

PART 373 PERMIT
MODULE IV - STORAGE/TREATMENT IN TANK SYSTEMS

A. AUTHORIZED TANK SYSTEMS AND WASTES

The Permittee is authorized to use the following tank systems for the storage and/or treatment of the following wastes subject to the terms of this Permit:

TABLE 1.0					
Tank System I.D.	Capacity (gallons)	Tank Usage & Material of Construction	Waste Origin & Description	EPA Hazardous Waste Code Nos.	Second. Contain. Volume (gallons)
Tanks Located Inside the AWT Building					
T-710	8000	Storage / Treatment ^{1,2} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,440
T-810	8000	Storage / Treatment ^{1,2} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,440
T-820	8000	Storage / Treatment ^{1,2} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,440
T-850	846	Treatment ^{1,5} FRP ⁴	Specific Offsite Commercial Solid & Lab Chemical Wastes ⁵	D001, D002, D005, D007 & Lab Chem. Waste Codes Listed in Attachment C ³	24,440
T-910	8000	Storage Steel	Offsite Commercial 98% Conc. Sulfuric Acid Liquid Waste	D002	24,440
T-1010 ⁶	10,000	Treatment ^{1,7} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,440
T-1020 ⁶	8000	Treatment ^{1,7} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,440
T-1111 ⁶	300	Storage Polyethylene	Aqueous Waste Filtrate from Filter Press	Waste Codes Listed in Attachment C ³	24,440

TABLE 1.0					
Tank System I.D.	Capacity (gallons)	Tank Usage & Material of Construction	Waste Origin & Description	EPA Hazardous Waste Code Nos.	Second. Contain. Volume (gallons)
T-1112 ⁶	450	Storage FRP ⁴	Aqueous Waste Filtrate from Filter Press	Waste Codes Listed in Attachment C ³	24,440
T-1310 ⁶	580	Treatment ^{1,8} FRP ⁴	Caustic Aqueous Wastes from Process Tank Air Emissions	Waste Codes Listed in Attachment C ³	24,440
Tanks Located Inside the Solids Separation Building					
T-3011 ⁶	375	Storage FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	14,851
T-3012 ⁶	375	Storage FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	14,851
Tanks Located Outside, North of AWT Building					
T-100 ^{6,9,10}	160,545	Storage Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	571,328
T-125 ¹⁰	394,271	Storage Steel (lined)	Treated Aqueous Waste ¹¹	Waste Codes Listed in Attachment C ³	571,328
T-8008 ⁶	500	Storage FRP ⁴	Onsite Generated Groundwater DNAPL	F039	571,328
Tank Located Outside, West of AWT Building					
T-58 ¹⁰	488,529	Storage Steel (lined)	Treated Aqueous Waste ¹¹	Waste Codes Listed in Attachment C ³	Not Required ¹²
Tanks Located Outside, East of AWT Building					
T-210 ^{6,9}	30,000	Treatment ^{1,13} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	49,980
T-230 ^{6,9}	30,000	Treatment ^{1,13} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	49,980

TABLE 1.0					
Tank System I.D.	Capacity (gallons)	Tank Usage & Material of Construction	Waste Origin & Description	EPA Hazardous Waste Code Nos.	Second. Contain. Volume (gallons)
T-310 ^{6,9}	30,457	Treatment ^{1,14} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	49,980
T-320 ^{6,9}	30,457	Treatment ^{1,14} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	49,980
Tanks Located Inside the Wastewater Treatment Building					
T-3004 ⁶	975	Treatment ^{1,15} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	15,317
T-3005 ⁶	975	Treatment ^{1,15} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	15,317
T-3007 ⁶	7600	Treatment ^{1,16} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	15,317
T-3008 ⁶	7600	Treatment ^{1,16} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	15,317
Tank Located Outside, South of Wastewater Treatment Building					
T-52	7600	Storage Steel (coated)	Aqueous Waste Carbon Slurry	Waste Codes Listed in Attachment C ³	9546
Tanks Located Outside, East of Wastewater Treatment Building					
T-3001 ^{6,9}	1255	Treatment ^{1,17} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	1872
T-3002 ^{6,9}	900	Treatment ^{1,17} FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	1872
T-3003 ^{6,9}	1210	Storage FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	1667

