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## SECTION O

### SUBPART CC AIR EMISSION STANDARDS

#### O-1 APPLICABILITY

The information presented in this section is submitted as required under 40 CFR Part 264 Subpart CC, and applies to air emissions from tank systems managing hazardous waste with average volatile organic (VO) concentrations equal to or greater than 500 parts per million (ppm) by weight.

Tank systems potentially subject to 40 CFR Subpart CC include the following:

##### Unit 12 (pH Adjustment) –

- Incoming waste storage tanks holding waste for chemical-physical pre-treatment
- Tank systems following the waste stream from the Unit 12 Holding Tanks
- Tank systems associated with the chemical-physical pre-treatment and biological treatment

##### Unit 20 (General Treatment, pH, some organics and solids) –

- Incoming waste storage tanks holding waste for chemical-physical pre-treatment
- Tank systems following the waste stream from the Unit 20 Holding Tanks
- Tank systems associated with the chemical-physical pre-treatment, filter press, sludge oven, and Flash Evaporation Distillation

##### Unit 21 (High Salt, Low Organics) –

- Incoming waste storage tanks holding waste for chemical-physical pre-treatment
- Tank Systems following the waste stream from the Unit 21 Holding Tanks
- Tank systems associated with the chemical-physical pre-treatment, and Flash Evaporation Distillation

##### Unit 23 (High Organics) –

- Incoming waste storage tanks in the flammable dike
- Tank systems following the waste stream from the Unit 23 Holding Tanks
- Tank systems associated with the Distillation Column, Biological Treatment, and Flash Evaporation Distillation

Figure O-1 indicates which streams (and thus which tank systems) are in vapor service and which are in liquid service. The Unit 20 and Unit 23 liquid streams and their tank systems will typically qualify as having greater than 500 ppm VO concentrations. The Unit 21 waste streams can contain some organics; Elcon is making the worst-case assumption that the Unit 21 tanks will contain more than 500 ppm VO concentrations. The Unit 12 waste streams are for pH neutralization only (no organics). Therefore, Units 20, 21, and 23 will be designed to meet the 40 CFR Part 264 Subpart CC requirements by tying into the thermal oxidizer through a closed vent system. Some of the equipment in the Unit 12 processing train will tie into the thermal oxidizer, although this is optional as the units are not handling organic materials.

A carbon adsorption unit serves as a backup air pollution control system for the tanks and vessels containing organic material in case the thermal oxidizer is not functioning.

No enclosures will be used to control air pollutant emissions from tank systems or containers.

The tanks subject to 40 CFR Part 264 Subpart CC regulation are either horizontal tanks or fixed roof vertical tanks. No floating roofs will be used in any of the Elcon tanks. The tanks vary in size, and the wastewater varies in composition. Tank Level 2 controls in accordance with 40 CFR 264.1084 will be applied to the tank systems, which in Elcon's case are closed vent systems vented to a thermal oxidizer. Additional information on the tanks is provided in Section D of this application, while additional information on the thermal oxidizer is provided in Section M of this application.

