

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 4

1130 North Westcott Road, Schenectady, NY 12306-2014

P: (518) 357-2069 | F: (518) 357-2460

www.dec.ny.gov

Transmittal Via Email (mark.hansen@safety-kleen.com)

March 10, 2016

Mr. Mark Hansen
Environmental Health and Safety Manager
Safety-Kleen Systems, Inc.
6741 VIP Parkway
Syracuse NY 13211

RE: **Renewal Permit**
Hazardous Waste Mgmt Permit
(6 NYCRR Part 373 – Permit Renewal)
Safety-Kleen Facility at Cohoes
EPA ID No: NYD986872869
DEC No. 4-0126-00167/00001
Town of Colonie, Albany County

Dear Mr. Hansen:

The permit renewal which you applied for is enclosed. **This permit becomes effective on March 10, 2016, and expires on March 9, 2026.** The permit is valid for only those activities expressly authorized therein. Work beyond the scope of the permit and the approved project plans may be considered a violation of the law and be subject to appropriate enforcement action.

Be advised, the Uniform Procedures Regulations (6NYCRR Part 621), provide that an applicant may request a hearing if a permit contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of this transmittal and must be addressed to the Regional Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Applications for permit renewal must be made in advance of the permit expiration date. Please refer to the general conditions listed in the permit for specific instructions. The number listed above pertains to this permit and should be referenced on all correspondence related to this permit and any future applications for permits associated with this facility or project.

If you have any questions, please feel free to contact me by telephone at (518) 357-2459 or by e-mail at james.eldred@dec.ny.gov.

Sincerely,



James J. Eldred
Deputy Regional Permit Administrator

Enclosures: Part 373 Hazardous Waste Management Permit & Responsiveness Summary



Department of
Environmental
Conservation

cc via email w/ Enclosures:

- A. Elliott, NYSDEC R4 DER
- H. Brezner, NYSDEC R4 DER
- J. Quinn, NYSDEC R4 DER
- K. Johnson, NYSDEC CO DER
- M. Cruden, NYSDEC CO DER
- Director, DPW, Town of Colonie
- A. Park, Chief, Permitting Section, USEPA



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 COHOES SERVICE CENTER
17 GREEN MOUNTAIN DR
COHOES, NY 12047-4807

Facility Location: in COLONIE in ALBANY COUNTY

Facility Principal Reference Point: NYTM-E: 604.051 NYTM-N: 4739.477
Latitude: 42°48'02.8" Longitude: 73°43'39.2"

Authorized Activity: Continued operation of a hazardous waste container storage facility at 17 Green Mountain Drive in Town of Colonie at Cohoes, New York. Authorized activities include:

Storage of hazardous waste in a 12,000 gallon steel double walled above ground tank and a 374 gallon dumpster (return and fill station) as described in Module IV and Attachment D of this permit.

Storage of 2,400 gallons of hazardous waste in container storage areas RF#1 (400 gallons) and RF #2 (2,000 gallons) as described in Module III and Attachment K of this permit.

Permit Authorizations

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

Permit ID 4-0126-00167/00001

(RCRA ID NYD986872869)

Renewal

Effective Date: 3/10/2016

Expiration Date: 3/9/2026

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: JAMES J ELDRED, Deputy Regional Permit Administrator

Address: NYSDEC Region 4 Headquarters
1130 N Westcott Rd
Schenectady, NY 12306

Authorized Signature: _____

Date 03 / 10 / 2016



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. Conformance with Approved Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by Safety-Kleen as part of the permit renewal application. Such approved plans were prepared by Safety-Kleen and received by the Department on June 12, 2015.
- 2. Permit Assumes that Permit Renewal Application is Complete and Accurate** The permit is based on the information submitted in the permit application submitted by Safety-Kleen on June 12, 2015 and subsequent investigations. The permit is based on the assumption that the information submitted by Safety-Kleen in the submitted application documents are complete and accurate and the facility will be operated as specified in the application. Any inaccuracies or incompleteness found in the information may be grounds for the termination or modification of this permit and potential enforcement action.
- 3. Permittee Shall Comply with Permit** 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).
- 4. Notify the Department of any Deviations** The Permittee shall immediately notify the Department of any deviation from 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. Modules and Attachments The Permittee shall operate the facility in strict accordance with the modules and attachments to this permit 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	Introduction
Attachment B	Security Plan
Attachment C	Waste Analysis Plan
Attachment D	Management of Waste in Tanks
Attachment E	Corrective Action Requirements
Attachment F	Preparedness and Prevention Plan
Attachment G	Contingency Plan
Attachment H	Personnel Training
Attachment I	Closure Plan
Attachment J	Air Emissions
Attachment K	Management of Waste in Containers
Attachment L	Inspection Plan
Attachment M	Permit Modification Log
Attachment N	Applicable Regulations

6. QA/QC Procedures The Permittee is responsible for verifying that the Quality Assurance/Quality Control 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.

7. Laboratories Shall be ELAP Certified As required by ECL 03-0119, any laboratory (Permittee or contract), used by the Permittee to perform analysis pursuant to this Permit shall 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 an ELAP approved contract laboratory to perform the analysis required by this Permit, then the Permittee shall inform the laboratory in writing that it must operate under the waste analysis and quality assurance provisions of this Permit.

8. Annual Report A copy of the Annual Report prepared by the Permittee for the Department pertaining to the Cohoes facility shall be submitted by the Permittee to: The Director, Department of Public Works, Division of Environmental Services, Town of Colonie, 347 Old Niskayuna Road, Latham, NY 12110.



GENERAL CONDITIONS - Apply to ALL Authorized Permits:

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 4 Headquarters
1130 N Westcott Rd
Schenectady, NY12306

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 M 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 M 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) and as designed in accordance with this Permit including **Schedule 1 of Module I**.

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. 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 it must operate under the waste analysis and quality assurance provisions of this Permit.

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 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.: 401043
EPA RCRA ID No.: NYD986872869

Facility Address: 17 Green Mountain Drive
 Cohoes, New York 12047
 Albany 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, - D042, D043, Nonhazardous spent part washer solvents	13,488 gallons
Container Storage R/F Area #2	2000 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
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 Plan
- C Waste Analysis Plan
- D Management of Waste in Tanks
- E Corrective Action for Specific Units
- F Preparedness & Prevention
- G Integrated Contingency Plan
- H Personnel Training Plan
- I Closure Plans
- J Air Emissions Plan
- K Management of Waste in Containers

- L Inspection Plan
- M Major / Minor Modifications

Incorporated by Reference:

“RCRA Permit Renewal Application, Cohoes, NY”, June 2015

“List of Emergency Coordinators, Cohoes NY”, October 2015

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
Submittal of updated Financial Assurance documents	Update of Financial Assurance	90 days from Permit issuance

D. FINANCIAL ASSURANCE

Financial assurance will be provided in the amount of \$ 222,600 via the following instrument: Indian Harbor Insurance policy, for facility closure. In addition, the current 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. ROUTINE REPORTING

The Permittee must submit the following routine reports to the Department by the indicated due date in accordance with the requirements of this Permit (Note: the table below is intended to serve as a guide for certain routine reporting required by this Permit. However, the Permittee is still obligated to comply with all applicable regulations cited in this Permit and all conditions and requirements contained in the Modules, Schedule 1 of Module I, Attachments and documents incorporated by reference into this Permit, regardless of whether they are or are not listed in the table below.):

Item	Frequency	Due Date	Requirement
Cost Estimate for Closure and Adjusted for Inflation	Annually	October 2	6NYCRR 373-2.8(c)(2) and 373-2.8(e)(2)
Tank Inspection Report	Every five (5) years	December 31	Condition K.3 of Module IV
Secondary Containment Inspection Report -Tanks	Annually	December 31	Condition K.4 of Module IV
Secondary Containment Inspection Report – Container Storage Areas	Every three (3) years	December 31	Condition K.1 of Module III

F. FACILITY-SPECIFIC REQUIREMENTS THAT SUPPLEMENT THE STANDARD MODULES

Exhibit A Supplement to Module I – General Provisions

- A General Conditions
- B Plans, Reports, Specifications, Implementation Schedules and Other Submittals
- C Land Disposal Restrictions
- D Public Participation

EXHIBIT A
SUPPLEMENT TO
MODULE I - GENERAL PROVISIONS

The following conditions supplement those conditions contained within Module I of this Permit:

A. GENERAL CONDITIONS

1. Upon notification by the Permittee of any partial closure of a unit or portion thereof, or of final closure of the Facility, the Department will determine at the time of said closures whether additional samples, sampling points, sampling techniques/methods and/or sample analysis (i.e., in addition to Closure Plan requirements in Attachment I of this Permit) will be necessary to verify the effectiveness of decontamination or removal of components, equipment, structures and contaminated soils. These determinations will be based upon the past history of operating practices and types of wastes handled at the unit/Facility and on the closure regulations and other requirements in effect at the time of closure of the unit/Facility. The operating record, the record of spills, the types of waste released, location of spills and the condition of any secondary containment systems will also provide data to be used in these determinations. Also, at the time of said closures, the Department will determine whether more restrictive and/or additional criteria (i.e., more restrictive than, or in addition to Closure Plan criteria in Attachment I of this Permit) will be necessary to verify the effectiveness of decontamination or removal of components, equipment, structures and contaminated soils, based on the Department's regulatory cleanup standards in effect at the time of said closures.
2. If the Department determines that additional sampling and analysis or more restrictive and/or additional criteria are necessary at the time of unit/Facility closure, the Department shall send the Permittee a notice of intent to modify this Permit in accordance with 6 NYCRR 621 to incorporate these requirements into the Permit. In the event the Department issues such a notice of intent, the Permittee will be restricted from issuing a certification of closure for the unit/facility in accordance with 6 NYCRR 373-2.7(f), until the associated 6 NYCRR 621 Permit modification process is completed and any associated closure requirement(s) that might result from this modification process are satisfied.
3. As used in this Permit, all references to "hazardous waste" include mixed waste (as defined in 6 NYCRR Part 374-1.9).
4. Compliance with the terms and conditions of this Permit does not constitute a defense to any other law providing for the protection of public health and the environment.

5. For permit modifications, the Permittee shall place a revision date on all pages submitted as part of any proposed permit modification application.

B. PLANS, REPORTS, SPECIFICATIONS, IMPLEMENTATION SCHEDULES AND OTHER SUBMITTALS

1. Submittals required by the Permit must be provided to the Department and other identified Agencies as indicated below, must be submitted to the addresses and titles (or designees) listed below. The list below identifies the Department/Agencies staff by title that must receive submissions and indicates the types of submissions each must receive. At any time during the life of this Permit, the Department may designate alternate titles to receive submissions (different than those indicated below), and direct the Permittee to make submissions to the alternate title. The list below also indicates whether the submission must be a paper or electronic copy. Where electronic copies are indicated, the submission must be in a form as required by **Condition N of Module I** of this Permit. Submissions of electronic copies may be made by e-mail or other methods acceptable to the Department.

- a. One (1) electronic copy of all submittals to:

Chief, RCRA Permitting Section
Remedial Bureau E Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7017
c/o Thomas.killeen@dec.ny.gov

and one (1) electronic copy, transmitted via e-mail, to:

Chief, Hazardous Waste Programs Branch
U.S. EPA Region II
c/o everett.adolph@epamail.epa.gov

Director, Remedial Bureau E
New York State Department of Environmental Conservation
c/o Michael.cruden@dec.ny.gov

RCRA Project Manager
New York State Department of Environmental Conservation
c/o Kent.johnson@dec.ny.gov

Regional Hazardous Waste Engineer
New York State Department of Environmental Conservation
Region 4 Office
1130 North Westcott Road
Schenectady NY 12306-2014
c/o Howard.brezner@dec.ny.gov

- b. One (1) paper copy and one (1) electronic copy of all waste reduction documents to:

Director, Bureau of Waste Reduction & Recycling
Division of Materials Management
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7253
c/o pmpettit@gw.dec.state.ny.us

- c. One (1) hard copy of Applications to renew or modify this Permit to:

New York State Department of Environmental Conservation
Region 4 Office
Division of Environmental Permits
1130 North Westcott Road
Schenectady NY 12306-2014

Where additional Department staff are copied on the above submittals, the Permittee shall submit these copies electronically. In addition, the Permittee shall provide hard copies of any of the above submittal(s) when specifically requested by the Department.

2. The Permittee shall submit plans, reports, specifications, implementation schedules and any subsequent amendments required by this Permit to the Department for review and comment. If the Department determines that any plan, report, specification, schedule or respective amendment required by this Permit is deficient either in whole or in part, the Permittee shall either promptly respond to the comments or make revisions to the submission consistent with the Department's comments. Within a reasonable time frame specified by the Department, a final plan, report, specification, schedule or respective amendment shall be submitted to the Department for approval. An extension of the due date for any submittal may be granted by the Department based on the Permittee's documentation that sufficient justification for the extension exists.

3. Administrative changes or updates (e.g., recipient names, titles, mail or e-mail addresses) to the information contained in Condition D.1 above shall be done via letter or e-mail.

B. LAND DISPOSAL RESTRICTIONS

The regulations regarding the storage of mixed waste are set forth in 6NYCRR Part 376. 6NYCRR Part 376.5 sets forth prohibitions on the storage of waste restricted from land disposal. In order to facilitate proper recovery, treatment or disposal, the Permittee may accumulate and store mixed waste for a period of greater than one year in accordance with 6NYCRR Part 376.5(a)(3).

C. PUBLIC PARTICIPATION (including 6NYCRR 373-1.10)

1. Information Repository (6NYCRR 373-1.10(c))

The Permittee shall establish and maintain an Information Repository at the William K. Sanford Library, 629 Albany Shaker Road, Colonie, New York 12211, (518) 458-9274. The Permittee shall provide the Department with thirty (30) days' notice of any change to the location of the repository. The Permittee will continue to maintain the information repository for the life of the Permit or until otherwise notified by the Department.

The repository shall contain a copy of the final approved Part 373 Permit application, approved documents such as plans, reports, other relevant documents, the Part 373 Permit Fact Sheet, public notices pertaining to the Part 373 Permit, copies of correspondence including enclosures and attachments from the effective date of the Permit between the Department and the Permittee pertaining to the Permit or to compliance.

The Permittee shall provide a written notice of the availability of the information repository to all individuals on the facility mailing list within one month from the effective date of this Permit (except to those previously notified within 1 year prior to the effective date of the Permit) and to all individuals on the facility mailing list one year before the expiration date of this Permit.

2. Other public participation activities to consider to maintain good community relations:
 - a. Public Meetings
 - b. Citizens Advisory Group Meetings

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”:

<u>RCRA Program Element</u>	<u>Equivalent Superfund Program Element</u>
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, 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 L**.
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 I 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 L** 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 I 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 D 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 within 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 overfill 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.
COHOES SERVICE CENTER
EPA ID No. NYD 986872869**

INTRODUCTION

INTRODUCTION

ABSTRACT

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

FACILITY ADDRESS: Safety-Kleen Systems, Inc.
17 Green Mountain Drive
Cohoes, New York

TELEPHONE NUMBER: (518) 783-8080

USEPA I.D. NUMBER: NYD 986876869

GEOGRAPHIC LOCATION: 42° 48' 00" N
073° 43' 50" W

OWNER: Safety-Kleen Systems, Inc.

DESCRIPTION OF ACTIVITIES:

The Cohoes Service Center manages a variety of regulated and non-regulated waste. The majority of this waste is handled on a transfer basis in accordance with applicable United States Department of Transportation (USDOT) and New York regulations. Hydrocarbon and aqueous based parts washer solvents are managed for storage at the facility. These materials are stored in a permitted container storage area and in a permitted 12,000-gallon, bulk storage tank.

Waste Description	Facility Capacity in gallons	Permitted Waste Codes	Estimated Annual Amount in 1000s of gallons
Safety-Kleen Solvent (hydrocarbon and aqueous based)	12,000 gallons in tank storage	D001, D004-D011, D018, D019, D021-D030, D032-D042, D043, non-hazardous	70
	Container Storage.		
	400 gallons in RF#1 2000 gallon in RF#2		

PROPERTY DESCRIPTION:

Approximately 2.4 acres with the following structures:

- a. A building for offices and two transfer container management areas;
- b. A tank farm with one 12,000-gallon above ground storage tank for spent parts washer solvent. Also in the tank farm are unused solvent and used oil storage tanks not subject to this permit;
- c. An enclosed solvent return and fill station equipped with loading docks with two drum dumpster units, one of which is equipped with a drum washer; and
- d. Two container storage areas in the return and fill building (RF#1 And RF#2) with a maximum storage capacity of 2,400 gallons.

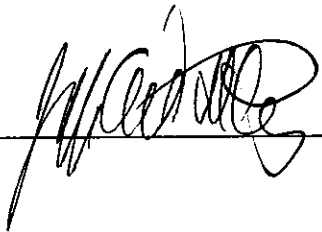
FACILITY TYPE:

Waste storage in an aboveground tank (S02) with containerized material managed in two permitted container storage areas (S01). No waste treatment or disposal occurs at this site.

ENGINEER'S CERTIFICATION

Safety-Kleen Systems, Inc.
Cohoes Facility
EPA ID No. NYD986872869

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)

5/18/15 (dated)



SAFETY-KLEEN SYSTEMS, INC.
Cohoes, NY

HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITY

OPERATING PERMIT RENEWAL APPLICATION

DEC PERMIT NO. 4-0126-00167/00001

EPA IDENTIFICATION NO. NYD986872869

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 Ross
Vice President, Environmental Compliance



Date

INTRODUCTION

1.0 DESCRIPTION OF BUSINESS ACTIVITY

The Cohoes Service Center is an accumulation point for spent solvents, dry cleaning wastes, paint related wastes, automotive wastes and various other waste. A majority of these wastes are handled as exempt 10-day transfer wastes. Only the hydrocarbon and aqueous parts washer solvents are terminated for storage. All wastes are ultimately transported off-site to a Safety-Kleen Recycle/Process Center.

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

Wastes managed by the Cohoes 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 and also manages the solvents when spent. This system allows Safety-Kleen to maintain control of the solvents except while they are in use at the customer's place of business. The Cohoes facility also provides assistance to waste generators for the proper transport and management of a variety of other waste materials. These materials are handled in containers and managed by the service center on an exempt transfer basis in accordance with relevant USDOT and New York regulations. All descriptions of exempt waste management within this document are for information only. A description of the waste management services provided by the Cohoes facility is detailed below.

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 leasing parts washer units containing Safety-Kleen parts washer solvent to customers. Safety-Kleen also provides this service for users who own their own parts washer machines. The parts washer solvents may be hydrocarbon (mineral spirits) or aqueous solutions. Both the hydrocarbon and aqueous parts washer solvents are used 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 10-15 of these services per day, collecting the containers of used solvent on a route van.

When returned to the facility, both hazardous and non-hazardous solvents are transferred from the containers to a permitted, hazardous waste storage tank, and containers of

product are filled for the next services. Transfer and filling operations occur at the return and fill station. 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. Aqueous solutions are prepared on site by diluting concentrate with water. Spent solvents are transported to a Safety-Kleen Recycle/Process Center.

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 Cohoes facility possesses sufficient knowledge to properly handle and store this waste prior to shipping it off-site. The containerized waste is managed by the facility in one of two transfer container management areas in the warehouse.

1.3 Transfer Waste Management Waste Service (for information only)

The Cohoes Service Center offers a service to collect other wastes from customers. These wastes are not generated from Safety-Kleen supplied solvents. Consequently, these wastes are generated from a variety of processes and may vary from customer to customer. They may be RCRA hazardous or non-hazardous. The temporary storage (up to 10 days) of these containerized wastes is incidental to transport. They are temporarily stored in the transfer container management areas of the warehouse and in trailers parked in a designated area of the outdoor paved parking lot. These management areas are exempt from RCRA permitting. The areas inside the warehouse are referred to as Area South and Area North, are shown in drawing 7046-WBOO-002.

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 appropriately approved containers and placed in the transfer container management areas in the warehouse. The wastes are transported from the Service Center to a Safety-Kleen or Clean Harbors Recycle/Process Center within the regulatory required time frame.

2.0 DESCRIPTION OF THE FACILITY

Safety-Kleen has operated the Service Center at the Cohoes, New York location since April, 1986. This hazardous waste storage and transfer facility consists of the following structures:

- A 12,400 square foot (sq. ft.) office and warehouse building with two designated areas for the storage of on-site generated waste and the management of exempt transfer wastes.
- A tank farm area with the 12,000-gallon aboveground, fixed-roof, storage tank for spent solvent, one 20,000 and one 12,000-gallon used oil tanks, and one 12,000-gallon tank for product solvent.

- Two container storage areas located in the Return and Fill Building with a maximum storage of 2,400 gallons of waste parts washer solutions.
- 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.
- A paved parking lot used for employee parking during the day and for parking of route vehicles during the night.

The lay-out of the facility is presented in drawing 7046-SPOO-001.

The Cohoes service center typically operates Monday through Friday. Storage areas are secured by fencing and 24-hour 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 Cohoes Service Center is located in Albany County, in the town of Cohoes. The facility is positioned in a business/industrial park. This area is zoned for commercial use and 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 in this section.

The topography of the Cohoes site is relatively flat. 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 southerly direction into Green Mountain Drive. Once on Green Mountain Drive, flow is to the south with ultimate discharge to the Mohawk River located approximately 2000 feet southeast of the property.

No oil or gas wells exist within one quarter mile of the Service Center. The site is not in or near a critical habitat and no schools or parks currently exist within one quarter mile of the facility. Furthermore, the site is not within a flood plain and the facility and surrounding area are serviced by public water. A wind rose of the Albany area is included. Because this is an existing Service Center, the seismic standard does not apply.

The entrance to the facility is on Green Mountain Drive, 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, as noted on drawing 7046-SPOO-001. The majority of the loading/unloading operations occur at and near the docks and these areas are paved.

There are general purpose service 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. Tank trucks dispatched from a Safety-Kleen Recycle Center deliver and pick up fresh and spent solvents at the aboveground tank area.

Tanker trucks enter the facility approximately once every 4-6 weeks. They hold approximately 6,000 gallons. Additionally, a box-trailer enters the facility on a weekly or twice a week basis to pick up containers of exempt transfer waste. The paving at the facility can support at least 80,000 pounds (the approximate weight of a 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 Cohoes site was designed to facilitate the handling and storage of the wastes resulting from the services offered by Safety-Kleen for its customers. The container storage areas (RF#1 & 2), aboveground storage tanks, the transfer container management areas and the return and fill station have secondary containment and the Service Center has the equipment necessary for employees to safely manage wastes on-site. Layouts of the transfer container management areas, the storage tank area, the return and fill station, and container storage area are provided in drawing 7046-SPOO-001.

Both hazardous and non-hazardous, hydrocarbon and aqueous parts washer waste may be accumulated in 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 in the form of a concrete dike at its base.

Safety-Kleen has recently begun to manage spent aqueous parts washer solutions as exempt transfer waste without transfer to the tank. This is done for several reasons – to minimize the generation of hazardous waste (many aqueous solutions are non-hazardous), and because the recycling cost of mineral spirits is higher when there is a significant aqueous component. However, the option to terminate and consolidate aqueous parts washer solutions in the tank will remain.

One permitted container storage area (RF#1) is located on the return and fill platform inside the warehouse. Parts washer containers are stored here on the steel grates adjacent to the wet dumpster and barrel washer units. A second permitted container storage area (R/F #2) is located to the Northeast of the dock. The secondary containment for both areas consists of concrete flooring, which is sloped to allow for collection of spilled liquids. The concrete curbing and flooring containment volume is approximately 1338 gallons for R/F #1, and 1354 gallons for R/F #2. The concrete curbing and flooring are coated with an impervious sealant compatible with the spent solvents stored. Any accumulated liquids in the containment area are promptly removed to prevent overflow. Material collected from spill cleanups will be treated as hazardous waste unless analysis

or sufficient knowledge is available to demonstrate otherwise. To minimize the potential of spills, all containers are stored in an upright position and remain tightly covered while in storage or in transit.

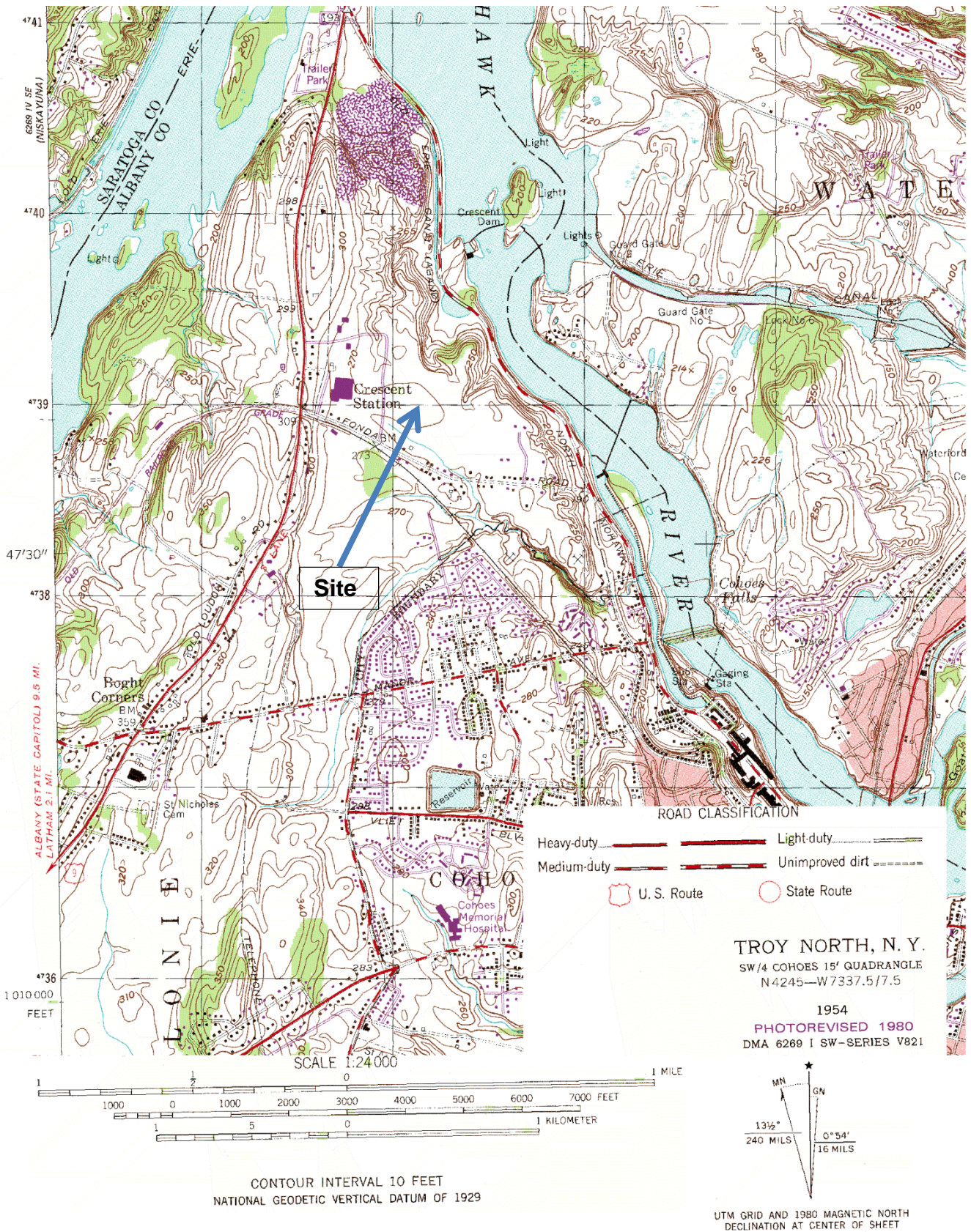
Container storage areas RF#1 & RF#2 are equipped with automatic fire suppression.

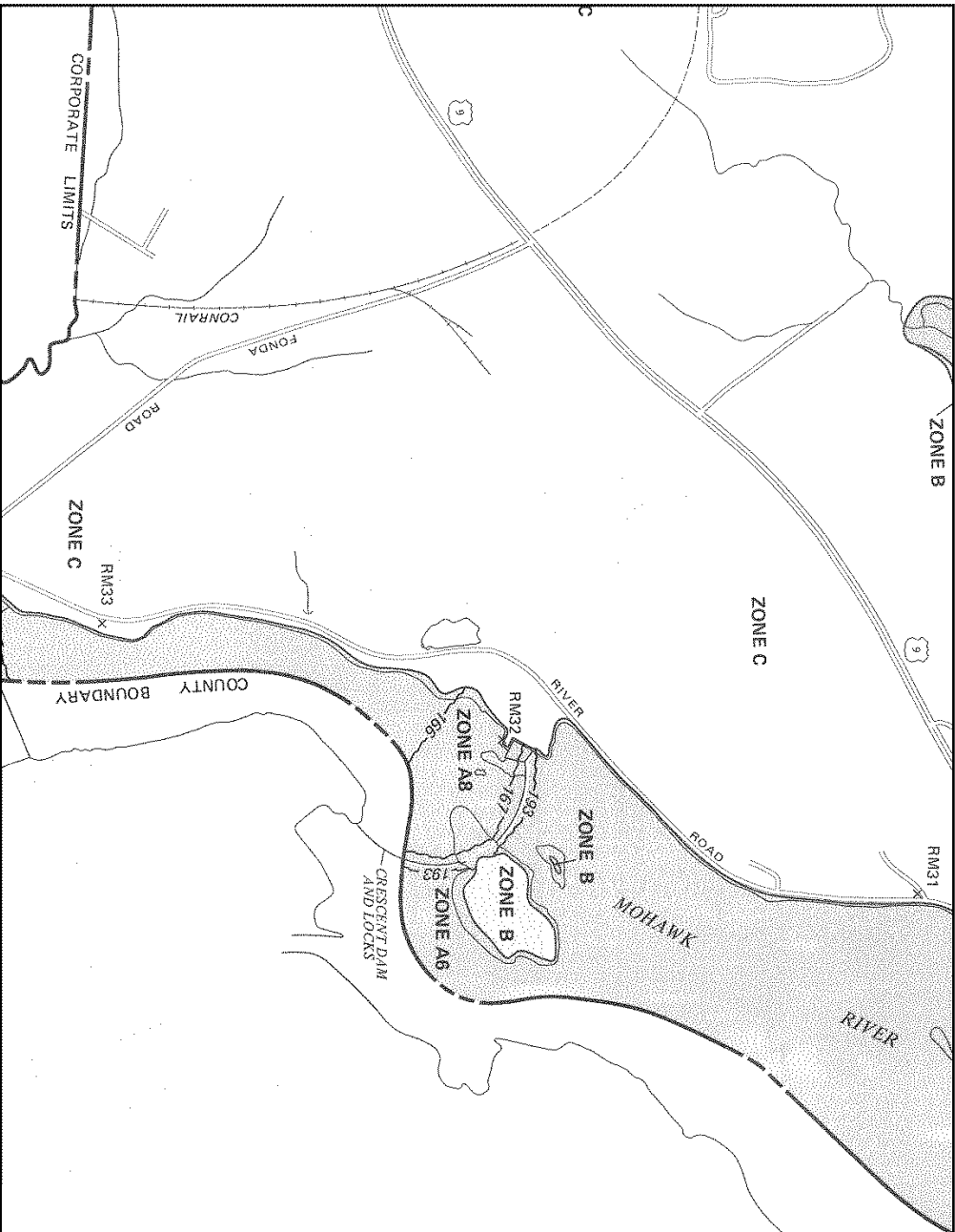
The return and fill station is also used to refill empty containers with fresh solvent. They are refilled with low pressure hose dispensers equipped with automatic shut-off valves; similar to those used at automotive service stations. Solvent is obtained from a 20,000 gallon storage tank located in the tank farm. Clean solvent is pumped from this tank through an overhead pipe bridge into the return and fill station.

The three aboveground tanks in the tank farm have been designed in accordance with National Fire Prevention Association (NFPA) standards and are constructed of carbon steel and painted white. The secondary containment systems for each tank are dedicated units. Essentially, each tank comes complete with its own secondary containment system. Each tank is equipped with a high level alarm. The secondary containment system for the spent solvent tank has a built in fire suppression system within the containment dike.

The transfer container management areas (exempt from this permit) in the office/warehouse have secondary containment in the form of steel-reinforced concrete slabs and curbing and collection trenches. These provide sufficient secondary containment for the management of 5,328 gallons in Area South and 5,000 gallons in Area North. Transfer containers are typically placed on pallets and moved with a forklift or pallet jack. The containers are stored with adequate aisle space.

Exempt transfer wastes may also be managed in trailers parked in a designated area of the yard.





APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
COLONIE, NEW YORK
ALBANY COUNTY

PANEL 15 OF 25
USE MAP INDEX FOR PANELS NOT PRINTED

COMMUNITY PANEL NUMBER
360007 0015 C

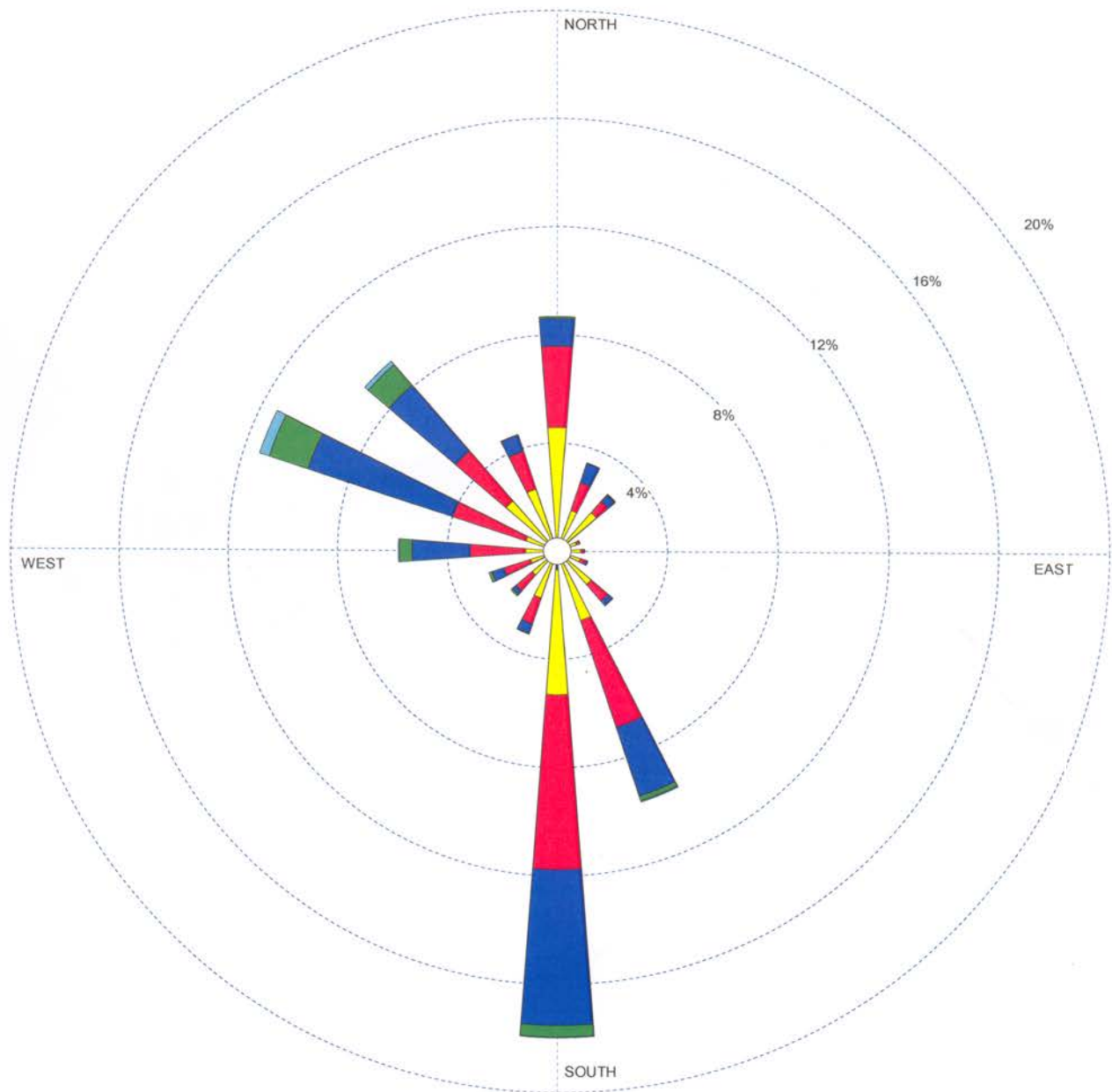
EFFECTIVE DATE:
SEPTEMBER 5, 1979

U.S. DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

This is an official copy of a portion of the above referenced flood map. It is not to be used for any purpose other than to determine the flood insurance rate for the property shown on the map. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.nsc.fema.gov

WIND ROSE PLOT

Station #14735 - ALBANY/COUNTY ARPT, NY



Wind Speed (m/s)



MODELER

DATE

2/10/2004

COMPANY NAME

DISPLAY

Wind Speed

UNIT

m/s

COMMENTS

WIND ROSE
COLONIE, NY.
1992

AVG. WIND SPEED

4.55 m/s

CALM WINDS

12.67%

ORIENTATION

Direction
(blowing from)

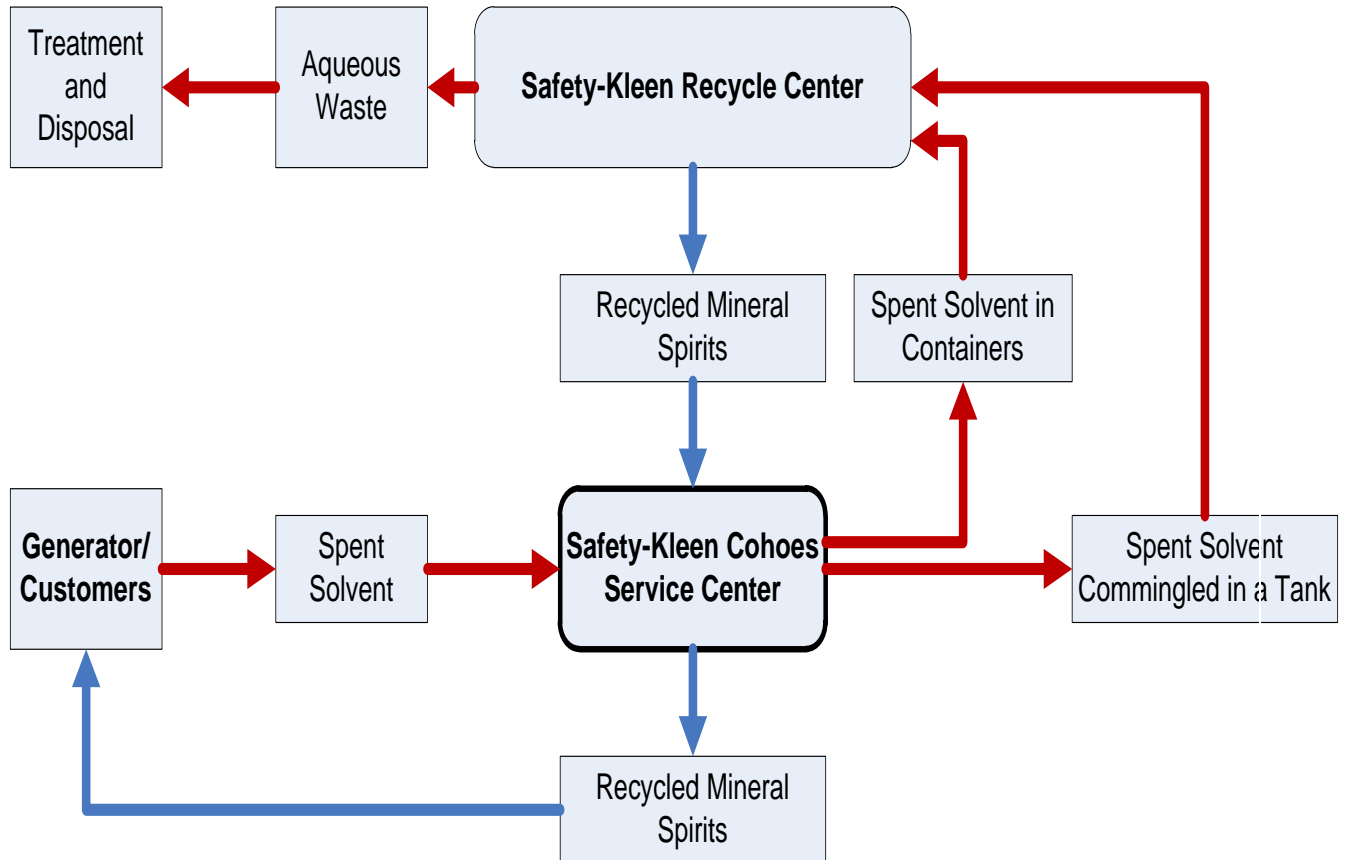
PLOT YEAR-DATE-TIME


1992
Jan 1 - Dec 31
Midnight - 11 PM

PROJECT/PLOT NO.

