phase II</b>	<b>\$5,080.00</b>
-------------------------	-------------------

## Phase III - Concrete Demolition

- |   |             |
|---|-------------|
| 1. Demolition of concrete pad<br>(200 x \$95.00/cubic yard)   | \$19,000.00 |
| 2. Removal and disposal of concrete   |             |
| 3. (200 cubic yard @ \$6.00/cubic yard)   | \$1,200.00  |
| 4. Hauling 20 mile round trip<br>(12 cubic yard truck - 200 cu. yd. x \$17.40/cu. yd.)<br>Includes cost for crew (standard crew - B -R-S means) | \$3,480.00  |

<b>Total - Phase III</b>	<b>\$23,680.00</b>
--------------------------	--------------------

## Phase IV - Backfilling, Regrading, Soil Testing

- |  |            |
|--|------------|
| 1. Test for soil contamination (2 samples) | \$3,000.00 |
|--|------------|

## 2. Re-grading

### Crew:

1 F. E. Loader \$38.50/hr x 4 hour	\$154.00
Equipment \$500.00 lump sum	\$500.00
Backfill 10 cubic yards x \$5.00/cu.yd.	\$50.00
Provision for disposal of 20 cu. yd. of contaminated soil (20 x \$500)	\$10,000.00

**Total - Phase IV** **\$13,704.00**

## Phase V - Truck Loading/Unloading Area

1. 2 Truck Drivers \$38.00/hr x 10 hours	\$760.00
2 Trucks - \$900.00 lump sum	\$1,800.00
Handling cost - 2 loads x 300 miles x \$6.00/mile	\$3,600.00

## 2. Clean loading/unloading area

### Crew:

1 Foreman \$42.00/hr x 10 hours	\$420.00
1 Laborer (\$31.00/hr & \$3.00/hr hazard pay) x 20 hrs	\$680.00

3. Dispose of wash water (1,200 sq.ft. x 4 gallons/sq.ft. x 0.65)	\$3,120.00
Hauling washwater 300 x \$6.00	\$1,800.00

4. Testing for contamination (1 sample x \$1,500.00 )	\$1,500.00
---	------------

**Total Phase V** **\$13,680.00**

## Summary of Closure Cost for 2- 12,000 gallon tanks:

Phase I	\$24,714.00
Phase II	\$5,080.00
Phase III	\$23,680.00
Phase IV	\$13,704.00
Phase V	\$13,680.00
<b>Subtotal</b>	<b>\$80,858.00</b>

B. Closure of Return and Fill Station - Remove, package and dispose of sediment/solvent, clean the dumpster and dock area, remove dumpster and dock structure for reuse or scrap.

1.1 Truck @ \$450.00 lump sum each	\$450.00
Hauling cost - 300 miles X \$6.00/mile	\$1,800.00
1 Truck Driver \$31.00/hour X 10 hours	\$310.00
Crew:	

1 Foreman \$42.00/hr x 10 hours	\$420.00
1 Laborer (\$31.00/hr & \$3.00/hr hazard pay) x 10 hours	\$340.00
2. Clean Dumpster and dock areas	
Crew:	
1 Foreman \$42.00/hr x 10 hours	\$420.00
1 Laborer (\$31.00/hr & \$3.00/hr hazard pay) x10 hours	\$340.00
Use of high-pressure water for one day	\$400.00
3. Disposal of wash water (200 gallons X \$0.45/gallon)	\$90.00
4. Disposal of dumpster mud (15-55-gallon drums X \$500.00/drum)	\$7,500.00
5. Testing for contamination ( 4 samples @ \$1,500.00 each) (Number and type of samples will be determined at time of closure)	\$6,000.00
6. Cut, disassemble and remove dumpsters and docks	
Crew:	
1 Foreman \$42.00/hr x 10 hours	\$420.00
1 Laborer \$31.00/hr x 10 hours	\$310.00
Equipment \$10.00/hr x 10 hours	\$100.00
<b>Total Dock Closure Cost</b>	<b>\$18,900.00</b>