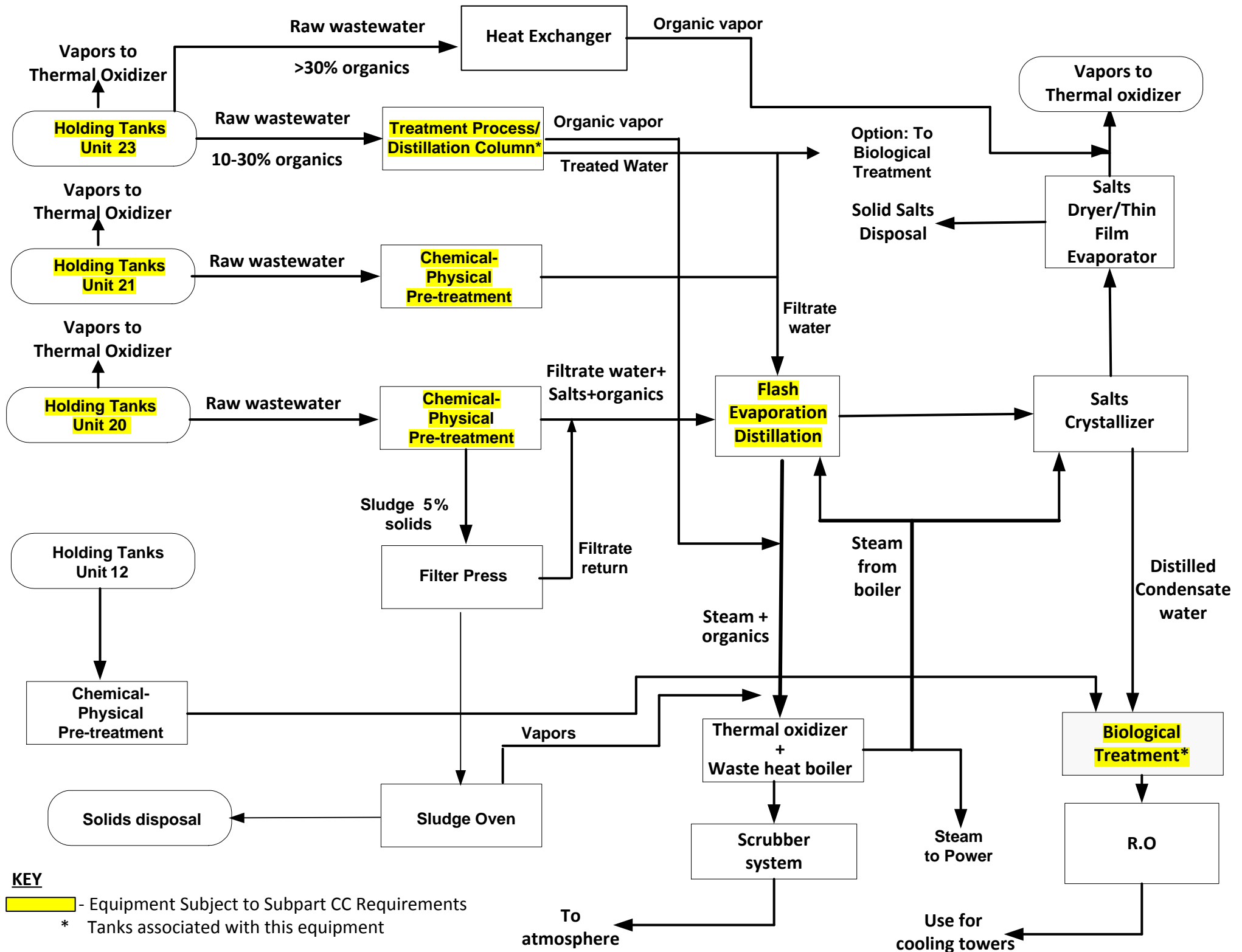
Containers of hazardous wastes subject to 40 CFR Part 264 Subpart CC will be received and off-loaded into a tank. The shipping containers will be subject to the DOT Hazardous Materials shipping regulations referenced in 40 CFR Part 264.1086(f). As containers which meet the 49 CFR requirements, the containers also meet the requirements of 40 CFR Part 264 Subpart CC. However, these containers will not be stored on the Elcon site.

The incoming storage container area at the facility is for acid and caustic waste streams, and these containers are not subject to the Subpart CC requirements. Additionally, there may be some containers onsite with a design capacity that is less than 0.1 cubic meters, containing more than 500 ppm, by weight, of VO; these containers are exempt under 40 CFR 264.1080(b)(2).

40 CFR 264.1080(c) and (d) on the Department's checklist are not applicable to Elcon's containers.

Containers receive solids generated by Elcon's treatment process (salts and sludges). The containers that accumulate solids for offsite disposal will be below the 40 CFR Part 264 Subpart CC threshold since the organics will have been removed and treated, with the emissions controlled by the thermal oxidizer. Hoppers that are intermediate between the sludge filter presses and sludge drying ovens will sometimes contain solids that exceed the Subpart CC threshold; these pieces of equipment do not meet the definition of container (not mobile) or tank system (not treating). However, the hoppers are ultimately ventilated to the air pollution control system for treatment of any organics.

**FIGURE O-1  
Equipment Subject to Subpart CC Air Emission Standards**



Design documentation and monitoring, operating, and inspection information for the closed-vent system and control device (thermal oxidizer) required to comply with the provisions of this part will be recorded and kept up-to-date in the facility's operating record. The specific information is delineated in Section M, which addresses the requirements of 40 CFR 270.24(d). (40 CFR 270.24(c) on the Department's checklist is not applicable since Elcon is using a thermal oxidizer for air pollution control.)