7092-SPOO-0049

Safety-Kleen Process Flow



SEND COMPLETED FORM TO: The Appropriate State or Regional Office.	United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM		
1. Reason for Submittal MARK ALL BOX(ES) THAT APPLY	Reason for Submittal: <input type="checkbox"/> To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location) <input 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 >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)		
2. Site EPA ID Number	EPA ID Number <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
3. Site Name	Name:		
4. Site Location Information	Street Address:		
	City, Town, or Village:		County:
	State:	Country:	Zip Code:
5. Site Land Type	<input 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		
6. NAICS Code(s) for the Site (at least 5-digit codes)	A. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	C. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	B. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	D. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
7. Site Mailing Address	Street or P.O. Box:		
	City, Town, or Village:		
	State:	Country:	Zip Code:
8. Site Contact Person	First Name:	MI:	Last:
	Title:		
	Street or P.O. Box:		
	City, Town or Village:		
	State:	Country:	Zip Code:
	Email:		
	Phone:	Ext.:	Fax:
9. Legal Owner and Operator of the Site	A. Name of Site's Legal Owner:		Date Became Owner:
	Owner Type: <input 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		
	Street or P.O. Box:		
	City, Town, or Village:		Phone:
	State:	Country:	Zip Code:
	B. Name of Site's Operator:		Date Became Operator:
	Operator Type: <input 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 2-10.

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

❖ 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.

[illegible]

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.

[illegible]

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)

United States Environmental Protection Agency

6. Nature of Business:

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.

Page 2 of 6

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																				
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3	3																				
3	4																				
3	5																				
3	6																				

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



Building Exterior



Rear Gate



Front Gate



Building Exterior



Truck Transfer Pad



Hazardous Waste Tank



Waste and Product Tanks



Drum Washer



Permitted Drum Storage



Return and Fill Dock



Transfer Area North (under mezzanine)



Transfer Area South

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

**ATTACHMENT B
SECURITY PLAN**

ATTACHMENT B

SECURITY PLAN

ABSTRACT

Purpose: Safety-Kleen's Cohoes, 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 and are opened only for the entry of vehicles and personnel. Warning signs stating "Danger - Unauthorized Personnel Keep Out" which are visible from twenty-five feet are posted at the entrances. In addition, outdoor lighting is on during non-daylight hours.

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

Because of the security fence and gate control, the hazardous waste tank is inaccessible to unauthorized personnel. Material cannot be added to it without activating the pumps, the controls for which are inside the warehouse. The pumps are not activated unless solvent is being added to the tank by Safety-Kleen personnel.

SECURITY MEASURES - The site is secured as follows:

- a. A chain link fence with barbed wire surrounds the facility.
- b. Warning signs are posted at entrances and along the perimeter fence.
- c. Locks are on entrances to the warehouse.
- d. Remote controls for tank operations are inside the warehouse.
- e. Outdoor lighting is on during non-daylight hours.

**SAFETY-KLEEN SYSTEMS, INC.
COHOES, NY SERVICE CENTER
EPA ID No. NYD 986872869**

ATTACHMENT C
WASTE ANALYSIS PLAN

ATTACHMENT C

WASTE ANALYSIS PLAN

ABSTRACT

The Cohoes Service Center will manage a variety of regulated and non-regulated waste. The majority of this waste will be handled on a transfer basis in accordance with applicable USDOT and New York regulations. Hydrocarbon and aqueous based parts washer solvents will be 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 2,400 gallons. This plan describes how the Cohoes facility will obtain sufficient 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.

Waste Description	Facility Capacity in gallons	Permitted Waste Codes	Estimated Annual Amount in 1000s of gallons
Safety-Kleen Solvent hydrocarbon and aqueous- based	12,000 gallons in tank storage	D001, D004-D011, D018, D019, D021-D030, D032-D042, D043 non-hazardous	70
	Container storage: 400 gallons in R/F #1 2000 gallons in R/F #2		

ATTACHMENT C - WASTE ANALYSIS PLAN

1.0 INTRODUCTION

This Waste Analysis Plan has been prepared for the Cohoes Service Center. The facility will function as a permitted storage area for the management of hydrocarbon and aqueous parts washer solvents. While in containers, these materials will be stored in 2 permitted container storage areas with a maximum storage capacity of 2400 gallons, and will be commingled in a 12,000-gallon, bulk storage tank.

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

2.0 DESCRIPTION OF BUSINESS ACTIVITY

The Cohoes Service Center is an accumulation point for spent parts washer solvents and solutions. Wastes are not treated, recycled, or disposed on site. They are transported off-site to a Safety-Kleen Recycle/Process Center.

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 Safety-Kleen 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 solvent and also manages the spent solvent. This system allows Safety-Kleen to maintain control of the solvents except while they're in use at the customer's place of business. Safety-Kleen may also accept spent parts washer solvent from new customers at the time of first service, provided it meets acceptance criteria.

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 hydrocarbon (mineral spirits) or aqueous solutions. Both the hydrocarbon and aqueous 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, both hazardous and non-hazardous solvents are transferred from the containers to a permitted, hazardous waste storage tank, and containers of product are prepared for the next services. Transfer and filling operations occur at the return and fill station. 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. Aqueous solutions are prepared on site by diluting concentrate with water. Spent solvents are transported to a Safety-Kleen Recycle/Process Center.

Safety-Kleen may also choose to manage aqueous solutions on a 10-day transfer basis instead of terminating them. When managed as 10-day exempt waste, they are not consolidated into the spent solvent tank (see 2.3).

2.2 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 Cohoes facility possesses sufficient knowledge to properly handle and store this waste prior to shipping it off-site.

2.3 Transfer Waste Management Waste Service (for information only)

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

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. The materials are packaged in accordance with applicable USDOT regulations on packaging and classified and segregated in accordance with 49 CFR 173.2(a) and 177.848. Hazardous waste received as lab packs are packaged in accordance with 49 CFR 173.12(b). The transfer wastes are transported from the Service Center to an authorized facility within 10 days.

3.0 WASTE DESCRIPTIONS

Only parts washer solvents and solutions will be managed under this permit. Wastes will be managed in a tank and in containers. Because the wastes contain free liquids, the bulk storage tank and container storage areas are equipped with secondary containment systems. This Section provides descriptions of the waste streams terminated and stored at the Service Center and their associated characteristics and

constituents. Similar data is provided for on-site generated wastes.

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

- Spent parts washer solvents. These are mostly mineral spirits and they may be either hazardous or non-hazardous, and
- Aqueous solutions. These may be either hazardous or non-hazardous depending upon use by the customer.

In addition to the above listed materials, several types of wastes are 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.,
- Sediment and debris from the drum dumpsters.
- Precipitation that could accumulate in secondary containment systems. If hazardous, this waste 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. Hydrocarbon Parts Washer Solvent

Safety-Kleen offers high-flash mineral spirits solvents for parts washer machines. Unused mineral spirits would not have a hazardous characteristic if discarded. The spent solvent may be returned by the customer as hazardous or non-hazardous, depending on the customer's use of the parts washer machine.

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

Analyses of spent mineral spirits solvents show low levels of metals and VOCs which may include benzene, trichloroethylene, methyl ethyl ketone, and tetrachloroethylene. Analyses of the spent parts washer solvent also showed detectable levels of barium, cadmium, lead, and chromium. In recent years, only tetrachloroethylene has been shown to exceed TCLP limits.

3.1.2 Aqueous Parts Washer Solution

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

Analyses indicate that depending on use, spent aqueous solution may be either hazardous or non-hazardous. Low level constituents that may be present include tetrachloroethylene, trichloroethylene, barium, chromium, and lead. Review of Safety-Kleen's analytical data indicates that only tetrachloroethylene exceeded established regulatory thresholds. Based on historic annual re-characterization data, only the aqueous solvents used in brake cleaning machines may be hazardous (D039) when spent.

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 parts washer solutions may be commingled and accumulated in the 12,000-gallon waste tank with the mineral spirits. The resulting material is managed as a hazardous waste.

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 and can collect up to 4,000 gallons of this waste for reclamation. This waste may be ignitable (D001) and may exhibit toxicity. This waste stream 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.

4.0 WASTE ACCEPTANCE CRITERIA

4.1 Quantitative Analysis

Hydrocarbon and aqueous parts washer solvents 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. The following sections describe the acceptance criteria for the parts washer wastes destined for bulking and storage at the Service Center.

After 50 years of servicing over 250,000 parts washer customers each year, Safety-Kleen has determined that the parts washer wastes generated by its customers are relatively homogeneous. The homogeneity of these wastes is evaluated annually through the Safety-Kleen Annual Recharacterization process (Quantitative Analysis).

Analytical data from the Recharacterization sampling is subjected to an EPA SW846 approved statistical model. The Cohoes facility is routinely included as one of the facilities sampled in the process for parts washer solvent. In addition, waste samples come from a variety of Safety-Kleen facilities across the country and are representative of the Cohoes facility.

Samples included in the AR process are selected from random customers serviced by Safety-Kleen facilities. Randomness is obtained by the Safety-Kleen Technical Center, which manages the AR program, selecting the month that the samples will be taken. Generator services are typically scheduled months in advance and those clients whose waste happens to be on hand on the month selected by the Technical Center will be the wastes that will be sampled. Analyses are performed at a NYSDOH ELAP certified lab.

The waste streams collected by Safety-Kleen are uniform across business types and geographical locations. This is demonstrated by the minimal changes in the codes assigned to each stream through the AR statistical evaluation each year via the Non-parametric Upper Confidence Interval Approach.

When subjecting AR sample data to the Non-parametric Upper Confidence Interval Approach, the last 3 years of analytical data for a given waste stream is used from samples pulled from across the country (in most cases). For example, statistically based waste codes assigned to a particular core waste stream in 2014 are based on samples analyzed in 2011, 2012, and 2013. Ideally 50 data points are used but at least 30 data points are required. If 30 data points are not available from samples pulled in 2011/2012/2013, samples from 2010 will also be incorporated into the population.

The results thus obtained are provided to customers to supplement generator knowledge of their wastes.

4.2 Qualitative Acceptance Criteria

Safety-Kleen performs a customer prescreening for all parts washer customers. Prior to leasing a parts cleaning machine or placing a Customer Owned Machine (COMs) service, the customer's business is reviewed. Where the possibility exists for contamination of the parts cleaner solvent (e.g. pesticide, herbicide, or pharmaceutical operations), operations are reviewed to ensure that the solvent is protected from the sources of contamination. In reviewing a customer's business, the Safety-Kleen Representative provides customers with written and verbal information on use of the equipment. This information will contain at a minimum:

- Proper usage and management of the unit
- Information on the reasons to not add materials to the unit, and
- Examples of what not to add to the unit

A key step in the prescreening process for all parts washer services is to ensure the solvent accepted as a core permitted waste stream is a Safety-Kleen supplied solvent. When a customer owns their machine, before Safety-Kleen accepts any solvent for recycling, any non-Safety-Kleen solvent must be individually profiled if it does not conform to Waste Analysis Plan criteria and will be managed as containerized transfer waste for disposal.

The waste acceptance criteria incorporate Safety-Kleen's quantitative historical knowledge of the parts washer solvents. 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 are 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 evaluation of the acceptability of the waste at the point of generation (i.e., prior to transport). Experience has shown that the acceptance criteria detailed here 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.

4.3 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 will be used to determine acceptability of future waste pick ups. Copies of the profiles will be kept on file or electronically for at least 5 years.

The profile/audit will be completed by a Safety-Kleen representative together with the customer prior to the initiation of service (i.e., when the customer signs up for Safety-Kleen's 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 ensure 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.

4.4 Screening Tests for Waste Acceptance

Visual screening and material observations conducted for each waste pick up prior the collection of parts washer 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.

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 historical knowledge and understanding of the parts washer solvent waste characteristics with the information provided on the profile, Safety-Kleen has established the specific

acceptance criteria set forth below. 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 deliberately contaminated) and is the same as described in the profile.

The specific gravity of spent solvent 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 distributed by Safety-Kleen in 30, 16 and five-gallon containers which hold approximately 23, 12 and 5 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 5 gallons, respectively. Prior to acceptance, the sales representative evaluates the contents of the container and checks the specific gravity to ensure that the volume and specific gravity requirement is met. 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 amber tint. As the solvent is used, it turns brown/black 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 will not be 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 will also be 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 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 solvent will also be managed in 16 and 30- gallon, USDOT specified UN 1A2, 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. The table below summarizes the type, size and color of the parts washer solvent containers that will be used by the Service Center.

Table I-1

WASTE TYPE	DRUM TYPES	SIZE OF EACH DRUM	DRUM COLOR
SK Solvents (Hydrocarbon and Aqueous Based)	UN 1A2 (Steel)	16, 30	Red
	UN 1A2 (Steel)	16, 30	Green
	UN 1A2 (Steel)	16, 30	Blue
	UN 3H1 UN1H2 (Plastic)	5	Black Blue

The container identification criteria are further supported by a waste label that identifies the contents. Each container of hydrocarbon and aqueous parts washer solvent, regardless of container type, size or color has a waste label affixed to it 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.

The specific containers that Safety-Kleen uses for parts washer solvents are not used for other wastes and are not supplied to customers for use other than parts washer service. Thus, 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 also distinguished by the label.

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.

Table I-2 summarizes the qualitative and quantitative acceptance criteria for the parts washer solvents. If these 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 will be 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 will be 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 a NYSDOH ELAP certified 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

Waste Description	Acceptance Parameter	Acceptance Criteria*
Spent Parts Washer Solvent	Waste Profile	Prior to initiation of service
	Volume	No greater than amount supplied
	Color	As specified in profile
	Incidental odor ¹	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
Exempt Transfer Waste ²	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>¹ 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> <p>²Transfer wastes are not terminated</p>		

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

<u>Waste</u>	<u>Reference for Sampling</u>	<u>Description of Sampling Method</u>
Spent Safety-Kleen Solvent In Tank	Sampling a tank ¹ "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 ^{1,2} "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

¹Sampler: Representative sample using a Coliwasa tube or other appropriate means.

²Sampler: 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

Waste Description	Parameter	Test Method¹
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: ¹ Safety-Kleen methods are adopted from SW-846 Methods.		

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 ensuring 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 them prior to sending them 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.

TABLE I-5**Waste Analysis Frequencies**

Waste Description	Parameter	Frequency¹
Spent Parts Washer Solvents	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 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.
¹ 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 I-6
Annual Recharacterization Analyses

Hazardous Waste Description	Parameter¹
Spent Parts Washer Solvents	TCLP, pH, Flash Point and Specific Gravity.
¹ TCLP waste numbers: D004-D011, D018, D019, D021-D030, D032-D043	

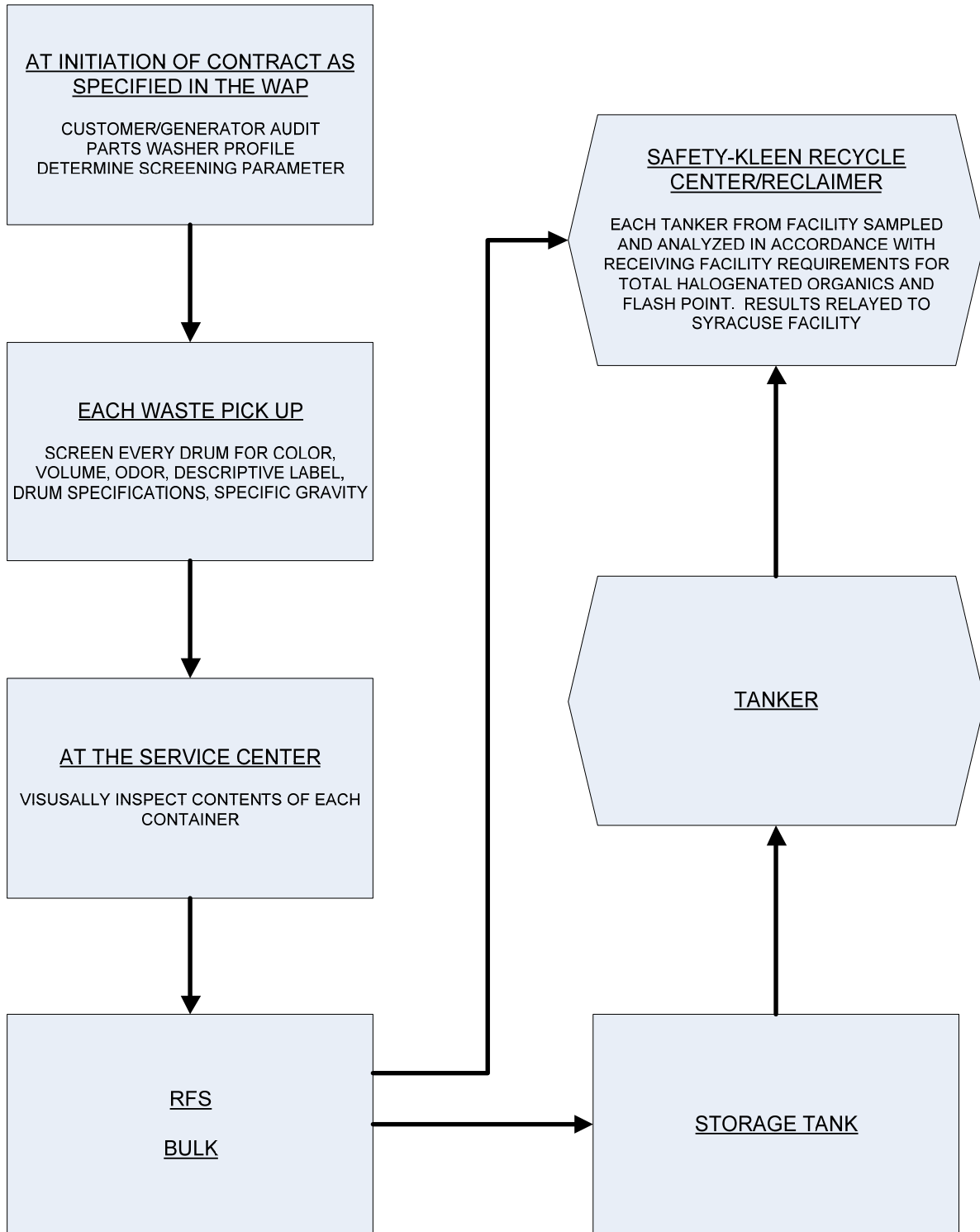
5.0 PROCEDURE FOR WASTE TRACKING.

The used hydrocarbon 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 and specific gravity) 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 centers operating permit. The analytical results must be within the receiving facility acceptance criteria.

Bulk loads originating from the Cohoes facility will be analyzed at the receiving facility in the manner described above. The Cohoes 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. Should a load be rejected, information as to why and the alternate mode of management will be provided to the facility.

As a 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 which are certified by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) will be used if analysis is performed.

WASTE ACCEPTANCE PROCEDURE FOR PARTS WASHER WASTES



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

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.

150 Solvent	Aqueous Solvent	Hazardous	Non-Hazardous	Quantity/machine

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 ¹	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
			Y	N	Y	N
			Y	N	Y	N

¹ 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.

APPENDIX 1-B

Annual Re-characterization Data

WASTE STREAMS			WASTE CODE CHANGES - NATIONAL		
2014 NATIONAL Profile/SKDOT	General Description	2014 National Waste Codes	2015 National Waste Codes	Changes from 2014 to 2015	2015 NATIONAL Profile/SKDOT
150100 / 626	Aqueous Brake Cleaner	None	None	No Change	150100 / 626
Refer to CH Outbound	Branch Contaminated Debris	F002, F003, F005, D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043	F002, F003, F005, D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043	No Change	Refer to CH Outbound
150629 / 950	Immersion Cleaner (IC 699)	D006, D008, D018, D027, D039, D040	D006, D008, D027, D039, D040	Remove D018	155629 / 7545427
150045 / 704 / 801(RQ)	Parts Washer Solvent 105 Virgin	D001, D018, D039, D040	D001, D018, D039, D040	No Change	150045 / 704 / 801(RQ)
Refer to CH Outbound	Parts Washer Solvents (Bulked) / Combination of 105 and 150 (Aqueous, where applicable)	D001, D018, D039, D040	D001, D018, D039, D040	No Change	Refer to CH Outbound
Refer to CH Outbound	Parts Washer Solvent Sludge/Dumpster Mud	D001, D018, D039, D040	D001, D018, D039, D040	No Change	Refer to CH Outbound
Refer to CH Outbound	Parts Washer Solvent Tank Bottoms (bulk)**	D001, D018, D039, D040	D001, D018, D039, D040	No Change	Refer to CH Outbound
150055 / 717	Parts Washer Solvent 150	D039	D039	No Change	150055 / 717
150055 / 717	PRF and PDF Mil Spec. Solvent	D039	D039	No Change	150055 / 717
157055 / 7534709	Parts Washer Solvent 150 DF Containers - no Special Permit	D039	D039	No Change	157055 / 7534709
150380 / 11658, 150425 / 12606(RQ)	Paint Gun Cleaner (SK)	F003, F005, D001, D018, D035, D039, D040	F003, F005, D001, D018, D035, D039, D040	No Change	150380 / 11658, 150425 / 12606(RQ)
150426 / 12607, 150427 / 12608(RQ)	Clear Choice Paint Gun Cleaner	F003, D001, D018, D035, D039, D040	F003, D001, D018, D035, D039, D040	No Change	150426 / 12607, 150427 / 12608(RQ)
150375 / 11653(ANY), 150376 / 11654(30), 150377 / 11655(55)	Paint Waste Other ***	F003, F005, D001, D018, D035, D039, D040	F003, F005, D001, D018, D035, D039, D040	No Change	150375 / 11653(ANY), 150376 / 11654(30), 150377 / 11655(55)
150589 / 7050108	Dry Cleaner (Perc) Bottoms	F002, D007, D039, D040	F002, D007, D039, D040	No Change	150589 / 7050108
150621 / 7050112	Dry Cleaner (Perc) Filters	F002, D007, D039, D040	F002, D007, D039, D040	No Change	150621 / 7050112
150591 / 7050118	Dry Cleaner (Perc) Separator Water	F002, D039, D040	F002, D039, D040	No Change	150591 / 7050118
150422 / 7051604	Dry Cleaning Naphtha Bottoms	D001, D007, D039, D040	D001, D007, D039, D040	No Change	150422 / 7051604
150424 / 12569	Dry Cleaning Naphtha Filters	D001, D007, D039, D040	D001, D007, D039, D040	No Change	150424 / 12569
150423 / 12566	Dry Cleaning Naphtha Separator Water	D001, D039, D040	D001, D039, D040	No Change	150423 / 12566
Refer to CH Outbound	Aqueous Parts Washer Tank Bottoms	D039, D040	NONE	Remove D039, D040	Refer to CH Outbound
Refer to CH Outbound	Aqueous Parts Washer Dumpster Sludge	NONE	NONE	No Change	Refer to CH Outbound

UHC Evaluation

NATIONAL UNDERLYING HAZARDOUS CONSTITUENTS

Aqueous Brake Cleaner		Branch Contaminated Debris		Immersion Cleaner (IC 699)		Parts Washer Solvent 105 (Virgin)		Parts Washer Solvents (Bulked) Combination of 105 and 150		Parts Washer Solvent Sludge/Dumpster Mud		Parts Washer Solvent Tank Bottoms (bulk)	
Tetrachloroethylene	229	1,1-Dichloroethylene	122	1,4-Dichlorobenzene	118	Benzene	67	Benzene	67	Benzene	67	Benzene	67
		1,2-Dichloroethane	121	Cadmium	250	Cadmium	250	Cadmium	250	Cadmium	250	Cadmium	250
		1,4-Dichlorobenzene	118	Chromium	251	Chromium	251	Lead	255	Lead	255	Lead	255
		2,4,5-Trichlorophenol	239	Lead	255	Lead	255	Tetrachloroethylene	229	Tetrachloroethylene	229	Tetrachloroethylene	229
		2,4,6-Trichlorophenol	240	Pentachlorophenol	211	Tetrachloroethylene	229	Trichloroethylene	237	Trichloroethylene	237	Trichloroethylene	237
		2,4-Dinitrotoluene	137	Silver	260	Trichloroethylene	237						
		Acetone	51	Tetrachloroethylene	229								
		Arsenic	247	Trichloroethylene	237								
		Barium	248										
		Benzene	67										
		Cadmium	250										
		Carbon tetrachloride	81										
		Chlorobenzene	84										
		Chloroform	91										
		Chromium	251										
		Hexachlorobenzene	164										
		Hexachlorobutadiene	165										
		Hexachloroethane	169										
		Lead	255										
		m-Cresol	101										
		Mercury	257										
		Methyl ethyl ketone	184										
		Methyl isobutyl ketone	185										
		Nitrobenzene	193										
		o-Cresol	100										
		p-Cresol	102										
		Pentachlorophenol	211										
		Pyridine	220										
		Selenium	259										
		Silver	260										
		Tetrachloroethylene	229										
		Toluene	231										
		Trichloroethylene	237										
		Vinyl chloride	244										
		Xylenes	245										

[illegible]

NATIONAL UNDERLYING HAZARDOUS CONSTITUENTS

[illegible]

**SAFETY-KLEEN SYSTEMS, INC.
COHOES SERVICE CENTER
EPA ID No. NYD 986872869**

**ATTACHMENT D
MANAGEMENT OF WASTE IN TANK PLAN**

ATTACHMENT D

MANAGEMENT OF WASTE IN TANK PLAN

ABSTRACT

Purpose: Spent parts washer solvents are stored at the Cohoes facility in a 12,000-gallon, aboveground storage tank. Spent solvents generated from off-site locations are transported to the facility in containers. At the Service Center, these containers are emptied into a bulk solvent storage tank through use of devices designed for commingling and bulking. Handling of the spent solvents follows specific practices. This plan details these practices and provides data relative to the hazardous waste management unit that is used for storage.

ATTACHMENT D - MANAGEMENT OF WASTE IN TANK PLAN

1.0 MANAGEMENT PRACTICE

The Cohoes Service Center manages spent parts washer solvents through use of a 12,000-gallon, aboveground storage tank. Table D - 1 provides some data on the tank. Additional information is provided in the text and in Appendix D - A.

TABLE D - 1

Tank Specifications

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

<u>Waste Description</u>	<u>Permitted Waste Codes</u>	<u>Tank Capacity in Gallons</u>	<u>Minimum Design Shell Thickness</u>
Safety-Kleen Parts Washer Solvents (Hydrocarbon and Aqueous Based)	D001, D004-D011, D018, D019, D021-D030, D032-D043, Non-Hazardous	12,000	0.1875"/0.25" (Carbon Steel)

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

6 NYCRR 373-1.5(c)(2) The 12,000-gallon, aboveground, horizontal tank is approximately 32'0" long and roughly 8'0" wide. It is constructed of carbon steel and is painted white to reflect sunlight and inhibit corrosion. The tank wall is approximately 0.1875" thick and the heads are about 0.25" thick.

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 waste tank from being over-filled. In addition, the 12,000-gallon, aboveground horizontal tank is equipped with a high level alarm which indicates when the tank is 95% full. The high level alarm is inspected daily for proper functioning of electrical and mechanical components. The tank assessment report and the engineering drawings provide additional information about the tank and the high level alarm.

The tank is equipped with an 8" diameter emergency vent and a 3" diameter pressure vacuum vent that operates at 2 oz. of pressure and 1 oz. of vacuum. The tank is further

equipped with a dedicated, secondary containment system. The tank system also has a dry chemical-based fire suppression system shown in drawing 7046-4100-399. The system is inspected and maintained in accordance with NFPA guidelines so that it will be functional when needed. No additional secondary containment capacity is needed to account for the fire suppression media. The specific gravity of the hydrocarbon-based parts washer solvents is approximately 0.8 and the vapor pressure is less than 2mm at 68° F.

6 NYCRR 373-1.5(c)(4) The process flow diagram is in Attachment A.

The tank is not subject to conditions that would result in severe external corrosion. Rain shields preclude the entry of storm water or snow into the secondary containment system. No severe atmospheric conditions are anticipated that would result in external corrosion.

6 NYCRR 373-2.10(c)(1) The tank installation assessment has been performed by an independent, professional engineer registered in New York. The assessment is included in Appendix D - A.

6 NYCRR 373-2.10(c)(1)(I) The tank is constructed in accordance with Underwriters Laboratories Standard 142 and is located more than 50' from the property line. The secondary containment for the tank consists of an external liner made of approximately 1/4" steel plates, as described in the tank installation assessment and engineering drawings.

The tank and its secondary containment are inspected each operating day. Any leaks or signs of deterioration are noted and remediated 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 closed 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 are removed promptly upon detection.

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

The tank secondary containment system is designed to collect liquids originating from the tank. The accumulated liquids are managed as described in this section and in the Contingency Plan.

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

- (1) Park the tanker truck inside tanker containment area and secure it for spent solvent 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) Engage pump and move clean product to storage tank. 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.
- (5) Check the available tanker truck volume. Reverse hose connections and move spent solvent from storage to tanker truck. (Again, check for leaks and repair as needed).
- (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 are followed. An incidental spill is handled as described in Section 4.5.1 and a major spill as described in Section 4.5.2. Any solvent or sorbent used in the cleanup will be containerized and will be handled as a hazardous waste unless analysis proves otherwise. Equipment used will be decontaminated as necessary and the rinse water will be managed as a hazardous waste unless analysis proves otherwise.

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 tank. 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.

1.1 Spent Solvent Management Operations

Spent parts washer solvents are transported to the facility in containers. The containers remain on the transport vehicles until they can be removed and processed in the return and fill station. On Mondays, Tuesdays, Wednesdays and Thursdays, the containers

are 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 are equipped with secondary containment systems designed to capture material released into the storage compartment of the vehicles.

Spent parts washer solvents from customers are transferred to the waste storage tank via the return and fill station which consists of a dumpster, dumpster/barrel washer and pump. Each container is manually emptied allowing the waste to flow into one of the dumpsters. After the waste is transferred into a dumpster, the container is 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 container rinsing unit is installed immediately adjacent to one of the dumpsters/barrel washer. The rinsing unit provides a final rinse for some containers that are being reused to ship clean 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.

1.2 Thickness Testing

Every fifth year from the effective date of the permit, the shell thickness of the tank is measured consistent with a procedure or practices developed by a nationally recognized association or independent testing laboratory. If thinning of one millimeter per year or greater occurs on the tank wall as compared to the design thickness, Safety-Kleen will obtain and submit to the Department an integrity assessment of the tank certified by an independent professional engineer licensed in New York state attesting the tank system has sufficient structural integrity for storing hazardous waste and the tank is structurally sound and will not result in a release before the next inspection. This assessment will be used by the Department to determine the acceptability of the tank for continued storage of hazardous waste.

APPENDIX D- A

Tank Integrity Assessment



**POST CONSTRUCTION ASSESSMENT OF
HAZARDOUS WASTE STORAGE TANK SYSTEM
SAFETY-KLEEN BRANCH
LOCATED AT
COLONIE, NY**

Prepared for:

Safety-Kleen Corp.
Elgin, Illinois

Prepared by:

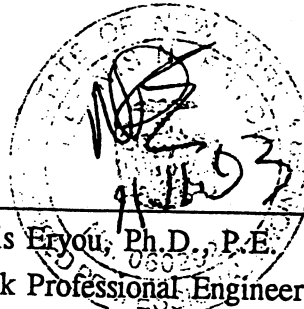
N.D.Eryou, Ph.D, P.E.
Consulting Engineer
8 Ivy Place
Huntington, NY 11743

NOVEMBER 1993

TANK SYSTEM CERTIFICATION
(6 NYCRR 373-2 (c)(i))

I hereby certify that I have reviewed this Hazardous Waste Tank Installation Assessment Report and being familiar with New York State Department of Environmental Conservation 6 NYCRR 373-2.10 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

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N.D. ERYOU, PH.D., P.E.
CONSULTING ENGINEER

SAFETY-KLEEN CORP.
COLONIE, NY

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APPENDIX A - DRAWINGS

APPENDIX B - DESIGN DOCUMENTATION

- B1 - Tank Level Indicator Documentation
- B2 - Tank Overfill Indicator Documentation
- B3 - Tank and Piping Test Procedure
- B4 - Tank and Piping Test Reports

APPENDIX C - PHOTOGRAPHS

1.0 INTRODUCTION

This report documents the assessment of a hazardous waste storage tank system at the Safety-Kleen facility in Colonie, NY. This assessment was written to address the requirements of New York State Department of Environmental Conservation (NYSDEC) Regulations (6 NYCRR 373-2.10 (c)). This assessment is based upon site inspections on November 4 and 11, 1993.

2.0 SYSTEM DESCRIPTION

Used solvents will be received from offsite generators in drums and unloaded into a dumpster inside the facility and pumped through aboveground piping into an aboveground steel storage tank of 12,000 gallon capacity. Accumulated used solvents will be periodically pumped from this tank to a tanker truck for offsite disposal. Sludge and solids that accumulate in the tank will be removed through a manway for offsite disposal.

The 12,000 gallon Areo-Power storage tank is a horizontal cylinder 32'-0" long and 8'-0" in diameter. The tank shell is 1/4" thick and the heads are 5/16" thick. The tank sits on four steel saddles in a rectangular steel dike, 36'-9" long by 12'-0" wide, by 4'-0" high. "Rainshields" cover the gap between the cylindrical tank and the rectangular dike to prevent the entrance of stormwater into the dike. The tank has a double shell and heads above the "rainshields" which prevent stormwater from entering the containment dike. The outer shell is 7 ga. steel and the outer heads are 1/4" thick. All joints are welded steel and the entire tank assembly is UL142 listed. Appendix A contains drawings of the tank and integral containment dike. This storage tank is vented to the atmosphere by a 3" diameter service vent and an 8" diameter emergency vent which opens at a pressure of 0.5 psi. Tank liquid level is monitored by a Varec level gauge located on the front of the tank dike and a Milltronics ultrasonic overfill alarm connected into an adjacent alarm panel with an audible/visible annunciator. Details on the level indicator and overfill alarm system are provided in Appendix B.

For the purpose of this assessment, the hazardous waste storage system has been defined to include the storage tank, the aboveground piping for truck loading and dumpster unloading, plus the secondary containment system for these components. An adjacent fresh solvent tank and piping system are not included in this assessment as its contents are not classified as hazardous waste.

3.0 STORAGE SYSTEM

3.1 Secondary Containment (6 NYC 373-2.10 (d) (2))

The secondary containment is considered to be a liner (external to the tank).

(a) Materials Compatibility

The waste material collected and stored by the system is hazardous waste, which consists of petroleum products and various contaminants. The containment dike is made of steel which is compatible with petroleum based products and is widely used to store this type of product.

(b) Strength

The steel containment dike is formed of 1/4" thick welded steel plates, reinforced with angles. The Areo-Power tank/dike are UL142 listed and are subjected to a full scale hydrostatic test to confirm their ability to withstand the forces which would occur if the dike were filled with water.

(c) Foundation

The tank and dike assembly sit on an 8" thick reinforced concrete slab. The Preconstruction Assessment Report, dated January 1993, provided calculations indicating that the reinforced concrete slab is capable of supporting the tank and dike, including 12,000 gallons of waste mineral spirits.

(d) Leak Detection

All components of the tank and piping system are above ground and capable of being accessed for visual inspection. Leaks in the primary tank can be detected by inspection of the containment dike for retained liquids.

(e) Liquid Removal

The tank containment dike is sloped to drain to a sump in the corner of the containment dike. A 3/4" diameter pipe runs from the sump to the vertical front of the dike wall, where a pump can be connected for removal of liquid by manual methods.

(f) Containment Volume

As shown by calculations provided in the Preconstruction Assessment Report, dated January 1993, the tank containment vault has a design volume sufficient to hold 100% of the 12,000 gallon tank. The calculated containment volume is 13,200 gallons, and since the rainshields preclude the entry of stormwater into the dike, this volume is more than adequate.

(g) Containment Impermeability

The 1/4" thick welded steel plate which the containment dike is fabricated from is inherently impermeable. All seams are double welded and the design was proven leaktight by a hydrostatic test. The interior and exterior surfaces of the dike are coated with a corrosion resistant primer, and the exterior surface is coated with an exterior grade enamel, to prevent corrosion.

(h) Ancillary Equipment

All of the ancillary equipment for this system is located aboveground and is accessible for visual inspection and detection of leakage. The dumpster and associated piping are underlain by an impervious concrete dike system designed to contain spills. All piping not over a concrete containment area uses butt welded joints, and the tanker truck connection points are contained in an above grade spill containment box.

3.2 Design Standards (6 NYC 373-2.10 (b) (2) (i))

All Areo-Power primary tanks are constructed in accordance with Underwriter's Laboratories Standard 142. The UL142 standard is intended to prevent the collapse or rupture of tanks non-corrosive stable liquids with a specific gravity not greater than one, and an operating pressure of 0.5 psig or less. The ancillary equipment includes a dumpster and steel pipe which runs between the tanks and the dumpster, plus piping from the tank to the tanker truck connection point. All the piping is above ground, and piping connections outside secondary containment are welded, and the piping is insulated and heat traced. The tanker truck connection points are contained in an above ground spill containment box.

3.3 Hazardous Characteristics of the Waste (6 NYC 373-2.10 (b) (2) (ii))

The three hazardous characteristics of the used mineral spirits waste, as defined by 40 CFR 261, are:

(a) Ignitability (D001): A waste is considered ignitable and, therefore, hazardous, if its flash point is below 140°.

The used mineral spirits to be stored in this tank have a typical flash point in the range of 100°F to 110°, and therefore is ignitable (D001).

(b) EP toxicity due to cadmium content (D006): A waste is considered to be EP toxic due to cadmium content if its concentration exceeds 1.0 ppm (parts per million).

A typical value for cadmium concentration is 0.93 ppm. Since this value is close to 1.0 ppm, it may be considered to be EP toxic due to cadmium content.

(c) EP toxicity due to lead content (D008): A waste is considered to be EP toxic due to lead content if concentration exceeds 5.0 ppm.

A typical value for lead concentration is 5.0 ppm. Therefore, the used mineral spirits is considered to be EP toxic due to lead content. Of these three hazardous waste characteristics, none would affect the compatibility of the mineral spirits waste with the carbon steel tank material. The ignitability quality of its own would not affect the tank material. Also, the presence of cadmium and lead, in concentrations as listed in B and C above, would not have an adverse affect on the tank material. Mineral spirits is often used as a light hydrocarbon coating to prevent rusting of metal parts, and therefore acts to preserve the carbon steel.

The National Fire Protection Agency identifies three types of fire hazards by degree. These ratings for the spent mineral spirits are below.

(a) Health Hazards - 0. Includes "materials which on exposure under fire conditions would offer no hazard beyond that of normal combustible material".

(b) Flammability Hazards - 2. Includes "materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur... (and) should include liquids having a flash point above 100°F, but not exceeding 200°F." It can be pointed out that, although the flash point falls in this category, the vapor pressure (which reflects the amount of ignitable gases given off by the liquid) of mineral spirits is very low (2 mm). Ignitability is therefore not nearly as great as that of other liquids with similar flash points.

(c) Reactivity (instability) Hazards - 0. Includes "materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water."

Finally, the Material Safety Data Sheet for fresh mineral spirits, which has mostly the same characteristics as spent mineral spirits, describes the material as stable and combustible, and incompatible only with strong oxidizing agents. Warnings include avoiding heat, sparks and flame. Oxidizers are not handled at the service center, and operating procedures

are such that they minimize the possibility of ignition sources near the tank farm. It can be concluded, therefore, that the tank is compatible with the hazardous waste being stored.

3.4 Corrosion Protection (6 NYC 373-2.10 (b) (2) (iii))

The tank exterior is painted white (alkyd based enamel over primer coat) to reflect sunlight and to inhibit corrosion. The tank will be periodically painted as required.

3.5 Documented Age of Tank System (6 NYC 373-2.10 (b) (2) (iv))

The tank, Areo-Power #657, was fabricated during the month of January 1993 and installed in October 1993.

3.6 Ancillary Equipment

Ancillary equipment items located off of the tank concrete pad are protected from damage by concrete filled steel bumper posts. All ancillary equipment items are supported to prevent excessive stress due to settlement, vibration, expansion or contraction. The ancillary equipment design and support is in compliance with ANSI B31.3 requirements.

3.7 Tank Integrity Examination (NYC 373-2.10 (b) (2) (v) (b))

On November 4, 1993, a tank integrity examination was conducted to ascertain that the installation of the storage and piping system components was performed substantially in accordance with the design documentation. No evidence of significant defects, damage, or evidence of improper construction or installation of the system primary containment components was noted during the inspection report.

3.8 Tank Tightness Test (NYC 373-2.10 (b) (2) (v) (b))

The waste solvent system components (tank and piping) were pressure tested and inspected in accordance with the Safety Kleen System Tank & Piping Test Procedure (copy attached in Appendix B3). A test report, certified by a New York State registered professional engineer, is provided in Appendix B4.

3.9 Piping

All system valves, threaded connections, and other non-exempt equipment items, joints and connections are provided with secondary containment by the concrete slabs. All waste mineral spirits piping outside the concrete slabs has butt welded connections and is insulated and heat traced.

3.10 Fire Suppression

The fire suppression, installed by a Kidde representative, was inspected on November 11, 1993 and was found to conform with the drawings in Appendix A.

4.0 CONCLUSIONS

Based upon the information presented above and included in the Appendices to this report, the hazardous waste tank and piping system installed at the Safety-Kleen facility in Colonie, New York has been designed and installed in accordance with the approved drawings. The system has adequate strength and support and is sufficiently compatible with the wastes being stored to not leak, collapse, rupture or fail when installed and operated as per the referenced construction drawings and 6 NYC 373.2-2.10 (b) (2) (i). Secondary containment measures have been provided that meet the requirements of 6 NYC 373-2.10 (d). The relevant tank, piping and system component drawings are included with this report.