## C. CONTAINER MANAGEMENT AREAS

### I. Permitted Container Storage Areas

1 Container Storage Areas- Remove and transport drums for recycling or Disposal of 2,560 gallons (approx. 85- 30 gallon drums of parts washer solvent @ \$50/drum + \$400 freight	\$4,250
2. 2 Truck Drivers - \$31.00/hour x 8 hrs.	\$496
2 trucks - \$500 lump sum	\$1,000
Hauling cost - 2 loads x 300 miles x \$6.00/mile	\$3,600
Cleaning Drum Storage Area	
Crew:	
1 Foreman \$42.00/hr x 10 hours	\$420
1 laborer (\$31.00/hr. & \$3.00/hr hazard pay) x 10 hours	\$340
Disposal of Wash water (480 sq.ft x 4 gallons/sq.ft x \$0.65/gallon)	\$1,248
Testing for contamination - 2 samples x \$1,500.00	\$3,000
Total Closure of Permitted Container storage Area	\$14,354

### II Closure of Two (2) Container Transfer Area (Existing Container Storage Areas)

1. Container Storage Area- Remove and transport drums for recycling or

disposal of 49,824 gallons (approx. 1,660-gallon drums of parts washer solvent @ \$50/drum + \$8,000 freight	\$91,000
--	----------

Clean the drum Transfer Area and dispose of wash water

2. 4 Truck Drivers - \$31.00/hour x 8 hrs.	\$992
4 trucks - \$500 lump sum	\$2,000
Hauling cost - 4 loads x 300 miles x \$6.00/mile	\$7,200

Cleaning Drum Storage Area

Crew:

1 Foreman \$42.00/hr x 20 hours	\$840
2 laborer (\$31.00/hr. & \$3.00/hr hazard pay) x 10 hours	\$680
Disposal of Wash water (8,000 sq.ft x 4 gallons/sq.ft x \$0.65/gallon)	\$20,800
Testing for contamination - 6 samples x \$1,500.00	\$ 9,000

<b>Closure Costs for Two (2) Container Transfer Areas</b>	<b>\$132,512</b>
---	------------------

4. PE Certification	\$1,500
---------------------	---------

E Total Closure Cost

12,000 gallon tank	\$80,858
Return and Fill Station	\$18,900
Container Storage Area	\$14,354
Container Transfer Areas	\$132,512
PE Certification	\$1,500

<b>Subtotal</b>	<b>\$248,124</b>
-----------------	------------------

Contingency Administrative Cost (20%)	\$49,625
Administrative Cost (15%)	\$37,219

<b>TOTAL</b>	<b>\$334,968</b>
--------------	------------------

<b>Inflation Adjusted for 2013</b>	<b>\$400,514</b>
------------------------------------	------------------

**SAFETY-KLEEN SYSTEMS, INC.  
AVON, NY SERVICE CENTER**

**ATTACHMENT J  
AIR EMISSIONS STANDARDS**

## **ATTACHMENT J**

### **AIR EMISSIONS STANDARDS FOR EQUIPMENT LEAKS PLAN**

#### **ABSTRACT**

Purpose: To ensure compliance with relevant sections of NYDEC Hazardous Waste Regulations, the Avon Facility will design and implement a program directed towards inspecting and monitoring the on-site regulated unit for air emission releases. The purpose of this plan is to describe how the facility will undertake these efforts.

## 1.0 AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

The permitted hazardous waste management unit at the Avon facility and its associated equipment are subject to the requirements of 6NYCRR Part 373-2.28, Air Emission Standards for Equipment Leaks.

The hazardous waste stream associated with the hazardous waste storage tank and associated equipment is spent, Safety-Kleen parts washer solvents. The vapor pressure of Safety-Kleen hydrocarbon-based product solvent is less than 0.27 kPa (2 mm Hg) at 20 degrees C, therefore this solvent is classified as a heavy liquid. Vapor pressure data for of Safety-Kleen's parts washer solutions are provided in the attached Table. The spent, hydrocarbon based solvents will impart a lower vapor pressure because of contamination with oils, greases, etc. from use.

Each piece of equipment subject to the Part 373-2.28 requirements is marked with proper identification in order to distinguish it from non-affected equipment. Figure X - 1 shows the piping schematic and marking for the waste tank system.

One open-ended unloading line is associated with the affected waste management unit. A check valve, gate valve, and camlock seal the open end except during operations requiring hazardous waste stream flow through the open-ended valve. This equipment arrangement complies with the requirements of 373-2.28 (g).

Pumps, valves, flanges and pressure relief devices in heavy liquid service are subject to inspection and repair requirements specified at 373-2.28 (i). Compliance with this standard will be achieved by daily visual inspection of affected equipment. Because the spent, hydrocarbon-based parts washer solvent has a maximum concentration of approximately 2,700 PPM in the vapor phase, a portable organic vapor analyzer will not be used for leak detection because leaks cannot result in concentrations of more than 10,000 PPM. The saturation concentration of parts washer solvent in the air will be much below 10,000 PPM as shown in the attachment. Suspect equipment leaks will thus be monitored based on visual observation. This will be recorded as a part of the facility inspection record.