Additionally, the design documentation and monitoring, operating, and inspection information for each tank system required to comply with the provisions of this part will be recorded and kept up-to-date in the facility's operating record. Section D contains this documentation as well as the specifications for the tank systems, including the dimensions and capacity of each tank; a description of the feed systems, safety cutoffs, bypass systems and pressure controls; diagrams of piping, instrumentation, and process flow for each tank system; a description of materials and equipment used to provide external corrosion protection; a detailed description of how the tank system will be installed; detailed plan and descriptions of the design, construction, and operation of the secondary containment system; description of controls and practices to prevent spills and overflows; specific operating procedures and tanks system design for tank systems that store or treat ignitable or incompatible wastes and information on air emission control equipment. Elcon is not seeking any variances related to the tank systems and is not seeking to process reactive waste.

Regarding 40 CFR 270.14(a) on the Department's checklist, this item includes general information required by the RCRA Part B permit. Information specifically related to 40 CFR 270.27, which is applicable to the Subpart CC requirements, is addressed below. Certifications, as required, are provided. Information that is specifically requested under the Subpart CC requirements is provided in this section, except where indicated.

Regarding 40 CFR Part 270.27:

- 40 CFR 270(a)(1) is not applicable since Elcon is not proposing any tanks with floating roofs.
- 40 CFR 270(a)(2), regarding container storage areas – Elcon is not proposing any container storage areas for materials that are subject to Subpart CC. A certification is provided in Appendix O-1.
- 40 CFR 270(a)(3), regarding enclosures for air pollution control, is not applicable.
- 40 CFR 270(a)(4), regarding floating membrane covers on surface impoundments, is not applicable.
- 40 CFR 270(a)(5), regarding closed vent and control device systems – 40 CFR 270.24(c) is not applicable since Elcon is using a thermal oxidizer. Information related to 40 CFR 270.24(d) is provided in Section M of this application.

- Attachment O-2 provides an Emission Monitoring Plan as required by 40 CFR 270.27(a)(6).
- 40 CFR 270(a)(7), regarding implementation plans, is not applicable because Elcon is not subject to 40 CFR 265 Subpart CC requirements and will comply with the applicable requirements of 40 CFR 264 at startup.

## O-2 LIST OF EXEMPT UNITS

Elcon will control air pollutant emissions from each hazardous waste management unit in accordance with standards specified in Subpart CC, as applicable. There are exemptions for some of the units, as addressed below.

See Appendix O-3 for a list of tanks that are subject to 40 CFR Part 264 Subpart CC.

40 CFR 270.27 is addressed in Section O-1.

### O-2a VO Less Than 500 PPM

Equipment is exempt from requirements if the hazardous waste entering the unit has an average VO concentration at the point of origination of less than 500 ppm, by weight.

Elcon's process expects to use Holding Tanks in Units 12 and 21 for hazardous wastes with volatile organic concentrations that are less than 500 ppm, by weight. All tanks and tank systems in Units 21 will be designed with a closed vent system that discharges through the thermal oxidizer. The Unit 12 tanks and tank systems are being designed for optional venting to the thermal oxidizer system because this treatment line is used for pH neutralization of wastes with no organics. Unit 12 tanks and tanks systems are exempt.

Additionally, there are portions of the process operations that are below 500 ppm, by weight, of VO. These include:

- Salts crystallization, although some steps of the process will vent to the thermal oxidizer
- Several tanks in the Unit 90 area for processing brine: Collecting tank T-90120 used for pH adjustment; balancing tanks T-90204 and T-90206; tanks that are part of the total dissolved solids treatment process (ultra-filtration system, reverse osmosis, and mechanical vapor recompression)

### O-2b Reduction by an Organic Destruction or Removal Process

Elcon is not seeking an exemption under 40 CFR 264.1082(c)(2). This section is not applicable.

### O-2c Content Meets Certain Specified Conditions

Elcon is not seeking an exemption under 40 CFR 264.1082 (c)(3). This section is not applicable.

O-2d Meets Organic Concentration Limits or has Been Treated

Elcon is not seeking an exemption under 40 CFR 264.1082 (c)(4). This section is not applicable.

O-2e Bulk Feed Waste Incinerator

Elcon is not seeking an exemption under 40 CFR 264.1082 (c)(5). This section is not applicable.

O-3 WASTE DETERMINATION PROCEDURES

For waste streams that are below 500 ppm, by weight, of VO, such as acid, base, or brine waste streams, Elcon will determine VO content in accordance with 40 CFR 265.1084(a)(4) based on generator knowledge. Documentation will be provided by the waste generator that presents the information used as the basis for the waste stream's VO content. This may include, for example, mass balance information on the source or process generating the waste stream or data from previous testing. In the event that the Department disagrees with the determination of VO content, the average VO concentration will be determined using a direct measurement method as specified in 40 CFR 265.1084(c)(3).