TABLE 1.0					
Tank System I.D.	Capacity (gallons)	Tank Usage & Material of Construction	Waste Origin & Description	EPA Hazardous Waste Code Nos.	Second. Contain. Volume (gallons)
T-3009 ¹⁸	6000	Storage Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	Double-Walled Tank ¹⁰
Tanks Located North of SLF 1-6 Landfills (Tank T-105 Inside, Tank T-130 Outside)					
T-105 ⁶	3000	Storage Steel (lined)	SLF 1-6 Leachate	F039	4143
T-130 ⁶	5732	Storage Stainless Steel	SLF 1-6 Leachate	F039	8228
Tanks Located Inside Buildings, Between Landfills SLF 7 & SLF 11					
T-107 ⁶	350	Storage FRP ⁴	SLF 7 Leachate	F039	2765
T-108 ⁶	10,000	Storage FRP ⁴	SLF 7 & SLF 11 Leachate	F039	15,709
T-111 ⁶	350	Storage FRP ⁴	SLF 11 Leachate	F039	15,709
Tanks Located Inside A Building, Northwest of SLF 10 Landfill					
T-109 ⁶	3000	Storage FRP ⁴	SLF 10 Leachate	F039	15,709
T-110 ⁶	350	Storage FRP ⁴	SLF 10 Leachate	F039	15,709
Tanks Located Inside A Building, East of the Leachate Tank Farm					
T-158 ⁶	17,000	Treatment ^{1,19} Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,876
T-159 ⁶	1000	Storage FRP ⁴	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	24,876
Tank Located Inside A Building, Southeast of SLF 12 Landfill					
T-150	8000	Storage Steel (lined)	Onsite Generated Aqueous Wastes	F039	18,388
Tank Located Inside Former Oil/Water Separator Building					

TABLE 1.0					
Tank System I.D.	Capacity (gallons)	Tank Usage & Material of Construction	Waste Origin & Description	EPA Hazardous Waste Code Nos.	Second. Contain. Volume (gallons)
T-157	8000	Storage Steel (lined)	SLF 12 & RMU-1 Leachate	F039	62,178
Tank Located Inside A Building, On the West Side of the RMU-1 Landfill					
T-160	3000	Storage Steel (lined)	RMU-1 Leachate	F039	7563
Tanks Located Outside, Within Leachate Tank Farm					
T-101 ^{6,9}	350,000	Storage ²⁰ Steel (lined)	SLF 1-11 Leachate, Offsite Commercial & Onsite Aqueous Wastes or SLF 12 & RMU-1 Leachate ²¹	F039 & Waste Codes Listed in Attachment C ³	500,820
T-102 ^{6,9}	350,000	Storage ²⁰ Steel (lined)	SLF 1-11 Leachate, Offsite Commercial & Onsite Aqueous Wastes or SLF 12 & RMU-1 Leachate ²¹	F039 & Waste Codes Listed in Attachment C ³	500,820
T-103 ^{6,9}	350,000	Storage ²⁰ Steel (lined)	SLF 1-11 Leachate, Offsite Commercial & Onsite Aqueous Wastes or SLF 12 & RMU-1 Leachate ²¹	F039 & Waste Codes Listed in Attachment C ³	500,820
Frac. Tank 3 ⁶	21,000	Storage Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	500,820
Tanks Located Inside Stabilization Building Northern Expansion					
Mix Pit Tank 1 ¹⁰	20,354	Treatment ²² Steel	Offsite Commercial & Onsite Solid Wastes ²³	Waste Codes Listed in Attachment C ³	Steel Vault
Mix Pit Tank 2 ¹⁰	20,354	Treatment ²² Steel	Offsite Commercial & Onsite Solid Wastes ²³	Waste Codes Listed in Attachment C ³	Steel Vault
Tanks Located Outside, South of Main Stabilization Building					
TA-1 ⁹	20,000	Storage Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	28,174

TABLE 1.0					
Tank System I.D.	Capacity (gallons)	Tank Usage & Material of Construction	Waste Origin & Description	EPA Hazardous Waste Code Nos.	Second. Contain. Volume (gallons)
TA-2 ⁹	20,000	Storage Steel (lined)	Offsite Commercial & Onsite Generated Aqueous Wastes	Waste Codes Listed in Attachment C ³	28,174
Tank Located Inside Truck Wash Building					
T-120	1650	Storage FRP ⁴	Onsite Generated Contaminated Surface Water	Waste Codes Listed in Attachment C ³	1659
Tanks Located Inside A Building, West of the AWT Building					
T-8001	5000	Storage Steel (lined)	Onsite Contaminated Groundwater	F039	6445
T-8002	550	Storage FRP ⁴	Onsite Contaminated Groundwater	F039	6445
Tank Located Inside A Building, South of SLF 3 Landfill					
T-8004	550	Storage FRP ⁴	Onsite Contaminated Groundwater	F039	892
Tank Located Inside A Building, South of SLF 10 Landfill					
T-8005	300	Storage Steel	Onsite Contaminated Groundwater	F039	356
Tank Located Inside A Building, East of SLF 12 Landfill					
T-8006	300	Storage Steel	Onsite Contaminated Groundwater	F039	356
Tank Located Inside A Building, South of PCB Warehouse					
T-8007	500	Storage FRP ⁴	Onsite Contaminated Groundwater	F039	539
Sump Tank Located Inside AWT Building					
Filter Press Sump Tank	175	Storage FRP ⁴	Onsite Generated AWT Wash Water ²⁴	Waste Codes Listed in Attachment C ³	Concrete Vault ¹⁰