If a leak is detected, the piece of equipment will be tagged and identified with the equipment identification number and date of actual leak detection. The first attempt at repairing the leaking equipment will be made within 5 calendar days of leak detection (373-2.28 (i)(1)(3)(ii)) and consist of those practices outlined in 373-2.28(h)(5). Leaks will be repaired within 15 calendar days of detection, delay of repairs will be allowed only in those cases listed in 373-2.28(j).

Equipment lists and records of equipment monitoring and repair are maintained within the facility operating record. The operating record includes the following information specified in 373-2.28(o)(2)(i):

- (i) Equipment identification number and hazardous waste management unit identification:



The hazardous waste management system consists of a 12,000-gallon aboveground, horizontal storage tank and ancillary equipment in the form of two drum washer/dumpsters and associated piping.

(ii). Approximate locations within the facility:

A site map identifying the waste management unit is provided and a piping schematic showing equipment location is provided with the drawings.

(iii). Type of equipment:

- The types of equipment subject to regulation are pumps, valves, flanges, open-ended lines and pressure relief devices in heavy liquid service.

(iv). Percent by weight total organic in the hazardous waste stream at the equipment:

- The hazardous waste streams handled by the subject equipment are spent hydrocarbon- and aqueous- based parts washer solvents. The hydrocarbon-based stream is comprised of 100 percent by weight organic material. The aqueous based material is not defined as an organic material.

(v). Hazardous waste state at the equipment:

- The physical state of the hazardous waste stream is liquid.

(vi). Method of compliance with the standard:

- The subject equipment maintained in heavy liquid service is subject to leak detection and monitoring requirements provided in 373-2.28(i). Compliance with this standard will be achieved through daily inspection of affected equipment and appropriate leak response procedures described above. The open-ended line has been installed to meet the proper equipment standards specified at 373-2.28(g).

## **2.0 STANDARDS FOR CONTAINERS AND TANKS**

The Safety-Kleen Avon facility shall control air pollutant emissions from waste management units at this facility pursuant to the requirements of 373-2.29, through implementation of this compliance plan. This plan describes the waste determination procedures, tank and container design and management practices, organic emissions controls, inspections and monitoring, and record keeping standards.

### **2.1 Waste Determination Procedures**

For purposes of waste determination, this facility utilizes knowledge developed in the Waste Analysis Plan found in Attachment I. Based upon this knowledge, it has been determined that all organic wastes managed in the tank or in containers display an

average volatile organic concentration of greater than 500 ppmw at the point of waste origination. Therefore, all hazardous wastes managed in tanks or containers shall be managed in accordance with the standards in 373-2.29.

## **2.2 Point of Waste Origination**

The point of waste origination for all wastes generated offsite and transported to the site in closed containers, which are subsequently managed in tanks or containers, is effectively the site boundary at the entrance gate.

For those wastes generated onsite, the point of waste origination is the point of waste generation, as defined in RCRA.

## **2.3 Tanks**

The tank in which organic wastes are managed is described in detail in Attachment D. Certain features of this tank as they relate to 373-2.29 standards are described here.

The tank is a fixed roof, non-pressurized, quiescent unit. The tank is managed under Level 1 controls. The tank design capacity is 12,000 gallons and the wastes managed in the tank exhibits vapor pressures of less than 5.2 kPa (11.1 psi). The actual vapor pressure of the waste managed in the tank is approximately 0.2 psia. The maximum organic vapor pressure is determined using knowledge of the waste pursuant to 373-2.29 (e)(3)(I).

The tank is designed so that all cover openings can be closed with no visible gaps, holes, cracks, or other open spaces into the interior of the tank. The cover and all cover openings operate with no detectable emissions when in a closed position. Cover openings are maintained in a closed position at all times except when waste is being added or removed from the tank, or when necessary sampling, repair, or maintenance is performed on the tank. A visual inspection of closure devices will be performed annually. A copy of the inspection plan is included in Appendix X-6.

The tank is equipped with a conservation vent which has been designed to operate with no detectable organic emissions when in the closed position. In addition, the tank is equipped with a long bolt manway pressure relief device which remains in the closed position when not in use to relieve pressure.

## **2.4 Containers**

The containers in which hazardous wastes are managed are described in Attachment D. Containers in use at the facility are less than 0.46 m<sup>3</sup> in size. Waste is not treated by stabilization. Therefore, air pollutant emissions from containers between 0.1 m<sup>3</sup> and 0.46 m<sup>3</sup> in size shall be controlled in accordance with Container Level 1 standards.