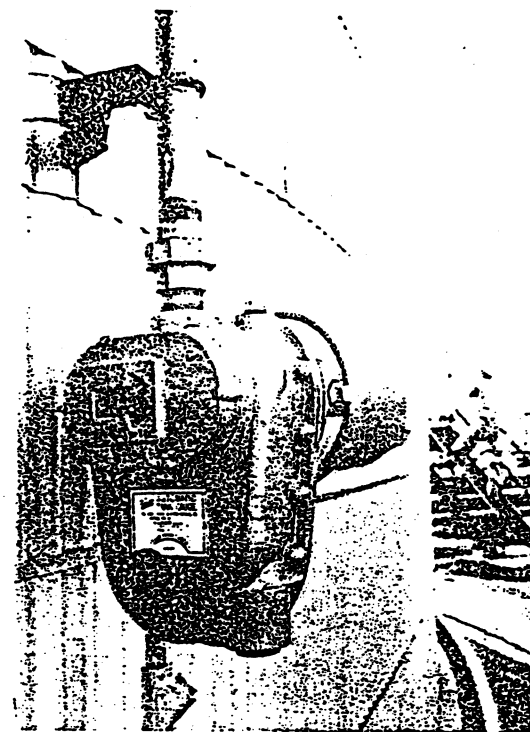
APPENDIX A DRAWINGS

APPENDIX B1
TANK LEVEL INDICATOR DOCUMENTATION

2500 SERIES

AUTOMATIC TANK GAUGE

- 4 mm Level Gauging Accuracy*
- Low Cost Continuous Measurement
- Easily Installed and Serviced
- Direct Reading English Fractional or Metric Counters
- Standard, Moderate, Severe and Extreme Service Kits
- Cone Roof, Floating Roof and Bolted Tank Kits
- Float Check Knob or Float Hoist Versions
- Gaugehead/Counter Suitable for Oil Filling
- Stilling Well and Water Interface Models



PRODUCT DESCRIPTION

The Varec 2500 Series Automatic Tank Gauge is a float operated instrument designed to provide continuous liquid level measurement of products stored in both above and below ground vessels.

The 2500 is suitable for installation on atmospheric or low pressure (2.5 psig) fixed cone roof, floating roof, fixed roof with an internal floating pan or underground tanks. It may be mounted either atop the storage vessel, or at grade, to suit user accuracy and installation requirements.

Varec manufactures analog and digital transmitters to facilitate transmission of level data to a central location. Varec limit switches are also available to change a contact status for on/off/start/stop device monitoring and control.

OPERATION AND FEATURE

A large 14.5" diameter Type 316 stainless steel hollow shell float is used to detect the liquid level. Attached to the float is a precision perforated stainless steel tape. As the liquid level rises or falls, the perforated tape is taken up or let out from the storage sheave. Constant pullback

*Per Sira Evaluation Report E1588583 (16 m Range)

tension is provided by a powerful stainless steel negator spring motor. The perforated tape engages pins on the sprocket sheave which, in turn, drives the gauge dial counter mechanism and any shaft position devices attached to the gaugehead. Varec offers a float operation check knob model, to ensure the unit is working properly, or a hand crank model, to hoist the float during turbulent mixing operations.

The Varec "A" frame method of mounting ground level reading automatic tank gauges reduces measurement error from vertical shift as product is added or removed from the vessel. All internal sheaves and sprockets are mounted on stainless steel shafts and teflon bearings to minimize friction. The gauge counter mechanism is easily calibrated, even when the gauge is in-service, and displays level data as white numerals on a black background.

APPLICATIONS

The standard Varec 2500 Series Automatic Tank Gauge is manufactured of components resistant to corrosion in most industrial environments and process applications. Moderate, severe and extreme service models are available from Varec to meet the rigors of chemical service applications.

2500 SERIES AUTOMATIC TANK GAUGE

APPLICATIONS (Cont)

available from Varec to meet the rigors of chemical service applications.

The 2500 is suitable for use in a wide range of applications, including petroleum and chemical storage, paint and ink, wine and spirit vessels, food and beverage tanks, pulp tanks and water purification and wastewater treatment. Medium and high pressure requirements (to 300 psig) can be satisfied by either the Varec 2520 Series High Pressure Automatic Tank Gauge, or the Varec 6500 Series Precision Servo Powered Level Gauge.

All components necessary for installation of the 2500 are included in the Installation Kits, with the exception of the interconnecting piping.

STANDARD AND OPTIONAL FEATURES DIAL COUNTER

Varec offers English Fractional, English Decimal and Metric counter displays. English reading gauges are manufactured with the fractional dial as standard, with the decimal dial included at no extra charge, for customers requiring decimal level display. All dial/counters reflect product innage. For outage reading requirements, Varec offers a modification kit (P/N 13-08744) for English units of measure. Varec's dial/counter unit provides excellent readability while minimizing the possibility of parallax. Numerals are white on a black background.

STAINLESS STEEL FLOAT

A 316 stainless steel hollow shell float is provided with each standard and severe service gauge kit. Monel and Carpenter 20 floats are provided with their respective extreme service kits for aggressive chemical service such as sodium hydroxide and sulfuric acid. Floats are 14.5" diameter with 17" guide eyelet centers.

SHEAVE ELBOWS

Varec manufactures sheave elbows to exacting standards to ensure the 2500 performance specifications are met. Standard service 90 degree elbows are die cast aluminum with a tape keeper formed in the cover to ensure trouble free operation. Severe and extreme service gauge kits are provided with cast iron 90 degree sheave elbows. The moderate service kit (oftentimes food grade products) includes 316 S.S. elbows.

NEGATOR MOTOR

The negator motor eliminates the need for counterweights and pulleys to maintain tension on the perforated tape. The motor is a strip of flat spring stainless steel which has been given a curvature by continuous heavy forming at a constant radius. The standard motor is designed for use with storage tanks up to 60 ft. high. Extended range kits for tanks to 96 ft (29 m) are available from Varec.

LIQUID SEAL ASSEMBLY (OPTIONAL)

Varec offers three (3) liquid seals, which may be ordered separately, to prevent tank vapors from entering the tape piping system and the gaugehead. Please refer to the specifications below for working pressures, part numbers and materials.

MANWAYS AND INSPECTION COVERS (OPTIONAL)

To facilitate initial installation, and subsequent future inspection and service, Varec offers several manways and inspection covers. The Model 226 is available in either 20" or 24" size, with a drilled base conforming to API 650 Standard. Also available is the Model 228 inspection cover for welding to an existing manway cover.

2500 SPECIFICATIONS

Description	Service Type				
	Standard	Moderate	Severe	Extreme (NaOH)	Extreme (H ₂ SO ₄)
Gaugehead	Aluminum	Aluminum	Cast Iron	Cast Iron	Cast Iron
Sheave Elbows	Aluminum	316 S.S.	Cast Iron	Cast Iron	Cast Iron
Top Anchors	Steel	316 S.S.	Steel	Steel	Stl/Carp. 20
Bottom Anchor	Steel	316 S.S.	316 S.S.	Monel	Carp. 20
Guide Cables	316 S.S.	316 S.S.	316 S.S.	Monel	Carp. 20
Perforated Tape	316 S.S.	316 S.S.	316 S.S.	Monel	Carp. 20
Hollow Shell Float	316 S.S.	316 S.S.	316 S.S.	Monel	Carp. 20

Prod. Gravity Range: 0.7 to 1.5

Service Rating: Atmospheric to 2.5 psig

Gauging Range: 0-60 ft (0-18 m)

Extended Range: 0-96 ft (0-29 m)

Requires Kit 13-08772 (English) or 13-08773 (metric)

Shipping Weight: Varies with model. 70 lb (32 kg) to 110 lb (50 kg)

SHEAVE ELBOWS

90° Aluminum Sheave	06-08564
90° Cast Iron Sheave	BM4675
90° 316 S.S. Sheave	BM5074
135° Aluminum Sheave	BM3480
180° Aluminum Sheave	BM3481
Aluminum Tape Carrier	BM3621

FLOAT SPECIFICATIONS

	Material	Part Number
Diameter: 14.5" (36.8 cm)	316 S.S.	BM9074-000
Eyelet Centers: 17" (43.2 cm)	Carp. 20	BM12339-000
Net Weight: 10 lb (4.4 kg)	Monel	BM12338-000

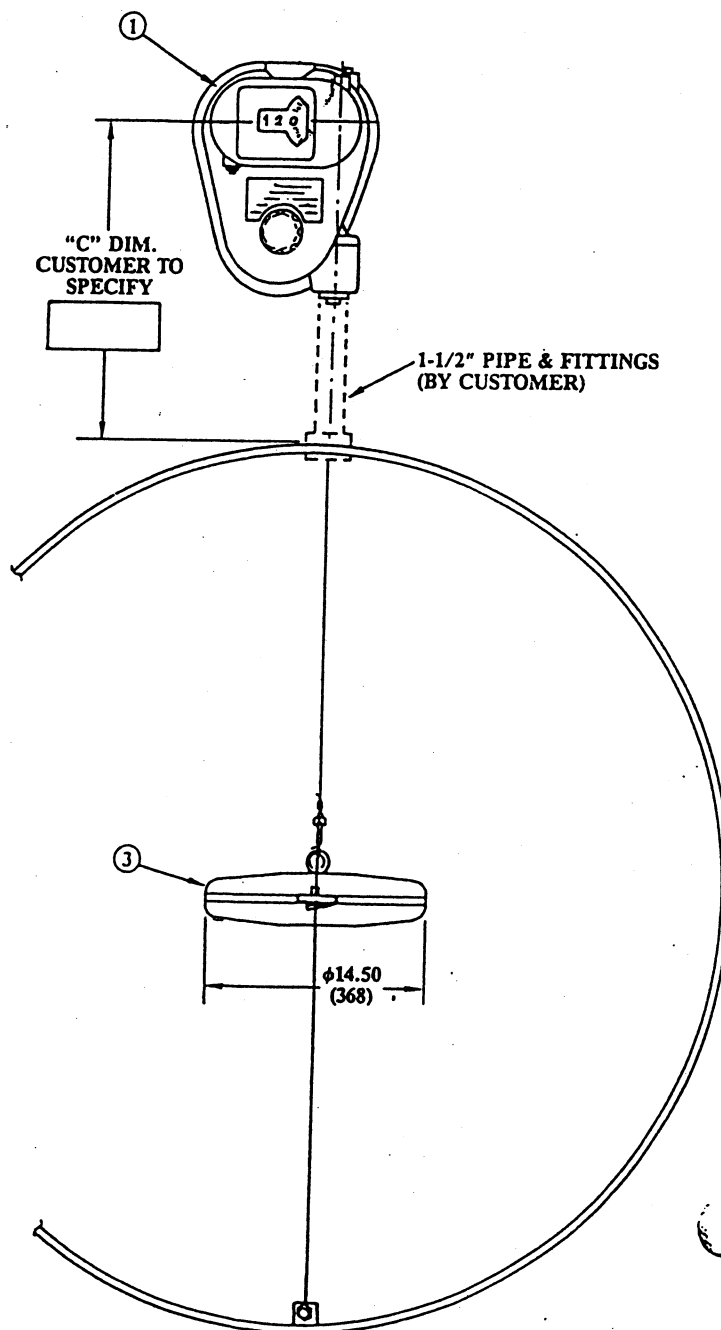
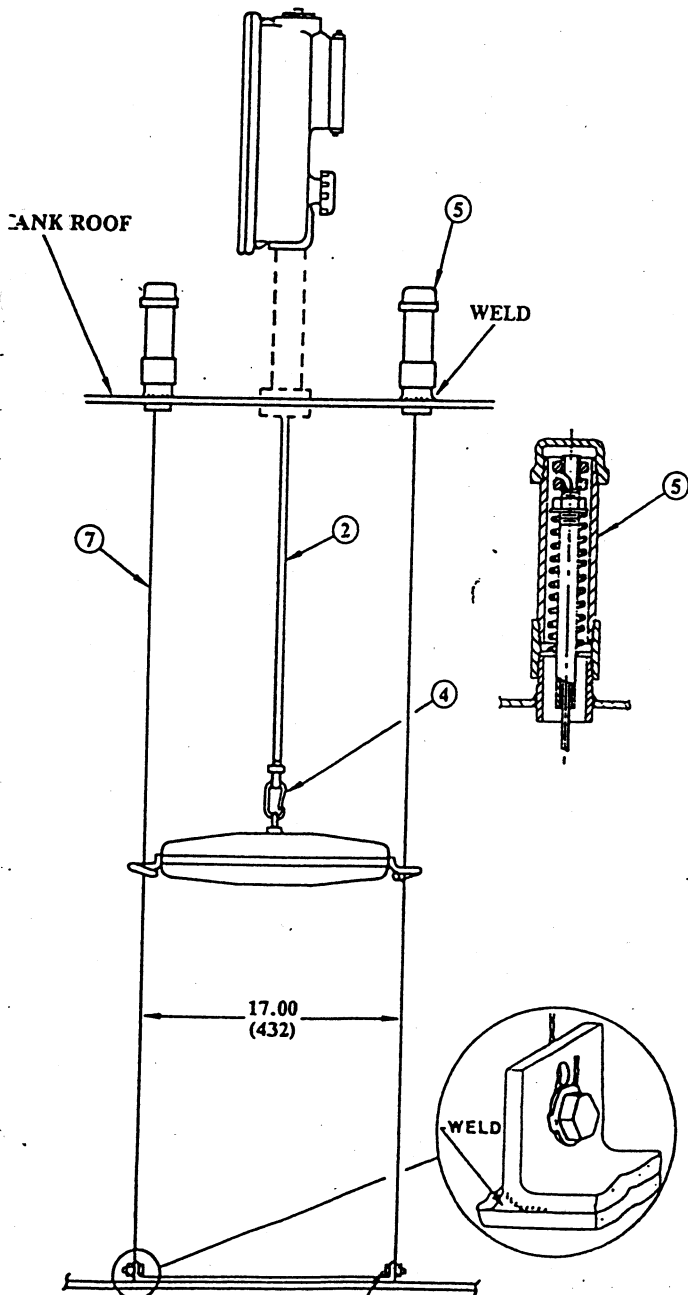
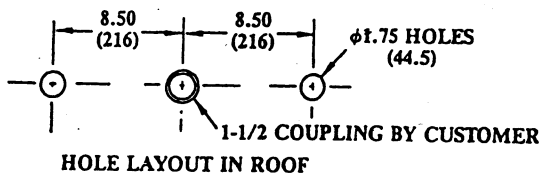
LIQUID SEALS

	Max Working Pressure	Part Number	Service
Aluminum Sheaves, Steel Pipe	8.5" W.C.	10-01994-AAA	Std.
Cast Iron Sheaves, Steel Pipe	8.5" W.C.	10-01994-BAA	Severe
Aluminum Sheaves, Steel Pipe	27" W.C.	10-02861-AAA	Std.

2500 SERIES AUTOMATIC TANK GAUGE

TOP/ROOF MOUNTING (2503)

Item	Description	Standard Materials
1	Gauge Head	Alum. Hsg. & Sheaves, 304 S.S. Trim
2	Tape	316 Stainless Steel
3	Float	316 S.S. Hollow Shell
4	Tape Fastener	316 Stainless Steel
5	Top Anchor	Stl. Hsg. & Spring Rod, Cad. Pl. Steel Spring
6	Bottom Anchor	Steel
7	Guide Cable	316 Stainless Steel

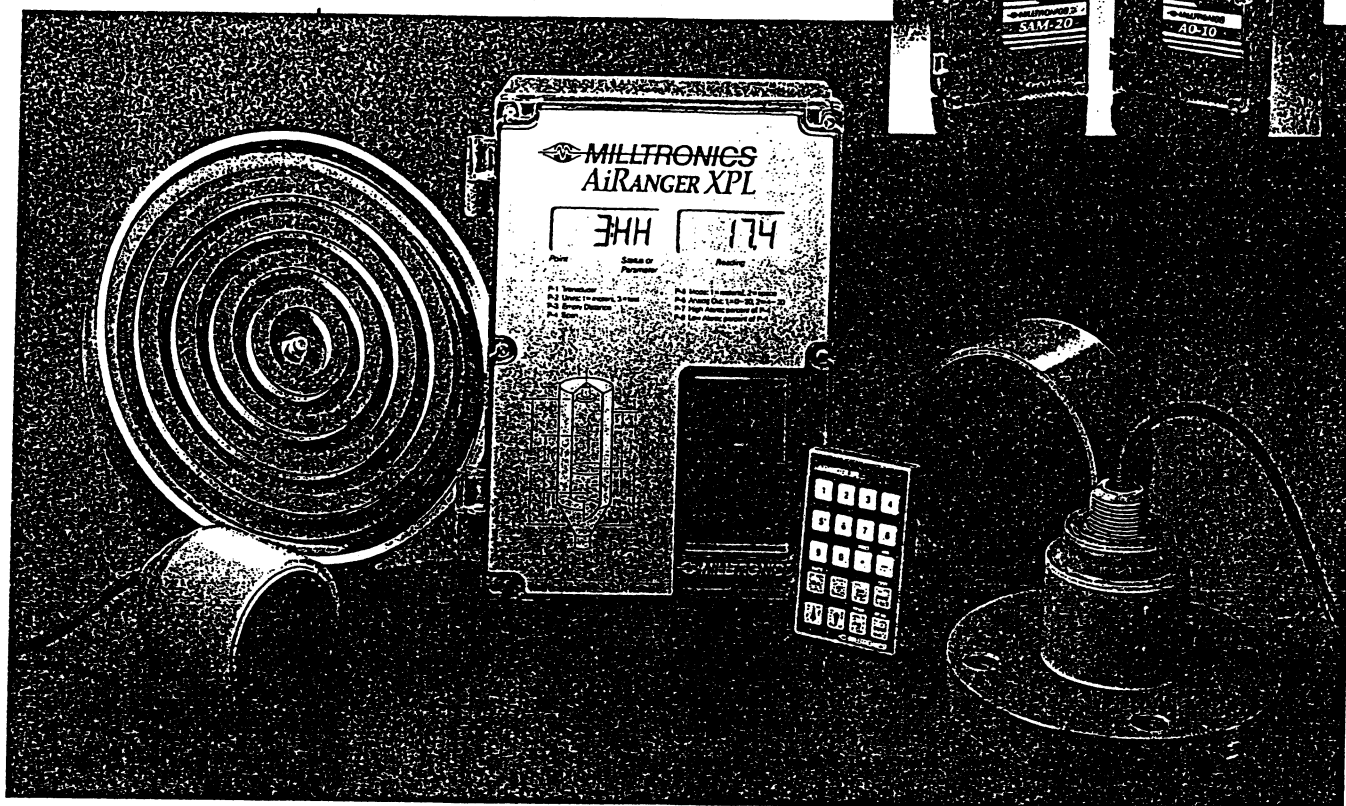


APPENDIX B2
TANK OVERFILL ALARM DOCUMENTATION

N.D. ERYOU, PH.D., P.E.
CONSULTING ENGINEER

SAFETY-KLEEN CORP.
COLONIE, NY

AiRanger XPL for measurement in 1 to 10 vessels



System flexibility

The flexibility for plant process measurement is exceptional. A single system monitors both liquids and bulk solids in 1 to 10 bins, in ranges up to 60 m (200 ft.). An AiRanger XPL can operate in conjunction with all of Milltronics transducers—including our new models for the 1990s. You can now monitor dissimilar vessels, materials, and environments, in varied locations within a plant area.

Easy use

This system offers ease of installation and set-up. Like our field-proven dual point system, eighty per cent of the AiRanger XPL systems will use the factory set-up without any adjustments. Calibration is simple. Enter just eight parameters of bin data and the XPL is operational. In service, even in constantly changing bin conditions, the system is self-adjusting.

Cost-effectiveness

Three factors contribute to cost-savings. First, as a modular system, you select only the options required. Second, installation cost is the lowest of any comparable system since the alarm and analog output modules are connected to the main display unit by a single two conductor cable. Finally, the main electronics can be located on the bin floor, near the transducers, which minimizes coaxial cable requirements and provides yet further economy.

The basic system

The basic AiRanger XPL system consists of a main display unit with a removable access programmer for easy operation. This system, which can be located up to 366 m (1200 ft) from the transducers, provides continuous bin data and alarm indication through its display, or through your computer via a serial interface. The rugged enclosure is totally sealed and all data is protected from power failure. You won't find a more economical way to monitor 1 to 10 points.

AO-10

When an analog output is required for either control or indication, use the compact AO-10. A group isolated 0-20 or 4-20 milliamp current output signal functions with 10 separate outputs. The settings are made through the main display unit, which may be located up to 1,500 m (5,000 ft.) from both the AO-10 and SAM-20.

SAM-20

When hardwired alarms in areas such as the motor control room are desirable, the SAM-20 unit provides individual alarm contacts. The assignment of high or low alarms is flexible, and capacity can be doubled using two units. In an active bin for instance, three or four alarms might be used; in another vessel, one might be sufficient. The choice is yours. The set-up is simple and is programmed through the main electronics.

Features

Versatility

The AiRanger XPL monitors both bulk solids and liquid levels in from one to ten vessels, in ranges up to 60 m (200 ft.). It matches this flexibility with technical excellence to master applications including high temperature, sanitary, dusty and steamy environments.

Accuracy/Resolution

The system provides achievable accuracy of 6 mm in ranges of 2400 mm or less, (0.25 inches in 8 feet), or 0.25% of selected range. Resolution is 0.1% of selected range, or 2 mm, whichever is greater.

Versatile Data Display

For convenience, all bin data is available in units of choice (meters, centimeters, feet, inches, liters, gallons) or expressed as a percentage of height or volume.

Maintenance-free Transducers

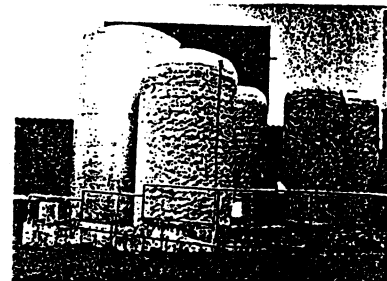
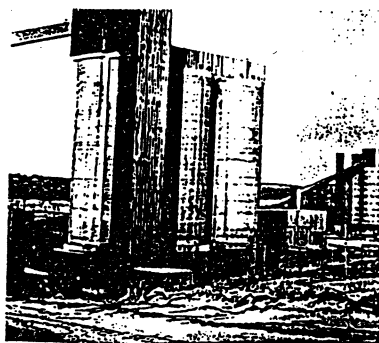
Millitronics high efficiency transducers do not require pre-amplification at the transducer head as do competitive units. The inconvenience of replacing basically inaccessible transducer circuit boards is eliminated with this system. You can install our units and forget about them, with the assurance of maintenance-free service, year after year.

Temperature Sensor

This unit is used for high accuracy applications to determine compensation for temperature variations within a bin. A sensor may be used in each bin, or in just one where it will represent the temperature of all.

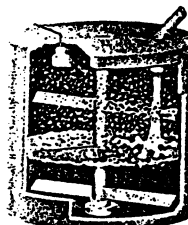
Volume Conversion

Pre-programming of exact mathematical equations for eight real world vessel configurations provides for precise volumetric measurement without the nuisance of having to determine and enter a specific height to volume conversion curve, as required with other systems.

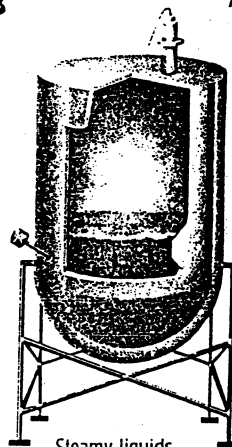


Sonic Intelligence masters the every day problems inherent in determining level or volume in highly active environments.

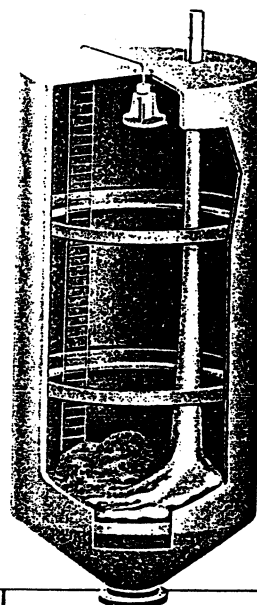
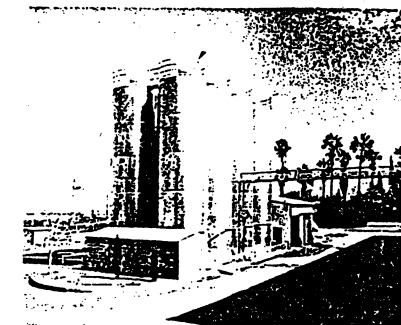
Turbulence



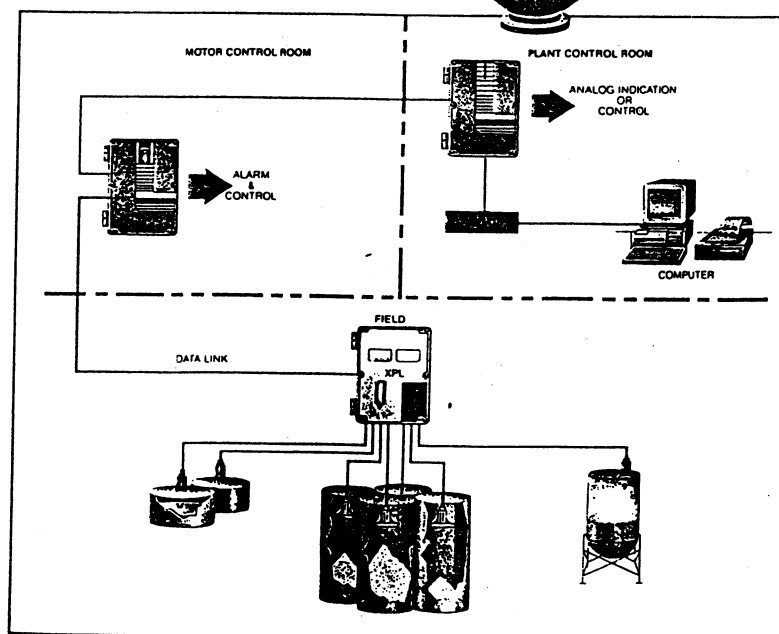
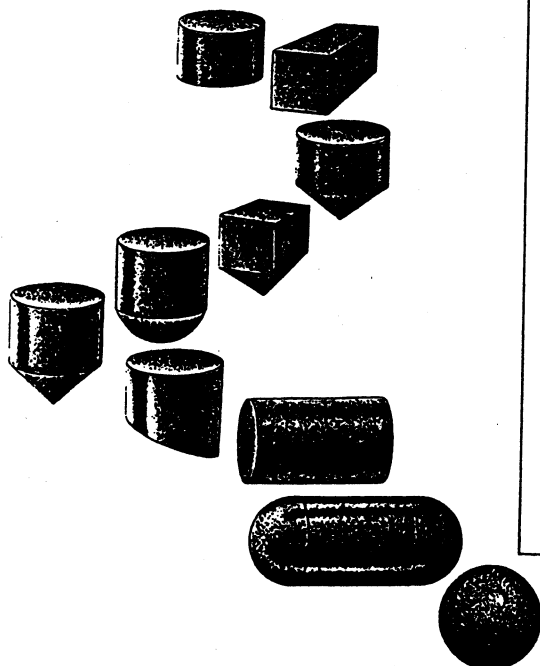
Agitators



Steamy liquids



Obstructions



Compared with any other multi-point ultrasonic measurement system, the AiRanger XPL features a configuration that is the most convenient and the most economical.

Specifications

Features:

Applications:

bulk solids and liquids levels

Number of Points:

up to 10 points any range, mixed frequencies
temperature input (individual or common)

Number of Alarms:

up to 40 (with up to 2 optional SAM-20s);
Level, Loss of Echo, Rate, Temperature, Band Alarm;
SPDT 250 VAC 5 amp non-inductive
completely programmable with up to 40 relays
(eg. allows HH, H, L, LL, LOE on one point)
up to 10 points on one relay allowing common alarm for
1-10 points
relays de-energize on alarm
LED indication on SAM-20, LCD indication on main unit of
level alarm status

Outputs: data link

bipolar current loop transmits to AO-10, SAM-20, BIC,
for easy hook-up and long distance noise immunity
(up to 1500 m (5,000 ft))

analog

4 to 20, 0 to 20 mA into 750 ohms max. (with optional
AO-10) up to 10 points with 0.1% resolution
assign to point, or average of selected points

Transducers:

ST-25HT, ST-25, ST-50, ST-100, LR-21, LR-13 and
variations

Display Units:

any engineering units

Conversions:

eight standard tank shape volume conversions, and
multiplier for non-standard display units

Programming:

removable magnetically attached programmer allows
programming without opening enclosure

Agitator Discriminator:

eliminates unwanted echoes from agitator blades

Spike Filter:

removes spikes from echo profile due to small objects,
or electrical noise

MK 3:

steadies display when minor changes on liquid surfaces
occur

Characteristics:

Display:

two 4 character 18 mm LCD displays

Resolution:

the greater of 0.1% of range, or 2 mm

Accuracy:

achievable to the greater of 0.25% of range or 6 mm

Echo Processing:

inherently adaptive echo extraction algorithms
manual algorithm selection for the most difficult applications

2 Damping Rates:

separate for fill & emptying;
adjustable in % of span/min.

Range:

up to 60 m (200 ft.) depending on transducer used

Blanking:

near—variable outward from 300 mm (1 ft.), depending
on transducer used
far—echoes beyond zero are ignored
range extension—variable from 0% (empty) into
far blanking

Operating Temperature:

—20°C to 60°C (—5°F to 140°F)

Power Supply:

15 VA @ 100/115/200/230 V±15% (50/60 HZ), jumper
selectable

Transducer/Temperature Sensor Separation:

up to 366 m (1200 ft.)

Cables:

—cable between transducer and XPL: RG62 U or equivalent
—cable between AO/SAM-20/temp. sensor and XPL:
Belden 8767 or equivalent

Options

TIB:

—10 point temperature scanner (mounts in XPL enclosure)

AO-10:

—10 current output channels, group isolated
—bipolar ASCII receive at 4800 baud, automatic polarity
—15 VA @ 100/115/200/230 V±15% 50/60 HZ jumper
selectable
—max. separation from electronics: 1,500 m (5,000 ft)

SAM-20:

—20 alarm relays with LED alarm indication
—bipolar ASCII receive at 4800 baud, automatic polarity
—transmit of received message (buffer)
—17 VA @ 100/115/200/230 V±15% 50/60 HZ jumper
selectable
—max. separation from electronics: 1,500 m (5,000 ft)

Physical Description

Packaging:

NEMA 4 construction polycarbonate enclosure:
209×285×92 mm (8.2×11.2×3.6 in) for XPL main unit,
AO-10, and SAM-20

Programmer:

ABS case with membrane keypad; 100×67×25 mm
(4×2.6×1 in)

MILLTRONICS

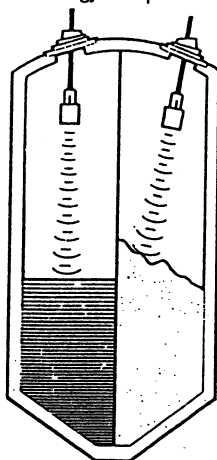
NON-CONTACTING ULTRASONIC TRANSDUCERS

Milltronics non-contacting ultrasonic technology provides industry with safe efficient process measurement. Our systems monitor levels from a few inches to 200 feet, on materials ranging from corrosive liquids to dry bulk solids. Because of their patented design, Milltronics transducers enable our systems to operate in applications including dust, steam, bin obstructions, as well as environmental noise.

In operation, a Milltronics transducer emits sonic pulses and captures the echoes which are reflected from the target material. The two way transit time is converted electronically into distance, level or volume, and presents the data as digital or analog signals.

Milltronics transducers are designed specifically to provide high level signal returns without

Ultrasonic Technology on Liquids and Bulk Solids



pre-amplification or in-field signal enhancement. This factor, combined with a unique echo processing capability is the foundation of our system reliability.

Features:

- maintenance-free operation
- self-cleaning
- totally enclosed—no moving parts
- temperatures as high as 300°F
- no bin top electronics required
- faces and flanges for acids, corrosives and sanitary applications
- ranges from 12 inches to 200 feet
- approvals for hazardous areas
- large echo capture area

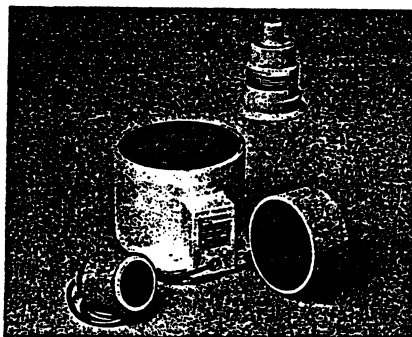
Short to Medium Range ST Series Transducers

The ST series Ultrason[®] transducers offer maximum operating efficiency for ranges to 100 feet. These maintenance-free units can be faced with protective coatings for both wet, corrosive applications and dry, dusty applications with high attenuation. In these dry applications, the radiating surface is self-cleaning. For corrosive applications, use of the flanged unit for standpipe mounting exposes only the protected face to the environment.

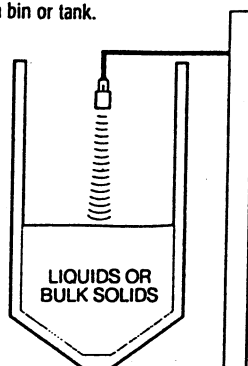
Long service is assured. Today, applications over twenty five years old still operate with original transducers.

Operating Advantages

- Acoustic impedance matching strengthens signals returned
- Self-cleaning radiating surface
- Operation in a wide temperature range
- Rugged construction
- Facing materials extend application possibilities



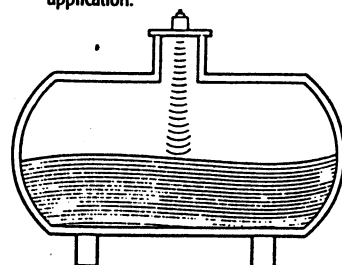
Typical ST 25 or 50 on an open bin or tank.



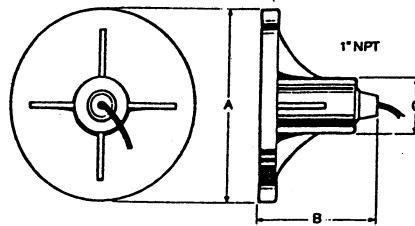
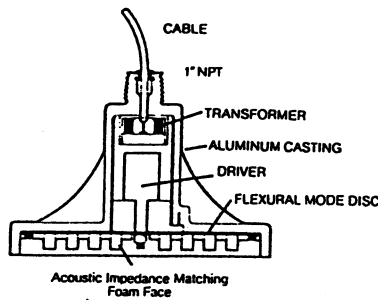
High Temperature and Sanitary Flange Transducers

In response to the needs of industry, Milltronics has developed transducers with advanced technical features which allow wider application possibilities. The high temperature ST25HT, with Teflon face, is designed to monitor processes with temperatures as high as 300°F. The ST25 CST sanitary transducer is designed for quick removal in applications where tank cleaning is important.

Typical ST 25 & 50 flange-mounted application.



Construction of LR Transducers



	LR-13-FM	LR-21-FM
"A"	14"	10.5"
"B"	9"	7"
"C"	3"	3"

Long Range LR Series Transducers

The patented LR series flexural mode transducers provide maximum acoustic coupling to assure superior operation in ranges to 200 feet. These transducers feature large echo capture areas to assure accurate measurement in applications with high signal attenuation.

When operating, the vibrating action of the sonic pulse assures maintenance-free service in applications characterized by dust. Conditions such as turbulence, steam, and environmental noise can also be overcome. The LR transducers master other applications such as coal, flour, and grain silos to mention a few.

Operating Advantages

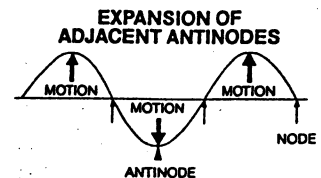
1. High Efficiency: Tests show that the LR series transducers are from 14 to 400 times more powerful than other transducer designs with comparable power requirements.
2. Narrow Beam Width: Typically 5.5° or better at -3db for maximum concentration of ultrasonic energy.
3. Sidelobes: Unwanted off-axis transmissions are suppressed by a very effective -19db.
4. Small Deadband: The more efficient coupling to the air path results in a shorter ring down period and therefore provides a shorter minimum range of 3 ft.
5. Maximum Range: Up to 200 ft.
6. Impervious to Dust Buildup: Exclusive self-cleaning action provides reliable maintenance-free operation in dusty areas.
7. Effective operation in moist environments.

Principle of Operation

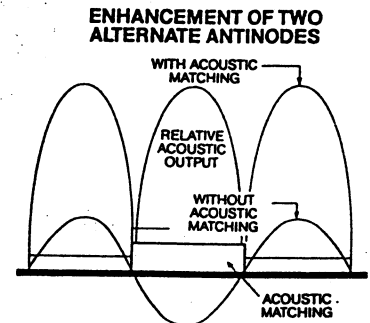
1. The diagram shows a cross section of a vibrating disc.



2. An expanded section of the disc shows adjacent antinodes. Note the out of phase motion which effectively cancels the sound wave and would result in a sonic pulse of little strength.

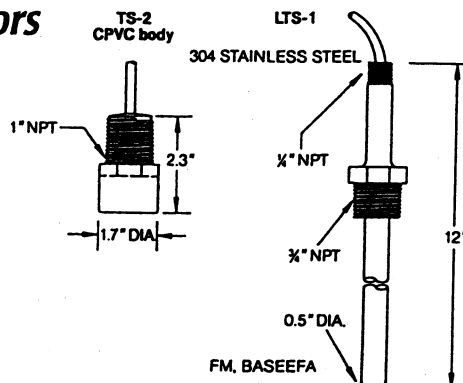


3. To produce an intense sonic pulse, we increase the radiation efficiency of the LR transducer by applying multiple layers of impedance-matching material to the disc face in a precisely determined pattern. Developed by, and patented solely to Milltronics, this technique results in the production of the most efficient sonic wave. This is the basis of the unmatched superiority of the LR series in determining levels to 200 ft.



Temperature Sensors

Temperature sensor holds output variation to within 0.01% per °C of range per °C of change.



TS-2:
range—(-40 to 158°F)
construction—CPVC body
—totally encapsulated
—teflon faced
approvals—CSA, FM and BASEEFA

LTS-1:
range—(-40 to 200°F)
construction—304 stainless steel
—totally encapsulated
—for corrosive environments
approvals—FM and BASEEFA

ST Series Approvals:

CSA	Class I Gr. A, B, C, D Class II Gr. F & G
FM	For ST-25 and ST-50 Series Class I, Div. 1, GR. A, B, C, D Class II, Div. 1 Gr. E, F, & G For ST-100 series Class II, Div. 1, Gr. E, F, & G
SAA	Ex s IIB T6 Class I, Zone 0 DIP T6 IP65
BASEEFA	EEx m II T5 Ex s II, Zone 0
CENELEC	EEx m II T5 (T amb = 70°C)
3A	For ST25 CST Authorized to display the 3A symbol. Standard #37-01

LR Series Approvals

CSA	Class I, Gr. D Class II, Gr. E, F & G
FM	Class I, Div. 1, Gr. A, B, C & D (outside tank) Class I, Div. 1, Gr. D, Methane only (inside tank) Class II, Div. 1, Gr. E, F, G
SAA	Ex s, IIB, T6, Class I, Zone 0 DIP T6, IP65
BVS	Zone 10, IP 65
BASEEFA	EEx m II, T5 Ex s II, Zone 0
CENELEC	EEx m II T5 (T amb = 70°C)

Condensed approval listing.