FOOTNOTES:

1. See Condition L.(1) of this Module regarding the overall operation of the aqueous waste treatment process that pertains to the specific Tank Systems identified above by this footnote.
2. Treatment allowed in Tanks T-710, T-810 & T-820 involves blending of compatible, offsite commercial and/or onsite generated aqueous wastes.
3. Authorized EPA waste codes are listed in Attachment C, Section C, Tables C-1 & C-2 of this Permit.
4. "FRP" = "Fiberglass Reinforced Plastic".
5. Treatment allowed in Tank T-850 involves dissolving sodium chlorate or chromic acid solids or other Department approved solids in an aqueous solution, or the dissolving and/or blending of compatible lab chemicals in an aqueous solution. Aqueous solutions from Tank T-850 must undergo additional treatment through the on-site aqueous waste treatment system.
6. See Condition J of this Module regarding air emission controls required by 6NYCRR 373-2.29 for the specific Tank Systems identified above by this footnote.
7. Treatment allowed in Tanks T-1010 & T-1020 involves pH neutralization and metals precipitation.
8. Treatment allowed in Tank T-1310 involves use of caustic solution to adjust the pH of air emissions from various specific treatment process tanks.
9. See Module I, Condition K.(6) regarding correction of interconnected tank systems.
10. See Condition L.(2) of this Module regarding leak detection monitoring requirements for the specific Tank Systems identified above by this footnote.
11. "Treated Aqueous Waste" refers to the effluent from the on-site AWTs that has completed the treatment processes deemed necessary to meet the Land Disposal Restriction wastewater treatment standards as required by 6NYCRR 376.
12. See Condition L.(3) of this Module regarding the variance from secondary containment requirements issued in accordance with 6NYCRR 373-2.10(d)(7) for Tank T-58.
13. Treatment allowed in Tanks T-210 & T-230 involves blending of compatible, offsite commercial aqueous wastes and/or onsite generated aqueous wastes and the addition of the specific reagents indicated on Figure D-8 "Aqueous Waste Treatment System Flow Diagram" in the Aqueous Waste Treatment System Operations and Maintenance (O&M) Manual listed in Table 2.0 of Condition B in Module I of this Permit .
14. Treatment allowed in Tanks T-310 & T-320 involves biodegradation to remove organic compounds.
15. Treatment allowed in Tanks T-3004 & T-3005 involves the multi-media filtration of aqueous wastes.
16. Treatment allowed in Tanks T-3007 & T-3008 involves carbon adsorption of aqueous wastes.
17. Treatment allowed in Tanks T-3001 & T-3002 involves pH neutralization and biotreatment inoculation.
18. See Module I, Condition K.(7) regarding additional hazard protection for double-walled Tank T-3009.
19. Treatment allowed in Tank T-158 involves the oil/water phase separation of landfill leachate, offsite commercial and onsite generated aqueous wastes.
20. See Condition L.(4) of this Module regarding requirements to maintain sufficient capacity in Tanks T-101, T-102 & T-103 for the storage of onsite generated leachates and contaminated groundwater.
21. See Condition L.(5) of this Module regarding the required separation strategy for the aqueous wastes stored in Tanks T-101, T-102 & T-103.
22. Treatment allowed in Mix Pit Tanks 1&2 involves stabilization of bulk solid wastes to meet waste strength and/or Land Disposal Restriction (LDR) requirements (6NYCRR 376), and microencapsulation of hazardous debris to meet LDR requirements. Also, see Condition L.(6) of this Module regarding requirements pertaining to the waste treatment operations conducted in Mix Pit Tanks 1&2.
23. Aqueous Wastes may also be placed in Mix Pit Tanks 1&2 to the extent necessary to facilitate the treatment of the solid wastes in these tanks, provided that such aqueous wastes are compatible with the solid wastes in these tanks, with reagents used in the treatment process, and with the steel tanks.
24. AWT Filter Press washwater must be transferred from the Filter Press Room steel container to the Filter Press Sump Tank through above ground piping within secondary containment. The Filter Press Sump Tank is also part of the AWT secondary containment, and as such, may receive accidental releases and cleanup washwater.

The Permittee must operate and maintain the tank systems in accordance with the portions of the Permit application and other specified documents incorporated by Attachments to this Permit and by reference into this Permit by **Module I**, and with 6NYCRR 373-2.10 as cited below.

The Permittee may also store in tanks hazardous waste (e.g. leachate from on-site landfills) that is generated on-site, for a period not exceeding 90 days in specifically designated on-site tanks other than those indicated in Table 1.0 above, provided that the Permittee complies with the requirements of 6NYCRR 373-1.1(d)(1)(iii).

For tank systems used to store or treat materials that are defined as hazardous waste in the future, the Permittee must comply with 6NYCRR 373-2.10(b) and 6NYCRR 373-1.7(g).