Containers received at the facility shall be equipped with covers and closure devices so that there are no visible holes, gaps, or other open spaces into the container when the closure devices are in place and secured. While in storage, closure devices on containers of hazardous waste shall be in place and secure.

When Safety-Kleen accepts possession of containers and the containers are not emptied immediately, a visual inspection of the containers will be performed within 24 hours of receipt. The container, cover, and closure devices shall be inspected for visible cracks, holes, gaps, or other open spaces. If a defect is noted the containers shall be either emptied into the Return and Fill unit; or it shall be repackaged, or the container will be repaired within one day of discovery. All repairs will be completed within 5 days or the waste will be removed from the container. Inspections of stored containers are documented on the facility inspection report forms found in Attachment II.

### **3.0 RETURN & FILL STATION/DRUM WASHER**

#### **3.1 Introduction**

One of Safety-Kleen's primary business lines is the collection of used parts washer solvent from small, medium and large customers and the redistribution of the reclaimed solvent back to the customer. The linchpin of this collection and redistribution process is the company's network of branch facilities and recycle centers. Each branch operates a fleet of vehicles manned by trained service representatives who are responsible for the collection of used solvent from the customer, servicing of the parts washers equipment, and replenishment of the equipment with clean solvent. Depending upon the size of the customer, a service representative will remove one to three containers of dirty solvent, each container holding from 16 to 30 gallons of solvent. Upon return to the branch facility, the service representative unloads the drums from the transport vehicle onto the branch dock area. The drums are emptied into a unit designated as a "Return and Fill Station" (RFS). The purpose of the drum washer is to contain the accumulation of wastes dumped into the unit, to wash the drums and contain the residuals resulting from washing. Appendix X-1 provides a detailed drawing of the floor plan of the RFS area. When sufficient quantities of solvent have been processed through the RFS and collected in the permitted storage tank, a tanker is arranged and the solvent is transported to one of Safety - Kleen's recycle centers for reclamation.

#### **3.2 Operation**

Spent parts washer solvent that is returned to the branch location is packaged in containers that can range in size from 10 to 30 gallons. In most of Safety-Kleen parts washers, the containers were used as the solvent reservoir for the parts washer unit while it was in use at the customer's location. Once at the branch, the transport vehicle will back up to the unloading dock area that typically includes the elevated return and fill/drum washer (RFS) area, vicinity grating and secondary containment. Containers are unloaded onto the RFS directly or staged for emptying in the adjacent container storage area (see drawings in Appendix X-1). Under normal operating conditions containers are emptied either as they are unloaded from the route trucks or box trailers or after the entire shipment has been unloaded into the permitted container storage area. Emptying a container requires the operator to open the lid of the RFS unit and individually pour each drum of used parts washer solvent into it. The RFS unit is equipped with a drum washer used to remove any solids that may have accumulated on the interior of the container. The drum washer uses solvent removed from the container and low-pressure spray to clean the interior of the drum. Revolving brushes dry-clean the exterior of the drum without solvent.

After a container has been emptied and washed, it is allowed to drip dry on a rack inside the RFS. Once the container is sufficiently dry, it is staged in the vicinity to be refilled with clean recycled parts washer solvent. If the container is to be refilled with Safety-Kleen's Premium 150 solvent, it is also rinsed with a small quantity of clean Premium 150 parts washer solvent before it is refilled with clean solvent. The Premium 150 solvent rinsing is conducted using special equipment located within the RFS unit containment system. During container processing, the solvent level in the RFS is closely monitored and once solvent accumulates to a certain level, it is pumped automatically (via float switch activation) to the used solvent tank. The pump can also be manually operated.

As previously mentioned, the facility typically empties the containers of used parts washer solvent as soon as the shipment arrives at the facility or as described in Section 1.1 of Attachment D. Following the emptying of all containers of used parts washer solvent in a shipment, the operator will pump any solvent remaining in the RFS unit to the lowest possible level (about 2 inches) and close the RFS lid until the next shipment arrives. This practice is repeated until all daily shipments are received. At the end of the operating day, the RFS is pumped to the lowest possible level and cleaned to be ready for the next day's use. All solids collected from the reservoir of the RFS are containerized and treated as a newly generated hazardous waste. Used parts washer solvent stored in the RCRA permitted tank is regularly transported to a Safety-Kleen Recycle Center where it is recycled into clean product for redistribution. Containerized solids collected from the RFS daily cleaning process are also shipped off site to a Safety-Kleen Recycle Center.