O-4 LEVEL OF CONTROL FOR TANKS

Since the hazardous wastes will vary and since Elcon wants to maintain the flexibility of accepting a variety of hazardous wastes with varying volatile organic concentrations, a closed vent system vented to a thermal oxidizer that meets Tank Level 2 requirements will be installed on the hazardous waste tanks containing organic compounds.

O-5 TANK LEVEL OPTION CRITERIA

O-5a Level 1 Option Criteria

Elcon will comply with the more stringent tank Level 2 option. This portion of the Department's checklist is not applicable.

O-5b Tank Level 1 and 2 Controls

Elcon will install the tanks such that they vent through a closed vent system to a thermal oxidizer that meets Tank Level 2 control requirements. The tank systems will be designed to contain the hazardous waste with the worst-case vapor pressure to be received by Elcon.

Item Nos. O-5b and O-5b(1) on the Department's Checklist apply to tanks with Level 1 controls but they are not applicable to Elcon since it is installing the more stringent Level 2 controls.



### *O-5b(2) Tank Level 2 Control Options*

*Regarding Item O-5b(2)(i) on the Department's Checklist, related to a Fixed Roof Tank Equipped with an Internal Floating Roof* – Elcon has proposed to install tanks vented through a closed-vent system to a control device (a thermal oxidizer) making this requirement inapplicable. All Elcon tanks will be either horizontal or vertical fixed roof tanks and not designed with an internal floating roof. Therefore, 40 CFR 264.1084(d)(1) and (e) are not applicable.

*Regarding Item O-5b(2)(ii) on the Department's Checklist, related to a Fixed Roof Tank Equipped with an External Floating Roof* – Elcon has proposed to install tanks vented through a closed-vent system to a control device (a thermal oxidizer) making this requirement inapplicable. All Elcon tanks will be either horizontal or vertical fixed roof tanks and not designed with an internal floating roof. Therefore, 40 CFR 264.1084(d)(2) and (f) are not applicable.

### *O-5b(3) Tank Vented Through Closed-Vent System to a Control Device*

Elcon has proposed to install tanks vented through a closed-vent system to a control device (a thermal oxidizer) as specified in 40 CFR Part 264.1084 (d)(3) and (g). Appendix O-3 presents a list of the tanks included in the Elcon installation.

Each tank will be installed and operated as follows:

1. Each tank will be covered by a fixed roof and vented directly through a closed-vent system to the thermal oxidizer.
2. The fixed roof and its closure devices are designed to form a continuous barrier over the entire surface area of the liquid in the tank.
3. Each opening in the fixed roof that is not vented to the thermal oxidizer will be equipped with a closure device. The tanks are designed to operate at slightly less than atmospheric pressure when the thermal oxidizer is operating. The closure devices are designed to operate when closed with no visible cracks, holes, gaps, or other openings.
4. The materials of construction of the tanks, fixed roof, and closure devices are such that they will be durable when in contact with a variety of hazardous wastes and will minimize exposure of the waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life.
5. The closed vent system and the thermal oxidizer are designed and operated in accordance with the requirements of 40 CFR 264.1087. See additional details in Section O-12 and Section M.
6. Exceptions to the requirement to vent the tanks to the thermal oxidizer include providing access to the tanks for performing routine inspection, maintenance, or other activities

needed for normal operations, such as sampling of the material in the tanks or removing accumulated sludge. Opening a safety device is permitted under 40 CFR 264.1084(g)(2)(ii) at any time conditions require doing so to avoid an unsafe condition.

7. Elcon will inspect and monitor the thermal oxidizer and closed vent system in accordance 40 CFR 264.1087 (see Section O-12 for additional details) by performing the following: visual inspections to check for defects that could result in air pollutant emissions; an initial inspection of the thermal oxidizer prior to startup, and at least annual inspections thereafter; upon detecting a defect, repairing the defect initially within five days and completed within 45 days after detection unless the tank needs to be removed from service prior to the repair being completed, in which case the defect will be repaired and completed the next time the tank is out of service. Records of inspections will be maintained.

#### O-5c Pressure Tank

Elcon's process will not include any pressure tanks.

#### O-5d Tanks in Enclosures

Elcon's process does not include any tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device.

#### O-5e Tank Level 1 Operating Requirements

Elcon will comply with the more stringent tank Level 2 option. This portion of the Department's checklist is not applicable.

#### O-5f Tank Level 2 Operating Requirements

The Department's Checklist includes a regulatory citation to 40 CFR 264.1084(e)(i); this citation does not exist in the current rules.