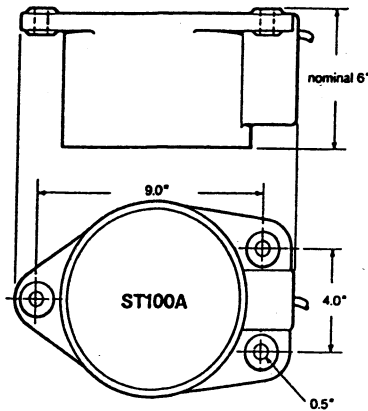
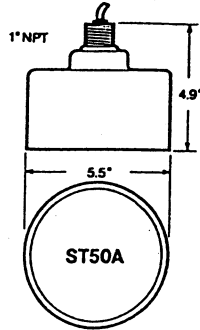
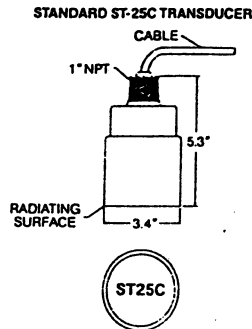
Specifications

STANDARD TRANSDUCERS

STANDARD TRANSDUCERS						FACINGS				TEMPERATURE			APPLICATIONS					
	MAX. RANGE M	MAX. RANGE FT	FREQUENCY	B E A M A N G L E	H O U S I N G	U R E T H A N E	P O L Y E T H Y L E N E F O A M	C P V C	T E F L O N	-40 +93°C -40 +200°F	-40 +77°C -40 +170°F	-20 +150°C -4 +300°F	W E T	D U S T Y	C O R R O S I V E	S A N I T A R Y	F L A N G E	F R E C U R R E D
ST25C	7.6	25	41.5	12°	CPVC	X				X			X					
ST25CP	7.6	25	41.5	12°	CPVC		X				X			X				
ST25CV	7.6	25	41.5	12°	CPVC			X		X			X		X			
ST25CT	7.6	25	41.5	12°	CPVC				X	X			X		X			X
ST25CST	7.6	25	41.5	12°	CPVC				X	X			X			X		
ST50A/U	15.2	50	41.5	5°	CPVC	X				X			X					
ST50AP/UP	15.2	50	41.5	5°	CPVC		X				X			X				
ST50AV/UV	15.2	50	41.5	5°	CPVC			X		X			X		X			
ST50AT/UT	15.2	50	41.5	5°	CPVC				X	X			X		X			X
ST100A	30.5	100	21	7°	Alum.	X				X			X					
ST100AP	30.5	100	21	7°	Alum.		X				X			X				
ST100AV	30.5	100	21	7°	Alum.			X		X			X					
ST25HT	7.6	25	44	13°	SUPEC				X			X	X	X				
ST25HT4	7.6	25	44	13°	SUPEC				X			X	X		X			X
LR-21	30	100	21	5.5°	Alum.		X				X			X				
LR-13	61	200	13	5.5°	Alum.		X				X			X				

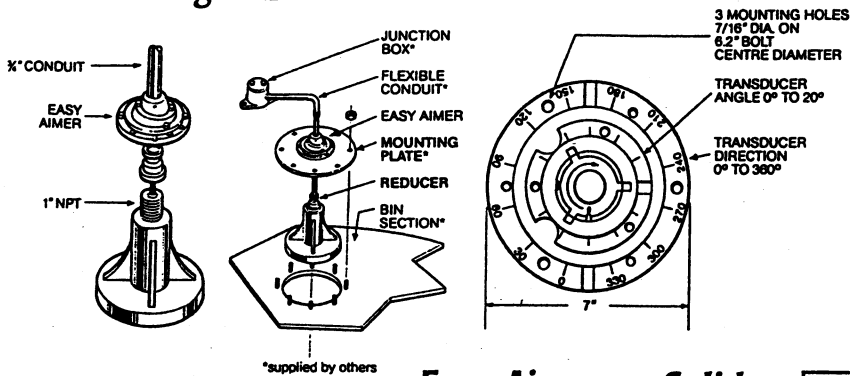
° approvals pending

Mounting Dimensions



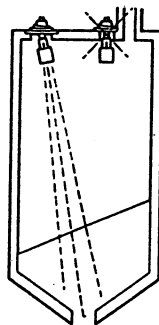
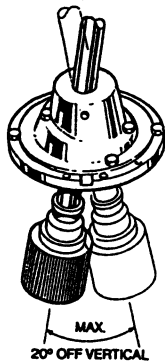
Consult factory for installation instructions and cable length requirements.

Installation of ST25/50 and LR Transducers with Aiming Kits



*supplied by others

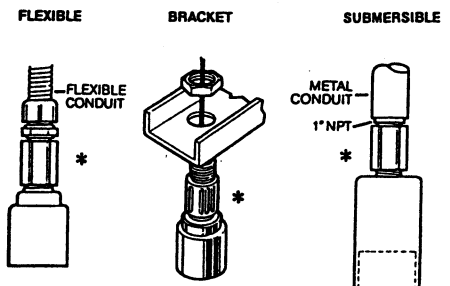
Easy Aimer on Solids



The Easy Aimer

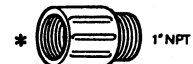
This option is recommended for use on all transducers with a top threaded connection when used on bulk solids applications. ST-100 series transducers will not use this unit. The Easy Aimer allows easy mounting and aiming of the transducer so that optimum performance is achieved whenever the material angle of repose is of concern. The device has a diameter of approximately 7 inches and a height of 3 inches. The kit includes 12 inches of 3/4 inch aluminum conduit and neoprene gasket.

Mounting: ST-25 & ST-50



Use a flexible conduit or suspend the transducer on proper cable

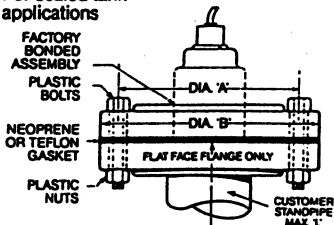
PVC ISOLATOR NIPPLE KIT



ASSURES OPTIMUM PERFORMANCE

Flange Mounted ST 25 & 50 Transducer

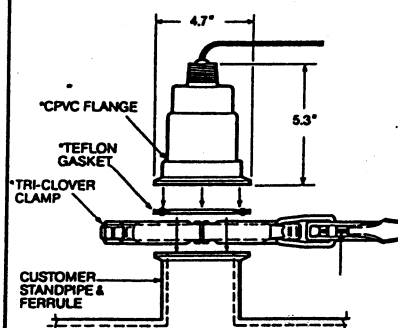
For sealed tank applications



FLANGE SIZE	DIA. 'A'	DIA. 'B'	MAX. 'L'
3"	6"	7.5"	12"
4"	7.5"	9"	12"
6"	9.5"	11"	14"
8"	11.75"	13.5"	16"
12"	17"	19"	24"

*ST 25 only

Sanitary Flange



*Milltronics supplied

3A authorized Standard #37-01

APPENDIX B3
TANK AND PIPING TEST PROCEDURE

SAFETY-KLEEN CORP.
ABOVE GROUND, PRE USE TANK TESTING PROCEDURE
Revised Nov. 5, 1990

SPECIFICATION FOR TANK AND PIPE TESTING

The EPA has mandated that all Hazardous Liquid Storage Tanks and related piping be leak tested. Air pressure is the method herein to be utilized for these tests.

All tanks are to be air pressure tested to 4.0 psi plus or minus 5% or plus or minus 0.2 psi. Each tank must hold this pressure within that 5% tolerance for a period of 30 minutes. For example, the pressure may drop to 3.8 psi in 30 minutes for a tank initially pressurized to 4.0 psi. No more loss will be accepted.

All piping is to be air pressure tested to 85.0 psi plus or minus 4.0 psi. Each piping run must hold this pressure within that 5% tolerance for a period of 45 minutes. For example, the pressure may drop to 81.0 psi in 45 minutes for a piping run initially pressurized to 85.0 psi. No more loss will be accepted.

The Testing Company will be required to have at least one pressure gauge measuring 0-10 psi in maximum 1 psi increments, and one pressure gauge measuring 0-100 or 0-150 psi in maximum 5 psi increments. At least two quick disconnects and two shut-off valves at the disconnects will also be required, the disconnects to permit the application of pressurized air to the system and the valves to be able to close off the pressurized tank or piping system, to check the ability of the tested system to maintain the test pressure within the limits described previously. Also required will be an air compressor with at least a capacity of 100 psi.

TEST TANK PROCEDURE

1. Disconnect the top-of-tank fill line if present, seal and plug the hole in the tank.
2. Remove the long bolts from the top manhole cover and install short bolts and nuts in ALL holes. Make sure the cover is gasketed. Fully tighten.
3. Remove the tank vent and tank gauging if installed, and seal and plug the holes.
4. Close all tank valves securely.
5. In a previously unused 2" or 3" port near the base of the tank, install the pressurizing assembly consisting of the 1-10 psi pressure gauge, a shut-off valve and a quick disconnect.
6. Seal and plug any remaining holes in the tank, including the side manhole cover which is to be gasketed and fully bolted in ALL holes.
7. Record the Manufacturer's Tank No. and any labeling plates (written word for word) installed on the tank. Also make note if they are missing.

SAFETY-KLEEN CORP.
ABOVE GROUND, PRE USE TANK TESTING PROCEDURE
Revised Nov. 5, 1990
Page 2

8. Pressurize the tank to 4.0 psi. Record the time. Soap water test all plugged openings, joints and around the manhole covers and their bolts. The tank can lose no more than 0.2 psi in 30 minutes. Check for leaks with soap water solution and repair as required. Repeat the procedure until the tank will hold the test pressure for the required 30 minute test period.
9. LEAVE THAT TANK IN THIS CONFIGURATION UNTIL THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE TESTING HAS OBSERVED THE TEST REPEATED IN HIS PRESENCE AND HAS ACCEPTED THE TANK FOR USE.
10. Remove the short bolts from the top manhole cover and install a long bolt with double nuts at the end of the bolt in every third hole around the perimeter of the cover. This cover functions as an explosion pressure release. It MUST be fastened loosely as herein described. This will permit the cover to raise about 5" under extreme pressure.
11. Re-install the tank vent and tank fluid level gauging equipment as per the Safety-Kleen drawings and specifications.
12. Remove the tank pressurizing assembly and seal and plug the port.
13. Repeat Steps 1 through 12 for each tank being tested.
14. When the piping tests have been completed, re-connect the tank fill lines, if applicable.
15. This completes the tank testing.

PIPING TEST PROCEDURE

(Note that each tank/piping system is to be tested separately. Follow procedures below for each system.)

1. Disconnect the top-of-tank fill line, if present. Seal and plug the hole in the end of line.
2. Remove the Return Line pump and the Fill Line pump and install by-pass piping of equivalent size. Tighten securely.
3. Close all tank valves securely. Close valve at the dumpsters securely. Make sure all piping ends are capped and sealed.
4. Test the Return Line and the Fill Line separately.
5. In the end of the piping segment being tested, install the pressurizing assembly consisting of the 1-100 psi or 0-150 psi pressure gauge, a shut-off valve and a quick disconnect.

SAFETY-KLEEN CORP.
ABOVE GROUND, PRE USE TANK TESTING PROCEDURE
Revised Nov. 5, 1990
Page 3

6. Pressure the line to 85.0 psi. Record the time. Soap water test all plugged openings, joints and other connections. The line can lose no more than 4.0 psi in 45 minutes. Check for leaks with the soap water solution and repair the line as required. Repeat the procedure until the line will hold the test pressure for the required 45 minute test period.
7. LEAVE THE LINE IN THIS CONFIGURATION UNTIL THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE TESTING HAS OBSERVED THE TEST REPEATED IN HIS PRESENCE AND HAS ACCEPTED THE LINE FOR USE.
8. Remove the tank pressurizing assembly and re-install the proper fittings as per the Safety-Kleen drawings and specifications.
9. Repeat Steps 1 through 8 for each piping segment until all segments have been tested.
10. When the tank testing has been completed, re-connect the tank fill lines, if applicable.
11. This completes the piping test.

CONCLUSIONS

The systems will only accepted for use after both tank and piping tests have been completed and accepted by the Professional Engineer responsible for the testing.

It is the responsibility of the Testing Contractor to clean up the site of all testing materials and fluids which may have been spilled during the testing.

Submitted by:

APPENDIX B4
TANK AND PIPING TEST REPORT

N.D. ERYOU, PH.D., P.E.
CONSULTING ENGINEER

SAFETY-KLEEN CORP.
COLONIE, NY



FPI Mechanical, Inc.

MECHANICAL CONTRACTOR

11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

Telephone (518) 783-7066
FAX (518) 783-7069

N. Dennis Eryou, PE
Consulting Engineer
8 Ivy Place
Huntington, N.Y. 11743

November 10, 1993

Re: Test reports for Safety Kleen - Colonie, N.Y.

Dennis:

This is a note to confirm that the tank and pipe tests performed and witnessed at your Colonie, NY facility were completed in accordance with SK's test procedures.

The pressure gauge used for the tank test was made by Weksler Instrument with a range of 0 to 10 psi with 0.1 psi increments. The gauge used for the piping tests was also a Weksler model with a 0 to 160 psi range. Both gauges had been recently calibrated by Industrial Instrumentation Inc. of Schenectady, NY.

As shown on the test reports, there was no pressure fluctuation witnessed for the duration of the tests. The weather conditions were calm on the days of the tests and the outside air temperature remain constant during the time the tests were in progress. The sky was cloudy on both days and we did not see any pressure rise from passive solar heating of the tank or pipes.

If you have any further questions, please feel free to call me.

Sincerely,

Joseph P. Herkenham
Joseph P. Herkenham, PE





FPI Mechanical, Inc.
MECHANICAL CONTRACTOR
11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

TEST
REPORT

Project: SAFETY KLEEN
COLONIE, N.Y.

To: DAVE PACQUETTE / DENNIS ERYOV

FPI Job No. 2935

LINE NO. : USED MINERAL SPIRITS

LINE PRESSURE : _____

LINE SIZE(S) : 2"

LINE SERVICE : USED MINERAL SPIRITS

SOURCE POINT : AT EAST WALL OF BUILDING

TERMINATION POINT : NOZZLE ON TOP OF USED MINERAL SPIRITS TANK

TEST MEDIUM : COMPRESSED AIR

TEST PRESSURE : 92 PSIG

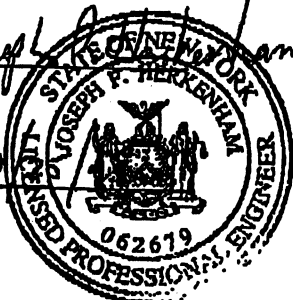
TEST DURATION : 4.5 HOURS

LOCATION OF BLINDS/FRYPANS : INSIDE BUILDING AND AT TANK NOZZLE

OWNER'S REPRESENTATIVE

SIGNATURE : Joseph P. Herkenham

DATE : 10/25/93



FPI MECHANICAL REPRESENTATIVE

SIGNATURE : John Huda

DATE : 10/25/93



FPI Mechanical, Inc.
MECHANICAL CONTRACTOR
11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

TEST
REPORT

Project: SAFETY KLEEN
COLONIE, N.Y.

To: DAVE PACQUETTE / DENNIS ERYOU

FPI Job No. 2933

VESSEL
LINE NO. : USED MINERAL SPIRITS TANK LINE PRESSURE : _____

LINE SIZE(S) : _____ LINE SERVICE : _____

SOURCE POINT : TANK

TERMINATION POINT : TANK

TEST MEDIUM : COMPRESSED AIR

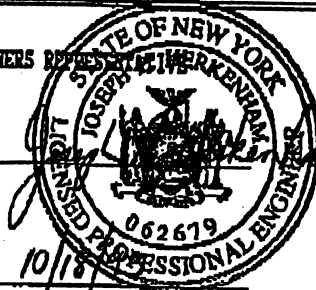
TEST PRESSURE : 2.6 PSIG

TEST DURATION : 3 HOURS

LOCATION OF BLINDS/TRYPANS : ALL TANK OUTLETS

SIGNATURE : _____

DATE : 10/18/93



FPI MECHANICAL REPRESENTATIVE

SIGNATURE : John Mulo

DATE : 10/18/93



FPI Mechanical, Inc.
MECHANICAL CONTRACTOR
11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

TEST
REPORT

Project: SAFETY KLEEN
COLONIE, N.Y.

To: DAVE PALQUETTE / DENNIS ERYOU

FPI Job No. 2933

LINE NO. : NEW MINERAL SPIRITS SUPPLY LINE PRESSURE : _____
LINE SIZE(S) : 3" LINE SERVICE : NEW MINERAL SPIRITS
SOURCE POINT : TRUCK OFFLOAD SPILL CONTAINER
TERMINATION POINT : NEW MINERAL SPIRITS TANK

TEST MEDIUM : COMPRESSED AIR
TEST PRESSURE : 85 PSIG
TEST DURATION : 2 HOURS
LOCATION OF BLINDS/FRYPANS : AT TANK NOZZLE

OWNERS REPRESENTATIVE

SIGNATURE : _____

DATE : _____



FPI MECHANICAL REPRESENTATIVE

SIGNATURE : _____

DATE : 10/19/93



FPI Mechanical, Inc.
MECHANICAL CONTRACTOR
11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

TEST
REPORT

Project: SAFETY KLEEN
COLONIE, N.Y.

FPI Job No. 2953

To: DAVE PACQUETTE / DENNIS ERYOU

VESSEL
LINE NO. : NEW MINERAL SPIRITS TANK

LINE PRESSURE : _____

LINE SIZE(S) : _____

LINE SERVICE : _____

SOURCE POINT : TANK

TERMINATION POINT : TANK

TEST MEDIUM : COMPRESSED AIR

TEST PRESSURE : 2.2 PSIG

TEST DURATION : 3 HOURS

LOCATION OF BLINDS/FITTINGS : ALL TANK NOZZLES

OWNER'S REPRESENTATIVE

SIGNATURE : _____

DATE : _____



FPI MECHANICAL REPRESENTATIVE

SIGNATURE : _____

DATE : _____

10/20/93



FPI Mechanical, Inc.
MECHANICAL CONTRACTOR
11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

TEST
REPORT

Project: SAFETY KLEEN
COLONIE, N.Y.

To: DAVE PACQUETTE / DENNIS ERYOU

FPI Job No. 2933

LINE NO. : NEW MINERAL SPIRITS LINE LINE PRESSURE : _____

LINE SIZE(S) : 2" LINE SERVICE : NEW MINERAL SPIRITS

SOURCE POINT : PUMP ON TANK

TERMINATION POINT : FRYPAN INSIDE BUILDING.

TEST MEDIUM : COMPRESSED AIR

TEST PRESSURE : 92 PSIG

TEST DURATION : 4 HOURS

LOCATION OF BLINDS/FRYPANS : INSIDE BUILDING AND AT PUMP

OWNERS REPRESENTATIVE

SIGNATURE : Joseph P. Brennan

DATE : 10/25/93



FPI MECHANICAL REPRESENTATIVE

SIGNATURE : John Eryou

DATE : 10/25/93



FPI Mechanical, Inc.
MECHANICAL CONTRACTOR
11 GREEN MOUNTAIN DRIVE • COHOES, NEW YORK 12047

TEST
REPORT

Project: SAFETY KLEEN
COLONIE, N.Y.

To: DAVE PACQUETTE / DENNIS ERYOU

FPI Job No. 2933

LINE NO. : USED MINERAL SPIRITS LINE LINE PRESSURE : _____

LINE SIZE(S) : 3" LINE SERVICE : USED MINERAL SPIRITS.

SOURCE POINT : USED MINERAL SPIRITS TANK

TERMINATION POINT : TRUCK UNLOAD SPILL CONTAINER CABINET

TEST MEDIUM : COMPRESSED AIR

TEST PRESSURE : 85 PSIG

TEST DURATION : 2 HOURS

LOCATION OF BLINDS/FRYPANS : AT TANK NOZZLE

OWNERS REPRESENTATIVE

SIGNATURE : _____

DATE : _____



FPI MECHANICAL REPRESENTATIVE

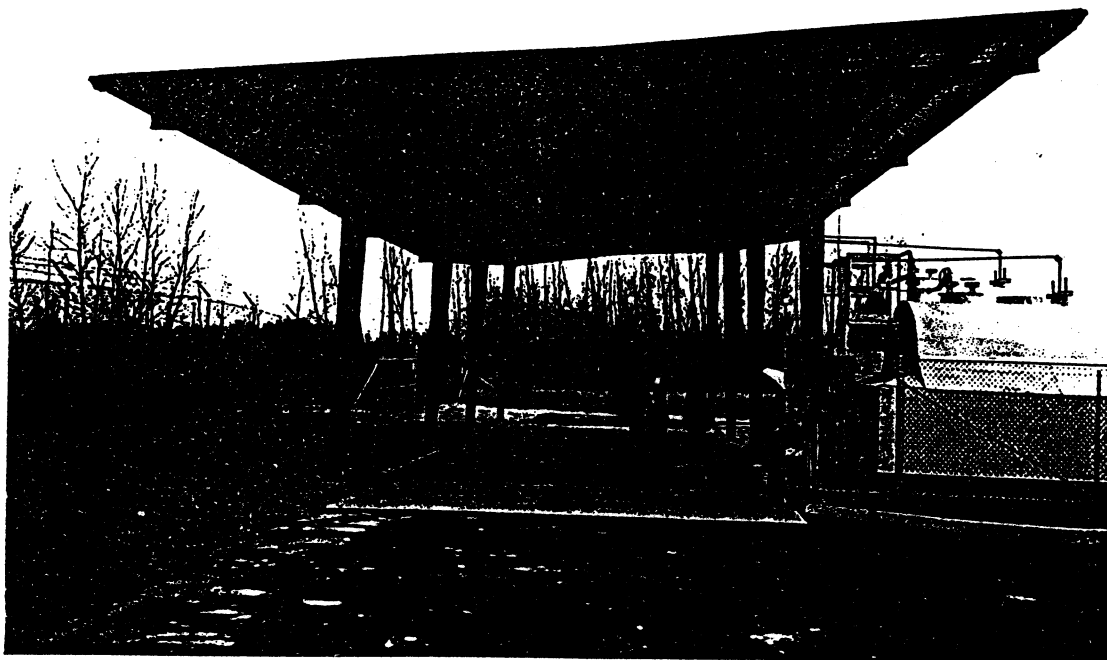
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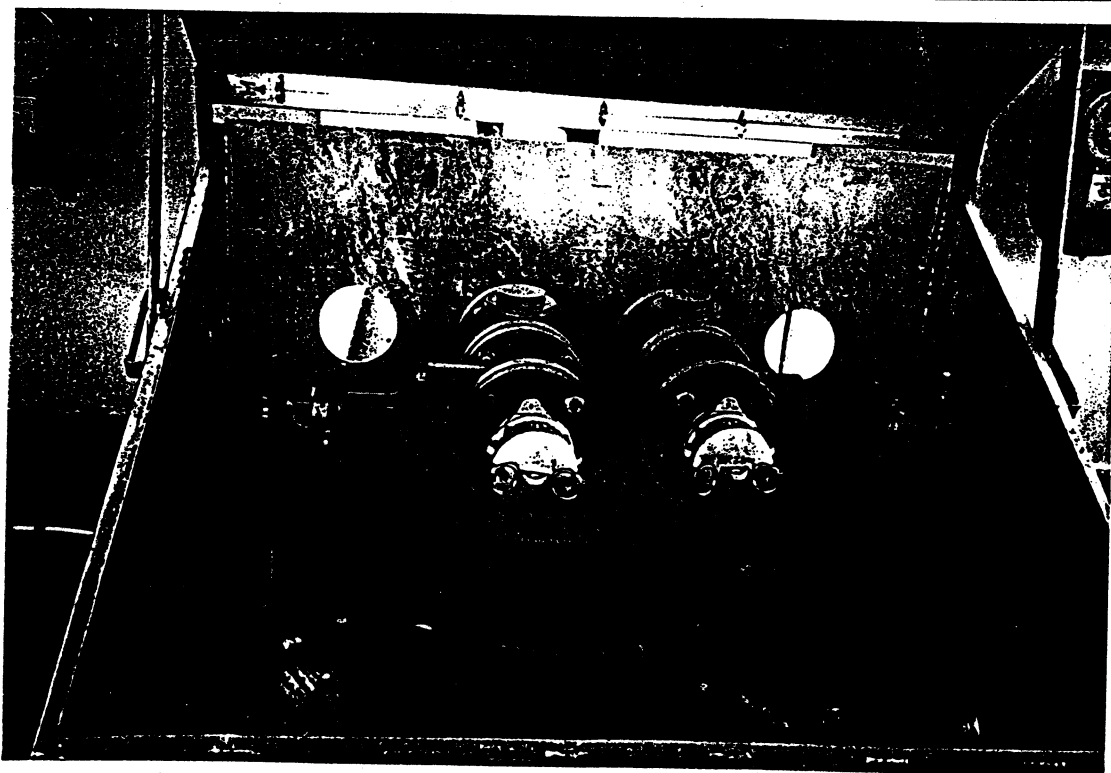
J. H. Gula

10/25/93

APPENDIX C PHOTOGRAPHS



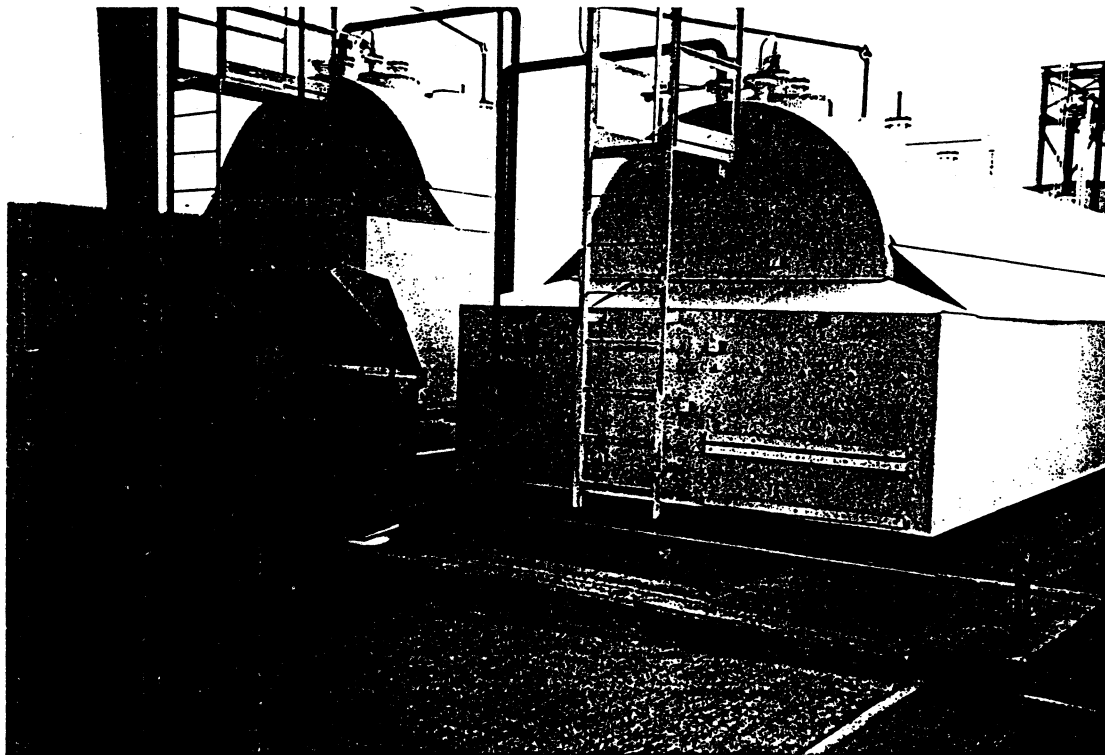
END VIEW OF TRANSFER PAD AND CANOPY



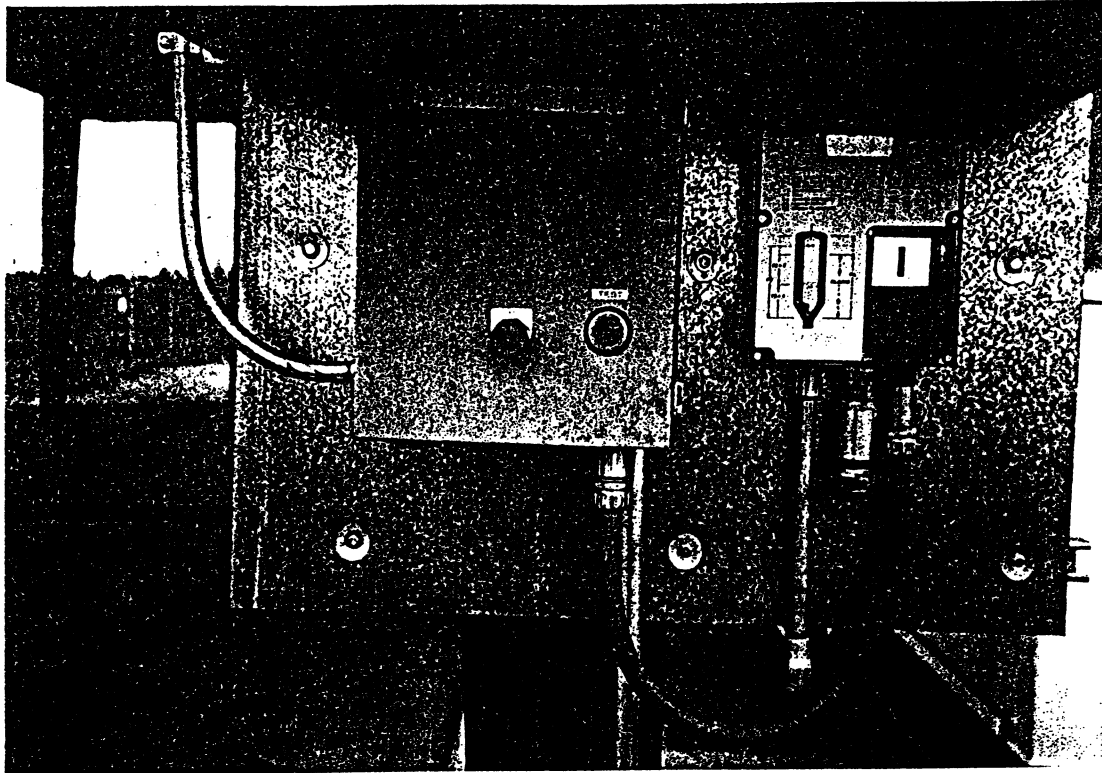
VIEW OF TANKER ACCESS CONTAINER



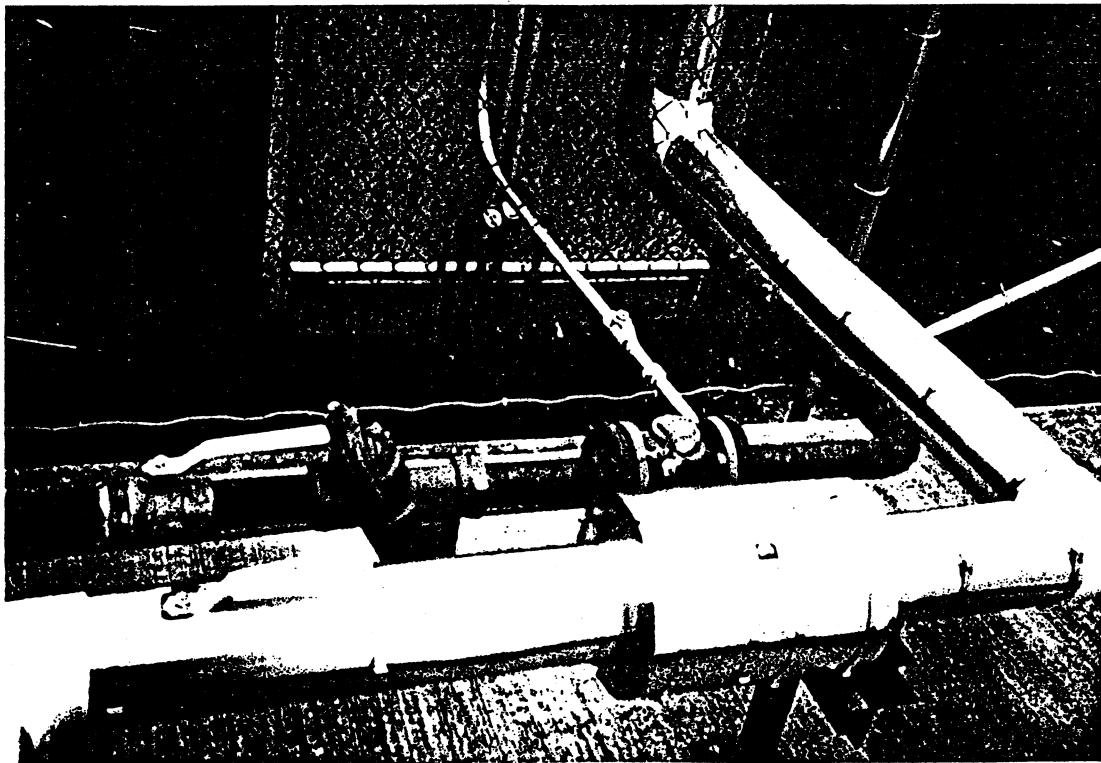
SIDE VIEW OF HAZARDOUS MATERIALS TANK



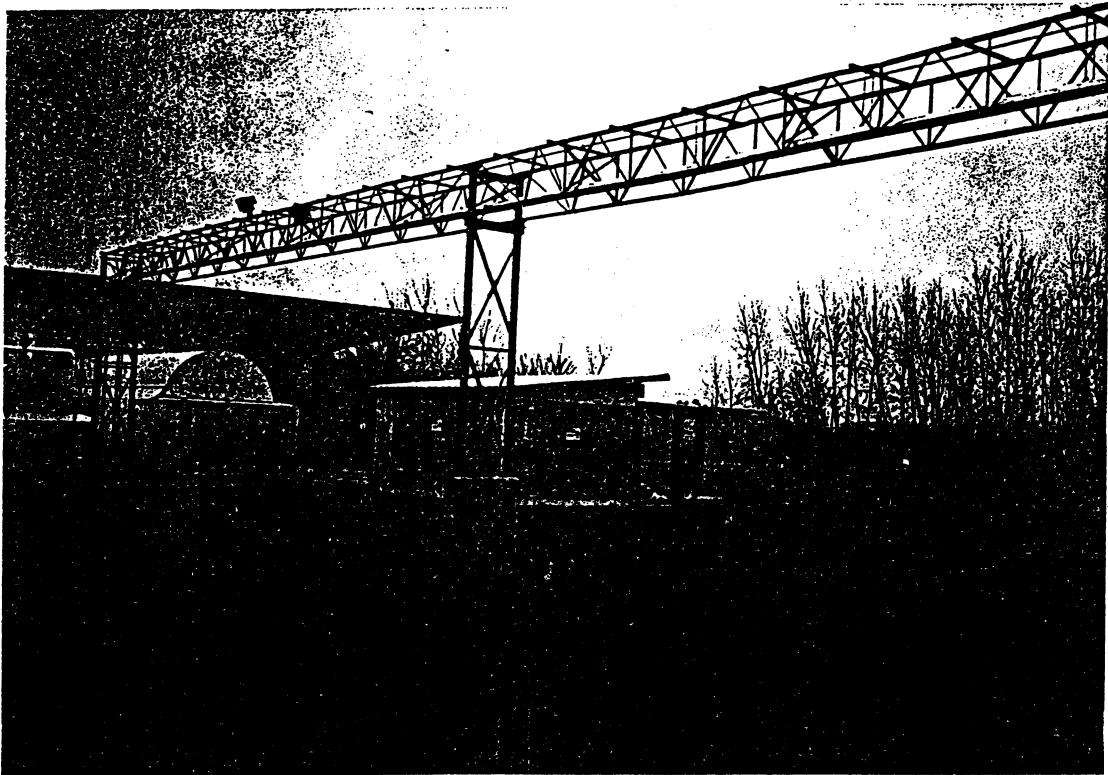
FRONT VIEW OF HAZARDOUS MATERIALS TANK



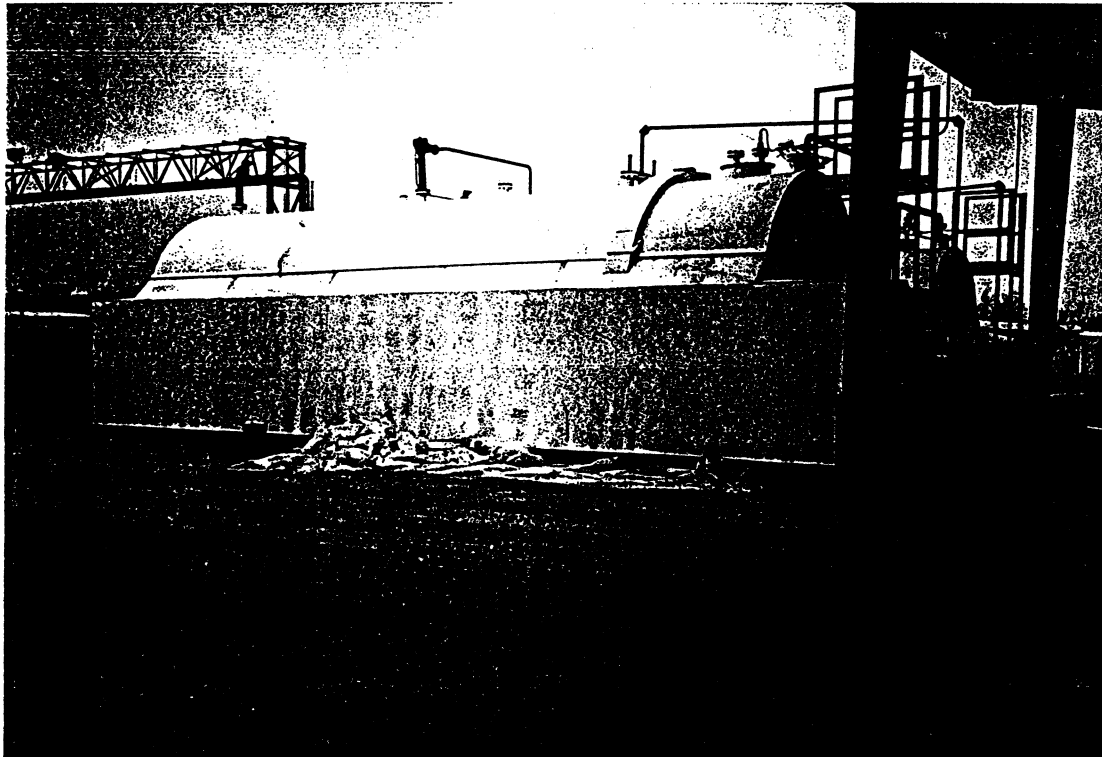
MILLTRONICS OVERFILL ALARM PANEL



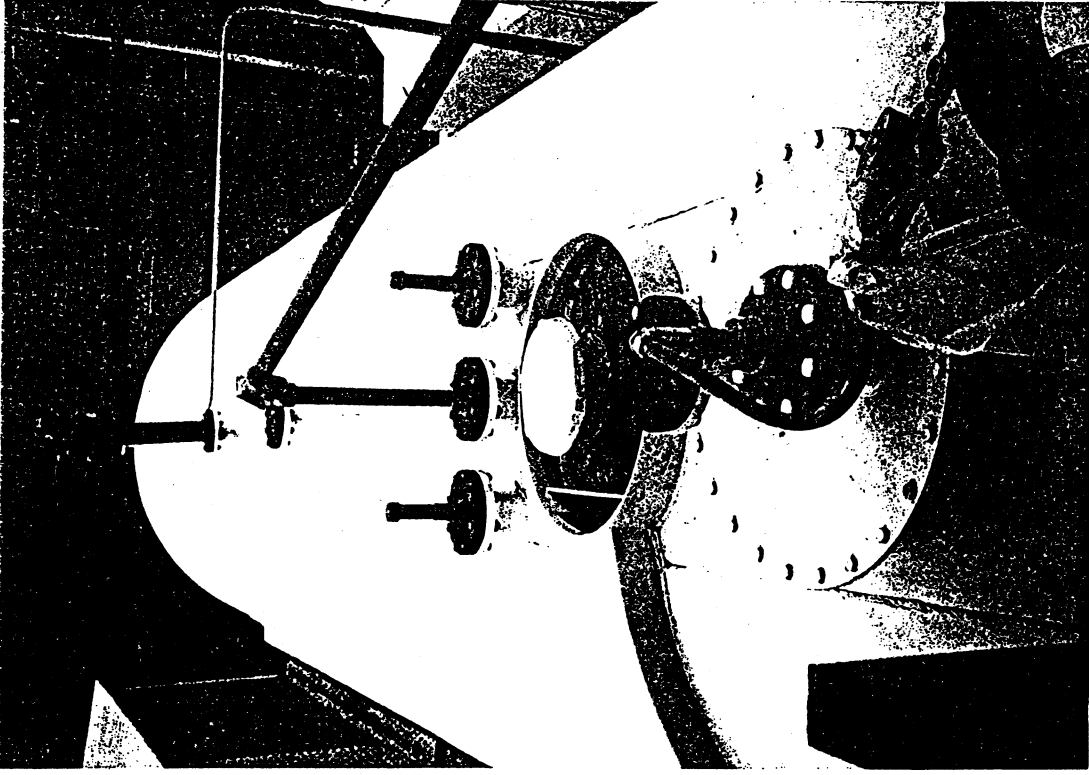
TANK ISOLATION VALVES



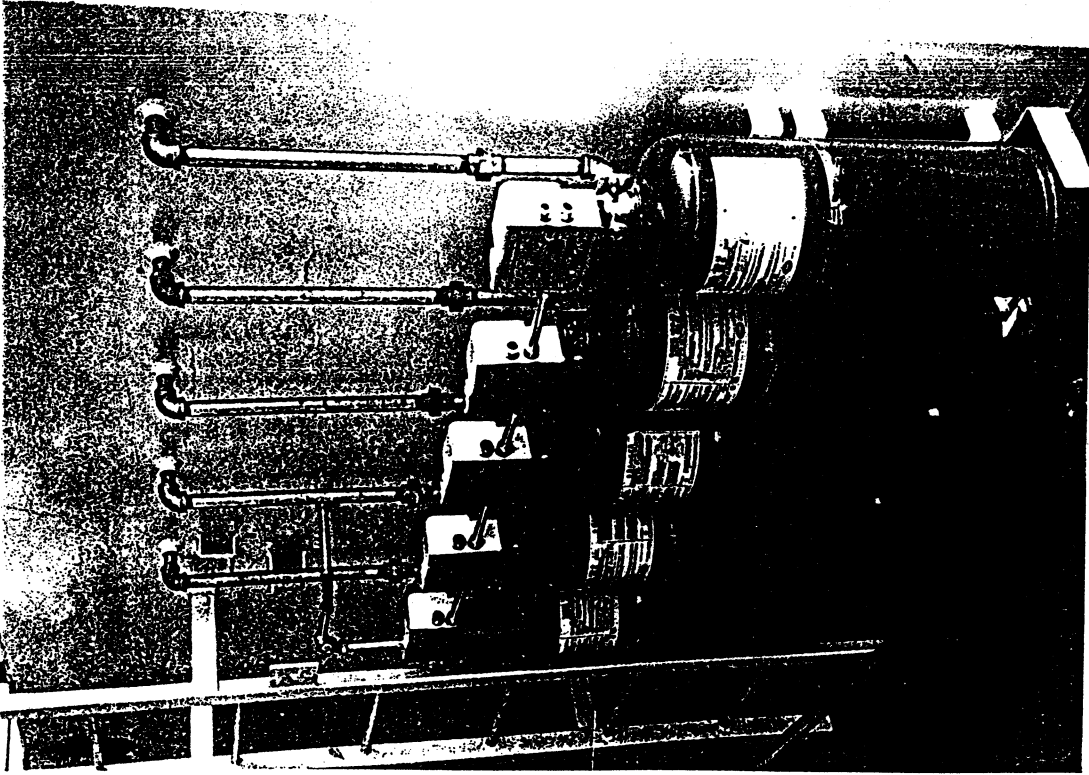
PIPING BRIDGE TO BUILDING



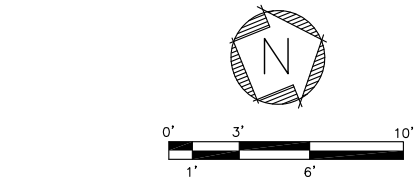
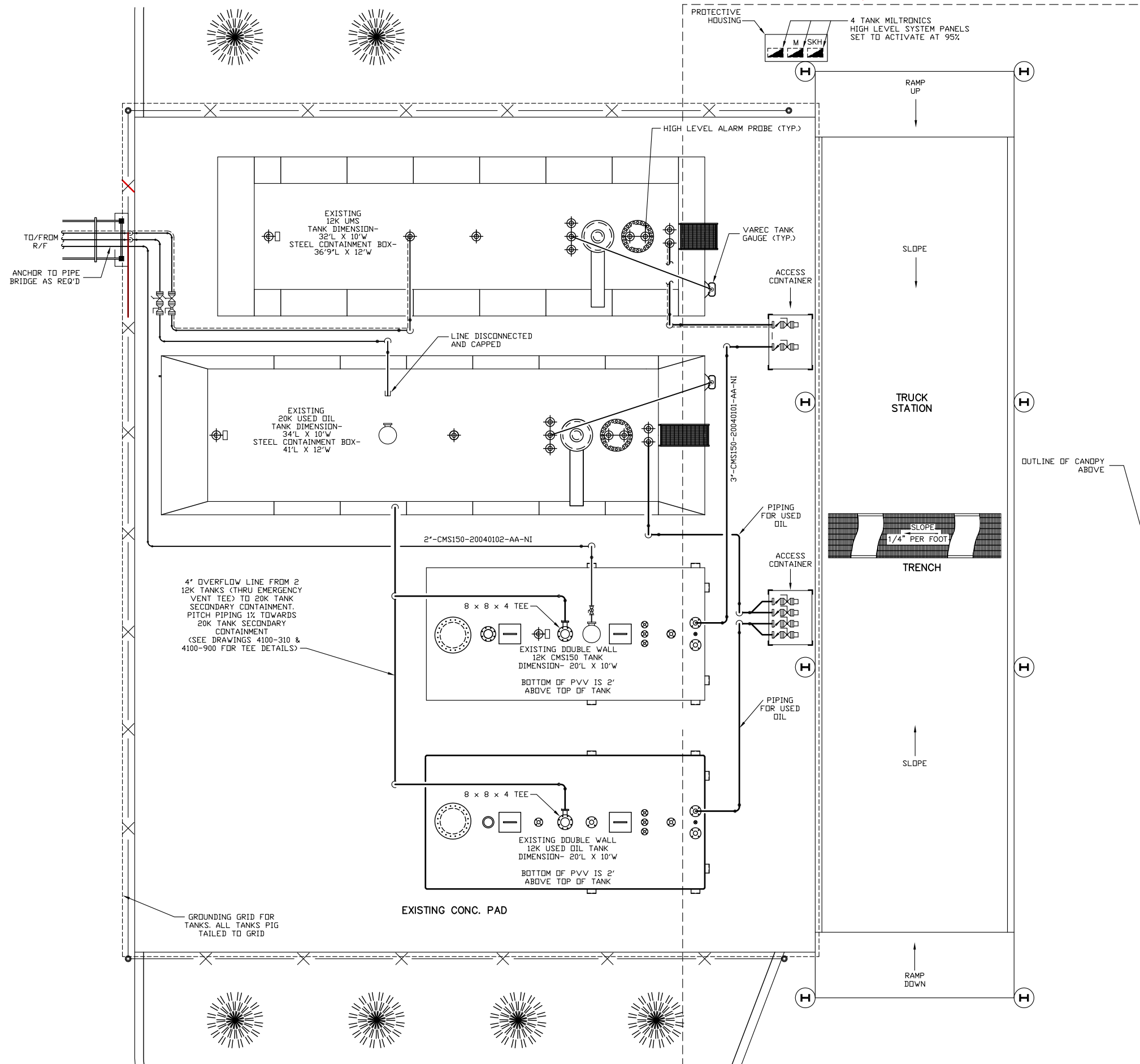
SIDE VIEW OF TANKS