### **3.3 Air Emission Control for the Return & Fill Station/drum washer**

SK will control the air emissions from the RFS as follows:

#### **3.3.1. Fugitive emission around the RFS and drum filling areas and employee protection:**

SK has provided a mechanical ventilation system in a location shown in the drawing in Appendix X-1 near the RFS and drum filling areas. The NFPA 30 - 4-4.2.11, Flammable and Combustible Liquids Code requires at least 1cfm per square foot of floor area. The mechanical ventilation system for dispensing areas is required to be equipped with an air flow switch or other equally reliable method that is interlocked to sound an audible alarm upon failure of the ventilation system. The technical information of the fan and calculations are included in Appendix X-4. The ventilation fan is a 4 bladed 20" diameter fan that provides a ventilation rate of 1.82 cfm/sq ft. that is well in excess of the 1.0 cfm/sq.ft. required by NFPA 30. Since the height of the room is 17', the interior volume is 30, 940 cu.ft. at the fan flow rate of 2,620 cfm, it produces a 6.42 air exchange per hour that is above the 6 air exchanges required by OSHA 29 CFR 1910.106(d)(4)(iv).

In addition, for employee safety, the personnel are required to wear personnel protective equipment as specified in the Hazard Assessments developed for the Return and Fill operations. Such PPE may include chemical resistant gloves, eye protection, and chemical resistant aprons. Required documentation of OSHA mandated programs are maintained in the facility files (e.g. Hazard Communication Program, Hazard Assessments, Personal Protective Equipment Program, Lock Out/Tag Out Program, etc.). Safety-Kleen maintains a written safety and health program for its employees involved in the hazardous waste operations according to OSHA 29 CFR 1910.120(b)(1)(i). As required in OSHA 29 CFR 1910.120(i) Safety-Kleen has

implemented an informational program as part of the safety and health program to inform employees engaged in the RFS operation of the nature, level, and likely degree of exposure.

### 3.3.2. Control of air emissions from the RFS:

To minimize potential VOC emissions during the washing of drums, Safety-Kleen will keep the lid of the Return and Fill unit closed at all times during the washing of drums, non-use, and at all times except when the spent solvent is added. Safety-Kleen follows the requirements for Level 1 tanks under RCRA Subpart CC, which requires closure devices (the RFS lids) to remain in a closed position, with no cracks or gaps, except to provide access to add or remove waste from the RFS units, performing inspection, maintenance and removal of accumulated sludge. Safety-Kleen believes Level 1- type controls are appropriate in the current situation, given the size of the Return and Fill units and the low vapor pressure of the solvent transferred through the unit. In addition, Safety-Kleen has installed a switch on the units so that the drum washer cannot be operated unless the lid is in a closed position and the ventilation fans are operating.

While not in operation, the RFS Unit sump will contain no more than two (2) inches in depth of hazardous waste, the minimum volume necessary to prime the pump. This unit will be deemed not in service between each shift, between each processing batch, or at any time the unit is left unattended for 15 minutes or longer. When not in operation, the RFS door will be closed and tightly fitted to ensure no organic vapor leaks resulting in emissions above 500 ppmv.

Safety-Kleen will conduct quarterly leak testing around the lid of the RFS unit according to the procedure outlined in 6 NYCRR 373-3.29(e)(4). The local ambient concentration around the source must be determined on the day of the test, before commencing the rinsing or RFS operations or any operation that could elevate the local ambient concentration. Alternatively, the local ambient concentration may also be determined outside the RFS building away from any emission source.

The leak test will be conducted midway through RFS operations when the drums are washed (example: if a batch of 20 drums are to be washed, the test should be performed when the 10th drum is washed). A monitoring log containing the following information will be maintained at the facility:

1. Time and date of the test,
2. Background reading, time, and location,
3. Monitoring results,
4. Calibration information,
5. The name of the person conducting the test, and
6. Defects and repairs completed if the reading is over 500 ppmv.

If the difference between the maximum organic concentration and background level exceeds or is equal to 500 ppmv, all repairs necessary to bring the difference below 500 ppmv must be done. Safety-Kleen will make the first efforts at repair of the defect no later than 5 calendar days after detection and complete the repair as soon as possible but no later than 45 calendar days after detection.