Items O-5(f)(1), related to a Fixed Roof Tank Equipped With Internal Floating Roof; O-5(f)(2), related to Tank Equipped With An External Floating Roof; O-5f(4), related to pressure tanks; and O-5f(5), related to tanks in an enclosure; on the Department's Checklist are not applicable because Elcon is not proposing to install these types of tanks.

#### *O-5(f)(3) Tank Vented Through Closed-Vent System to a Control Device*

Elcon operates the tanks vented through a closed vent system to a control device (thermal oxidizer) such that when hazardous waste is in the tank, a fixed roof will be installed with closure devices secured in the closed position and vapor headspace underneath the fixed roof will be vented to the control device, except as specified. Elcon will inspect and monitor the air emission control equipment. See operating requirements under O-5(b)(3) above.

*O-5(f)(4) Pressure Tank*

No pressure tanks are proposed.

*O-5(f)(5) Tank Located Inside An Enclosure That Is Vented Through A Closed-Vent System To An Enclosed Combustion Control Device*

Elcon is not operating any tanks located inside enclosures that are vented through a closed-vent system to an enclosed combustion control device. This section is not applicable.

*O-5(f)(6) Hard Piping or Equivalent*

Elcon will transfer hazardous waste to a tank subject to this section in accordance with the following requirements:

1. Transfer of hazardous waste, except as provided in item 2 below, to the tank from another tank subject to this section will be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. An individual drain system is considered to be a closed system when it meets the requirements of 40 CFR Part 63, Subpart RR, related to the National Emission Standards for Individual Drain Systems.
2. As permitted under 40 CFR 264.1084(j), the requirements of Item 1 above do not apply when transferring a hazardous waste to the tank under any of the following conditions:
  - a. The hazardous waste meets the average VO concentration conditions specified in 40 CFR 264.1082(c)(1) at the point of waste origination.
  - b. The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in 40 CFR 264.1082(c)(2), related to organic destruction or removal.
  - c. The hazardous waste meets the requirements of 40 CFR 264.1082(c)(4), related to numerical concentration limits or treatment technology.

**O-6 SURFACE IMPOUNDMENTS**

Elcon's operation will not include a surface impoundment; this section is not applicable.

**O-7 HARD-PIPING OR OTHER SYSTEM FOR SURFACE IMPOUNDMENTS**

Elcon's operation will not include a surface impoundment; this section is not applicable.

## O-8 CONTAINER STANDARDS

Elcon will receive incoming waste in containers (drums or totes). Elcon expects to unload the container, once it has been cleared through the acceptance criteria, into a tank or directly to the treatment process. There are provisions to store acid and caustic waste in containers, but these waste streams do not contain VO in excess of 500 ppm, by weight.

The salts and sludges generated by the treatment process will be stored in containers prior to shipment. However, these waste streams will not contain VO in excess of 500 ppm, by weight.

There are several places within the process where container storage is used, such as in mobile containers or super sacks. These containers will not be used to store waste with an organic content of more than 500 ppm, by weight.

### O-8a Container Level 1 Standards Applicability

#### *O-8a(1) Design Capacity Between 0.1 and 0.43 Cubic Meters*

Elcon anticipates receiving waste in containers (e.g., drums) with a capacity greater than 0.1 cubic meters and less than or equal to 0.43 cubic meters. These containers are subject to Container Level 1 requirements. The containers that arrive at the facility will all meet DOT regulations related to packaging hazardous materials for transportation. However, Elcon does not anticipate storing hazardous waste with a VO content greater than 500 ppm, by weight, in containers in this size range. The containers will be emptied, through a closed system, into an appropriate tank or to the process. Therefore, this requirement does not apply.

#### *O-8a(2) Capacity Greater Than 0.46 Cubic Meters Not In Light Material Service*

Elcon anticipates receiving waste in containers (e.g., totes) with a capacity greater than 0.43 cubic meters not in light liquid service. These containers are subject to Container Level 2 requirements. The containers that arrive at the facility will all meet DOT regulations related to packaging hazardous materials for transportation. However, Elcon does not anticipate storing hazardous waste with a VO content greater than 500 ppm, by weight, in containers greater than 0.43 cubic meters. The containers will be emptied, through a closed system, into an appropriate tank or to the process. Therefore, this requirement does not apply.

### O-8b Capacity Greater Than 0.46 Cubic Meters in Light Material Service

Elcon anticipates receiving waste in containers (e.g., totes) with a capacity greater than 0.43 cubic meters in light liquid service. These containers are subject to Container Level 2 requirements. The containers that arrive at the facility will all meet DOT regulations related to packaging hazardous materials for transportation. However, Elcon does not anticipate storing hazardous waste with a VO content greater than 500 ppm, by weight, in containers greater than 0.43 cubic meters. The containers will be emptied, through a closed system, into an appropriate tank or to the process. Therefore, this requirement does not apply.