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

Note: Throughout this Permit, the term “new tank system/s” shall include replacement tank(s) or modified tank(s).

1. For new, modified or replacement hazardous waste tank systems or components (such as the secondary containment system) not authorized by A above or as allowed by **Condition K.1** of this Module, which the Permittee proposes to construct in the future, the Permittee must, prior to construction, submit to the Commissioner an application to modify this Permit including design plans, specifications and a written assessment of the tank systems' structural integrity, as required by 6NYCRR 373-2.10(c) and obtain a permit modification.
2. The Permittee must ensure that proper handling procedures are followed to prevent damage to the new tank system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified, installation inspector or an independent, qualified, professional engineer registered in New York, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system for the presence of any of the following items:
 - (i) weld breaks;
 - (ii) punctures;
 - (iii) scrapes of protective coatings;
 - (iv) cracks;
 - (v) corrosion, and
 - (vi) other structural damage or inadequate construction/installation.

All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.

3. New tank systems or components that are placed underground and that are backfilled must be provided with a backfill material that is a non-corrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.
4. All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system must be performed prior to the tank system being covered, enclosed or placed into use.
5. Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
6. The Permittee must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under 6NYCRR 373-2.10(c) (1)(iii), or other corrosion protection if the Commissioner believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.
7. The Permittee must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of **Condition 1 through 6** above that attest that the tank system was properly designed and installed and that repairs, pursuant to **Condition 2 and 4** above were performed. These written statements must also include the certification statement as required in 6NYCRR 373-1.4(a)(5)(iv).
8. 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 NY registered Professional Engineer stating that the tank has been constructed or modified in compliance with the permit;
 - b) A Department representative has inspected the newly constructed or modified tank and has found it is in compliance with the conditions of the Permit; or
 - c) If, within 15 days of the date of submission of the letter in clause “a” above the Permittee has not received notice from the Department of its intent to inspect, the “prior” inspection requirement, clause “b” above, is waived and the Permittee may use the tank, per Part 373-1.6(a)(12)(ii)(‘b’)(‘2’).

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

1. In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment must be provided for tank systems that meets the requirements of 6NYCRR 373-2.10(d) and Attachment D, Appendix D-3 of the Permit except for Tank T-58 as specified by **Condition L.3** of this Module.
2. Secondary containment systems must be:
 - (i) designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and
 - (ii) capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
3. Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of **Condition C.2** except for:
 - (i) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;
 - (ii) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;
 - (iii) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and pressurized aboveground piping systems with automatic shut-off devices (e.g. excess flow check valves, flow metering shutdown devices, loss of pressure activated shut-off devices) that are visually inspected for leaks on a daily basis.

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

1. Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode or otherwise fail.
2. The Permittee must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:
 - (i) spill prevention controls (e.g., check valves, dry disconnect couplings);

- (ii) overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and
 - (iii) maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.
3. The Permittee must comply with the requirements of **Condition F** below, if a leak or spill occurs from a tank system.
 4. The Permittee must mark all tanks with the words "Hazardous Waste" and with other words that identify the contents of the tank. For underground tanks, the markings must be placed on sign in the area above the tank.

E. INSPECTIONS 6NYCRR 373-2.10(f)

The Permittee must inspect tank systems and components pursuant to Attachment F, Section F of the Permit and the following:

1. The Permittee must follow the schedule and procedures for inspecting overfill controls in Attachment F, Section F of the Permit and for testing such controls as required by **Condition K.2.b** of this Module.
2. The Permittee must inspect at least once each operating day:
 - (i) aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
 - (ii) data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and
 - (iii) the construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
3. The Permittee must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:
 - (i) the proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

- (ii) all sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e. every other month).
- 4. The Permittee must remedy any deterioration or malfunction found in accordance with 6NYCRR 373-2.2(g)(3) and the requirements in **Module I, Condition N.2** and Attachment F of the Permit.
- 5. The Permittee must document in the operating record of the facility those items in paragraphs E.(1) through E.(4).

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

A tank system or secondary containment system 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 satisfy the following requirements:

- 1. Cessation of use; prevent flow or addition of wastes. The Permittee must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.
- 2. Removal of waste from tank system or secondary containment system.
 - (i) If the release was from the tank system, the Permittee must, within 24 hours after detection of the leak or, if the Permittee demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tanks system.
 - (ii) If material was released to a secondary containment system all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.
- 3. Containment of visible releases to the environment. The Permittee must immediately conduct a visual inspection of the release and, based upon that inspection:
 - (i) prevent further migration of the leak or spill to soils or surface water; and
 - (ii) remove, and properly dispose of, any visible contamination of the soil or surface water.