TOP OF TANK PIPING



TANK FIRE SUPPRESSION SYSTEM



UMS - USED MINERAL SPIRITS
CMS 150 -150 FLASHPOINT CLEAN MINERAL SPIRITS

GENERAL NOTES

1. REF. CMS150 PROCESS SCHEMATIC DWG 7046-4100-202 FOR GENERAL NOTES & EQUIPMENT SCHEDULE.

2. INSTALL MILTRONICS ULTRASONIC UNIT ON 12K USED OIL TANK AND TIE INTO EXISTING PANEL.

3. DISCONNECT 2" PIPING FROM 20K USED OIL TANK (CONVERTED FROM 105 SOLVENT)

C	ADD OVER FLOW PIPING	JEK	DDP	DDP	031511
B	ADD U/O TANK RELOC. FROM LEEDS CONV. 105 TANK TO U/O	JEK	DDP	DDP	072910
A	RELEASED TO D.P. FOR BID	MCL	KJM	D.P.	081195
NO.	DESCRIPTION	BY	CHK	APPR	DATE

REVISIONS

PROPRIETARY STATEMENT

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TITLE

TANK FARM PIPING PLAN
WITH OIL STG. TANKS

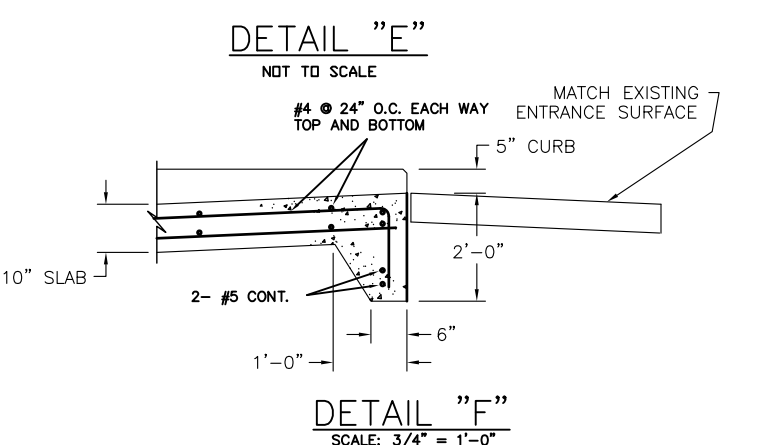
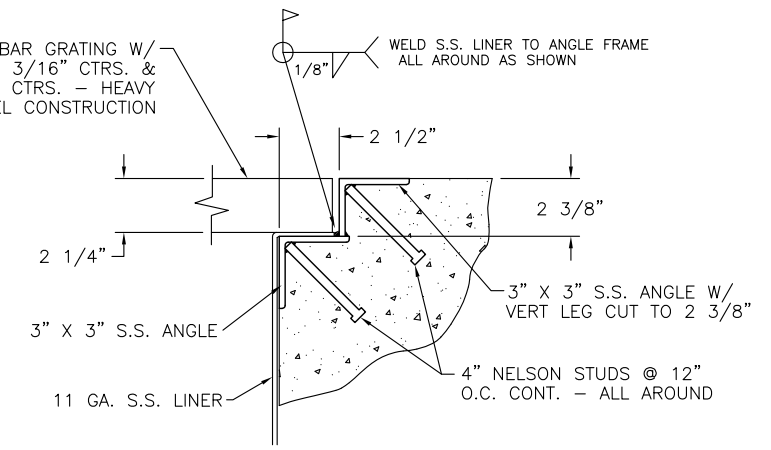
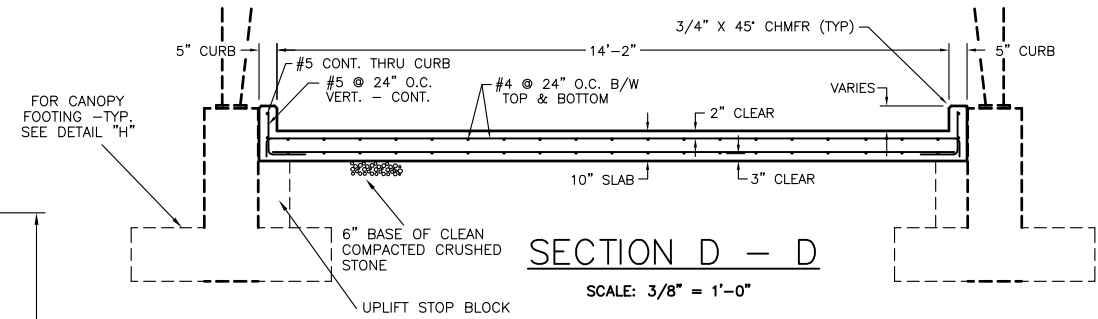
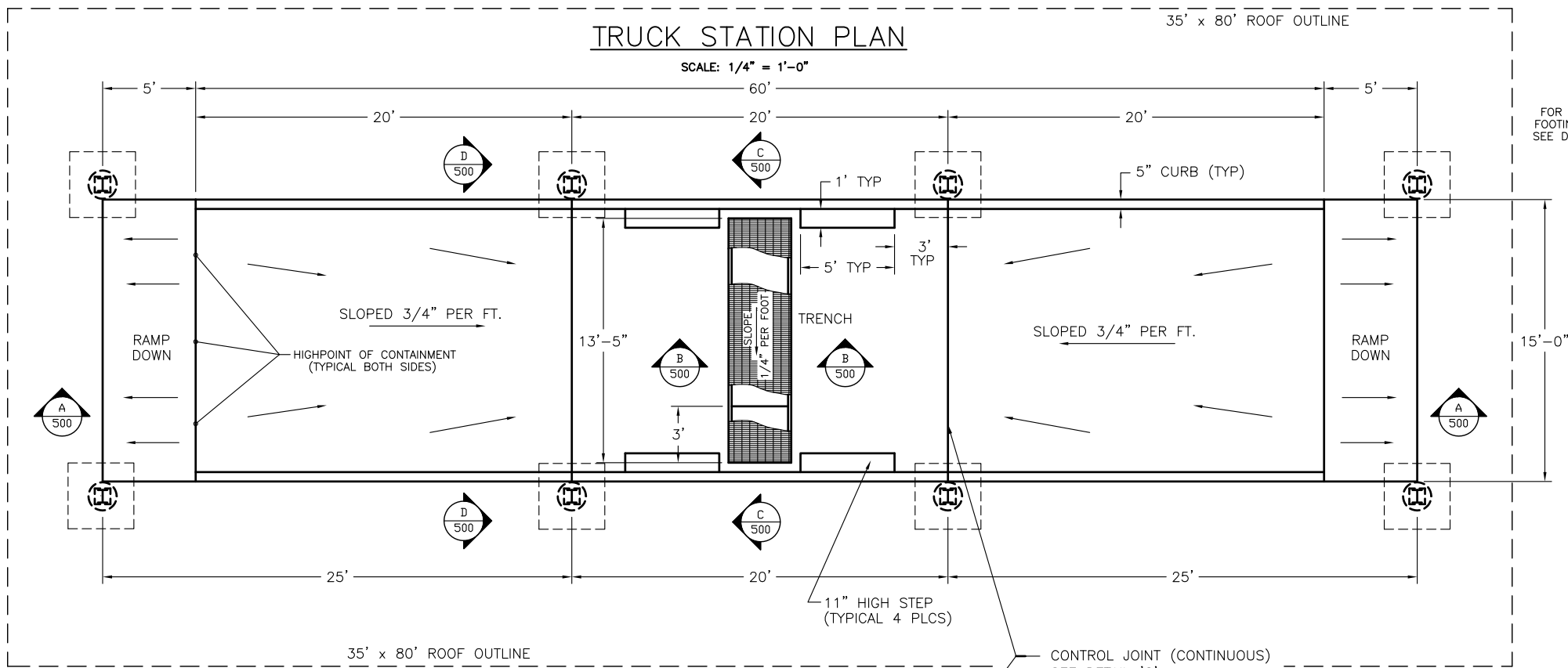
S

SAFETY-KLEEN SYSTEMS, INC.

2000 N. CENT. EXPRESSWAY STE 400 RICHMOND, TX. 75080

PHONE 800-688-5740

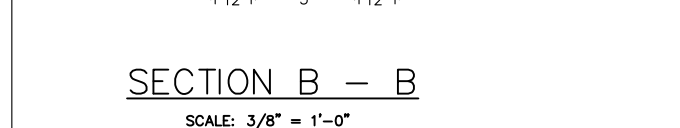
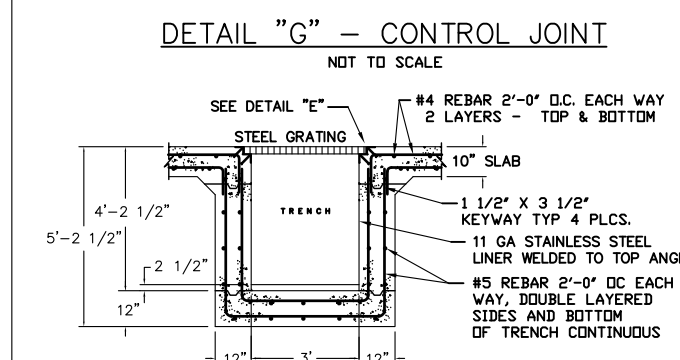
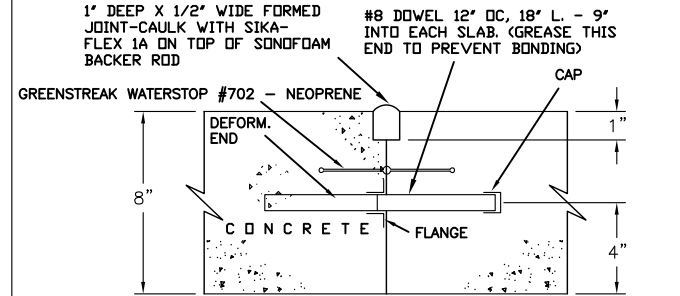
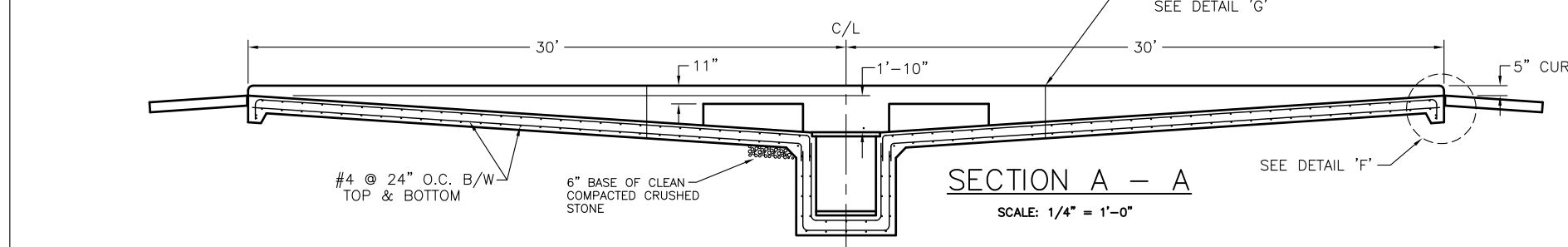
SCALE	BY	CHKD	APPROVED	OPERATIONS	DATE
1/4"=1'0"	MCL	KJM	D.P.		08-11-95
SERVICE CENTER LOCATION	SC-DWG NUMBER		REV. NO.		
COLONIE, NY	7046-4100-300		C		



CONTAINMENT VOLUME CALCULATION

TRENCH SUMP VOLUME -	L X W X H X 7.48 GAL/CU. FT	
13' X 3' X 4.1' X 7.48	=	1197 GALLONS
TANKER PAD VOLUME -	(1/2)L X W X H X 7.48 GAL/CU. FT	
(1/2)30' X 14.16' X 1.83' X 7.48	=	5828 GALLONS
TOTAL CONTAINMENT VOLUME -	1197 GAL + 5828 GAL	= 7025 GALLONS

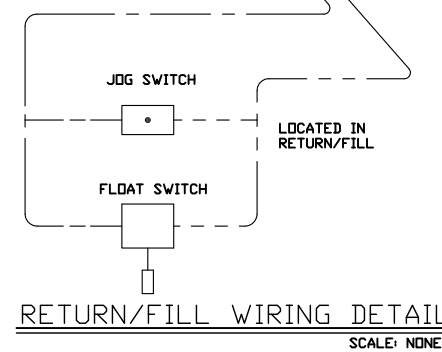
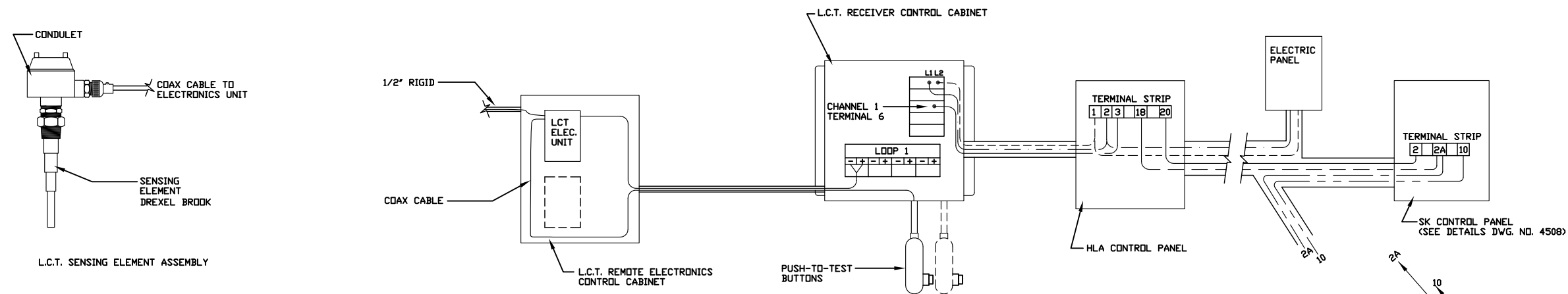
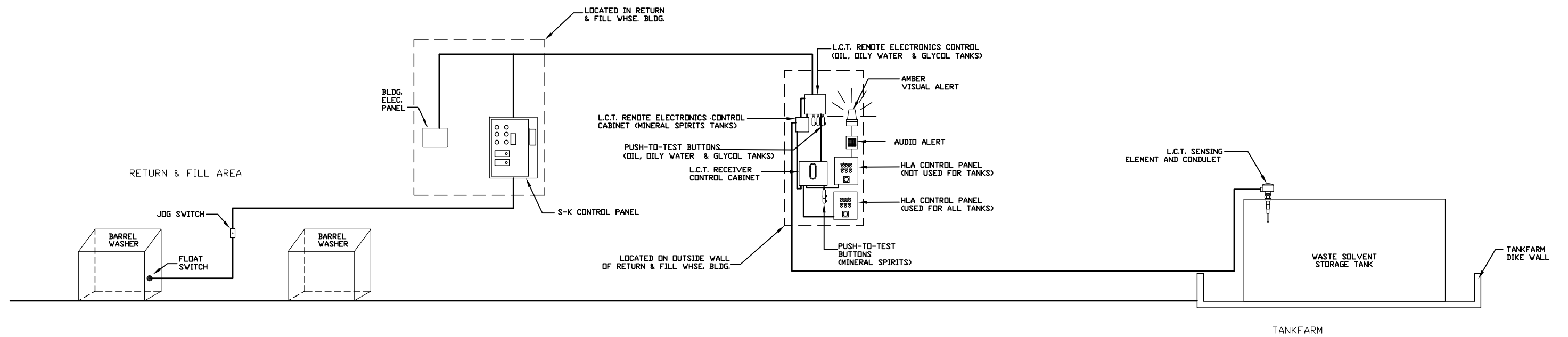
- NOTE:**
1. CONTAINMENT VOLUME CALCULATION DOES NOT INCLUDE ANY ALLOWANCE FOR RAINWATER VOLUME.
 2. REFER TO DRAWING NO. AA06605B FOR CANOPY DESIGN & DETAILS.



PROPRIETARY STATEMENT

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REVISIONS					TITLE				
C	CONTROL JOINT UPDATE	NDE		052893	TRUCK STATION & CANOPY CONCRETE PLAN				
B	UPDATE	NDE		012393					
A	PRELIMINARY FOR REVIEW	M.O'C		11/2/92	SAFETY-KLEEN SYSTEMS, INC. 2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080 PHONE 800-869-5740				
NO.	DESCRIPTION	BY	CHK	APPR					
					SCALE 1/4" = 1'-0"	BY	CHKD	APPROVED	OPERATIONS
					SERVICE CENTER LOCATION	COLONIE, NY		SC-DWG-NO	DATE
							7046-6100-599		11/2/92
									REV. NO.
									C



- GENERAL NOTES

1. ACTUAL WIRING CONFIGURATION MAY CHANGE DUE TO MAINTENANCE/ UPKEEP OF FACILITY
2. CHARLOTTE NC BRANCH FACILITY US E.P.A. No. NCD079060059


PROPRIETARY STATEMENT

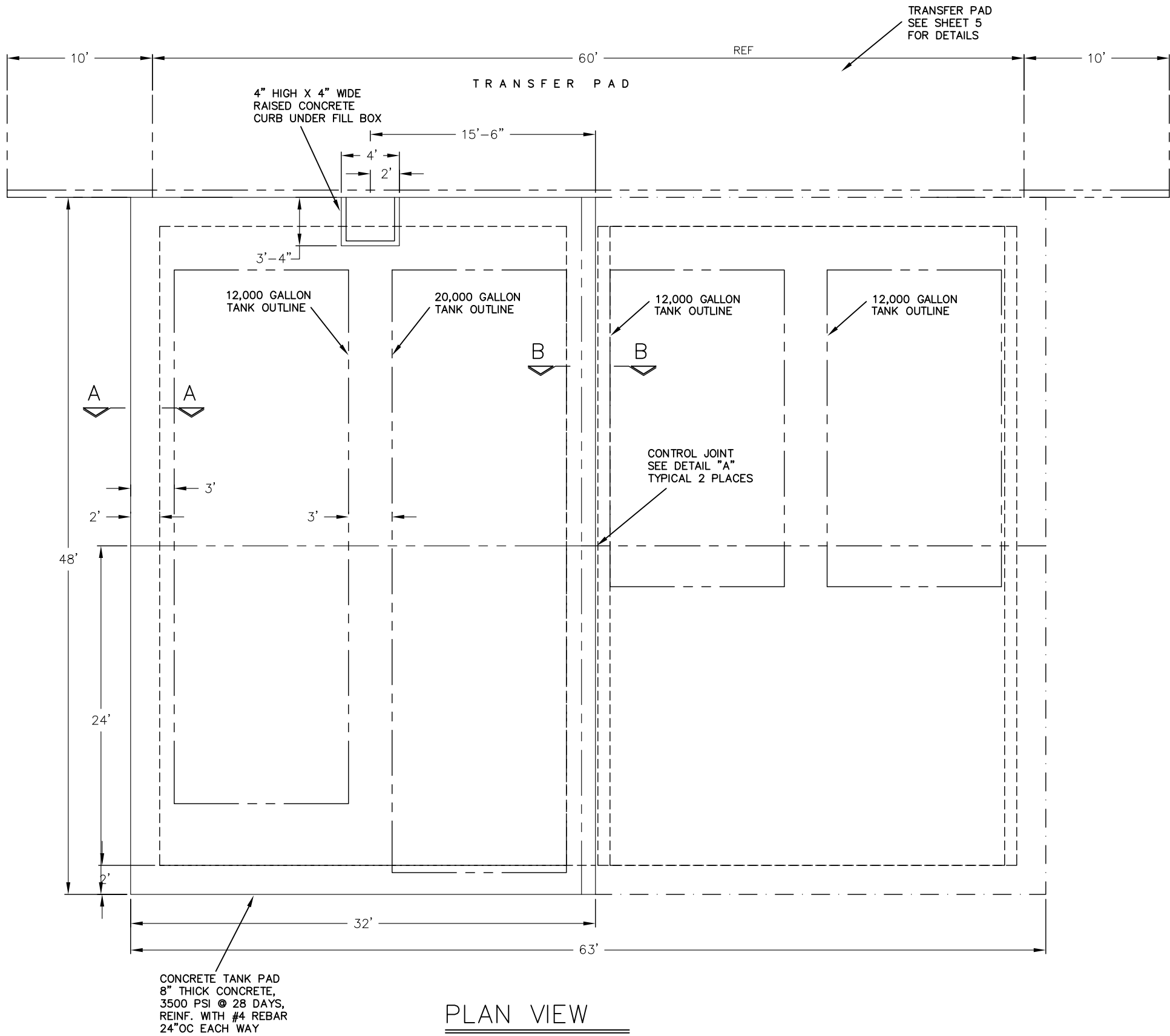
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TITLE

WASTE SOLVENT HLA SYSTEM
DIAGRAM - EXISTING

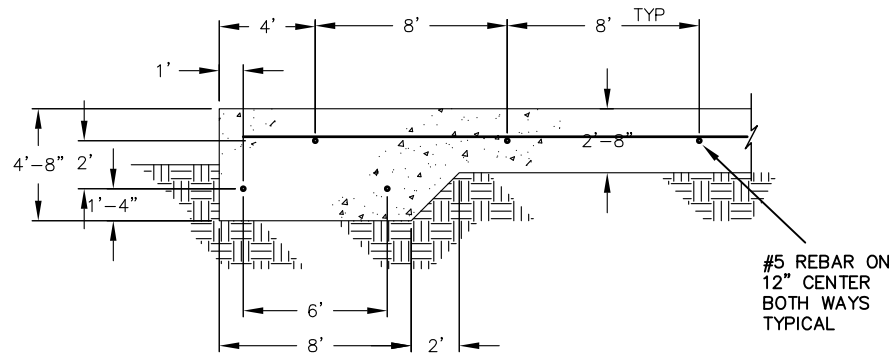
SK SAFETY-KLEEN SYSTEMS, INC.
2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

						TITLE WASTE SOLVENT HLA SYSTEM DIAGRAM – EXISTING					
						 SAFETY-KLEEN SYSTEMS, INC. 2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080 PHONE 800-669-5740					
B	REVISE FOR 2004 SUB-PART BB	JEK	TB	-	13104	SCALE AS SHOWN	BY MBH	CHKD KJM	APPR -	OP. APPR -	DATE 070192
A	RELEASED FOR PART 'B' PERMIT	MBH	KJM	-	070292	SERVICE CENTER LOCATION			SC-DWG NUMBER		REV. NO.
NO.	DESCRIPTION	BY	CHK	APPR	DATE	COLONIE, N.Y.			7046-9100-499		B
REVISIONS											



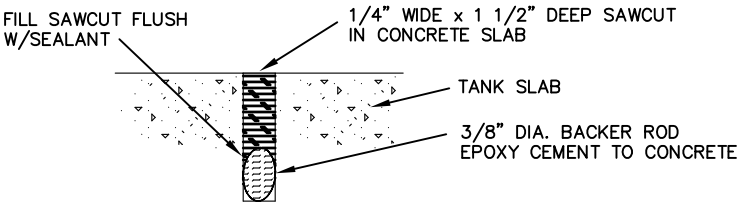
PLAN VIEW

SCALE: 1/4" = 1'-0"



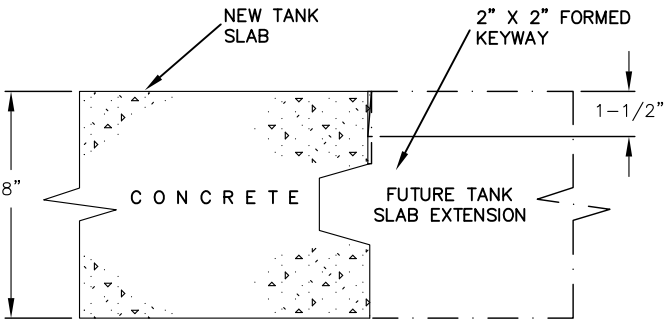
SECTION A-A

SCALE: 1" = 1'-0"



DETAIL "A" - CONTROL JOINT

NOT TO SCALE



FILL

SECTION B-B - CONSTR. JOINT


NOT TO SCALE

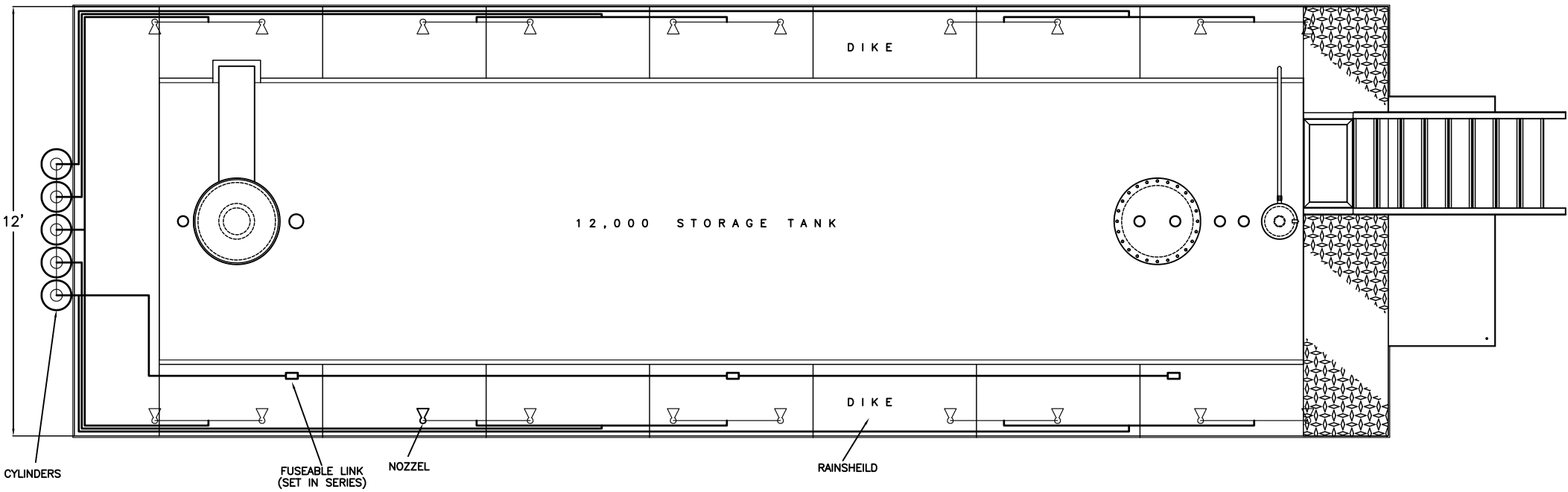
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TITLE
TANK SLAB PLAN & DETAILS
FOR AREO POWER

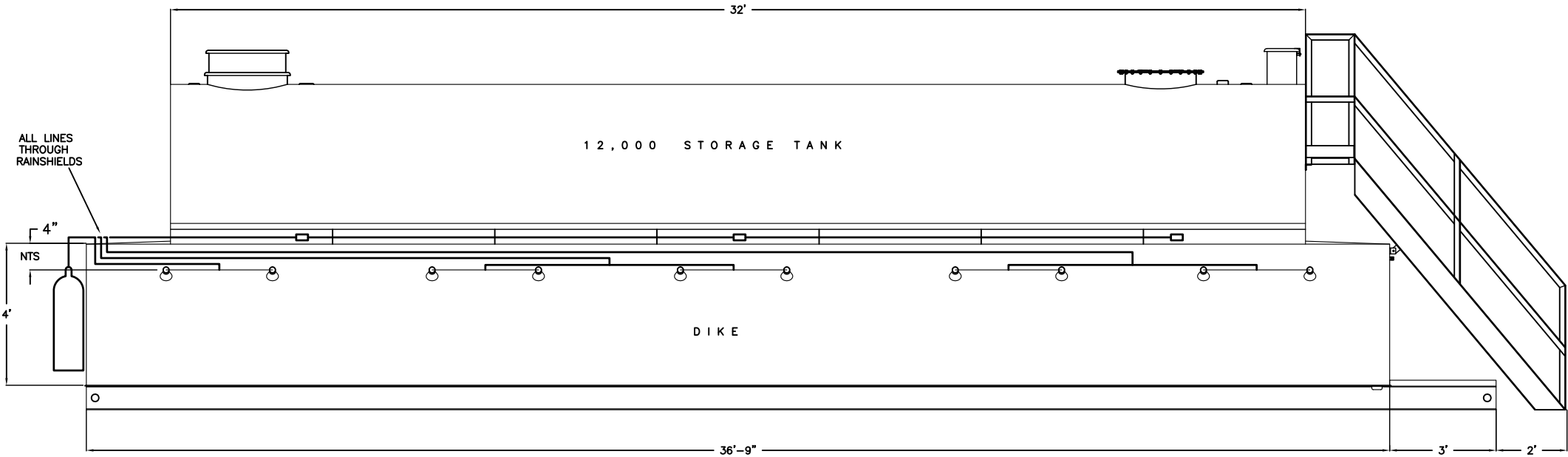
SAFETY-KLEEN SYSTEMS, INC.
2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

						TITLE TANK SLAB PLAN & DETAILS FOR AREO POWER								
						 SAFETY-KLEEN SYSTEMS, INC. 2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080 PHONE 800-669-5740								
B	REVISE REBAR IN DETAIL A				NDE	RBS	-	070794	SCALE AS NOTED	BY RBS	CHKD NDE	P.E. APPR	OP. APPR	DATE 3/4/99
A	RELEASED FOR PART "B" PERMIT				RB	NDE	-	030493	SERVICE CENTER LOCATION			SC-DWG-NO.		REV. NO.
NO.	DESCRIPTION				BY	CHK	APPR	DATE	COLONIE, NY			7046-4100-599		B
REVISIONS														



PLAN VIEW

SCALE: 1/2" = 1'-0"



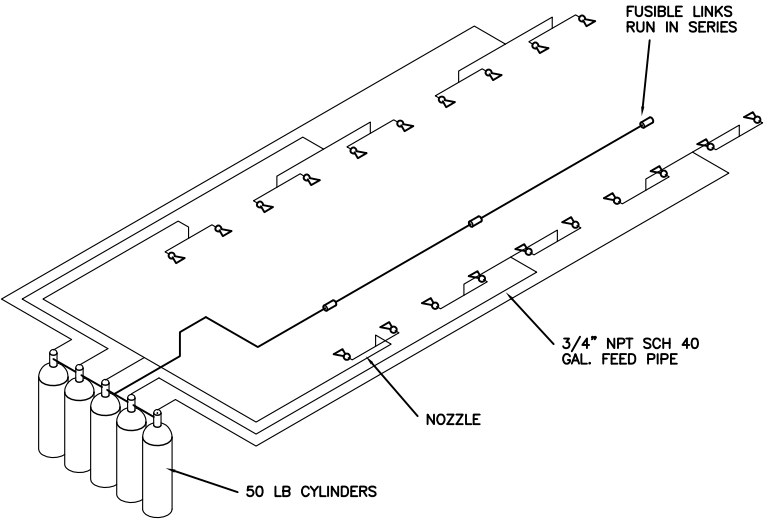
ELEVATION VIEW

SCALE: 1/2" = 1'-0"

- NOTES:
1. SYSTEM SHALL BE INSTALLED ACCORDING TO THE GUIDELINES AND LIMITATIONS LISTED IN THE KIDDE-FENWAL INDUSTRIAL DRY CHEMICAL SYSTEM MANUAL (P/N 220423).
 2. FINAL COMPONENT LOCATIONS SHALL BE DETERMINED BY SYSTEM INSTALLER.
 3. ALL CONDUIT AND PIPING SHALL BE INSTALLED USING GOOD COMMERCIAL PRACTICES AND SHALL BE ADEQUATELY SUPPORTED.
 4. THE AGENT DISTRIBUTION SYSTEM SHALL BE GALVANIZED STEEL PIPING AS SPECIFIED IN THE KEDDE-FENWAL DRY CHEMICAL SYSTEM MANUAL.
 5. ALL CINTAINMENT VESSEL PENETRATION SHALL BE MADE IN ACCORDANCE WITH AREO-POWER REQUIREMENTS AND IN ACCORDANCE WITH LOCAL REQUIREMENTS.
 6. ELECTRICAL CONTACTORS AND WIRING FOR EQUIPMENT SHUT OFF SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
 7. INSTALLATION SHALL BE INSPECTED AND PLACED INTO SERVICE BY A FACTORY TRAINED KIDDE-FENWAL FIRE SYSTEMS DISTRIBUTOR.
 8. SYSTEM SHALL BE INSPECTED AND SERVICED EVERY SIX MONTHWS IN ACCORDANCE WITH KIDDE-FENWAL INDUSTRIAL DRY CHEMICAL SYSTEM MANUAL (P/N 2204230). ONLY FACTORY TRAINED KIDDE-FENWAL FIRE SYSTEMS DISTRIBUTORS ARE AUTHORIZED TO SERVICE THIS SYSTEM.