#### O-8c Capacity Greater Than 0.1 Cubic Meters used for Stabilization

Elcon will not use containers for waste stabilization. This section does not apply.

#### O-9 CONTAINER AREAS SUBJECT TO SUBPART CC

Elcon will be receiving containers with hazardous wastes. These containers will be designed to meet the Department of Transportation Hazardous Materials Transportation requirements for DOT-approved packaging. As such, these containers meet the requirements of Subpart CC. At this point; however, Elcon will not store hazardous waste in containers with a VO content greater than 500 ppm, by weight, and; therefore, will not have a container storage area for these materials. The unloading area for incoming materials is identified as Area 9 on Figure D-1 in Section D of this application.

#### O-9a Containers Using Level 1 Controls

##### *O-9a(1) Meets DOT Regulations On Packaging*

Elcon will receive containers (e.g., drums) using Level 1 controls that meet 49 CFR Part 178 or Part 179 requirements in accordance with 49 CFR 107, 172, 173, and 180. It is the responsibility of the shipper (not Elcon) to pack and ship the waste in appropriate containers and in accordance with the DOT regulations. Elcon is not proposing to accept lab pack waste.

##### *O-9a(2) Containers Equipped With Cover And Closure Devices*

Elcon will not be managing containers using Level 1 controls with covers and closure devices.

##### *O-9a(3) Containers Equipped With Organic-Vapor Suppressing Barrier*

Elcon will not be managing any open containers using Level 1 controls with organic-vapor suppressing barriers.

#### O-9b Containers Using Level 2 Controls

##### *O-9b(1) Meets DOT Regulations On Packaging*

Elcon will receive containers (e.g., totes) using Level 2 controls that meet 49 CFR Part 178 or Part 179 requirements in accordance with 49 CFR 107, 172, 173, and 180. It is the responsibility of the shipper (not Elcon) to pack and ship the waste in appropriate containers and in accordance with the DOT regulations. Elcon is not proposing to accept lab pack waste.

##### *O-9b(2) Operates with No Detectable Organic Emissions*

Elcon will not be managing any containers using Level 2 controls with no detectable organic emissions. This section does not apply

*O-9b(3) Demonstrated to be Vapor-Tight*

Elcon will not be managing any containers using Level 2 controls that are demonstrated to be vapor tight.

O-9c Container Using Level 3 Controls

Elcon will not be using containers to treat hazardous waste through a waste stabilization process. Therefore, Container Level 3 controls are not applicable.

O-10 CONTAINER CLOSURE DEVICES

Elcon will receive containers (e.g., drums, totes) that meet 49 CFR Part 178 or Part 179 requirements in accordance with 49 CFR 107, 172, 173, and 180. It is the responsibility of the shipper (not Elcon) to pack and ship the waste in appropriate containers and in accordance with the DOT regulations. Elcon will keep the closure devices “closed” except as detailed below. An empty container may be open at any time; covers and closure devices are not required.

O-10a Container Level 1 Closure Devices

Elcon will receive containers with Level 1 controls; these containers will meet DOT hazardous materials shipping requirements. Elcon may open the closure device or cover for the purpose of:

- Removing hazardous waste. The cover or closure device will be promptly closed following removal.
- Performing routing activities, such as determining the depth of the material in the container.
- Maintenance, such as maintaining the internal pressure of the container in accordance with the design specifications.
- To avoid unsafe conditions.

Upon receipt of a container, Elcon will visually inspect the container and its cover and closure device for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure device are secured in the closed position. If a defect is detected for the container, cover, or closure devices, Elcon will unload the contents to an appropriate tank or treatment vessel or another suitable container. Elcon does not intend to store materials in containers for more than 24 hours.

O-10b Container Level 2 Closure Devices

Elcon will receive containers with Level 2 controls; these containers will meet DOT hazardous materials shipping requirements. Elcon will transfer the material in a manner that minimizes exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling the hazardous materials.

Elcon may open a container's closure device or cover for the purpose of:

- Removing hazardous waste. The cover or closure device will be promptly closed following removal.
- Performing routing activities, such as determining the depth of the material in the container.
- Maintenance, such as maintaining the internal pressure of the container in accordance with the design specifications.
- To avoid unsafe conditions.