4. Notifications, reports.

- (i) Any release to the environment, except as provided in 4 (ii) below, must be reported to the Commissioner within 24 hours of its detection. If the release has been reported pursuant to 6 NYCRR Part 595, that report will satisfy this requirement. (Note: Use the DEC spill hotline number (800) 457-7362; or from outside of New York State (518) 457-7362; or any designated telephone numbers which may subsequently replace those listed above. Also, see requirements in **Module I, Condition G**, Oral Reports.)
- (ii) A leak or spill of hazardous waste is exempted from the requirements of (4) if it is:
 - ('a') less than or equal to a quantity of one pound; and
 - ('b') immediately contained and cleaned-up.
- (iii) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Commissioner:
 - ('a') likely route of migration of the release;
 - ('b') characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);
 - ('c') results of any monitoring or sampling conducted in connection with the releases (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Commissioner as soon as they become available;
 - ('d') proximity to downgradient drinking water, surface water, and populated areas; and
 - ('e') description of response actions taken or planned.
- (iv) If the spill is over the 6NYCRR596 "Reportable Quantity", it must be reported to the Department within 2 hours of discovery unless the spill can be completely contained and cleaned up within 24 hours.

5. Provision of secondary containment, repair, or closure.

- (i) Unless the Permittee satisfies the requirements of (5)(ii) through (iv), the tank system must be closed in accordance with **Condition G** of this Module.
- (ii) If the cause of the release was a spill that has not damaged the integrity of the system, the Permittee may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
- (iii) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

(iv) Except for a release from Tank T-58 which must be managed in accordance with 6NYCRR 373-2.10(d)(7)(iii)&(iv) and **Condition L.3** of this Module, if the source of the release was a leak to the environment from a component of a tank system without secondary containment, the Permittee must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of **Condition C** of this Module before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of **Condition 6** below are satisfied. If a component is replaced to comply with the requirements of this Condition, that component must satisfy the requirements for tank systems or components in **Condition K.1** of this Module. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with **Condition C** of this Module prior to being returned to use.

6. Certification of major repairs. If the Permittee has repaired a tank system in accordance with **Condition 5** above, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the Permittee has obtained a certification by an independent, qualified, professional engineer registered in New York in accordance with 6NYCRR 373-1.4(a)(5)(iv) of this Title that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Commissioner within seven days after returning the tank system to use.

(Note: The Commissioner may, on the basis of any information received that there is or has been a release of hazardous waste or hazardous constituents into the environment, issue an order under ECL Article 71 requiring corrective action or such other response as deemed necessary to protect human health or the environment.)

(Note: See 6NYCRR 373-2.2(g)(3), **Module I, Condition N.2** and Attachment F of the Permit for the requirements necessary to remedy a failure. Also, 40 CFR Part 302 may require the owner or operator to notify the National Response Center of certain releases. Notification of other agencies may also be required by other applicable Federal regulations.)

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

1. At closure of a tank system, the Permittee must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless 6NYCRR 371.1(d)(4) of this Title applies. The closure plan, closure activities, cost

estimates for closure, and financial responsibility for tank systems must meet all of the requirements specified in 6NYCRR 373-2.7 and 2.8 and **Module I** of this Permit.

2. If the Permittee demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in paragraph (1) above, then the Permittee must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (see 6NYCRR 373-2.14(g)). In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the Permittee must meet all of the requirements for landfills specified in 6NYCRR 373-2.7 and 2.8.

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

1. Ignitable or reactive waste must not be placed in tank systems, unless:
 - (i) the waste is treated, rendered, or mixed before or immediately after placement in the tank system so that:
 - ('a') the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under 6NYCRR 371.3(b) or (d), and
 - ('b') 6NYCRR 373-2.2(i)(2) is complied with.
 - (ii) the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react, or
 - (iii) the tank system is used solely for emergencies.
2. The Permittee of a facility where ignitable or reactive wastes are stored or treated in a tank must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (see 6NYCRR 370.1(e)).

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

1. Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank system, unless 6NYCRR 373-2.2(i)(2) is complied with.

2. Hazardous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless 6NYCRR 373-2.2(i)(2) is complied with.

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

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of sections 6NYCRR 373-2.28 and 373-2.29, with special attention to paragraphs: (a), (c), (d), (e), and (h) through (k) of 6NYCRR 373-2.29. Where and when control of air pollutant emissions are deemed applicable in accordance with 6NYCRR 373-2.29(a) through (d) for tank systems in **Table 1.0, Condition A** of this Module which are identified by Table Footnote 6 and any other tank systems, the Permittee must employ and maintain controls in accordance with 6NYCRR 373-2.29(e) and Attachment D, Appendix D-3, Section VI of the Permit.

K. SPECIAL CONDITIONS FOR TANK SYSTEMS (GENERAL)

The special conditions for tank systems presented below are applicable to all Tank Systems (TSs) listed in **Table 1.0** under **Condition A** of this Module, unless otherwise specified.

1. Tank System Process & Instrumentation Diagrams

The Permittee shall operate and maintain all tank systems in accordance with the “Process & Instrumentation Diagrams (PIDs)” from the Permit Application which are incorporated by reference into this Permit by **Module I**. 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 have its on-site staff 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 **Conditions B.1 through B.8** of this Module.