PARTS LIST

ITEM	DESCRIPTION/PART NUMBER		QUANT
1	50 LBS CYLINDER	486571	5
2	DISCHARGE ADAPTER	844908	5
3	MOUNTING BRACKET	486488	5
4	MECH CONTROL HEAD	899063	1
5	TANDEM CONTROL HEAD	899082	4
6	TANK SIDE NOZZLE	259072	20
7	FUSIBLE LINK HOUSING	804548	3
8	FUSEABLE LINK -212°F	282662	3
9	MANUAL RELEASE	875572	1
10	CORNER PULLEY	844648	AR
11	NOZZLE CAP	69740014	20



PIPING SCHEMATIC

NOT TO SCALE

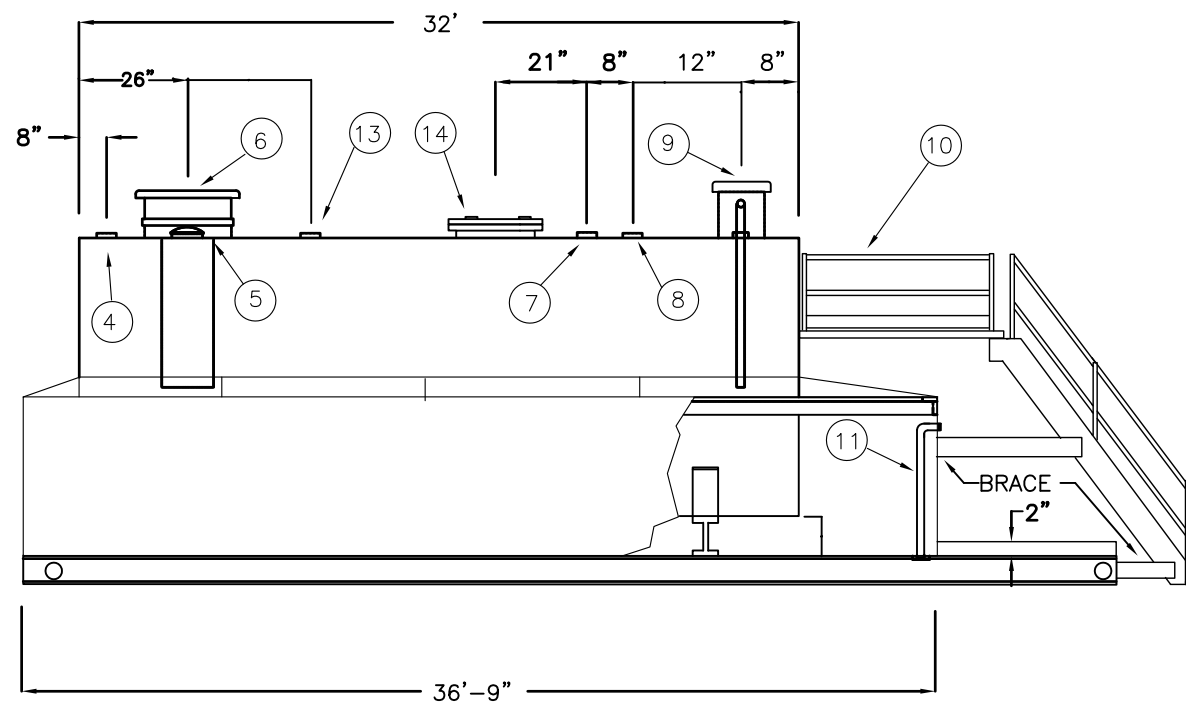
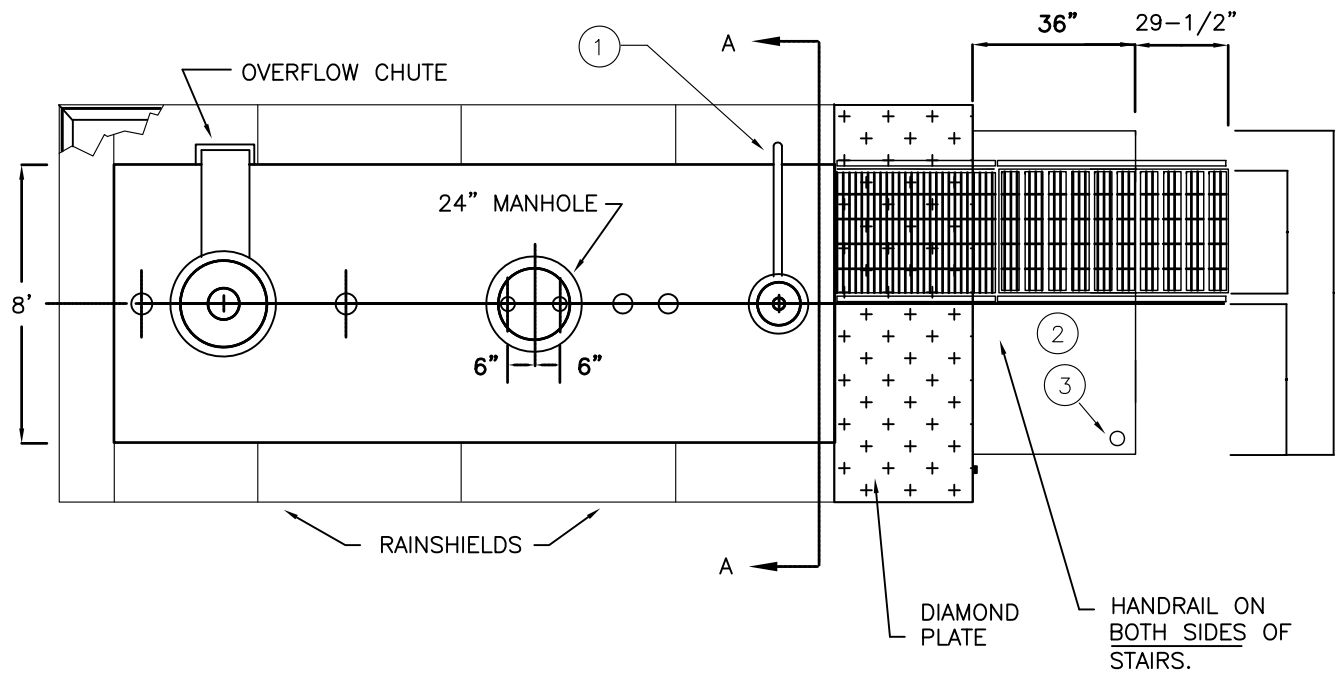
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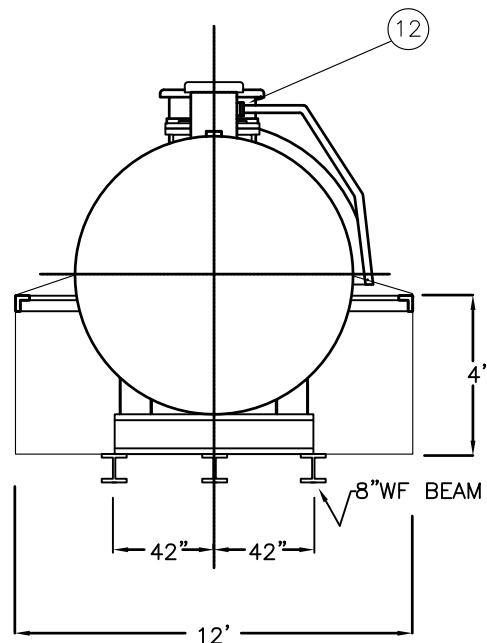
TITLE
FIRE SUPPRESSION SYSTEM
12,000 GALLON AREO TANK

SAFETY-KLEEN SYSTEMS, INC.
2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

A		RELEASED FOR PART "B" PERMIT		RS	NDE		030493	SCALE AS NOTED	BY RBS	CHKD NDE	P.E. APPR	OP. APPR	DATE 3/4/93
NO.		DESCRIPTION		BY	CHK	APPR	DATE	SERVICE CENTER LOCATION		SC-DWG-NO.		REV. NO.	
		REVISIONS						COLONIE, NY		7046-4100-399		11	



SECTION A-A



NOTES :

1. SHELL: 1/4", HEAD: 5/16"
CONTAINMENT: 1/4"
2. MATERIAL - MILD CARBON STEEL.
3. TEST - 5 PSIG
4. ENTIRE UNIT UL LISTED, NOT JUST PRIMARY TANK.
5. PAINT - RED PRIMER (STANDARD).
6. FOR FURTHER INFORMATION CALL
1-800-242-2736 OR FAX (516) 366-0905

ITEM #	DESCRIPTION
1	1" FILL BOX OVERFLOW PIPE
2	PUMP PLATFORM W/2" LIP
3	1/2" DRAIN FITTING
4	3" VENT FITTING
5	8" - 8 oz EMERGENCY VENT - SHIPPED LOOSE:
6	VENT DEFLECTOR ASSEMBLY SHIPPED LOOSE
7	3" FCPLG
8	3" FITTING
9	OVERFILL CONTAINMENT CHAMBER WITH 4" FILL FITTING
10	STAIRS, PLATFORM AND HANDRAIL- DESIGNED TO OSHA REQUIREMENTS SHIPPED LOOSE
11	3/4" PUMPOUT PIPE W/ 3" PIPE CAP SUMP
12	1" PIPE UNION
13	4" FITTING
14	(2) 3" FITTING

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AREO-POWER®

TITLE	REV #	REV DATE
12,000 GAL. FUELER		
U.S. PATENT # 4895272	CANADIAN PATENT APPLIED FOR	
SCALE NONE	DATE 2/12/91	DRAWN BY JF
		DWG. NO. UL12K96

PROPRIETARY SATATEMENT

1. ACTUAL TANK CONFIGURATION MAY VARY DUE TO MANUFACTURER'S REVISIONS.

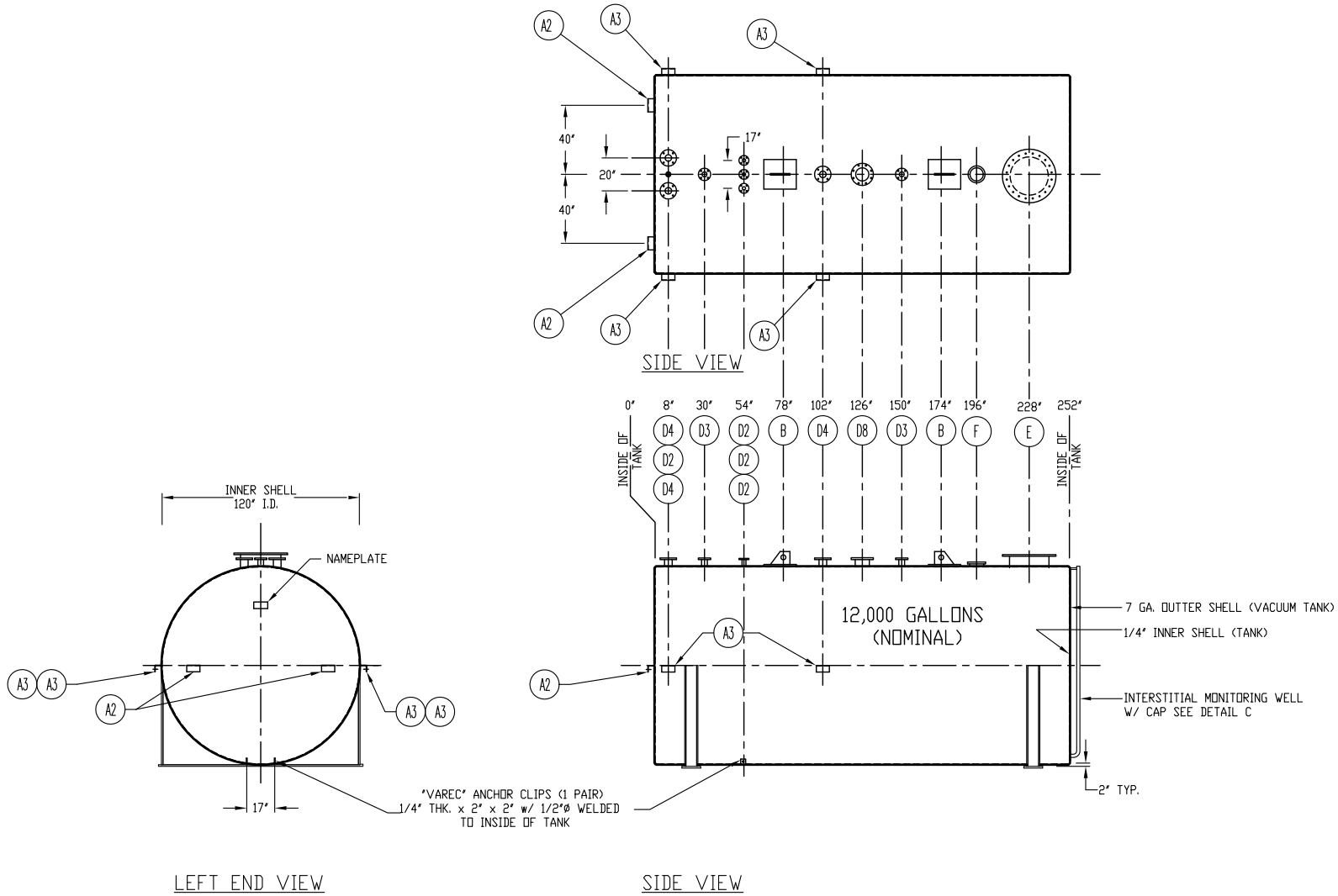
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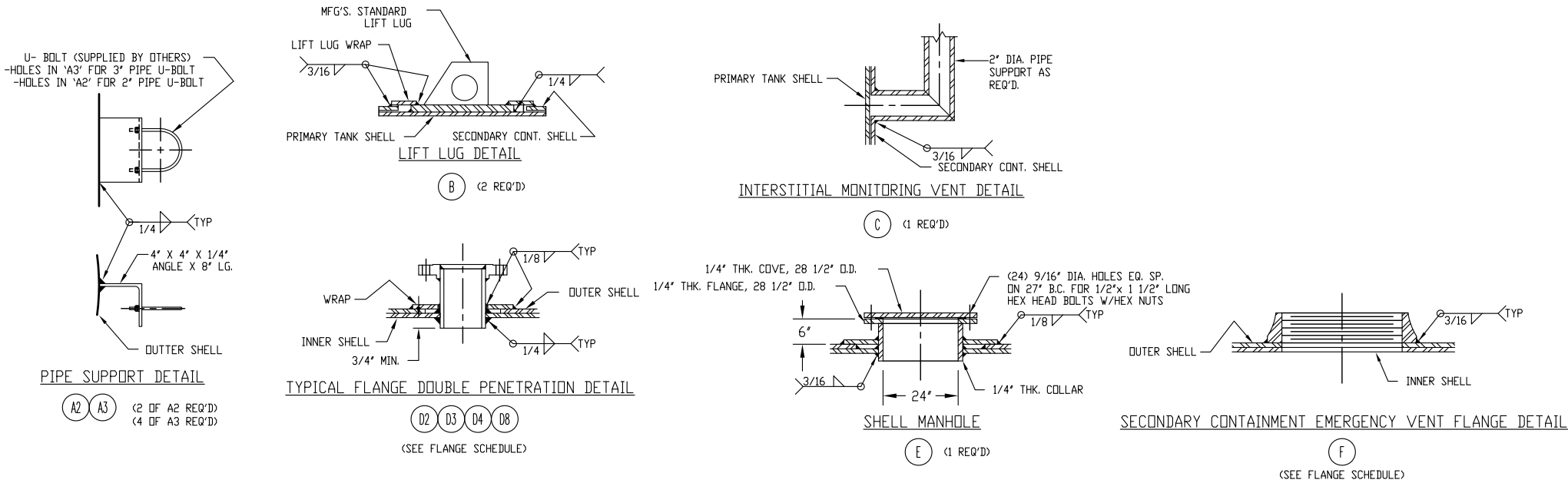
TITLE
AREO TANK
12K DETAILS

SAFETY-KLEEN SYSTEMS, INC.
2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

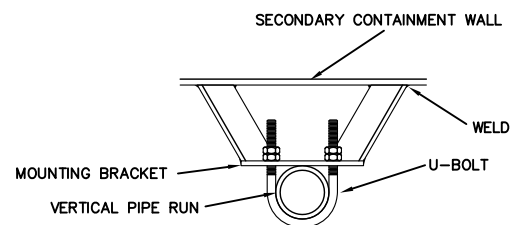
A	RELEASED FOR PART "B" PERMIT	RS	NDE	-	030493	SCALE AS NOTED	BY RBS	CHKD -	P.E. APPR	OP. APPR	DATE 3/4/93
NO.	DESCRIPTION	BY	CHK	APPR	DATE	SERVICE CENTER LOCATION	SC-DWG-NO.				REV. NO.
	REVISIONS					COLONIE, NY	7046-4100-203				09



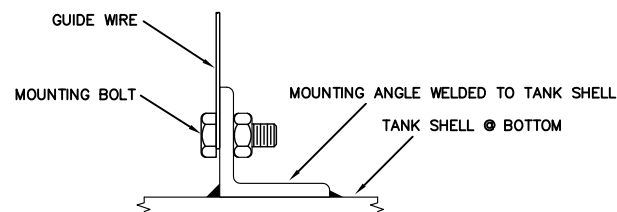
MATERIALS						GENERAL NOTES					
HEADS: INNER - 1/4" A-36 FLAT FLANGED HEAD OUTER - 1/16" A-36 FLAT FLANGED HEAD						<div>1. ALL PERTINENT SAFETY REGULATIONS, "OWNERS AND CFR'S" SHALL BE ADHERED TO RIGIDLY. IN ADDITION, ALL SAFETY PRECAUTIONS NOTED ON THE MANUFACTURER'S PRODUCT DATA SHEETS AND LABELS SHALL BE OBSERVED FOR BOTH MATERIAL AND EQUIPMENT.</div> <div>2. BOLT HOLES STRADDLE LINE PARALLEL NATURAL CENTERLINES.</div> <div>3. FABRICATOR SHELL PROVIDE GASKETS, BOLTS & HEX NUTS FOR ALL MATING PARTS INCLUDING BLIND FLANGES WHERE NOTED.</div> <div>4. ✓ INDICATES MACHINE FINISHED SURFACE.</div> <div>5. INSULATION CLIPS ARE NOT REQUIRED.</div> <div>6. FABRICATOR SHELL PROVIDE PROTECTIVE SHIELDS FOR ALL FLANGES & OPENINGS.</div> <div>7. MTR'S WILL ONLY BE RETAINED UNTIL COMPLETION OF JOB.</div> <div>8. <u>SHOP TOLERANCES:</u> DIMENSIONS - ± 1/8" NOZZLES - ± 1/2"</div> <div>9. SANDBLAST (EXT.): SSPC-SP6 TO A 1.5-2.0 MIL PROFILE</div> <div>10. LINING: NONE</div> <div>11. PAINTING: PRIME - ONE COAT Sherwin-Williams KEM KROMIC, WHITE OXIDE PRIMER #B50W1 ☉ 1 MIL DFT, ALLOW TO DRY FOR 24 HRS.</div> <div>12. TANK SUPPORT SADDLES TO BE CONSTRUCTED PER UL-142.</div> <div>13. TANK MANUFACTURER TO PROVIDE SAFETY-KLEEN CORP. WITH "AS-BUILT" FABRICATION DRAWING.</div>					
SHELL: INNER - 1/4" A-36 PL. OUTER - 3/16" A-36 PL.											
FLANGES: A-36/A-105											
REPADS: NONE											
NOZZLE NECKS (PIPE): A-106B											
NOZZLE NECKS (PLATE): A-36											
TANK FLANGES: A-105											
VESSEL SUPPORT: A-36											
STRUCTURAL: A-36											
NUTS (EXT.): (ZINC) A-307											
BOLTS (EXT.): (ZINC) A-307											
BOLTS (INT.): --											
NUTS (INT.): --											
GASKETS: 1/8" CB-1228											
WEIGHTS & CAPACITIES											
EACH HEAD: N/A											
PER FT. STRAIGHT SIDE: 587.52											
TOTAL: 12,338											
SP. GR. OF CONTENTS: (BASED ON WATER) 1.0											
EST. WT. OF CONTENTS: 102,898#											
EST. WT. OF VESSEL: 19,112#											
TOTAL EST. WT.: 122,010											
FITTINGS SCHEDULE											
MARK	QTY.	SIZE	RATING	FACING	PIPE SCH	DESCRIPTION					
C	1	2"	-	-	40	MONITOR					
D2	4	2"	150#	RFSD	40	-					
D3	2	3"	150#	RFSD	40	-					
D4	3	4"	150#	RFSD	40	-					
D8	1	8"	150#	RFSD	40	EMERGENCY VENT, PRIMARY TANK					
E	1	24"	UL	FF	1/4"	AL MANWAY					
F	1	8"	TANK FLG.		-	EMERGENCY VENT, SECONDARY TANK					



S SAFETY-KLEEN SYSTEMS, INC.
2000 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX 75080
PHONE 800-688-5740

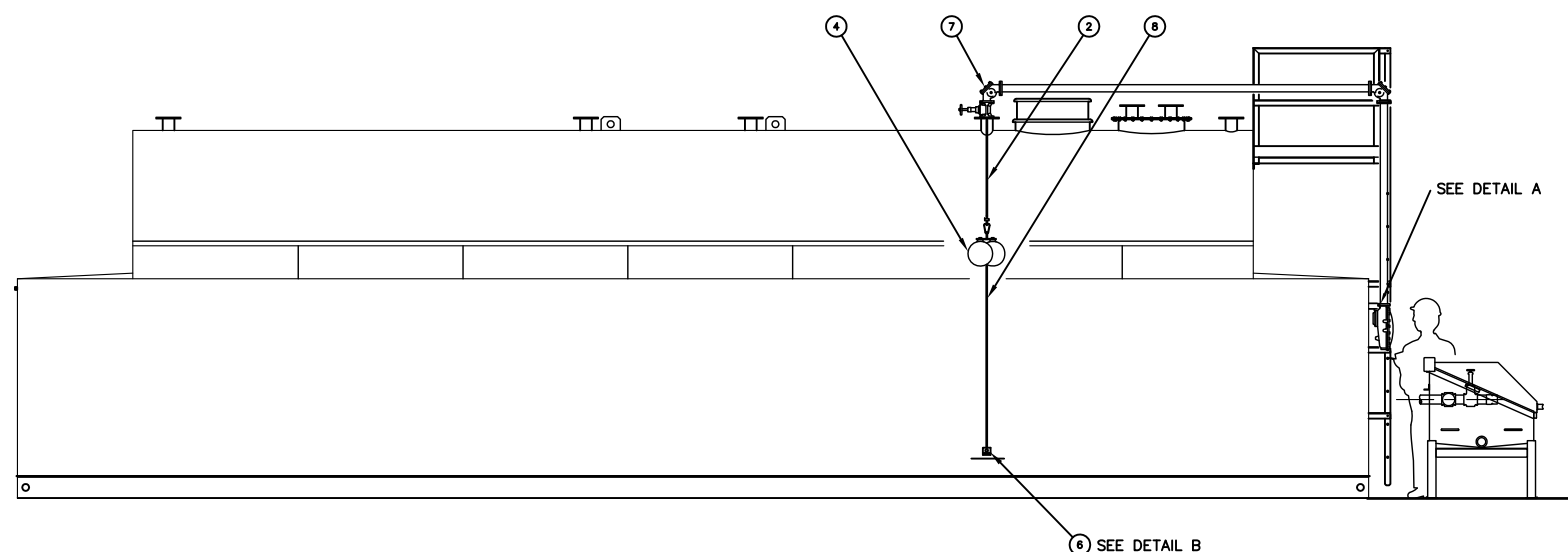


DETAIL A - VAREC PIPE MOUNT
INSTALLED BY AREO-POWER
-NTS-

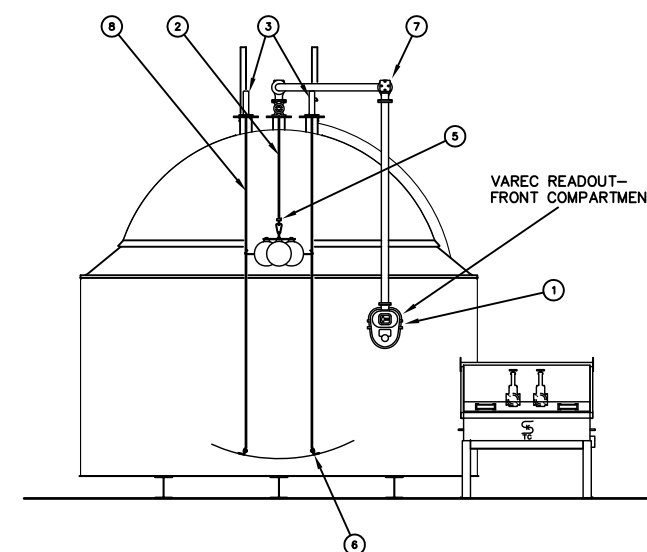


DETAIL B - VAREC CABLE MOUNT
INSTALLED BY AREO-POWER
-NTS-

EQUIPMENT SCHEDULE		
VAREC AUTOMATIC TANK GUAGE 2500 SERIES		
MARK	PART DESCRIPTION	REMARKS
1	GUAGE HEAD IRON HOUSING AND SHEAVES 304 S.S TRIM	
2	GUAGE TAPE 316 STAINLESS STEEL	
3	TOP GUIDE MRE ANCHOR, STEEL HOUSING AND SPRING ROD, CAD PLATE STEEL SPRING	
4	GUAGE FLOAT 316 S.S HOLLOW SHELL WELDED	
5	TAPE FASTENER 318 STAINLESS STEEL	
6	BOTTOM GUIDE MRE ANCHOR, STEEL	SEE DETAIL B
7	SHEAVE ELBOW IRON HOUSING, 316 S.S TRIM, TEFLON BEARING	
8	GUIDE WIRE 316 STAINLESS STEEL	



SIDE ELEVATION - AREO-POWER TANK
SEE DWG #AA06101B FOR TANK FABRICATION DETAILS.
-NTS-



END ELEVATION
-NTS-

<h1 style="text-align: center;">PROPRIETARY STATEMENT</h1>				
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<p>TITLE</p> <h2 style="text-align: center;">VAREC GAUGE DETAILS FOR AREO TANKS</h2>				
<div style="display: flex; align-items: center;"> <div> <h3 style="margin: 0;">SAFETY-KLEEN SYSTEMS, INC.</h3> <p style="margin: 0;">2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080</p> <p style="margin: 0;">PHONE 800-669-5740</p> </div> </div>				
93	SCALE AS NOTED	BY RBS	CHKD NDE	P.E. APPR OP. APPR DATE 3/4/93
E	SERVICE CENTER LOCATION		SC-DWG-NO.	REV. NO.
	COLONIE, NY		7046-4100-398	10

A	RELEASED FOR PART "B" PERMIT	RS	NDE	-	0304
NO.	DESCRIPTION	BY	CHK	APPR	DATE
REVISIONS					

**SAFETY-KLEEN SYSTEMS, INC.
COHOES, 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) 12,000 gallon Spent Mineral Spirits above ground Storage Tank
- 2) 7,025 gallon sump next to the Hazardous waste tank (Transfer Pad Sump)
- 3) Container storage Return/Fill Area #1
- 4) Container storage Return/Fill Area #2
- 5) Container Storage Area in the north side of Warehouse (CSA-North)
- 6) Container Storage Area in the south side of Warehouse (CSA-South)
- 7) Location for Trucks carrying hazardous waste to park (Truck Parking Area)
- 8) Enclosed shelter for Paint Waste (Flammable Materials Storage Shed)

B. CORRECTIVE ACTION REQUIREMENTS.

1. No Action Requirement.

- (a) On the basis of the RCRA Facility Assessment-Preliminary Review Report dated June 1992, 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) 12,000 gallon Spent Mineral Spirits above ground Storage Tank
 - 2) 7,025 gallon sump next to the Hazardous waste tank (Transfer Pad Sump
 - 3) Container storage Return/Fill Area #1
 - 4) Container storage Return/Fill Area #2
 - 5) Container Storage Area in the north side of Warehouse (CSA-North)
 - 6) Container Storage Area in the south side of Warehouse (CSA-South)
 - 7) Location for Trucks carrying hazardous waste to park (Truck Parking Area)
 - 8) Enclosed shelter for Paint Waste (Flammable Materials Storage Shed)
- (b) The Permittee need not undertake corrective action at any aforementioned SWMU(s) and/or AOC(s) identified in Condition B.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 B.1.(a) that could pose a threat to human health or the environment

SAFETY-KLEEN SYSTEMS, INC.
Cohoes, NY SERVICE CENTER

ATTACHMENT F
PREPAREDNESS AND PREVENTION PLAN

ATTACHMENT F
PREPAREDNESS AND PREVENTION PLAN
ABSTRACT

Purpose: The Cohoes 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 Cohoes 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 Cohoes 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 Cohoes 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 D, along with the tank installation engineering assessment engineer drawings. The inspection procedures in Attachment L will detect failure of the containment system or the presence of accumulated liquid within 24 hours.

The high level alarm system for the tank has a siren and strobe light to 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 also 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.

1.4 Container Storage

The container storage areas are located in the return and fill area of the facility. Containers of hazardous waste solvent 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 1338 and 1334 gallons respectively. The concrete collection sumps, curbing, and flooring have been coated with a sealant, which is compatible with the materials stored in the dumpster, washer, and solvent containers. Any accumulated liquid in the containment area is 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.

(For information only). The Cohoes Service Center offers a service to collect and manage other wastes from its 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 will be temporarily stored in the transfer container management areas of the warehouse and on trailers. These management areas will 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 will be temporarily staged in the parking lot. The spent solvent containers will then be removed from the vehicles and stored in the authorized storage locations. These containers are then inspected as to the accuracy of the paperwork, labels, and their contents prior to being emptied into the storage tank conveyed through the return and fill dumpsters. Transfer operations will occur at the secondarily contained return and fill station. Open containers of waste will not be left unattended. Below are descriptions of 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 (one that can be remediated without assistance from a clean up contractor and does not require implementation of the Contingency Plan) pollution incident:

a. Pouring containerized material into the dumpsters.

As the parts washer solvent containers are poured into the dumpsters, material can splash out. Employee training emphasizes the importance of taking care in emptying the drums. The return and fill station is underlain by a metal pan with a drain that empties into a satellite accumulation container. The entire area over which the emptying of containers takes place is secondarily contained. This design will contain this type of spill.

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 product, hydrocarbon-based solvent. Leaking fittings, a damaged hose or carelessness could lead to the discharge of solvent outside of the container. Manual emergency shut-off valves are on each hose, should the equipment not

function properly. In addition, employee training emphasizes the importance of inspection, maintenance and reporting of conditions with pollution incident potential.

c. Moving containers.

When a container is moved, a potential exists for it to tip over. To minimize the potential for spillage of material, containers must be maintained in an upright position and remain tightly covered while in storage or in transit.

d. Delivery truck transfers.

The cargo should be secured in the vehicle before transport. Individual containers of material can tip over or be dropped when being moved on or off a delivery truck so where possible, transfers will be made using a handcart, forklift and/or a hoist. However, some situations may require the manual movement of a container. In these instances, caution will be exercised to ensure safe movement.

If an incidental spill does occur, the amount of material in the containers is a quantity which can be collected with sorbent or pads. Contaminated soil that results will be removed and shipped to a Safety-Kleen Recycle/Process Center or other properly permitted facility for proper management.

2.2 Potential Major Spill Sources

The following activities have the potential for a major (one for which remedial action will require assistance and implementation of the Contingency Plan) pollution incident:

a. Storage tank Overfills

Both product and used fluid tanks can be overfilled with a resulting discharge of fluid. A high level alarm and daily checks of tank volumes 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 are the 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. 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.

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 a tank or in containers, neither of which are 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, dusts or gases in quantities sufficient to threaten human health. The vapor pressure of Safety-Kleen hydrocarbon-based solvent is low (2mm) and it is reactive with strong oxidizers only. Toxic mists, fumes, dusts or gases will not form in quantities sufficient to threaten human health since strong oxidizers are not managed proximal to the solvent handling areas. Additionally, material is segregated in accordance with USDOT regulations. The solvent low vapor pressure 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.
 - 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, a water based automatic sprinkler system covers the container storage areas RF#1 and RF#2 and the storage tank is provided with a fire suppression system as shown in the drawing 7046-4100-399. The transfer areas where ignitable wastes are managed are also covered by a dry chemical suppression system. It should be noted that Safety-Kleen has an automatic response system with the fire department which operates 24 hours a day.

2.4 Tank Evaluation and Repair Plan

The waste stored in the tank at this facility consists of mineral spirits and aqueous parts washer solvents which are compatible with the carbon steel tank structure; in fact, the hydrocarbon based parts washer solvent is often used as a coating to prevent rusting of metal parts.

If corrosion is noted, it will be removed and the tank will be repaired as required. If the corrosion is significant and localized, the tank will be taken out of service and repaired, (e.g., a patch welded over the corroded area). Should the corrosion of the tank be extensive or if it is found to be leaking and repair is not practicable, the tank will be taken out of service and replaced. In the case of a tank which leaks outside of the 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 is 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 will 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 sales office. Included in these phone numbers is the 24-hour telephone number which can be used to contact the Environmental, Health and Safety Department.

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

ATTACHMENT G
INTEGRATED CONTINGENCY PLAN

ATTACHMENT G

INTEGRATED CONTINGENCY PLAN

ABSTRACT

PURPOSE: This Integrated Contingency Plan describes the proper actions to take during a response incident at Safety-Kleen's Cohoes, 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 Integrated Contingency Plan during an emergency.

EMERGENCY COORDINATORS: The branch manager is the facility's primary emergency coordinator. The Service Center 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 G - 1.

EMERGENCY NOTIFICATIONS:

AGENCY		TELEPHONE
Safety-Kleen's 24-hr EHS Department		(800) 468-1760
Emergency Fire and Police		911
Albany Memorial Hospital		(518) 262-3791
Response Contractor	Clean Harbors	(800) 468-1760
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 – INTEGRATED CONTINGENCY PLAN

This Integrated Contingency Plan has been prepared for the Safety-Kleen Systems, Inc. Service Center located at 17 Green Mountain Dr. Cohoes, 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 handled in containers through use of two permitted container storage areas with a maximum waste storage capacity of 2,400 gallons located in the return and fill building; and in bulk in a 12,000 gallon storage tank. 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 Integrated 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 Integrated Contingency Plan is to be expeditiously carried out 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 Integrated Contingency Plan during an emergency response event; however, employees must be familiar with the procedures in this plan to ensure that it is properly implemented.

The plan will be maintained and amended when there are changes to ensure overall preparedness for potential contingencies related to waste management including both hazardous and non-hazardous wastes. Copies will be maintained at the Service Center and by the local police department, fire department, and hospital for use during an emergency.

1.0 GENERAL INFORMATION

This Integrated Contingency Plan describes the actions to be taken at the Cohoes 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.
17 Green Mountain Dr.
Cohoes, New York 12047

The operator of the Service Center is:

Safety-Kleen Systems, Inc.
2600 North Central Expressway.
Richardson, TX 75080

1.1 Description of Business Activity

The Cohoes 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 will be handled as 10-day storage exempt waste on a USDOT transfer basis. Only the hydrocarbon and aqueous parts washer solvent wastes will be terminated for storage. Wastes are ultimately transported off-site to a Safety-Kleen Recycle/Process Center.

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 Cohoes 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 Cohoes 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 (i.e., hydrocarbon and aqueous parts washer solvents) 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. The Cohoes 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.

1.2 Waste Descriptions

Various types of wastes will be handled by the Service Center. Wastes will be managed in both tanks and containers. Because the wastes are assumed to contain free liquids, 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 (i.e., hydrocarbon- and aqueous- based parts washer solvents) and their associated hazardous characteristics and/or constituents. Additionally, for informational purposes, similar data is provided for on-site generated wastes and for wastes that will be managed on a transfer basis.

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

- Spent parts washer solvents. These are mostly mineral spirits and they may be either hazardous or non-hazardous, and
- Aqueous solutions. These may be either hazardous or non-hazardous depending upon use by the customer.

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:

- Tank bottoms,
- Contaminated Gloves, Rags, Paper, Absorbent, etc.,
- Sediment and debris from the drum dumpsters.
- Precipitation that could accumulate in secondary containment systems. If hazardous, this waste 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.

1.2.1 Permitted Storage Wastes

1.2.1.1 Parts Washer Service Wastes

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.

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

Review of Safety-Kleen waste sampling studies reveals a great deal about the spent parts washer solvents. Analyses of spent, hydrocarbon-based, parts washer solvents have shown concentrations of TCLP metals and volatiles in the parts per million range. Analyses of spent aqueous parts washer solvent have shown concentrations of TCLP volatiles in the parts per million range.

The recycled parts washer solvent delivered to a customer 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 that is delivered to the customer.

Historically, spent hydrocarbon based parts washer solvents have had a flash point ranging between 135 - 145 F.

The aqueous-based parts washer is a service that uses a solution of 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 hydrocarbon-based solvents. The Clean Air Act, health and safety concerns and waste minimization are all possible reasons for a customer to want to use an aqueous-based parts washer.

Hazardous aqueous based 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. (These solvents are commingled with the hydrocarbon-based material). Containers holding hazardous aqueous parts washer solvents are poured into one of two drum washer/dumpster units at the return and fill station and then pumped into the tank.

The 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 four weeks. This commingled waste may be ignitable (D001) and may exhibit toxicity characteristics using the toxicity characteristic leaching procedure.

1.2.2 On-Site Generated Wastes

As a result of operating and maintaining the facility, waste is generated at the Service Center. Waste that is containerized is stored in the container management area located in the warehouse.

1.2.2.1 Wastes from Tank

Periodically, it may become 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 and can collect up to 4,000 gallons of this waste for reclamation. This waste may be ignitable (D001) and may exhibit toxicity characteristics using the toxicity characteristic leaching procedure. This waste stream is generated on-site by Safety-Kleen and is not a waste accepted from an off-site generator.

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. 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 Cohoes Service Center offers a service to collect and manage various solvents and wastes from its industrial and automotive customers. This waste is generated from a variety of processes and varies from customer to customer. The containerized wastes will be managed at the facility as a 10-day storage exempt waste on a USDOT transfer basis. It will be temporally stored for ten days or less in the transfer container management areas of the facility. These wastes will be under active shipping papers.

Many US EPA 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. The materials will be managed and segregated in accordance with 49 CFR 177.848. These wastes will be transported from the Cohoes 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 parts washer solvents will be stored in permitted container storage areas located in the return and fill building (RFS). Waste containers will be stored on the RFS platform and on the concrete pad located to the north of the dock. The return and fill dock is equipped with metal pans for additional secondary containment. 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.

Hydrocarbon and aqueous parts washer solvents will be stored in the above described permitted container storage areas and in a 12,000-gallon bulk storage tank. The tank is constructed of steel and is secondarily contained.

Parts washer solvent is transferred into the tank through use of two wet dumpsters. These units are positioned atop a secondarily contained area commonly referred to as the return and fill station. The return and fill station is inside the warehouse.

Containerized wastes managed as a 10-day storage exempt waste on a USDOT transfer basis and that generated from on-site operations will be stored in one of the transfer waste management areas located at the facility. The two locations are designated as Area South and Area North in Figure G-1. Transfer containers are also stored in trailers parked in the outdoor parking area.

2.0 EMERGENCY COORDINATORS

The emergency coordinators and alternates are trained to respond in the event of an emergency situation. The primary and alternate emergency coordinators, home addresses, phone numbers and pager numbers as well as the office phone number are provided to emergency service providers (e.g. the fire department), and listed in **Table G-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 Integrated Contingency Plan.

At least one emergency coordinator, or an alternate emergency coordinator, is at the Service Center or on call and capable of reaching the Service Center in time to effectively respond to potential response situations. Each emergency coordinator and alternate emergency coordinator is familiar with this Integrated 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 G – 1
List of Emergency Coordinators

Emergency Coordinators	Office Phone #	Home Phone #	Home Address
Primary Art Poublon	(518) 783-8080 Cell (978) 270-4628	(978) 655-4243	110 Rolling Ridge Lane Methuen, MA 01844
Alternate Joseph Vincent	(518) 783-8080 Cell (518) 858-2723	(518) 434-0003	76 Van Rensselaer Blvd Albany, NY 12204
Alternate Rob LaJeunesse	(518) 783-8080 Cell (518) 265-9967	(518) 233-1869	322 Saratoga St. Cohoes, NY 12047

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 then the responsibility of the emergency coordinator or the alternate emergency coordinator (when the emergency coordinator is not available) to:

- Evaluate the situation and decide whether to implement the full Integrated Contingency Plan;
- Identify the character, exact source, amount and aerial extent of any released materials;
- Assess possible hazards to human health or the environment;
- Supervise emergency response following the procedures in the Integrated Contingency Plan;
- Notify outside emergency, state and local agencies and Safety-Kleen's EHS Department;
- Supervise the evacuation, if warranted;
- Act as liaison between emergency and state agencies and Service Center personnel;
- Supervise cleanup operations following the procedures in the Integrated 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 a technically-effective and time-efficient manner.

The decision to implement the Integrated 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 Integrated Contingency Plan should be implemented.

The full Integrated 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.

For general guidance and consideration, the Integrated Contingency Plan will be implemented in response to the situations detailed below. The decision to implement the Plan 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;
- Spill resulting in the release of toxic liquids from a secondary containment system;
- Spill that may cause potential ground water contamination;
- Spill that cannot be contained on-site;
- Spill of significant size or danger to threaten human health, contaminate the environment or cause personal injury;
- Spill outside of secondary containment if it exceeds 10 lbs.

4.0 RESPONSE PROCEDURES

4.1 Response Classification

Safety-Kleen has a classification system that is 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 Integrated 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 Integrated 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 Integrated Contingency Plan. Response actions will be performed by on-site personnel.

4.1.2 Major Emergency

A major emergency warrants full implementation of the Integrated 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:

- non-containable, quickly-spreading fire or one that could potentially spread to other waste containers or cause an explosion;
- non-containable release that threatens to enter storm sewers, municipal sewer or surface waters;
- 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 being 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 involved by review of the facility operating log, 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 that should be used to respond to an incident involving specific hazardous materials. This reference provides response data on the hazardous materials that will be managed by the facility.

Following the review of available information and, if necessary, the ERG, 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 597 whichever is less, and of any fires in the facility or implementation of the full Integrated 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 Integrated Contingency Plan. If the event is a major emergency, the emergency coordinator will perform the following:

- implement the Integrated Contingency Plan;
- supervise the response following the procedures in the Integrated 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 Integrated Contingency Plan is implemented.

Cleanup Contractor; To assist with remedial action after a release.

Table G-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 G - 2

Outside Notification of Major Emergencies

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

AGENCY	TELEPHONE
Emergency Fire and Police	911
Albany Memorial Hospital	(518) 262-3791
Clean Harbors/Safety-Kleen Emergency Services	(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 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 Integrated Contingency Plan should be implemented.

4.5.1 Incidental Spills

Responses to incidental spills do not require implementation of the full Integrated Contingency Plan. The following actions will be taken in response to such a situation. If a spill should occur while pouring spent parts washer solvent into a drum washer/dumpster unit or filling containers with parts washer solvent product at the return and fill station and it is contained in the secondary containment system at the base of

the return and fill station, actions will be taken promptly to remove the solvent from the containment system. Should the spill occur outside the containment, different actions will be taken depending on whether the spill occurs on a paved or unpaved area.

- If the parts washer solvent spills on a paved area, it must be collected with sorbent materials. The inert sorbents will be collected and containerized for proper management.
- If the parts washer solvent spills on an unpaved area, the free solvent will be collected with sorbent material. The sorbent material and any contaminated soil will be collected and containerized for proper management.

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 the incidental release exceed ten (10) pounds or should it meet any other relevant reporting threshold, the emergency coordinator will properly report the event. 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.

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. 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. Safety-Kleen will be in compliance with all OSHA requirements for personnel protective equipment including respiratory protection (if necessary) when responding to an emergency situation. 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.

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 Integrated Contingency Plan. If a fire cannot be extinguished immediately or an explosion occurs, implementation of the Integrated 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 Integrated 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 throughout the office, warehouse and return and fill areas. This system is further supported by dry-chemical fire suppression systems positioned in the transfer container management 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 expeditiously as possible.