Upon receipt of a container, Elcon will visually inspect the container and its cover and closure device for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure device are secured in the closed position. If a defect is detected for the container, cover, or closure devices, Elcon will unload the contents to an appropriate tank or treatment vessel or another suitable container. Elcon does not intend to store materials containing VO above 500 ppm, by weight, in containers for more than 24 hours.

#### O-10c Container Level 3 Closure Devices

Elcon will not be using containers to treat hazardous waste through a waste stabilization process. Therefore, Container Level 3 closure controls are not applicable.

### O-11 CLOSED-VENT SYSTEM AND CONTROL DEVICE STANDARDS

#### O-11a Applicability

Elcon will use a closed vent system venting to a thermal oxidizer to control working and breathing losses from tanks containing organic materials. Elcon will operate its processes according to 40 CFR 264.1087, related to standards for closed-vent systems and control devices.

#### O-11b Closed-Vent System

Information related to the closed-vent system under 40 CFR 264.1087 is provided below.

##### *O-11b(1) Route Gases, Vapors, and Fumes to Control Device*

Elcon is designing its closed-vent system to route gases, vapors, and fumes to the thermal oxidizer. As discussed in Sub-section O-12a below, this system will meet the requirements of 40 CFR 264.1087(c), related control device requirements. Information regarding 40 CFR 270.27(a)(5), relating to documentation for closed-vent and air pollution control systems, is provided in Section M of this application. 40 CFR 270(c) is not applicable because Elcon is proposing to use a thermal oxidizer for air pollution control.

*O-11b(2) Designed And Operated in Accordance With 40 CFR Part 264.1033(k)*

Elcon is designing its closed-vent system to satisfy 40 CFR Part 264.1033(k), which requires a closed-vent system. The system will operate under a slight negative pressure, and pressure monitoring devices will be used to ensure that the system is operated in this manner.

*O-11b(3) Bypass Devices*

Elcon's air pollution control system will include provisions to vent emissions from the thermal oxidizer to a carbon adsorption unit in the event that the thermal oxidizer is down. The carbon adsorption unit will control breathing losses from the tanks, but not working losses; the tanks will not be loaded or unloaded when venting to the carbon adsorption unit. Emissions will not be vented to the atmosphere from the thermal oxidizer. A flow indicator, seal, or locking device will be in place to prevent emissions from by-passing the thermal oxidizer.

**O-12 CONTROL DEVICE**

Information regarding 40 CFR 270.27(a)(5), relating to documentation for closed-vent and air pollution control systems, is provided in Section M of this application. 40 CFR 270(c) is not applicable because Elcon is proposing to use a thermal oxidizer for air pollution control.

**O-12a Control Device Type**

Elcon's primary air pollution control device will be a thermal oxidizer.

*O-12a(1) Control Device at 95% Efficiency*

The thermal oxidizer will be designed and operated to reduce the total organic content of the inlet vapor stream vented to the thermal oxidizer by at least 95% by weight. Elcon will commit to a 99.9% reduction by weight in the air permit application associated with the control device, which more than exceeds this requirement.

*O-12a(2) Enclosed Thermal Oxidation Device*

Elcon is complying with the control device requirements by using a thermal oxidizer with a destruction efficiency in excess of 95% by weight.

*O-12a(3) Flare*

Elcon is complying with the control device requirements by using a thermal oxidizer with a destruction efficiency in excess of 95% by weight. A flare is not part of the Elcon design.



#### O-12b Operating Requirements

Elcon will operate the closed-vent system and thermal oxidizer such that planned routine maintenance of the thermal oxidizer will not exceed 240 hours per year; system malfunctions will be corrected as soon as practicable; and the system will be operated such that gases, vapors, or fumes are not actively vented to the thermal oxidizer during planned maintenance or system malfunction. As permitted under 40 CFR 264.1087(c)(2)(vi), there are periods when venting can be done, such as to avoid an unsafe condition or to implement a malfunction corrective action.

Elcon will have two weeks of planned preventive maintenance per year. During this time period, the process equipment will not actively be operating. Breathing emissions from the inactive tanks containing organic materials will be controlled by venting to the carbon adsorption system. During thermal oxidizer malfunctions, the process equipment will be safely shutdown and the breathing emissions from the tanks and vessels (i.e., reactors) containing organic materials will be vented to the carbon adsorption unit. The process will not continue to operate if the thermal oxidizer is not in operation.

Elcon will keep records of periods when the thermal oxidizer is not in use and the required minimum organic destruction efficiency is not achieved. These records will show if emissions were vented to the carbon adsorption back-up system or to the atmosphere to document compliance with the control efficiency requirements.