2. Tank Systems' Ancillary Equipment Operation and Maintenance

- a) Ancillary Equipment Without Secondary Containment - The Permittee shall perform visual daily inspections of the ancillary equipment listed in the table entitled "Aboveground Ancillary Equipment Without Secondary Containment", from the Permit Application which is incorporated by reference into this Permit by **Module I**, and maintain records of these inspections in accordance with 6NYCRR 373-2.2(g)(4) and Attachment F of this Permit. Any replacement of the ancillary equipment listed in this table and any new additional ancillary equipment which is installed without secondary containment, must meet the secondary containment exception requirements specified by **Conditions C.3.(i) through C.3.(iii)** of this Module.
- b) Electronically Operated Ancillary Equipment - The Permittee shall perform annual testing of all 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 shall be conducted by manually simulating the condition each device is designed to detect, and observing to see if the designed reaction occurs. The Permittee shall notify Department staff at least 24 hours in advance of scheduled testing events. The Permittee shall record the results of this testing in the operating record required by 6NYCRR 373-2.5(c). If any device or its associated electronic system fails to function as designed, the Permittee shall make all necessary repairs in accordance with **Module I, Condition N.2** of this Permit, and re-test the repaired system.

- c) Underground Hazardous Waste Transfer Lines - The Permittee shall pressure test all newly installed underground hazardous waste transfer lines prior to burial and placing into service. The Permittee shall also pressure test any existing underground hazardous waste transfer line or transfer line section upon repair, replacement or alteration, prior to placing back in service. The Permittee shall test both the inner carrier pipe and outer containment pipe of double-walled transfer lines. The Permittee must perform this testing in strict accordance with the procedures contained in Attachment D, Appendix D-3, Section VIII of this Permit. The Permittee shall record the results of this testing in the operating record required by 6NYCRR 373-2.5(c). Any transfer line, or portion thereof, that fails its specified test, must be repaired or replaced in accordance with **Module I, Condition N.2** of this Permit and re-tested prior to its use.

3. Tank Systems' Secondary Containment Operation

Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as possible to prevent harm to human health and the environment, if the Permittee can demonstrate to the Commissioner that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours. All removed liquids must be managed in accordance with Attachment D, Appendix D-3, Section II and of this Permit and 6NYCRR 373-2.10(d)(3)(iv).

4. Tank Systems Independent Assessment

In addition to the inspections required by **Condition E** of this Module, the Permittee shall 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 shall be independently assessed at a minimum of once every five (5) year time period as measured from the end of the calendar year of the Tank System's last assessment, except for Mix Pit Tanks 1&2 and the Filter Press Sump Tank which must be independently assessed each calendar year. The year of the most recent assessment for each Tank System is indicated in Attachment D, Appendix D-3, Section IX 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.

Each Tank System assessment shall entail an inspection of all visible Tank System components including but not necessarily limited to the tank exterior (interior for Mix Pit Tanks 1 & 2 and the Filter Press Sump Tank), tank supports, piping, pumps, valves and any overflow prevention controls (Tank System secondary containment shall be inspected in accordance with **Condition K.5** of this Module). For certain Tank Systems, as indicated in Attachment D, Appendix D-3, Section IX of this Permit, the Tank System assessment shall also include a visual inspection of the tank's interior. Tanks requiring an internal inspection shall be completely emptied and cleaned to expose all internal tank surfaces for examination by the engineer/inspector. The engineer/inspector shall identify and record all observed cracks, leaks, corrosion, interior coating defects (where applicable) and any other areas of deterioration that could effect the integrity of the Tank System. For steel tanks the engineer/inspector shall also obtain ultrasonic thickness measurements of all accessible tank surfaces to determine the integrity of the tank shell.

Each calendar year, the engineer/inspector shall report to the Permittee on or before August 31, unless the Department approves an extension, any and all Tank System defects identified during that year's assessment along with repair recommendations. The Permittee shall 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 are found to be leaking or unfit for use by the engineer/inspector shall be immediately removed

from service in accordance with **Condition F** of this Module and shall not be returned to service until the Permittee obtains a certification of major repairs in accordance with **Condition F.6** of this Module.

The engineer/inspector must prepare a detailed annual report for all Tank Systems that are assessed during the calendar year. For each Tank System the report shall 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 shall 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 during that calendar year are capable of handling hazardous wastes without release for the intended life of the system, as indicated in **Condition F.6** of this Module. This annual report must be submitted to the Department on/before November 30 of each calendar year, unless the Department approves an extension of no greater than 30 days.