Leaking or damaged containers will be overpacked into appropriately sized recovery drums. The Cohoes 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 Cohoes 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 wash down; 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 soon 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 G - 2 shows the locations of the emergency equipment. Much of this equipment is inspected once per week.

Gloves - Neoprene gloves are to be used when handling wastes. The gloves provide adequate 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 Area North transfer waste management area and the hazardous waste storage tank are supported by a 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, mops 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 from one container or tank to another.

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 NYSDEC approval of changes made to this plan, arrangements will be made with the police department, fire department and local emergency teams to familiarize them with the layout of the Cohoes 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 Integrated 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 Cohoes Service Center exits are clearly marked and employees are trained to know the escape routes. Posted in several locations at the facility are figures 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 G - 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 staging area directly across from the main access gate to the facility on Green Mountain Dr. 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 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 G - 2.

When NYDEC is contacted, the reporting individual must be prepared to provide the following information:

- a. Name and telephone number of the 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 Integrated Contingency Plan. Within 5 days of the incident, a written report, detailing the circumstances of any incident that requires the implementation of the Integrated 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 Integrated 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 INTEGRATED CONTINGENCY PLAN

This Integrated Contingency Plan is kept at the Cohoes 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 Integrated Contingency Plan, are made available to the manager, supervisors and emergency response personnel as well as employees working at the Service Center.

The Integrated Contingency Plan is reviewed and updated, if necessary, whenever:

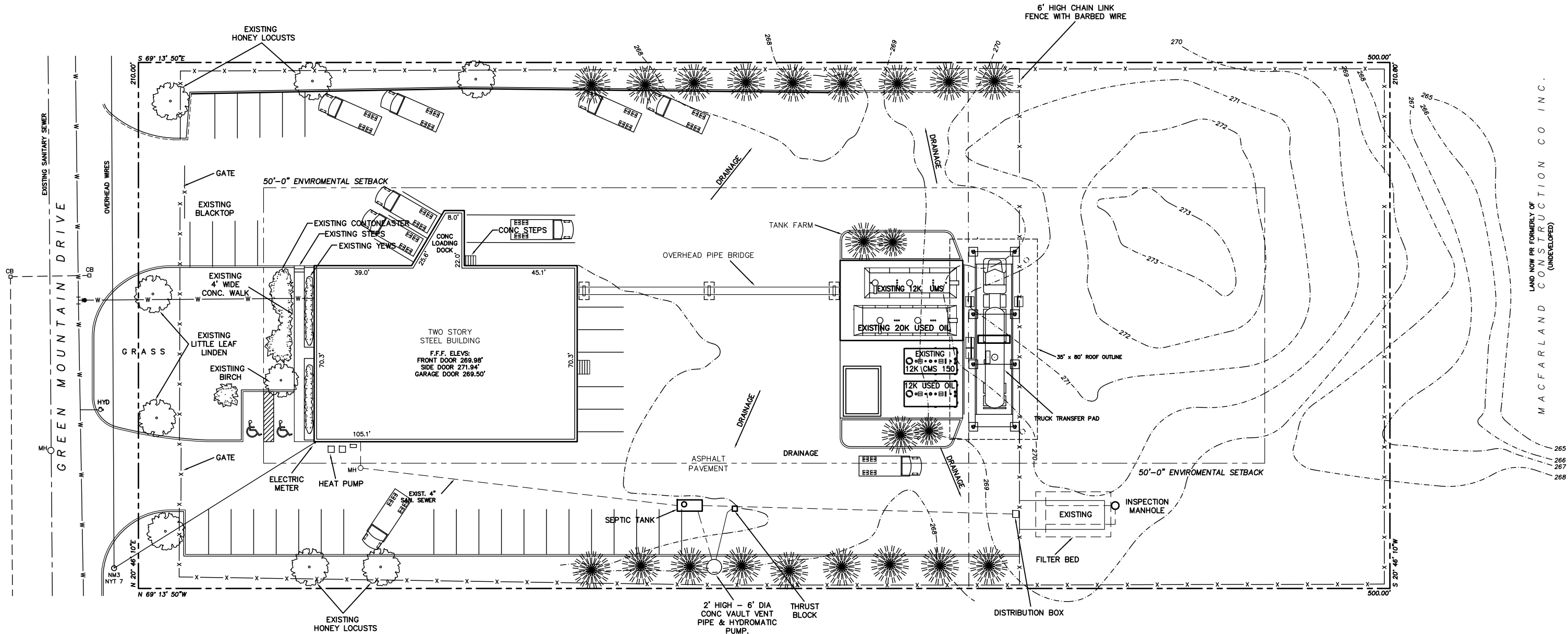
- The Service Center's Permit is modified to allow new wastes to be stored or treated, or applicable regulations are revised;
- The list or location of emergency equipment changes;
- The Service Center changes in its design, construction, operation, maintenance, or other circumstances in a way that increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
- The Integrated Contingency Plan fails when implemented in an emergency.

Safety-Kleen will provide a current list of the emergency coordinators to the NYSDEC, the local police, and the local fire department. Changes to this list will be promptly communicated to these organizations.

FIGURE G-1

SITE PLAN

LAND NOW PR FORMERLY OF
ABF FRIEGHT CARRIER CORP.
(WAREHOUSE)



LAND NOW PR FORMERLY OF
BAER SUPPLY
(OFFICE/WAREHOUSE)

SITE PLAN

SCALE: 1" = 20'-0"



SITE STATISTICS

SITE ZONING.....- INDUSTRIAL F ZONE
TOTAL AREA.....- 2.4± ACRES
PARKING SPACES....- 31

SITE COVERAGE

EXISTING
BUILDING.....7390 SQ. FT.....7.0 %
PAVEMENT.....40,952 SQ. FT.....39.2 %
GREEN AREA.....56,202 SQ. FT.....53.8 %

UMS - USED MINERAL SPIRITS

CMS - 150 FLASHPOINT CLEAN MINERAL SPIRITS

NO.	DESCRIPTION	BY	CHK	APPR	DATE
D	REVISE TANK CONTENTS	JEK	MH	MH	102810
C	ADD RELOCATED TANK FROM LEEDS, ME.	JEK	DOP	DDP	072810
B	UPDATE	RS	NDE	-	6/97
A	RELEASED FOR PART "B" PERMIT	RS	NDE	-	030493
REVISIONS					

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TITLE

EXISTING SITE PLAN



SAFETY-KLEEN SYSTEMS, INC.

2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

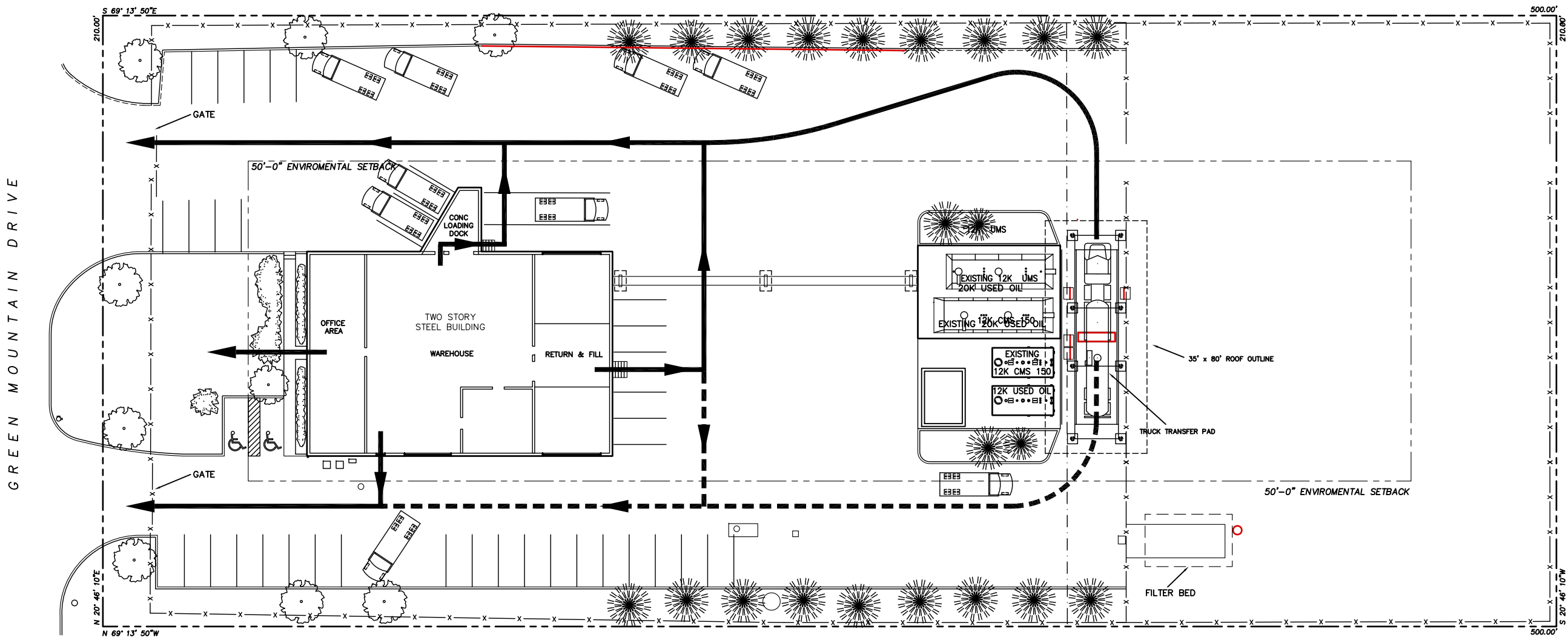
SCALE	BY	CHKD	P.E. APPR	OP. APPR	DATE
AS NOTED	RBS	NDE			3/4/93
SERVICE CENTER LOCATION			SC-DWG-NO.		REV. NO.
COLONIE, NY			7046-SP00-001		D

FIGURE G-2

EMERGENCY EQUIPMENT

FIGURE G-3

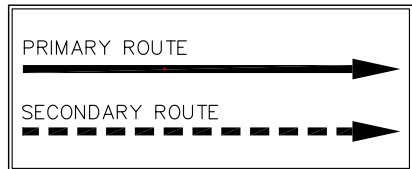
EMERGENCY EVACUATION ROUTES



SITE PLAN

SCALE: 1" = 20'-0"

LEGEND




GENERAL NOTES

- NON-PERMITTED AREAS MAY CHANGE.

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						TITLE			
						EMERGENCY EVACUATION PLAN			
						 SAFETY-KLEEN SYSTEMS, INC. 2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080 PHONE 800-669-5740			
C	REVISE TANK CONTENTS	JEK	MH	MH	102610	SCALE	BY	CHKD	P.E. APPR
B	UPDATED FOR NEW 105 TANK	DE	NDE	-	060697	AS NOTED	RBS	NDE	OP. APPR
A	RELEASED FOR PART "B" PERMIT	RS	NDE	-	030493	DATE		REV. NO.	
NO.	DESCRIPTION	BY	CHK	APPR	DATE	SERVICE CENTER LOCATION		SC-DWG-NO.	
REVISIONS						COLONIE, NY		7046-SPOO-002	
								C	

SAFETY-KLEEN SYSTEMS, INC.
Cohoes, 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 Cohoes Service Center will be designed to ensure 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 Cohoes Service Center will train its employees in accordance with the requirements detailed in 6NYCRR, Part 373, Section 373-2.2(h). Employees will be 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 training programs given both initially and annually to employees who manage or handle hazardous waste at this Service Center is provided in Appendix H - 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 provides a training program to be completed annually.

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 will be maintained at the facility. A copy of the job description for each individual will also be 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 H - 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, in turn, 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. Inspect or designate an employee to inspect the facility, 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.

3.2 Regional Manager

The regional manager, or designate, oversees the operations of several service centers in a geographic area. Branch managers report to her/him and he verifies 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 designate 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 for branch operations in the absence of the branch manager.
- e. Ensure that annual training for branch employees has been completed.

3.3 Environmental, Health & Safety Department

Safety-Kleen's Environmental, Health and Safety Department is headquartered at the corporate office. An EHS Manager is responsible for the training, permits and other compliance issues for the branches in a geographic area of the country. The EHS Department will:

- a. Train 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 periodically 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 completed.

An employee will be 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 H - 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 regulations 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 H - A. Annual training will also be provided following the guidance detailed in the Annual Training For Branch Employees form in Appendix H - 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 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.

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 Other Personnel

There may be other personnel on site who are not direct Safety-Kleen employees (such as Clean Harbors personnel). These people are not involved in the management of the facility, but may have an office on the premises. These personnel will complete health and safety and environmental training appropriate to their job functions. In addition, they will participate in site specific RCRA awareness training applicable to this facility.

4.6 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 H - 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 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 H - A

Initial Training Program Outline

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

SESSION ONE: ORIENTATION

1. Safety-Kleen 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

Annual Training for Branch Employees

- 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 H- 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. Coordinates administration staff training on all issues, as well as maintaining ETTS information for facility.

Essential Job Functions and Responsibilities:

- Supervise Branch Secretaries.
- Verification of Sales and Haz 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 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, Workers' 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 Haz 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.

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**

Job code: **CST**

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
- E, H, & 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
- Mechanical aptitude
- Ability to interface with Customers and branch personnel

Position Overview: Assist Branch Service Manager to ensure optimum customer service leading to retention and expansion of branch business

Essential Job Functions and Responsibilities:

- Assist in recruiting, training and managing Customer Service Reps
- 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 including proper completion of customer audits, fingerprints for waste acceptance, and checklists.
- Other duties as assigned by the Branch Service Manager

FIELD POSITION DESCRIPTION

Position title: **Customer Service Representative**

Job code: **CSREP**

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:

- 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**

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 B 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

FIELD POSITION DESCRIPTION

Position title: **Branch Sales Specialist**

Job code: **BSS**

Reporting Relationship: Reports to Branch Sales Manager or Senior Sales Specialist

Qualifications:

- high school graduate
- proven sales ability
- self motivated
- excellent communication and presentation skills

Position Overview: Grow branch businesses through direct selling to new and existing customers

Essential Job Functions and Responsibilities:

- Full time direct sales to specific SIC
 - Current account expansion
 - New account creation
- Account retention / Accounts Receivable
- Sample waste streams
- Comply with Corporate Credit Policies

**SAFETY-KLEEN SYSTEMS, INC.
COHOES SERVICE CENTER
EPA ID No. NYD986872869**

**ATTACHMENT I
CLOSURE PLAN**

ATTACHMENT I
CLOSURE PLAN
ABSTRACT

WASTE MANAGEMENT UNITS TO UNDERGO CLOSURE:

- a. One 12,000-gallon aboveground steel storage tank with secondary containment.
- b. A transfer container management area (Area South) with an area of about 1,026 square feet with a storage capacity of 5,328 gallons. This area was a previously permitted container storage area.
- c. Container Storage/Return and Fill Station (R/F #1) consisting of a parts washer solvent management area with container storage. This area has a capacity of 750 gallons (2 solvent dumpsters) and 400 gallons of container storage.
- d. Container storage area (R/F #2) with a container storage capacity of 2,000 gallons.

CLOSURE PERFORMANCE STANDARDS:

Safety-Kleen will close the facility in a manner that:

- a. Minimizes the need for further maintenance and,
- 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, surface waters, or the atmosphere.

The closure performance standard will be accomplished by removing all 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 Cohoes Service Center operates as a storage and 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. At closure 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 TANK AND ASSOCIATED PIPING

To safely clean and decommission the aboveground storage tank:

- a. Remove the remaining material from the tank and return the materials to a Recycle/Process Center for reclamation.
- b. Provide access to the tank.
- c. Rinse, scrape and squeegee the tank interior, removing residual waste material and rinsate. Decontamination of the 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 tank 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 Tank

The contents of the tank will be removed using a pump, vacuum or similar equipment and will then be shipped to a reclaimer.

The manway will be used to gain access to the aboveground tank. 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 tank, personnel will have the proper respiratory protection and protective clothing. Once the tank has been opened, it will be provided with positive ventilation. The tank 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 of Tank

Before removing any residual waste from the tank, piping and appurtenant equipment will be flushed with clean, hydrocarbon-based parts washer solvent followed by a detergent solution. The method used to remove the residual waste materials from the tank will depend on the physical properties and quantities of that material. Prior to any person entering the tank, an effort will be made to remove as much liquid and sediment as possible.

Subsequent to vacuuming the majority of the material from the tank, 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 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 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

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

Analyte	Parameter
Residuals and wash water	TCLP Volatiles and Semi Volatiles
Soil	Part 375 parameters
Rinse Test for verification of decontamination (DEC sampling method)	As determined by DEC at the time of closure based on the waste stored.
Sampling and analysis will be done in accordance with section 3 of this attachment.	

TABLE VII - 2

Methods Used To Sample During Closure

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

<u>Waste</u>	<u>Reference for Sampling</u>	<u>Description of Sampling Method</u>
Residuals and Rinse	Sampling a tank ¹ "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
Rinse	Sampling a drum ^{1,2} "Samples & Sampling Procedures for Hazardous Waste Streams" EPA-600/	Test Methods Evaluation of Solid Waste/Physical/ Chemical Methods, SW846, Current Edition

¹Sampler: Representative sample using a Coliwasa tube or other appropriate means.

²Sampler: 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*

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.

1.3 Removal of the Tank

To safely remove the tank:

- a. Disconnect appurtenant piping.
- b. Disconnect appurtenant pumping equipment.
- c. The tank shall be removed and reused or cut up and sold as scrap.
- d. 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 I - 1 and I - 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 ground 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 rinse will be analyzed for the parameters listed on Table I - 1. The cleaned area will be inspected using a photo ionization detector to determine the completeness of the cleaning. Any other wastes generated in the closure process will be reclaimed or properly disposed of.

2.0 TRANSFER CONTAINER MANAGEMENT AREA (AREA SOUTH)

Safety-Kleen converted a formerly permitted container storage area at the Cohoes facility to an exempt 10-day transfer area. The final closure of this area will 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 rinse 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.

3.0 PARTS WASHER SOLVENT RETURN AND FILL STATION/CONTAINER STORAGE AREA

The container storage area is located in the Return and Fill building with a maximum waste storage of 2,400 gallons (80 thirty- gallons drums). The container storage area consists of the Return & Fill Dock area, drum storage area on the Return and Fill platform, and drum storage on the adjacent concrete pad. At closure all drums will be removed and transported to a solvent reclaimer. The concrete floor will be pressure washed using detergent solution followed up by a clean rinse. The rinse will be analyzed for the solvent stored. The cleaned area will be verified for decontamination in accordance with Section 4.0 B Asampling and analysis for final closure@ of this closure plan.

The rinse will be discharged through the appurtenant piping system into the storage tank, which will be subjected to separate closure procedure as described earlier. The rinse will be analyzed for the parameters listed on Table I-1.using the methods in Table

I-2. The clean dumpster and dock structure may be reused by Safety-Kleen or scrapped.

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.

4.0 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 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.

5.0 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 2035.

Within 90 days of receiving the final volume of hazardous waste, Safety-Kleen will remove hazardous wastes 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 will, of necessity, take longer than 90 days to complete; provide 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 at the site, 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 closure plan and within 180 days after receiving the final volume of wastes. Periodic

inspections will be made during closure 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.
Cohoes, New York**

A. Tank Closure - Open, remove contents of, clean, remove and dispose of one 12,000 gallon above-ground storage tank.

Phase I - Remove Contents and Clean

1. Ship contents (12,000 gallons of mineral spirits) to a reclaimer.

Crew:

2 Truck Drivers \$38.00/hr x 8 hour (loading)	\$1216.00
Tank size - 12,000 gal - 6,000 gal/truck - 2 trucks	
2 Trucks x 300 miles x 6.00/mile	\$3,600.00
Reclamation costs (\$0.59/gal for mineral spirits)	\$7,080.00

2. Squeegee 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

Total - Phase I \$17,720.00

Phase II - Remove and Dispose of Tank

1. Disconnect and Remove Appurtenant Equipment

Crew:

1 Foreman \$42.00/hr x 10 hours	\$420.00
2 Laborers \$31.00/hr x 10 hours	\$620.00

2. Cut Up Tank

Crew:

1 Foreman \$42.00/hr x 10 hours	\$420.00
---------------------------------	----------

1 Laborer \$31.00/hr x 10 hours	\$310.00
3. Remove Tank	
Crew:	
1 Foreman \$42.00/hr x 4 hours	\$168.00
2 Laborers \$31.00/hr x 4 hours	\$248.00
1 Backhoe \$38.50/hr x 4 hour	\$154.00
Equipment \$200 Lump Sum	<u>\$200.00</u>
Total - Phase II	\$2,540.00
Phase III - Concrete Demolition	
1. Demolition of concrete pad (200 x \$95.00/cubic yard)	\$19,000.00
2. Removal and disposal of concrete (200 cubic yard @ \$6.00/cubic yard)	\$1,200.00
3. Hauling 20 mile round trip (12 cubic yard truck - 200 cu. yd. x \$17.40/cu. yd.) Includes cost for crew (standard crew - B -R-S means)	<u>\$3,480.00</u>
Total - Phase III	\$ 23,680.00
Phase IV - Backfilling, Regrading, Soil Testing	
1. Test for soil contamination (2 samples)	\$3,000.00
2. Regrading	
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)	<u>\$10,000.00</u>
Total - Phase IV	\$13,704.38
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)	<u>\$1,500.00</u>
Total Phase V	\$ 13,680.00

Summary of Closure Cost for one 12,000 gallon tank:

Phase I	\$17,720.00
Phase II	\$2,540.00
Phase III	\$23,680.00
Phase IV	\$13,704.00
Phase V	<u>\$13,680.00</u>
	\$71,324.00

B. Closure of Transfer Waste Management Area (Area South) - Remove and return drums to reclaimer, clean the drum storage areas, and dispose of wash water generated.

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 drum management 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. Dispose of containers	
(333 16-gallon drums x \$50/drum)	\$16,650.00
5. Testing for contamination (3 samples x \$1,500.00)	<u>\$4,500.00</u>

Total Area South Closure Cost \$ 33,330.00

C. Closure of Return and Fill Station - Remove, package and dispose of sediment, 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) x 10 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. Torch, 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	<u>\$100.00</u>
Total Return and Fill Station	\$18,900.00

D. CONTAINER STORAGE AREA

1.	Container Storage Area - Remove and transport drums for recycling or disposal of 2,400 gallons (approx. 80, 30- gallon drums of parts washer solvent @ \$50/drum + \$ 400 freight)	\$ 4,400.00
2.	2 Truck drivers - \$ 31.00/hour x 8 hrs.	\$496.00
	2 trucks - \$ 500 lump sum	\$1,000.00
	Hauling cost - 2 loads x 300 miles x \$6.00/mile	\$3,600.00
	Cleaning Drum Storage Area	
	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
	Disposal of Waste water (480 sq.ft x 4 gallons/sq.ft x \$0.65/gallon)	\$1,248.00
	Testing for contamination - 2 samples x \$1,500.00	\$3,000.00
	Total Closure of Container storage Area	\$14,504.00

E. PE Certification **\$1,500.00**

F. Total Closure Cost

12,000 gallon tank	\$71,680.00
Transfer Waste Management Area (Area South)	\$33,330.00
Return and Fill Station	\$18,900.00
Closure of Container storage Area	\$14,504.00
PE Certification	<u>\$1,500.00</u>
	\$139,558.00
Contingency Administrative Cost (20%)	\$ 27,911.00
Administrative Cost (15%)	<u>\$ 20,934.00</u>
TOTAL (based on 2005 cost)	\$188,403.00
Cost adjusted for 2010 inflation factor as required by 373-2.8 (c)(2)	\$204,582.00
Cost adjusted for 2015 inflation factor*	\$222,600.00

*Inflation factors applied:

2011	1.012
2012	1.010
2013	1.021
2014	1.018
2015	1.01

ATTACHMENT J

AIR EMISSIONS STANDARD FOR EQUIPMENT LEAKS, CONTAINERS, AND TANKS PLAN

ABSTRACT

Purpose: To ensure compliance with relevant sections of NYDEC Hazardous Waste Regulations, the Cohoes facility will design and implement a program directed toward 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.

ATTACHMENT J - AIR EMISSIONS STANDARDS

1.0 AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

The permitted hazardous waste management units at the Cohoes 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. The piping schematic drawing AA19001 shows the location and markings of each piece of equipment subject to 6 NYCRR 373-2.28.

One open-ended unloading line is associated with the affected waste management unit. A check valve, gate valve, and cam lock 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 is achieved by daily visual inspection of affected equipment. Inspection of each piece of tagged equipment also includes the flanges connecting the equipment to the pipeline. 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 are therefore monitored based on visual observation. This is 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 15,000-gallon aboveground, horizontal storage tank and ancillary equipment in the form of one drum washer/dumpster, one drum dumpster, 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 is 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 Cohoes facility controls 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. 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 ppmv 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 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 exhibit 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). Wastes in the tank are not heated to a temperature greater than the temperature at which the maximum organic vapor pressure was determined.

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.

The tank is equipped with a conservation vent that 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 that 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 K. Containers in use at the facility are less than 0.46 m³ in size. Waste is not treated by stabilization. Therefore, air pollutant emissions from containers between 0.1 m³ and 0.46 m³ 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 are either emptied into the Return and Fill unit; or they are repackaged, or the container is repaired within one day of discovery. All container repairs are completed within 5 days

or the waste is removed from the container. Inspections of stored containers are documented on the facility inspection report forms.

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 recycles 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. The typical size of the containers is 5, 16, or 30 gallons. Depending upon the size of the customer, a service representative will remove one or more containers of dirty solvent, each container about 2/3rd full of waste solvent. Upon return to the branch facility, the service representative unloads the drums from the transport vehicle onto the branch dock area or other permitted container storage area. The drums are then emptied into a unit designated as a "Return and Fill Station" (RFS). An attached drawing provides the details 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 spent solvent is pumped to a tanker parked within a secondary containment and transported to one of Safety - Kleen's recycle centers for reclamation.

3.2 Operation

Spent parts washer solvents that are returned to the branch are packaged in containers that can range in size typically from 5 to 30 gallons. In many of Safety-Kleen's parts washers, the containers were used as the solvent reservoir located below the parts washer unit while it was in use at the customer's location. Once at the branch, the transport vehicle backs up to the unloading dock area that includes the elevated return and fill/drum washer (RFS) area, vicinity grating and secondary containment. Containers are unloaded onto the RFS (see drawings in Attachment XI). 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 a permitted container storage area. Emptying of a container requires the operator to open the lid of the RFS unit and individually pour each drum of used parts washer solvent into the unit. The RFS units are equipped with a drum washer that is used to remove any solids that may have accumulated on the interior of the container. The RFS Unit holds the waste dumped and the residues from the washing process. The drum washer uses the solvent removed from the container to clean the interior of the container by low pressure spraying. The exterior of the container is cleaned by revolving brushes on which the emptied drum is placed.

After a container has been emptied and washed, it is allowed to drip dry on a rack located within 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. It can also be manually operated when required.

As previously mentioned, the facility typically empties the containers of used parts washer solvent soon after the shipment arrives at the facility. Following the emptying of 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 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. Periodically, solids are collected from the reservoir of the RFS and 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 Controls for the Return & Fill Station/Drum Washers:

SK will control the air emissions from the RFS as follows:

SK has provided a mechanical ventilation system (fans) in a location near the drum filling areas. The ventilation system for dispensing areas will 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 volume of the room is 28,253 CF. The ventilation fans will provide a ventilation rate of at least 6 air exchanges per hour.

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 by 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.

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. Please refer to the attached drawings. 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 during periods of time 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 Unit cover will be maintained in the closed position and the junctions of the lid will be tightly fitted to ensure that no organic vapor leaks resulting in emissions above 500 ppmv occur.

In addition, 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 will be determined outside the RFS building away from any emission source.

The leak tests must be conducted midway through the RFS operation when the drums are washed [example: If a batch of 20 drums are washed, the test must be performed when the 10th drum is washed]. A monitoring log containing the following information is maintained at the facility:

1. Time and date of the test.
2. Background reading, time and where it was taken.
3. Monitoring results.
4. Calibration information.
5. The name of the person who conducted the test.
6. Defects and repairs completed if the reading was 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 must make the first efforts at repair of the defect no later than five calendar days after detection and complete the repair as soon as possible but no later than 45 days after detection.

After any repair as described above, monitoring will be conducted on a monthly basis for three months. At the end of the three monthly monitoring, if the results indicate that the maximum organic concentration difference each time was below 500 ppmv, then quarterly monitoring will resume. If the results indicate that the maximum organic concentration difference is not below 500 ppmv, then additional repairs and monthly monitoring must occur until three successive monthly monitoring results are below 500 ppmv.

4.0 INSPECTION AND MONITORING REQUIREMENTS:

Safety-Kleen will inspect and monitor air emission control equipment in accordance with 373-2.29(l)(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 J-1 of this attachment.

Table I

	<u>Mean</u>	<u>Std. Deviation</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, F	150	2.9	19	1.9
<u>SK 105 Solvent Recycled</u>				
Vapor Pressure @ 68 F, torr*	0.39	0.25	13	63
Flashpoint, F	134	10	13	7.7
<u>SK 105 Solvent Virgin</u>				
Vapor Pressure @ 68 F, torr*	0.81	0.21	6	26
Flashpoint, F	106	1.0	6	1.0

* torr = mm Hg, 0 C; = 0.133 kPa

EQUILIBRIUM (SATURATION) CONCENTRATIONS OF VOCs IN AIR AT ATMOSPHERIC PRESSURE (760 mm Hg) AND AMBIENT TEMP (68 F)

SK Parts Washer Solvent

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 (PPMwght)	5488.29818

The Saturation Concentration is calculated using Dalton's Law, I.e., the sum of the partial pressures equals the total pressure and overall gas phase material balance wherein the sum of vapor (and air) mole fractions equals 1.

APPENDIX J-1

Subpart CC Visual Inspection Checklist

Annual Visual Tank Inspection

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.
COHOES SERVICE CENTER
EPA ID No. NYD 986872869**

**ATTACHMENT K
MANAGEMENT OF WASTE IN CONTAINERS**

ATTACHMENT K
MANAGEMENT OF WASTE IN CONTAINERS

ABSTRACT

Purpose: The Cohoes Service Center is permitted for the management of parts washer spent solvent waste in bulk through use of an on-site aboveground storage tank. Containerized parts washer solvent routed to the facility will remain on the transport vehicles for a limited time, unloaded in the permitted container storage area shown in drawing 7046-WBOO-002 to verify its contents and documentation prior to it being transferred into the bulk storage tank. Containerized materials destined for out-of state facilities are also managed at the Cohoes Service Center as a 10-day storage exempt waste. The purpose of this plan is to describe the operational practices associated with the management of these materials.

ATTACHMENT K - MANAGEMENT OF WASTE IN CONTAINERS

1.0 WASTE MANAGEMENT AREAS

Hydrocarbon and aqueous parts washer solvents are 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 is 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. The return and fill station is attached to the warehouse.

Containerized materials managed on a 10-day storage exempt basis, and waste generated from on-site operations are stored in one of two transfer waste management areas located in the warehouse. The two locations are designated as Area South and Area North.

2.0 MANAGEMENT PRACTICES

The Cohoes facility accepts containerized spent parts washer solvent from off-site generators for management. The spent parts washer solvents are transported to the facility in containers. This material is removed from the transport vehicles, transferred to the container storage area on R/F #1 prior to bulking the solvent into the bulk waste solvent storage tank through the drum washer/return and fill station. As shown in drawings 7046-SP00-003 and 7046-SP000-005, trucks back up to the outside loading dock, R/F #1, or R/F #2 to unload containers.

The containers may 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 7046-WBOO-002. These containers are 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 areas (R/F #1 and #2) are located in the Return & Fill building. They consist of concrete pads utilized for the storage of waste containers. The total waste volume of waste parts washer solutions stored on these concrete pads will not exceed 2,400 gallons. Other liquid products are also stored in containers in this area. The total quantity of waste and product combined will not exceed 3,600 gallons. The container storage areas are managed in accordance with 6 NYCRR Part 373-2.9.

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. If liquid accumulates in the containment areas it is promptly removed. All materials collected from spills will be treated as hazardous waste unless Safety-Kleen demonstrates otherwise.

The return and fill station (RFS) 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 1338 gallons. The return and fill station is also underlain by a metal pan that empties into a satellite accumulation container. This is to collect any splash out when emptying drums into the return and fill station. The total volume of waste solvent stored on the platform of the RFS will not exceed 400 gallons. The total quantity of waste and product combined will not exceed 1,200 gallons. Containers in this area are not required to be stored on pallets since they are already elevated above the floor. A minimum of 2 feet aisle space between containers and a 2-foot central aisle space is maintained for conducting daily inspections and movement of emergency equipment to the RFS when needed.

The concrete pad (RF#2) adjacent to the return and fill station has a waste storage capacity of 2,000 gallons. This area is also a monolithic concrete slab surrounded by a 4"x 4" concrete curb, which provides a secondary containment of 1354 gallons. The total permitted container storage capacity of waste and product combined will be 2,400 gallons (or 80 - 30-gallon drums) equivalent to the total average volume of part washer wastes received at the facility for one day. Waste containers in this area are stored on pallets to elevate them off the floor. As illustrated in Drawing K-2, 2' of aisle space will be maintained between rows of pallets and pallets will be placed no closer than 4' from interior building walls.

If for 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 will be subject to the available secondary containment volume

When waste containers are moved, a potential exists for the drums to tip over. To minimize the potential for spillage of solvents, all containers are maintained in an upright position and remain tightly covered while in storage or in transit. A 2' aisle space is maintained for waste drums.

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

3.0 MANAGEMENT OF TRUCK STORAGE OF SOLVENT CONTAINERS PRIOR TO TRANSFER TO THE STORAGE TANK

Spent parts washer solvents are transported to the facility in containers. The containers 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 equipment. This truck storage will be regulated under the permit. On Mondays, Tuesdays, Wednesdays, and Thursdays, the containers are removed from the vehicles and either stored in the container storage area or transferred to the tank within 16 hours of arrival at the facility. Vehicles arriving after work hours, on Fridays, or on holidays are off-loaded before 12:00 noon of the next working day.

Vehicles holding containers of spent parts washer solvent may be staged in the Service Center parking lot before unloading. As shown on the site plan, the vehicles are parked in designated areas at least 50 feet from the property boundary. The total number of vehicles containing waste temporarily staged at the Service Center before off-loading will not exceed 15. The maximum volume of parts washer solvent waste stored on each vehicle does not exceed 2000 gallons. The total volume of parts washer wastes stored in trucks does not exceed the remaining volume available in the storage tank for transfer of the waste at any time. All of the vehicles temporarily staged at the service center are equipped with a secondary containment system designed to capture material released into the storage compartment of the vehicle. The restrictions described in this paragraph are not mandated for vehicles in which parts-washer solvent containers are unloaded in within two hours.

Waste transported to the facility is managed in accordance with applicable USDOT regulations. Hazardous materials are loaded and segregated in accordance with the Segregation Table for Hazardous Materials in 49 CFR 177.848.

4.0 PARTS WASHER CONTAINER MANAGEMENT

Spent parts washer solvents from customers are either stored in containers prior to shipment off site; or are transferred to the waste storage tank via the return and fill station. This consists of a dumpster, dumpster/barrel washer and pump. For solvent consolidated into the bulk tank, containers are manually emptied allowing the waste to flow into one of the dumpsters. After the waste is transferred into a dumpster, the container is 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 second container rinsing unit is installed immediately adjacent to the dumpster/barrel washer. The rinsing unit provides a final rinse using Safety-Kleen's 150 grade solvent for some containers that are being reused to ship clean 150 solvent to customers. The containers for which this unit is utilized are rinsed with clean solvent and drained upside down on a funnel-like device. The container rinsing unit is piped directly to the dumpster to minimize emissions and to minimize the chance of spills.

The parts washer waste containers are of a specific type, size and color to distinguish them from other waste containers accepted for 10-day exempt storage at the facility. This management practice eliminates the need to conduct compatibility tests prior to bulking the parts washer solvent wastes. The parts washer containers are easily recognizable. 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 either green or red.

Aqueous solvents are also managed in 16- and 30- gallon USDOT specification UN 1A2, open-topped containers. These steel containers are readily identified by the blue color of the units.

In addition to the steel containers described above, a 5-gallon, closed-head, plastic unit

is used for both hydrocarbon and aqueous parts washer solvents. These uniquely shaped containers (USDOT specification UN3H1 or UN1H2) are further distinguished by color - black for hydrocarbon solvent and blue for aqueous material. Table K - 1 summarizes the type, size and color of all of the parts washer solvent containers that are used by the Cohoes Service Center.

TABLE K-1

Summary of Parts Washer Solvent Containers
Container Color and Type
Safety-Kleen Systems, Inc.
Cohoes, New York

WASTE TYPE	WASTE CODES	DRUM TYPES	SIZE OF EACH DRUM	DRUM COLOR
SK Solvents (Hydrocarbon and Aqueous Based)	D001, D004- D011, D018, D019, D021- D030, D032- D042, D043 and Non- hazardous	UN 1A2(steel)	16, 30	red, green, blue
		UN 3H1, UN1H2 (Plastic)	5	Blue Black

A waste label further supports the container type, size and color criteria. Each container of parts washer solvent, regardless of container type, size, or color has a waste label affixed to it denoting its contents, generator, shipping description, etc. 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 waste labels will ensure that the spent parts washer solvents will not be contaminated by commingling with other transfer waste managed at the facility while bulking the solvents into the storage tank.

5.0 TRANSFER WASTE MANAGEMENT (for information only)

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

- A. The areas where the consolidation of loads takes place by moving containers from one transport vehicle to another or when containers are removed from transport vehicles and stored 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 will be classified and segregated in accordance with 49 CFR 173.2(a) and 177.848 for transport and management at the facility;
- E. Labpacks will be packaged in accordance with 49 CFR 173.12(b). The contents of labpacks are inspected by qualified personnel authorized by Safety-Kleen prior to transport to the facility.
- F. Hazardous and non-hazardous transfer wastes are stored on site for a maximum of 10 days.
- G. A current inventory of all transfer waste on site is maintained at all times.
- H. Transfer waste containers are inspected each operating day.
- I. Storage where oxidizers, ignitable or reactive wastes are stored are designed and provided with fire suppression systems in accordance with the design specifications of the NFPA and Fire and Property Management Code of New York State.
- J. Certain very high hazard wastes such as radioactives, explosives, temperature sensitive organic peroxides, water reactives, pyrophorics, unstable monomers, flammable metal powders, wastes classified as DOT 6.1 Zone A, and strong oxidizers (example: NFPA Class 3 and 4) are not accepted for storage by Safety-Kleen. Some wastes with the EPA waste code of D003 are not accepted for storage with the exception of some isocyanate based urethane adhesives.

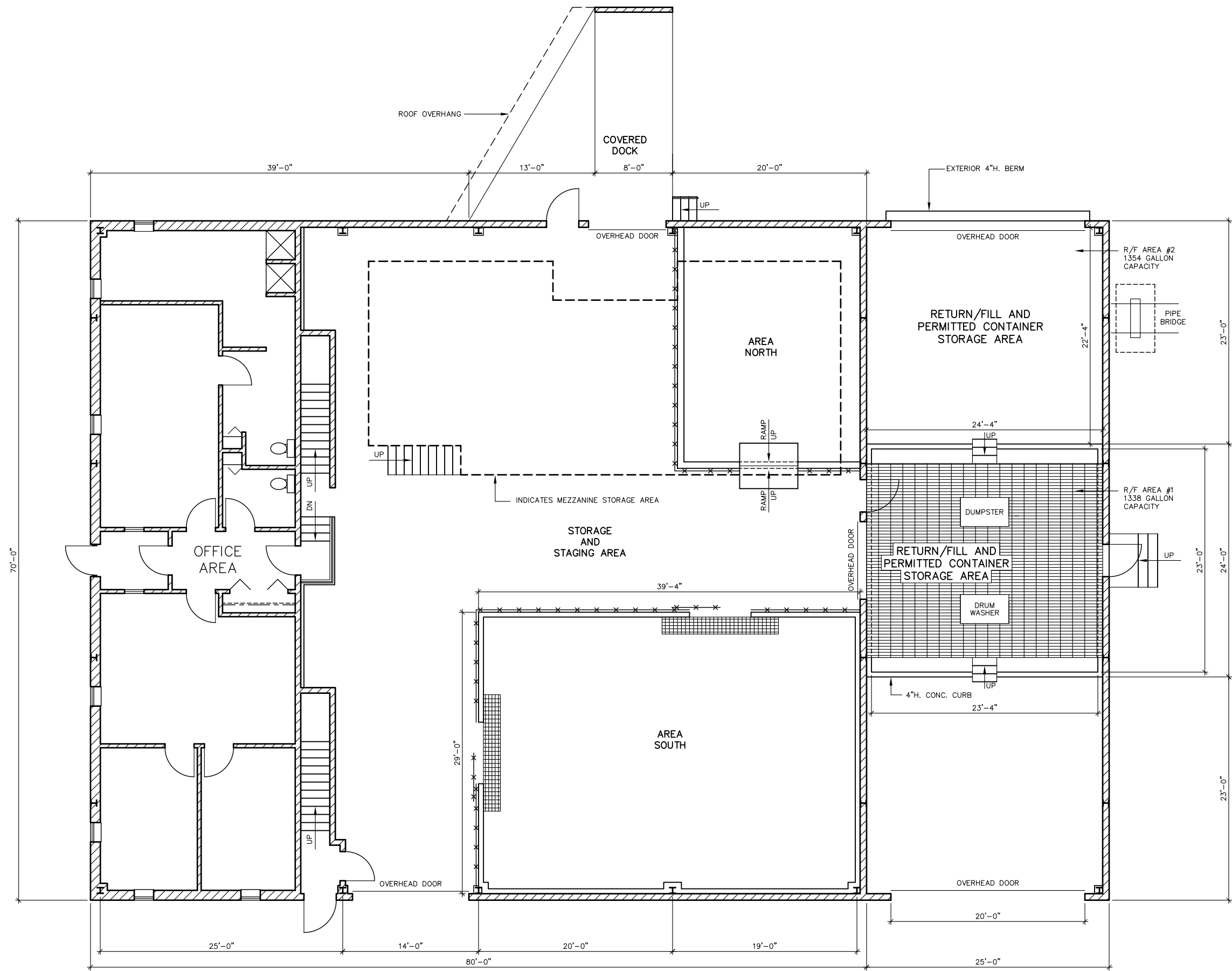
Since containers are never opened while in storage the potential for reactions between incompatible materials remains low. However, a risk does exist in the event of leaks from multiple adjacent containers. To reduce this hazard, containers are segregated according to the USDOT segregation rules for 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.