### **3.4 INSPECTION AND MONITORING REQUIREMENTS**

Safety Kleen will inspect and monitor air emission control equipment in accordance with 373-2.29(i)(1). Safety Kleen has developed and implemented a written plan and schedule to perform the inspections and monitoring in accordance with 373-2.29(i)(2). The plan is included in the Appendix X- 1 of this attachment.

Table I

	<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>#</u> <u>Samples</u>	<u>%RSD</u>
<u>SK Premium Gold Solvent</u>				
Vapor Pressure @ 68 F, torr*	0.15	0.052	19	34
Flashpoint, cF	150	2.9	19	1.9

\* torr = mm Hg, 0 cC; = 0.133 kPa

EQUILIBRIUM (SATURATION) CONCENTRATIONS OF VOCs IN AIR AT  
ATMOSPHERIC PRESSURE (760 mm Hg) AND AMBIENT TEMP (68 F)

Atm . Pressure (mm Hg)	760
Weight of Air (pounds)	1
Ambient Temp (F)	68
VOC Vapor Pressure (mm Hg)	0.81
Molecular Weight of VOC	150
(1) Partial Pressure air	759.19
(2) Mole Fraction of air	0.998934211
(3) Pound-moles of air	0.034482759
(4) Pound-moles, total	0.034519549
(5) Pound-moles of VOC	3.67906E-05
(6) Pounds of VOC	0.005518586
(7) VOC Concentration (PPM vol)	1065.789474
(8) VOC Concentration (PPM wt)	5488.29818

The saturation concentration is calculated using Dalton's Law, i.e. the sum of the partial pressure equals the total pressure and overall gas phase material balance wherein the sum of vapor (and air) mole fractions equals 1.



## **APPENDIX X-1**

### **Annual Visual Tank Inspection**

#### **Subpart BB Repair Record**

## Subpart CC Visual Inspection Checklist

### Annual Visual Tank Inspection

Complete this inspection by July of each year to satisfy the annual inspection requirements under Subpart CC.

The inspector shall check for defects in the waste solvent tank that could result in air pollutant emissions.

- Visible cracks, holes, or gaps in roof sections or between the roof and the tank wall.

\_\_\_ No                                      \_\_\_ Yes

- Cracked or damaged seals or gaskets on closure devices.

\_\_\_ No                                      \_\_\_ Yes

- Broken or missing hatches, access covers, caps, or other closure devices.

\_\_\_ No                                      \_\_\_ Yes

- Other defects.

\_\_\_ No                                      \_\_\_ Yes

Action taken to correct unacceptable conditions:

---

---

---

---

Inspector Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Date of Inspection: \_\_\_\_\_ Facility No.: \_\_\_\_\_

COMPLETE FOR WASTE SOLVENT TANK

## REPAIR RECORD FOR EQUIPMENT IN HEAVY LIQUID SERVICE

In Compliance With 40 CFR 264.1064 and/or 6NYCRR 373-2.28

Date of Potential Leak\_\_\_\_\_

Equipment Identification Number\_\_\_\_\_

Date Leak Was Detected\_\_\_\_\_

Date(s) of Each Attempt to Repair the Leak\_\_\_\_\_

Date of Delay for Repair and Reason for Delay  
(required if repairs are delayed by more than 15 days)\_\_\_\_\_

Method of  
Repair\_\_\_\_\_

Date of  
Repair\_\_\_\_\_

Signature of  
Inspector/Repairer\_\_\_\_\_

This form must be completed for each time a leak is discovered in any piece of equipment in hazardous waste liquid service.

### Additional Requirements

If a leak is detected, the following additional steps must be taken:

1. Attach a waterproof and readily visible tag to the piece of leaking equipment. This tag must be marked with the equipment ID number.
2. Make an attempt to repair the equipment within 5 days of detection.
3. If the leaking equipment is a valve, the tag must be left in place for 2 months after repair. The tag may be removed from other types of equipment immediately after repair.

**SAFETY-KLEEN SYSTEMS, INC.  
LACKAWANNA, NY SERVICE CENTER**

**ATTACHMENT K**

**Permit Modification Log**

**ATTACHMENT K - MAJOR/MINOR MODIFICATION**

The permit may be modified for causes as allowed under 6NYCRR 373-1.7 and 621.14. Modification shall be requested in writing as required by 6 NYCRR 621.13 and 621.14. Requests for modifications shall be submitted to the Regional Permit Administrator for approval and modification of the permit.

**PERMIT MODIFICATION LOG**

The name of the specific document being modified (sections, and/or attachments)	Modified page numbers		Date of Revised pages	The nature of the modifications
	Old	New		