5. Tank Systems Annual Secondary Containment Independent Assessment

In addition to the inspections required by **Condition E** of this Module, the Permittee shall have the secondary containment for all tank systems which have secondary containment, inspected annually 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. All surfaces must be completely exposed for this inspection. The engineer/inspector shall identify all observed cracks, failed joints, coating defects or any other defects which may decrease the relative impermeability of the secondary containment or reduce the effectiveness of collecting spilled waste. The engineer/inspector shall complete the inspection of all Tank Systems with secondary containment, and report the findings of any and all defects, along with repair recommendations, to the Permittee, on or before August 31 of each calendar year, unless the Department approves an extension. The Permittee shall repair all identified defects in accordance with the engineer's/inspector's recommendations and have the engineer/inspector verify the adequacy of the repairs.

The engineer/inspector must prepare a detailed report which specifies the nature and content of the inspection, observations made, details of any defects found (including photographs if needed to fully describe the defect), evaluates the adequacy of repairs made and certifies that all repairs made in response to the inspection were made in accordance with the engineer's/inspector's recommendations and that all Tank Systems with secondary containment meet the requirements of **Condition C** of this Module (6NYCRR 373-2.10(d)). The report must be submitted to the Department on or before November 30 of each calendar year, unless the Department approves an extension of no greater than 30 days.

L. SPECIAL CONDITIONS FOR TANK SYSTEMS (SPECIFIC)

The special conditions for tank systems presented below are applicable only to specific Tank Systems listed in **Table 1.0** under **Condition A** of this Module.

1. Aqueous Waste Treatment (AWT) Tank Systems

The Permittee shall operate all treatment tank systems which are identified by Footnote 1 in **Table 1.0, Condition A** of this Module and all other components associated with the AWT system, in strict accordance with the April 2000 Revision and any subsequently Department approved revisions of the “Aqueous Waste Treatment System (AWTS) Operations and Maintenance (O&M) Manual”, which is incorporated by reference into this Permit by **Module I**.

2. Tank Systems’ Leak Detection Monitoring

For the tank systems identified by Footnote 10 in **Table 1.0, Condition A** of this Module (Tanks T-58, T-100, T-125, T-3009, Mix Pit Tank 1, Mix Pit Tank 2 & Filter Press Sump Tank), the Permittee shall inspect the leak detection monitoring systems of these tanks for the presence of liquid, on a daily basis, in accordance with Attachment F, Section F of the Permit. If liquid is found to be present in sufficient volume for analysis (i.e., 30 ml or greater), the Permittee shall perform the tank-specific procedures presented in Table 2.0 below to determine if such liquid is or is not indicative of tank leakage or, in the case of below grade tanks, indicative of containment vault leakage. This determination shall be made based on the tank-specific criteria in Table 2.0.

TABLE 2.0		
Tank ID	Liquid Evaluation Procedures	Liquid Evaluation Criteria
T-58	Conductivity Testing	Conductivity Threshold Criteria = <u>5000 umhos</u>
T-100	Conductivity Testing	Conductivity Threshold Criteria = <u>5000 umhos</u>
T-125	Conductivity Testing	Conductivity Threshold Criteria = <u>5000 umhos</u>
T-3009	Conductivity Testing	Conductivity Threshold Criteria = <u>5000 umhos</u>
Mix Pit Tank 1	Conductivity Testing Volume Measurement	Conductivity Threshold Criteria = <u>14,000 umhos</u> Volume Threshold Criteria = <u>5.0 gals.</u>

TABLE 2.0		
Tank ID	Liquid Evaluation Procedures	Liquid Evaluation Criteria
Mix Pit Tank 2	Conductivity Testing Volume Measurement	Conductivity Threshold Criteria = <u>14,000 umhos</u> Volume Threshold Criteria = <u>5.0 gals.</u>
Filter Press Sump Tank	Conductivity Testing Depth Measurement	Conductivity Threshold Criteria = <u>5000 umhos</u> Depth Threshold Criteria = 1.0 inches

For each tank listed in Table 2.0 above, if any of the above criteria which are applicable to that tank, are exceeded for two (2) consecutive days, the Permittee shall immediately remove that tank from service, unless in the case of Mix Pit Tanks 1 & 2, where only the conductivity threshold criteria has been exceeded and there are no obvious defects in the steel tank. Where Mix Pit Tank conductivity leak detection criteria exceedance has occurred and there are no identified tank defects, the Permittee may leave the tank in service and immediately conduct a thorough inspection of the upper perimeter seal between the tank and its secondary containment vault. Any identified defects in this seal shall be repaired in accordance with **Condition N.2** in **Module I** of the Permit. For any tanks which must be taken out of service due to exceedance of leak detection criteria, the Permittee must immediately commence transfer of its contents and begin an investigation to determine if the detected liquid is indicative tank leakage or, in the case of below grade tanks, indicative of containment vault leakage. The tank in question shall not be returned to service until the Permittee either: 1) justifies, to the Department's satisfaction, that the detected liquid is not the result of tank or where applicable, containment vault leakage; or 2) locates and repairs the tank/vault leak, and, where required by **Condition F.6** of this Module, obtains an independent certification.