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 Clean Harbors Central Profile Group. 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 Cohoes facility.



CONTAINMENT CALC.

RETURN/FILL AREA CAPACITY:
R/F AREA #1:
(23'-4"L.)(23'-0"W.)(4"DP.)(7.48GAL./CU.FT.) =1338 GALLONS
R/F AREA #2:
(24'-4"L.)(22'-4"W.)(4"DP.)(7.48GAL./CU.FT.) =1354 GALLONS
TOTAL R/F CAPACITY =2692 GALLONS

REVISIONS


NO.	DESCRIPTION	BY	CHK	APPR	DATE
1	UPDATED TO EXISTING	MBH	DP	DC	051000

PROPRIETARY STATEMENT

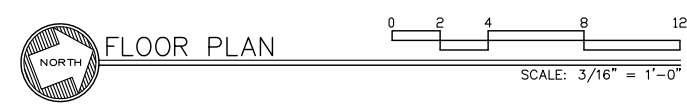
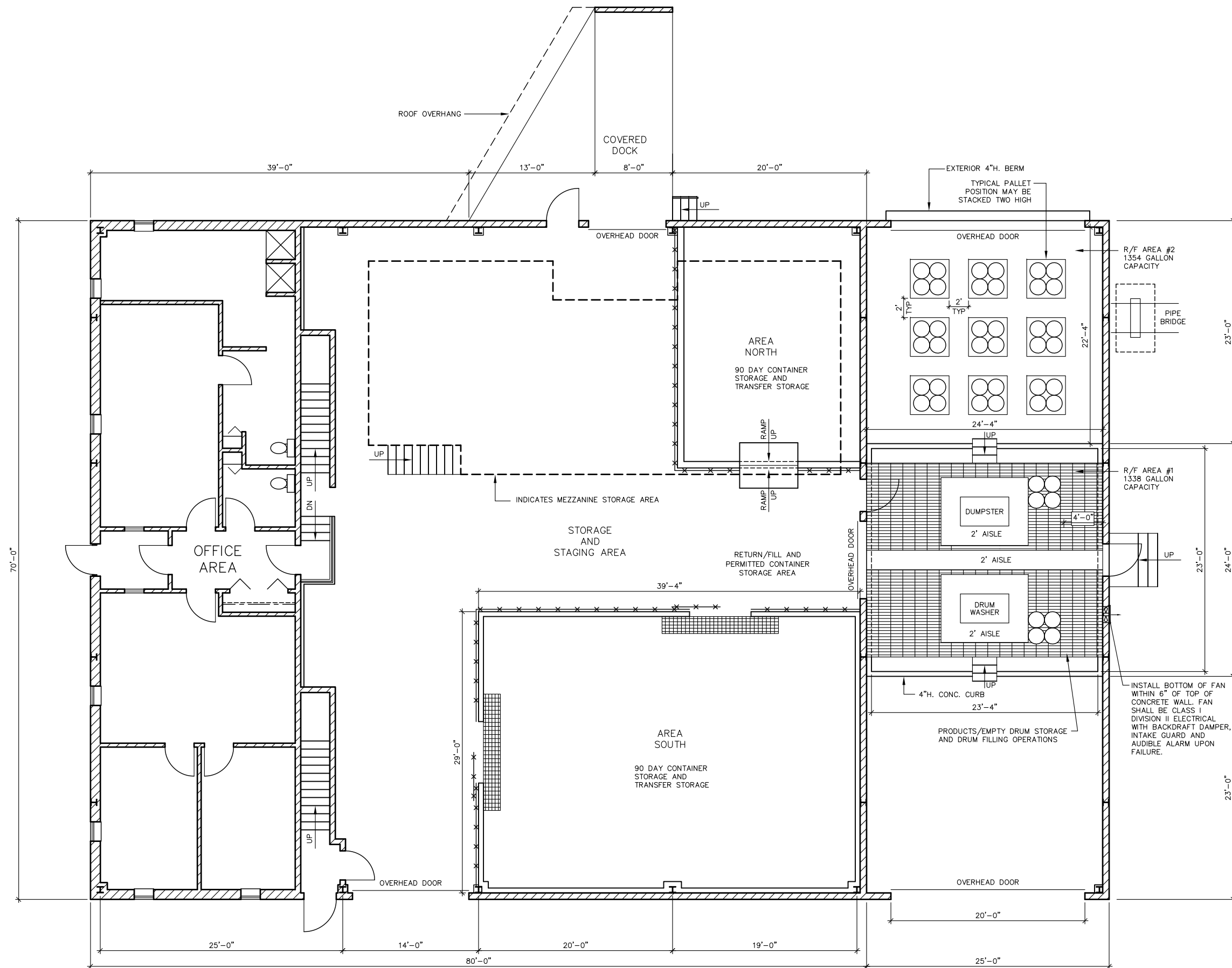
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TITLE

BUILDING FLOOR PLAN

 SAFETY-KLEEN SYSTEMS, INC.
2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

SCALE 3/16"=1'	BY MBH	CHKD DP	APPROVED DC	OPERATIONS -	DATE 5/4/2000
SERVICE CENTER LOCATION COLONIE(COHOES), NY			SC-DWG. NO. 7046-WB00-001		REV. NO. 1



R/F EHAUST FAN CALCS.

R/F VOLUME:
W=68'-0"
L=24'-6"
H=15'-6"
H₂=2'-11"

$(W \times L \times H) = 68'-0" \times 24'-6" \times 15'-6" = 25,823 \text{ CF}$
 $2 \left[\frac{1}{2} \times H_2 \times \frac{1}{2} W \times L \right] = 2 \left[\frac{1}{2} \times 2'-11" \times 34'-0" \times 24'-6" \right] = 2,430 \text{ CF}$
TOTAL=28,253 CF

REQUIRED CFM FOR 6 AIR CHANGES PER HOUR

60 MIN./HR. (CFM REQUIRED) = 6 A.C./HR.
TOTAL VOLUME

$\frac{60(X) \text{ CF/HR.}}{28,253} = 6 \text{ A.C./HR.}$

X = $\frac{169,518}{60}$

X = 2,826 MINIMUM CFM REQUIRED

CONTAINMENT CALC.	
RETURN/FILL AREA CAPACITY:	
R/F AREA #1: (23'-4"L.) (23'-0"W.) (4"DP.) (7.48 GAL./CU.FT.)	=1338 GALLONS
R/F AREA #2: (24'-4"L.) (22'-4"W.) (4"DP.) (7.48 GAL./CU.FT.)	=1354 GALLONS
TOTAL R/F CAPACITY	=2692 GALLONS

REVISIONS					
NO.	DESCRIPTION	BY	CHK	APPR	DATE
1	UPDATED TO EXISTING ADDED PALLET & CONTAINMENT CALC. FOR TRANSFER STORAGE	MBH	DP	DC	051000
2	ADDED R/F EXHAUST FAN CALCS. AND LOCATION	JEK	DP	DP	062504
3	SHOW AISLES IN R/FM AREA UPDATE NOTES FOR NORTH & SOUTH AREAS	JEK	MH	MH	072804

PROPRIETARY STATEMENT

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TITLE

CONTAINER STORAGE LAYOUT

 SAFETY-KLEEN SYSTEMS, INC.

2600 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
PHONE 800-669-5740

SCALE 3/16"=1'	BY MBH	CHKD DP	APPROVED DC	OPERATIONS -	DATE 050400
SERVICE CENTER LOCATION COLONIE(COHOES), NY			SC-DWG. NO. 7046-WB00-002		REV. NO. 3

APPENDIX I

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 ft²
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.

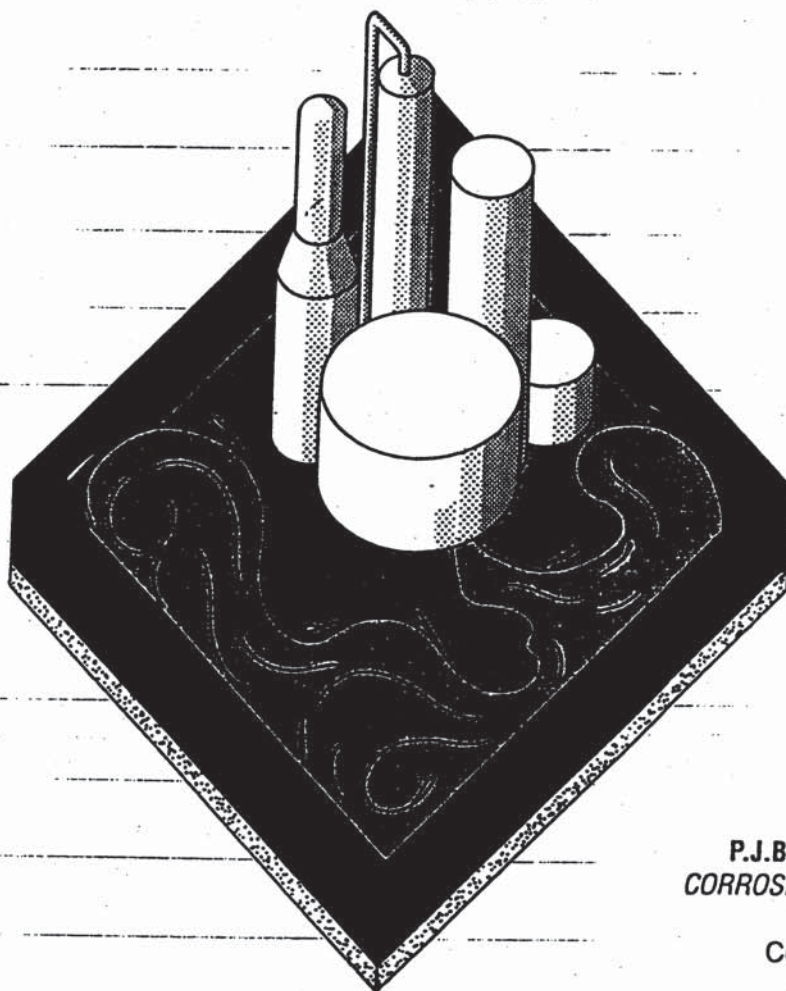
This limited warranty will be rendered null and void by any one or more of the following: SENTRY is not paid timely and in full at Freeport, Texas, for all goods and services sold by SENTRY for use on the applicable project; USER does not cooperate with SENTRY'S reasonable investigations regarding the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

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- 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.
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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

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Corro-Flor 100% Solids Epoxy

*Installations can begin with 24 hours of
pouring concrete.*

Corro-Flor is a 100% solids, USDA Approved, solvent Free, low odor, resin rich, trowellable, epoxy flooring system. It's specially formulated resin is mixed with Corro-Fill to produce a surface impervious to a wide variety of acids, solvents, caustic solutions and many other types of corrosive liquids. Due to its low odor it makes for the ideal protection systems for use in the food, dairy, meat, brewery, bakery, beverage and chemical industries.

Special Features

Corro-Floor when mixed with Corro-Fill (granite mix) which contains a very hard wearing granite aggregate produces an extremely hard wearing, highly abrasive, resin rich floor with a hygienic pinhole free surface. The granite will out

Set Times

Corro-Flor is available in various setting times allowing for applications at cold temperatures. For quick reference, the following guide is given for the different temperature applications.

At ambient or higher use Corro-Flor.

For faster times at ambient or higher use Corro Flor FS (Fast Set)
For extremely fast set times at ambient or higher use Corro-Flor XFS (Extra Fast Set)

Applications between 45°F - 60°F use Corro- Flor CS (Cold Set)

For temperatures between 35° - 45°F use Corro-Flor XCS (Extra Cold Set).

Applications below

observed. Avoid prolonged skin contact, regular washing with warm soapy water is recommended. Long exposure to resins and hardeners may cause skin irritation, and the wearing of protective gloves is advised. Before using any of the products, please refer to their respective safety data sheets.

Priming

Corro-Flor is self priming, however, priming is recommended only as a precautionary measure to try and seal the concrete to help reduce outgassing and eliminate the formation of blisters and "dry spots". Refer to Corro-Prime data sheet. However, if the Corro-Flor is going to be applied over "green" concrete, then our Corro-Cure (a slow set primer) must be used first.

sheets also matches the buckets. All products will be identified by their own color coding. Corro-Flor is supplied in a user friendly mix ratio of 2:1 by volume A:B, in all of the setting times.

Clean Up

Corro-Flor while still wet can be cleaned up with warm soapy water, but if allowed to set the mechanical cleaning or the application of a very strong paint stripper will have to be used.

Technical Assistance

With a combined total of over 220 years of experience, our management team can offer unequalled design details to concrete and epoxy floors as well as installation techniques and materials designed to meet your requirements. We are prepared to assist in training your own maintenance crew in the installation of our products.

Physical Properties

Compressive strength ASTM C-579 7,680 psi
Tensile Strength ASTM C-307 1,333 psi
Tensile Strength ASTM D-638 2,200 psi

Pot Life at 77°F

A & B Mixed 45 minutes
A & B & Corro0Fill 50 minutes

5,200 psi		
Tensile Elongation	ASTM D-638	Set Time at 77°F
20%		For walking on
Thermal Compatibility to		15 hours
Concrete		Light Traffic
ASTM C-884		24 hours
	Pass	Heavy Traffic
Water Absorption	ASTM C-413	39 hours
<.06%		Maximum Chemical
Flexural Strength	ASTM C-580	Resistance
3,172 psi		7 days
Flexural Modulus of Elasticity		
ASTM C-580		
	9.82	
x 10 ⁵		
Flexural Secant Modulus of		
Elasticity		
ASTM C-580		
	8.05	
x 10 ⁵		
Adhesion to concrete		
100% failure in concrete		

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Website designed and maintained by Pearson B. Potts

For comments and/or suggestions about this site, e-mail webmaster.

Margia Floors, Inc. and Ruys Vloeren BV is located on the web at

<http://www.MARGIAFLOORS.com>

CORRO-SHIELD INTERNATIONAL, INC.

10548 Lunt Avenue • Rosemont, Illinois 60018 • 1-800/298-7637 • 847/298-7770 • fax 847/298-7784

CHEMICAL RESISTANCE CHART

Corro-Flor - Corro-Flor FS - Corro-Flor CS - Corro-Flor XFS - Corro-Flor XCS

<u>Chemical</u>	<u>Rating</u>	<u>Chemical</u>	<u>Rating</u>	<u>Chemical</u>	<u>Rating</u>
Acetic Acid - 10%	OS	Green Liquor	FS	Peroxyacetic Acid (conc.)	NR
Acetic Acid - 20%	OS	n-Hexane	OS	Peroxyacetic Acid 50%	OS
Acetic Acid - 36%	NR	Hydrobromic Acid - 50%	OS	Phenol	NR
Acetic Anhydride	NR	Hydrochloric Acid - 37%	FS	Phosphoric Acid 30%	OS
Acetone	NR	Hydrofluoric Acid - 10%	NR	Phosphoric Acid 50%	NR
Acrylonitrile	NR	Hydrofluoric Acid - 30%	NR	Phosphoric Acid 85%	NR
Alum	FS	Hydrofluoric Acid - 50%	NR	Picric Acid, conc.	FS
Ammonium Hydroxide	FS	Hydrofluoroallic Acid 30%	OS	Potassium Nitrate	FS
Ammonium Nitrate	FS	Hydrogen Peroxide 50%	OS	Pyridine	NR
Aniline	NR	Hydrogen Sulfide	FS	Salt Brine	FS
Animal Fats	FS	Isoprene	FS	Silver Nitrate	FS
Beer	FS	Isopropyl Alcohol	FS	Skidrol	FS
Benzene	NR	Jet Fuel	FS	Sodium Chloride	FS
Black Liquor	FS	Kerosene	FS	Sodium Hydroxide - 30%	FS
Boric Acid	FS	Klenzade	FS	Sodium Hydroxide - 50%	FS
Brake Fluid	FS	Kodak Developer	FS	Sodium Hypochlorite, 5%	FS
Butyl Alcohol	FS	Lactic Acid - 20%	OS	Sodium Hypochlorite, 10%	OS
Butyl Cellusolv	FS	Lactic Acid - 50%	NR	Sodium Hypochlorite, 15%	NR
Calcium Chloride	FS	Lactic Acid - 88%	NR	Stearic Acid, conc.	FS
Calcium Nitrate	FS	Maleic Acid	NR	Styrene	NR
Carbon Tetrachloride	FS	Malic Acid	FS	Sugars	FS
Carbonated Beverage	FS	Methanol	FS	Sulfamic Acid, conc.	FS
Chlorine Water	FS	Methyl Acetate	FS	Sulfuric Acid - 10%	FS
Chloroform	NR	Methyl Esters	NR	Sulfuric Acid - 50%	OS
Chromic Acid, 0 - 30%	OS	Methyl Ethyl Ketone	NR	Sulfuric Acid - 80%	NR
Citric Acid, conc.	FS	Methyl Isobutyl Ketone	NR	Sulfuric Acid - 98%	NR
Copper Chloride	FS	Methyl Methacrylate	NR	Tannic Acid - 50%	FS
Copper Sulfate	FS	N-Methyl Pyrrolidone	NR	Tartaric Acid, conc.	FS
Cumene Hydroperoxide	OS	Methyl Salicylate	FS	Tetrachloroethylene	FS
Diesel Fuel	FS	Methylene Chloride	NR	Tetrahydrofuran	NR
Ethanol	FS	Mineral Oil	FS	Toluene	FS
Ethyl Acetate	NR	Mineral Spirits	FS	1,1,2 Trichloroethane	FS
Ethylene Dichloride	NR	Nitric Acid - 10%	FS	Trichloroethylene	NR
Ethylene Glycol	FS	Nitric Acid - 30%	OS	Trichlorofluoroethane	FS
Ferric Chloride	FS	Nitric Acid - 50%	NR	Tri Sodium Phosphate	FS
Ferrous Chloride	FS	Nitric Acid - conc.	NR	Uric Acid	FS
Formaldehyde	OS	Nitropropane	FS	Vinegar	FS
Formic Acid - 10%	NR	Oleic Acid	FS	WA Premium Peroxide (conc.)	FS
Formic Acid - 30%	NR	Oxalic Acid	FS	Water, Deionized	FS
Formic Acid - 50%	NR	Oxonia Active (conc.)	FS	Water, Distilled	FS
Freon TS	FS	Palm Oil	FS	White Liquor	FS
Gasoline	FS	Perchloroethylene	OS	Xylene	FS
Glacial Acetic	NR				

Key: NR - Not Recommended
OS - Occasional Spillage
FS - Frequent Spillage

Note: The above test data was obtained from total immersion tests at 77°F. The table should be used as a guideline, as no warranty can be expressed or implied regarding the accuracy of the information given as it would apply to actual plant use. Certain chemicals will discolor the epoxy floor, however, this will in no way affect the integrity of the system.

SAFETY-KLEEN SYSTEMS, INC.
Cohoes, NY SERVICE CENTER

ATTACHMENT L
INSPECTION PLAN

ATTACHMENT L

INSPECTION PLAN

ABSTRACT

Purpose: To ensure a safe and compliant operation the Cohoes 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 L - INSPECTION PLAN

1.0 INSPECTION PROGRAM

The branch (i.e., Service Center) manager or 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 completed 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 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 L - A). The format of these records may change or be modified as necessary; changes in content will require a permit modification. Inspection records may be kept electronically, but are available for viewing.

An inspection record file for the hazardous waste management units 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 to ensure that the inspections are properly completed and that any necessary repairs have been effected. Documentation of inspections may be kept electronically, and will be provided upon Agency request. Note: If the electronic inspection system is down or unavailable, paper copies will be completed.

The facility inspection will include the following:

- A. Tank Inspections - At a minimum, the tank holding the spent parts washer solvents will be inspected each operating day. The inspection will include checks of the high level alarm, any releases and of the volume held in the tank. Sudden deviations in the solvent volume will be investigated and their cause determined. If necessary, repairs will be initiated immediately. When the tank used to store spent solvent is 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 tank will be checked for cracks or other deterioration. Any damage to the tank (such as rust or loose fixtures) or the secondary containment system will be noted and repairs initiated.

- B. 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.

- C. 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. The fire extinguishers will be checked to ensure that the units are charged and accessible. Every six months a comprehensive inspection of the fire suppression systems will be conducted by an independent inspector according to the manufacturer's and local Fire Department standards and per NFPA standards to ensure that they will be operational during an emergency.
- D. 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.
- E. 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. Five gallon spent parts washer solution containers stored on the return and fill dock will be stacked to a maximum height of 4'. The drums may be double stacked when they are stored on the permitted concrete pad (RF#2) in the return and fill building provided they are stored on pallets. The secondary containment is inspected for deterioration of coating, cracks, and failures. If cracks or failures are noted, they are repaired immediately.

APPENDIX L - A

Inspection Forms



Compliance Header	
Inspector Name	
Area of Inspection	Container storage
Inspection Date and Time	
CO CSA Inspection Instructions	
Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.	
CO CSA Inspection Items	
Container Placement and Stacking - Check for evidence of failure (e.g., containers on pallets, pallets too high, unstable, other).	
Sealing of Containers - Check for evidence of failure (e.g., containers not closed or sealed, open).	
Labeling of Containers - Check for evidence of failure (e.g., no label, improper label, content, other).	
Container Integrity - Check for evidence of failure (e.g., condition, bulging, leaks, rust, corrosion, other).	
Pallets - Check for evidence of failure (e.g., broken, loose, condition).	
Doors - Check for evidence of failure (e.g., indoor area, broken or not working as intended).	
Base/ Foundation/ Roof - Check for evidence of failure (e.g., cracked, gaps, other).	
Berms/ Racks - Check for evidence of failure (e.g., cracks, gaps, broken, other).	
Debris and Refuse - Check for evidence of failure (e.g., proper storage, location, container type, other).	
Exit Signs - Check for evidence of failure (e.g.	

missing, lamps, battery backup, other).	
Aisle Space - Check for evidence of failure (e.g., minimum 2 ft required, other).	
Containment Area - Check for evidence of failure (e.g., secondary containment, curbing, floor, cracks, deterioration, ponding or wet spots, other).	
Sumps - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).	
Loading/ Unloading Areas - Check condition of area (e.g., available equipment, spill response, containment, pad condition, valve access box, ponding or wet spots, other).	
Communication and Alarm System - Check for evidence of failure (e.g., test function, siren, strobe, other).	
Storage Capacity - Check for acceptable limit (e.g., area or permit restrictions, type restriction, volume limit, other).	
Bonding and Grounding - Check for evidence of failure (e.g., loose, broken, corrosion or deterioration, other).	
Pumps - Check for evidence of failure (e.g., deterioration or broken, leaks, other).	N/A
Inventory Age - Check for acceptable limit (e.g., within area limits, permit restrictions, other).	
Satellite Accumulation Containers - Check for condition and appropriate for area (e.g., filter/basket, solids, label and marking, other).	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	

**Compliance Header**

Inspector Name

Area of Inspection

WAREHOUSE

Inspection Date and Time

CO Safety Security Inspection Instructions

Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

CO Safety Security Inspection Items

Perimeter Fences - Check for evidence of failure (e.g., broken ties, corrosion, holes, distortion, other).

Gates/External Warehouse Doors - Check for evidence of failure (e.g., locking mechanism, broken ties, corrosion, holes, distortion, direct access doors working properly, other).

Warning Signs - Check for evidence of failure (e.g., missing, faded, other).

Exit Signs - Check for evidence of failure (e.g., missing sign, illumination, lamp bulbs, battery backup, other).

Exits/Firelanes/Evacuation Routes - Check that all routes are clear or unobstructed.

Lighting System - Check for evidence of failure (e.g. expired lamps, effectiveness, location, other).

Emergency Lighting System - Check for evidence of failure (e.g., expired lamps, battery backup, effectiveness, other).

Accessibility of Safety Equipment/Protective Gear - Check for evidence of availability (e.g., hardhats, faceshields, goggles, safety glasses, boots, gloves, aprons, uniforms, duct tape, absorbents, other).

Adequate Supply of Safety Equipment/Protective Gear - Check for evidence of availability (e.g., cleanliness, inventory available, other).	
Condition of Safety Equipment - Check for evidence of failure (e.g., review PPE for damage or excessive wear, other).	
Breathing Apparatus Accessibility - Check for evidence of availability (e.g. SCBA respirators, equipment, other).	N/A
Breathing Apparatus Adequate Supply/Full Charge - Check for evidence of availability (e.g., SCBA tanks, charged, other).	N/A
Breathing Apparatus Condition - Check for evidence of failure (e.g., SCBA damage, other).	N/A
First Aid Kits - Check for evidence of availability (e.g., adequate inventory, other).	
Bloodborne Pathogen Kits - Check for evidence of availability (e.g., adequate inventory, other).	
Emergency Eyewashes - Check for evidence of failure (e.g., disconnected or malfunctioning valves, inadequate pressure, inaccessible, malfunctioning drain, leaking, other).	
Emergency Showers - Check for evidence of failure (e.g., disconnected or malfunctioning valves, inadequate pressure, inaccessible, leaking, other).	
Internal/External Communication - Check for evidence of failure (e.g., inadequate supply of phones or radios, malfunctioning intercom, telephones not working properly, emergency alarm does not work, phone moved from proper location, other).	
Fire Extinguishers - Check for evidence of failure (e.g., overdue inspection, not charged, inaccessible, other).	
Absorbent Supply - Check for evidence of availability (e.g., adequate inventory, other).	

Recovery Drum Supply - Check for evidence of availability (e.g., adequate inventory, other).	
Respirators and Cartridges - Check for evidence of availability (e.g., adequate APR inventory, other).	
Fire Suppression System Accessibility - Check for evidence of failure (e.g., monitors, pull stations, alarms, other).	
Fire Suppression System Operable - Check for evidence of failure (e.g., test, other).	
Water Lines/Hydrants - Check for evidence of failure (e.g., blocked, broken, other).	
Alarm Systems - Check for evidence of failure (e.g., test, other).	
Fire Blankets - Check for evidence of availability (e.g., adequate inventory, other).	N/A
Strainer on Fire Suppression System - Check for evidence of failure (e.g., functioning as intended, other).	
Surveillance System/Guard Service - Check for evidence of failure (e.g., equipment or service provided and functioning properly, other).	N/A
Supplied Air Delivery System and Reserve - Check for evidence of failure (e.g., system operational, equipment functioning, other).	N/A
Decontamination Equipment/Spill Clean-up Equipment - Check for evidence of availability (e.g., adequate supply of shovels, mops, cleaning solvents, available inventory, other).	
Portable Sump Pumps - Check for evidence of availability (e.g., adequate inventory, functioning properly, other).	N/A
Gasoline Pumps - Check for evidence of failure (e.g., broken parts, leaks, other).	N/A
Loud Speakers - Check for evidence of failure (e.g., test, other).	
Chocked Wheels on Parked Vehicles - Check	

for evidence of failure (e.g., chocks not used, missing, deteriorated, other).	
Cylinders Secure - Check for evidence of failure (e.g., properly stored, secured, chained, other).	N/A
Ventilation Operable - Check for evidence of failure (e.g., system working as intended, other).	
Fall Protection - Check for evidence of availability (e.g., adequate inventory, integrity of equipment, other).	
Electrical Boxes - Check for evidence of failure (e.g., closed, not blocked, marked properly, other).	
Emergency Contact Info Posted - Check for evidence of availability (e.g., up-to-date postings, location requirement, other).	
Hearing Protection Available - Check for evidence of availability (e.g., type appropriate per location, other).	
Housekeeping - Check for evidence of failure (e.g., blocked egress, proper storage, procedure followed, other).	
Portable Compressor - Check for evidence of availability (e.g., adequate inventory, functioning properly, other).	N/A
Lime Supply - Check for evidence of availability (e.g., adequate inventory, other).	N/A
QC Lab Hood - Check for evidence of failure (e.g., functioning properly, other).	N/A
Rolloff Parking Area - Check for evidence of failure (e.g., housekeeping, staging, other).	N/A
Dumpster/Outside Containers - Check for evidence of failure (e.g., housekeeping, condition, appropriate use and storage, other)	
Stormwater Collection System - Check for evidence of failure (e.g., functioning properly, damaged equipment, integrity, other).	N/A

Rally Point - Check for evidence of failure (e.g., location identified, communication, other).	
Visitor Log - Check for evidence of failure (e.g., available, communication, proper use, other).	
Contingency Plan - Check for evidence of failure (e.g., available, up-to-date, communication, other).	
Wind Instrument/Wind Sock - Check for evidence of failure (e.g., operational, functioning properly, not broken, other).	N/A
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	



Compliance Header	
Inspector Name	
Area of Inspection	Tanks
Inspection Date and Time	
CO Tank Systems Inspection Instructions	
Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.	
CO Tank Systems Inspection Items	
Tanks - Check for evidence of failure (e.g., rusty or loose anchoring, distortion, paint failure, other).	
Pipes/Piping Supports - Check for evidence of failure (e.g., distortion, corrosion, paint failure, other).	
Valves - Check for evidence of failure (e.g., disconnected, corrosion, sticking, leaks, other).	
Fittings/Hose Connections - Check for evidence of failure (e.g., loose, disconnected, corrosion, other).	
Liquid Level - Check for acceptable level. (e.g., high level max, permitted volume, other).	
Secondary Containment - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).	
Sumps - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).	
Bonding and Grounding - Check for evidence of failure (e.g., loose, broken, corrosion or deterioration, other).	
Transfer Equipment/Pump and Pump Motors - Check for availability and condition (e.g., pumps, filters, strainers, hoses, leaks,	

overheating, other).	
Communication and Alarm System - Check for evidence of failure (e.g., test function, siren, strobe, other).	
Satellite Accumulation Containers - Check for condition and appropriate for area (e.g., filter/basket, solids, label and marking, other).	
Manways, Hatches, Other Openings - Check for evidence of failure (e.g., condition, corrosion, closure, other).	
Pressure Relief Valves (PRV)/ Flame Arrestors - Check for evidence of failure (e.g., condition, corrosion, other).	
Tanks marked with the words "Hazardous Waste" - Check for appropriate markings.	
Tanks not used marked as "Out of Service" - Check for appropriate markings.	
Tanks marked as to the contents - Check for appropriate markings (e.g., Non-Haz Only).	
Monitoring Equipment/Level Indicators - Check for evidence of failure (e.g., pressure and temperature gauges, level indicators, sticking, condensation, disconnected, other).	
Loading/ Unloading Areas - Check condition of area (e.g., available equipment, spill response, containment, pad condition, valve access box, ponding or wet spots, other).	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	



Compliance Header	
Inspector Name	
Area of Inspection	WAREHOUSE
Inspection Date and Time	
CO Return and Fill Area Instructions	
Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained. Include any repairs changes or corrective actions.	
CO Return and Fill Area Inspection Items	
Pump Seals - Check for evidence of failure (e.g., leaks, other).	
Pump Motors - Check for evidence of failure (e.g., overheating, other).	
Fittings - Check for evidence of failure (e.g., leaks, other).	
Valves - Check for evidence of failure (e.g., leaks, sticking, other).	
Hose Connections and Fittings - Check for evidence of failure (e.g., cracked, loose, leaks, sticking, other).	
Hose Body - Check for evidence of failure (e.g., crushed, cracked, thin spots, leaks, other).	
Clam Shell Unit Type - Lid Fusible Link - Check for evidence of failure (e.g., broken, spring missing, other).	N/A
Clam Shell Unit Type - Lid Hinge Assembly - Check for evidence of failure (e.g., broken pivot arm, damaged lid arm, missing pins, other).	N/A
Sliding Lid Unit Type - Gaskets - Check for evidence of failure (e.g., broken, cracked distorted, other).	N/A
Sliding Lid Unit Type - Lid/ Slide Assembly - Check for evidence of failure (e.g., damaged lid, rollers, slide rail, temperature gauge, limit	N/A

switches, other).	
Roll-up Door Unit Type - Seals - Check for evidence of failure (e.g., broken cracked, distorted, other).	
Roll-up Door Unit Type - Door/ Roll-up Assembly - Check for evidence of failure (e.g., damaged lid, rollers, slide rail, temperature gauge, limit switch, other).	
Wet Dumpster/Drum Washer - Check for evidence of failure (e.g., leaks, rust, split seems, distortion, deterioration, excess debris, sediment accumulation, other).	
Secondary Containment - Check for evidence of failure (e.g., excess sediment, leaks, distortion, deterioration, excess debris, other).	
Loading/Unloading Area - Check for evidence of failure (e.g., cracks, ponding or wet spots, deterioration, other).	
Satellite Accumulation Containers - Check for condition and appropriate for area (e.g., filter/basket, solids, label and marking, other).	
Ventilation Fan - Check for evidence of failure (e.g., inoperative, shutters jammed, other).	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	



Compliance Header	
Inspector Name	
Area of Inspection	Solvent Tank
Inspection Date and Time	
CO Tank System BB Equipment Instruction	
Note condition of inspection items. Inspect all tagged and non-tagged points per area plan or system drawing specification. All unsatisfactory findings must be explained. Include any repairs, changes or corrective actions.	
CO Tank System BB Equipment Inspection Items	
Inspect all tagged and non-tagged tank system identified BB equipment points per area plan - Check for evidence of failure. (e.g., all inclusive review of all equipment pumps, valves, flanges, connections, unions, couplings or caps for potential leaks, active leaks, sticking, wear, does not operate smoothly, other).	
Each open-ended valve or line is equipped with a cap, blind flange, plug, or a second valve, which seals the open end at all times except when hazardous waste flows through the open ended valve or line. [264.1056/ 265.1056]	
Pieces of equipment found to be leaking, usually by visual means, are repaired within 15 calendar days and the first attempt to repair is made within 5 calendar days. [264.1058(c)/ 265.1058(c)]	
When a leak is detected, a weatherproof identification tag is attached to the leaking equipment with ID # and the date leak was detected. The identification may be removed after repair. [264.1064(c)/ 265.1064(c)]	
The liquids in use are heavy liquids. It should be assumed that all hazardous liquids managed in storage tanks contain between 80% and 100% organics.	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	

**Compliance Header**

Inspector Name

Area of Inspection

RF 1

Inspection Date and Time

CO CSA Inspection Instructions

Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

CO CSA Inspection Items

Container Placement and Stacking - Check for evidence of failure (e.g., containers on pallets, pallets too high, unstable, other).

Sealing of Containers - Check for evidence of failure (e.g., containers not closed or sealed, open).

Labeling of Containers - Check for evidence of failure (e.g., no label, improper label, content, other).

Container Integrity - Check for evidence of failure (e.g., condition, bulging, leaks, rust, corrosion, other). Containers do not have waste/staining on the outside which would require cleaning or overpacking.

Pallets - Check for evidence of failure (e.g., broken, loose, condition).

Doors - Check for evidence of failure (e.g., indoor area, broken or not working as intended).

Base/ Foundation/ Roof - Check for evidence of failure (e.g., cracked, gaps, other).

Berms/ Racks - Check for evidence of failure (e.g., cracks, gaps, broken, other).

Debris and Refuse - Check for evidence of failure (e.g., proper storage, location, container type, other).

Exit Signs - Check for evidence of failure (e.g. missing, lamps, battery backup, other).	
Aisle Space - Check for evidence of failure (e.g., minimum 2 ft required, other).	
Containment Area - Check for evidence of failure (e.g., secondary containment, curbing, floor, cracks, deterioration, ponding or wet spots, other).	
Sumps - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).	
Loading/ Unloading Areas - Check condition of area (e.g., available equipment, spill response, containment, pad condition, valve access box, ponding or wet spots, other).	
Communication and Alarm System - Check for evidence of failure (e.g., test function, siren, strobe, other).	
Storage Capacity - Check for acceptable limit (e.g., area or permit restrictions, type restriction, volume limit, other).	
Bonding and Grounding - Check for evidence of failure (e.g., loose, broken, corrosion or deterioration, other).	
Pumps - Check for evidence of failure (e.g., deterioration or broken, leaks, other).	
Inventory Age - Check for acceptable limit (e.g., within area limits, permit restrictions, other).	
Satellite Accumulation Containers - Check for condition and appropriate for area (e.g., filter/basket, solids, label and marking, other).	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	

**Compliance Header**

Inspector Name

Area of Inspection

RF 2

Inspection Date and Time

CO CSA Inspection Instructions

Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

CO CSA Inspection Items

Container Placement and Stacking - Check for evidence of failure (e.g., containers on pallets, pallets too high, unstable, other).

Sealing of Containers - Check for evidence of failure (e.g., containers not closed or sealed, open).

Labeling of Containers - Check for evidence of failure (e.g., no label, improper label, content, other).

Container Integrity - Check for evidence of failure (e.g., condition, bulging, leaks, rust, corrosion, other). Containers do not have waste/staining on the outside which would require cleaning or overpacking.

Pallets - Check for evidence of failure (e.g., broken, loose, condition).

Doors - Check for evidence of failure (e.g., indoor area, broken or not working as intended).

Base/ Foundation/ Roof - Check for evidence of failure (e.g., cracked, gaps, other).

Berms/ Racks - Check for evidence of failure (e.g., cracks, gaps, broken, other).

Debris and Refuse - Check for evidence of failure (e.g., proper storage, location, container type, other).

Exit Signs - Check for evidence of failure (e.g. missing, lamps, battery backup, other).	
Aisle Space - Check for evidence of failure (e.g., minimum 2 ft required, other).	
Containment Area - Check for evidence of failure (e.g., secondary containment, curbing, floor, cracks, deterioration, ponding or wet spots, other).	
Sumps - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).	
Loading/ Unloading Areas - Check condition of area (e.g., available equipment, spill response, containment, pad condition, valve access box, ponding or wet spots, other).	
Communication and Alarm System - Check for evidence of failure (e.g., test function, siren, strobe, other).	
Storage Capacity - Check for acceptable limit (e.g., area or permit restrictions, type restriction, volume limit, other).	
Bonding and Grounding - Check for evidence of failure (e.g., loose, broken, corrosion or deterioration, other).	
Pumps - Check for evidence of failure (e.g., deterioration or broken, leaks, other).	
Inventory Age - Check for acceptable limit (e.g., within area limits, permit restrictions, other).	
Satellite Accumulation Containers - Check for condition and appropriate for area (e.g., filter/basket, solids, label and marking, other).	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	



Compliance Header	
Inspector Name	
Area of Inspection	Tanks
Inspection Date and Time	
COH Subpart BB Inspection Instructions	
Check for visual evidence of a leak or a missing tag. A leak or a missing tag is a fail. If there is a leak, you must also complete a paper copy of the REPAIR RECORD FOR EQUIPMENT IN HEAVY LIQUID SERVICE	
COH Subpart BB Inspection Items	
Tag #4 - Camlock Fitting (containment box)	
Tag #5 - Ball valve (containment box)	
Tag #6 - Check Valve (containment box)	
Tag #11 - Ball valve (R/F)	
Tag #12 - Ball valve (R/F)	
Tag #19 - Shut off valve (R/F)	
Tag #20 - Flex hose (R/F)	
Tag #21 - Shut off valve (R/F)	
Tag #22 - Flex hose (R/F)	
Tag #23 - Shut off valve (R/F)	
Tag #24 - Flex hose (R/F)	
Tag #25 - Pump (R/F)	
Tag #26 - Shut off valve (R/F)	
Tag #27 - Flex hose (R/F)	
Tag #28 - Ball valve (R/F)	
Tag #29 - Basket Strainer (R/F)	
Tag #30 - Pump (R/F)	
Tag #31 - Clean Out Tee (R/F)	
Tag #32 - Check Valve (R/F)	
Tag #34 - Flange (Line to tank)	

Tag #38 - Suction assembly (tank)	
Tag #45 - Fill assembly (Tank)	
Tag #46 - Clamp (R/F)	
Compliance Footer	
Inspector Signature	
Inspection Overall Assessment	

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

ATTACHMENT M

Permit Modification Log

ATTACHMENT M - 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		

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

ATTACHMENT N

**CD Containing Applicable Regulations
(6 NYCRR Parts 370 through 373-2 & 376)**