3. Tank T-58 Secondary Containment Variance

With this Permit, the Commissioner is granting a variance to the Permittee from secondary containment requirements for Tank T-58 in accordance with 6NYCRR 373-2.10(d)(7). This variance is only applicable under the operational restrictions and requirements for Tank T-58 as listed below:

- a) The Permittee may only use Tank T-58 for the storage of treated aqueous hazardous waste discharged from its on-site treatment process in accordance with the "Aqueous Waste Treatment System (AWTS) Operation and Maintenance (O&M) Manual" which is incorporated by reference into this Permit by **Module I**.

- b) The hazardous wastes contained in Tank T-58 must meet all the Land Disposal Restriction (LDR) treatment standards for wastewater as presented in 6NYCRR 376.4. The Permittee must analyze the Tank T-58 influent and the contents of Tank T-58 prior to each discharge in accordance with the Waste Analysis Plan in Attachment C, Section C of the Permit, to verify that the hazardous wastes contained in Tank T-58 meet all LDR treatment standards.
- c) The Permittee shall monitor the groundwater in the area of Tank T-58 in accordance with **Module II** and **Module VIII** of this Permit.
- d) The Permittee shall have independent assessments performed on Tank T-58 as required by **Condition K.4** of this Module.
- e) The Permittee shall monitor the Tank T-58 leak detection system and take all appropriate actions as required by **Condition L.2** of this Module.
- f) The Permittee shall comply with the requirements in 6NYCRR 373-2.10(d)(7)(iii) & (iv) in the event of a release of hazardous waste from Tank T-58.

Failure on the part of the Permittee to adhere to the operational restrictions and meet the operational requirements, as listed above, shall constitute a violation of this Permit.

4. Leachate Tanks T-101, T-102 & T-103 Storage Capacity

In order to assure adequate storage and treatment capacity for on-site landfill leachates and contaminated groundwater, the Permittee shall maintain a minimum of 625,000 gallons of available (empty) tank capacity in Tanks T-101, T-102 & T-103 (cumulative) for the storage of on-site wastewaters that would be generated by a 25-year, 24-hour storm or larger precipitation event. To maintain this storage capacity, the Permittee must take the following actions whenever the available capacity in these tanks is less than 625,000 gallons:

- a) Immediately notify the Department that the capacity is less than 625,000 gallons. The notification shall include a discussion regarding the cause of the capacity shortfall and a proposed plan to restore the required 625,000 gallons of empty volume in Tanks T-101, T-102 & T-103.
- b) Treat on-site or ship off-site for treatment no less than 200,000 gallons/day until the empty volume in Tanks T-101, T-102 & T-103 is restored to equal to, or greater than 625,000 gallons. On a case by case basis, the Department may (either verbally or in writing) waive this requirement if the Permittee demonstrates to the Department's satisfaction that their proposed plan, specified in (a) above, will restore the required 625,000 gallons of empty volume in Tanks T-101, T-102 & T-103 within a three (3) day period, as measured from the day when the shortfall first occurs. If this waiver is

granted and the Permittee fails to completely eliminate the capacity shortfall within the three (3) day time period, the Permittee must comply with the requirement to treat on-site or ship off-site for treatment no less than 200,000 gallons/day until the empty volume in Tanks T-101, T-102 and T-103 is restored to equal to, or greater than, 625,000 gallons.

- c) Cease on-site treatment of all off-site generated commercial aqueous waste receipts until the empty volume in Tanks T-101, T-102 & T-103 is restored to equal to, or greater than 625,000 gallons.

5. Leachate Tanks T-101, T-102 & T-103 Separation of Wastewaters

The Permittee shall designate specific tanks within the Tank T-101, T-102 & T-103 system for storage of leachate from the RMU-1 landfill so as to facilitate separate treatment strategies. The Permittee shall at no time store leachate from landfills SLF 1 through 11, or offsite commercial aqueous waste in any tank within this system which is designated for the storage of RMU-1 leachate. The Permittee may store SLF 12 leachate or contaminated groundwater in any tank within this system.

6. Operation of Mix Pit Tanks 1 & 2

The Permittee shall operate Mix Pit Tanks 1 & 2 in strict accordance with Attachment D, Appendix D-3 of this Permit and the June 1999 Revision and any subsequently Department approved revisions of the “Operations and Maintenance Manual for the Stabilization Facility”, which is incorporated by reference into this Permit by **Module I**. In addition to these operational requirements, the Permittee shall either close all doors leading into the Stabilization Facility North Expansion Building during the addition of dry reagents and during the mixing process or take other actions as necessary to insure that airborne particles from the waste/reagents are not visible outside of the building. Visible releases of particles from the building as a result of waste stabilization operations is prohibited. There shall be no free liquids in or added to the wastes in the Mix Pit Tanks and no reagents added at the end of each work shift.