#### O-12c Carbon Adsorption System

Elcon will be operating a carbon adsorption system; however, it will only be used as a back-up to the thermal oxidizer. Carbon replacement and removal will follow the prescribed requirements in 40 CFR Part 264.1033(h) and (n). Elcon is not proposing to use a carbon adsorption unit that regenerates onsite; therefore, 40 CFR 264.1033(g) is not applicable. The carbon replacement will be determined through monitoring or will occur at a frequency less frequently than the design carbon replacement interval. Elcon will handle the spent carbon as hazardous waste, unless testing indicates otherwise, and the spent carbon will be managed following one of the options identified in 40 CFR 264.1033(n).

#### O-12d Other Control Devices

Elcon is operating its process with a thermal oxidizer backed up by an activated carbon unit. Therefore, 40 CFR 264.1087(c)(4) is not applicable.

#### O-12e Performance Testing Design Requirement Analysis

The thermal oxidizer is designed to exceed the 95 percent by weight destruction efficiency required by 40 CFR 264.1033(c). Based on the manufacturer's data provided for the air permit, the thermal oxidizer will be operating at 99.9% by weight destruction efficiency. Specifically, the thermal oxidizer is designed and will be operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 parts

per million by volume (ppmv), expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 % oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C (1,400 °F). Elcon is actually proposing to operate the unit at a minimum of 1,800 °F with an actual design residence time of 2 seconds.

Information provided in Section M of this application supports the basis of design and meets the RCRA requirements; therefore a performance test is not specifically required under the RCRA program. However, the air permit will require emission testing, which in all likelihood will exceed the RCRA program requirements. Prior to the testing, Elcon will submit a pre-test protocol to the Department's air quality staff outlining the details of the testing program, including testing location, methods, and schedule. The Department will be invited to witness the compliance testing programs.

#### O-12f If Design Analysis Is Not Sufficient

Elcon anticipates that its air permit will require emissions testing and that this required testing will meet or exceed the emissions testing required under the RCRA program. However, Elcon will conduct any additional testing as directed by the Department (or EPA). The Department, or its designated representative, will be informed of the testing dates and invited to observe the testing. Elcon will use a third-party testing firm with a Pennsylvania Environmental Laboratory Registration Number. Prior to testing, a detailed emission testing protocol will be submitted to the Department for review.

#### O-12g Inspection and Monitoring of Control Device

Elcon will perform daily inspections and monitoring of the thermal oxidizer at least once per operating day.

As required by 40 CFR 264.1033(f)(2)(i), related to monitoring and inspection requirements for a thermal oxidizer, Elcon will install, calibrate, maintain, and operate in accordance with the manufacturer's specifications a temperature monitoring device equipped with a continuous recorder on the thermal oxidizer. The monitoring device will have an accuracy of  $\pm 1$  % of the temperature being monitored in °C or  $\pm 0.5$  °C, whichever is greater. The temperature sensor will be installed at a location in the oxidation chamber downstream of the oxidation zone.

Any necessary corrective actions will be implemented immediately to ensure that the thermal oxidizer is operated in compliance with the applicable regulations.

40 CFR 264.1033(l) is not applicable to the control device option (i.e., 95% by weight or more emission reduction) selected by Elcon.

## O-13 INSPECTION, MONITORING, AND REPAIR REQUIREMENTS

Elcon will perform the inspection, monitoring and repairs required in 40 CFR 264.1084 through 264.1087, excluding 264.1085, related to surface impoundments. This includes the following:

*For tanks containing organic materials* – Elcon will inspect and monitor the thermal oxidizer and closed vent system in accordance 40 CFR 264.1087 (see Section O-12) by performing the following: visual inspections to check for defects that could result in air pollutant emissions; an initial inspection of the thermal oxidizer prior to startup and at least annual inspections thereafter; upon detecting a defect, repairing the defect initially within five days and completing them within 45 days after detection unless the tank needs to be removed from service prior to the repair being completed, in which case the defect will be repaired and completed the next time the tank is out of service. Records of inspections will be maintained.

*For incoming containers containing organic materials* – Upon receipt of containers, Elcon will visually inspect them and their covers and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the containers when the covers and closure devices are secured in the closed position. If a defect is detected for a container, cover, or closure device, Elcon will unload the contents to an appropriate tank or treatment vessel or another suitable container. Elcon does not intend to store materials in containers for more than 24 hours.

*For the thermal oxidizer* – Elcon will install, calibrate, maintain, and operate in accordance with the manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder. This monitoring device will have an accuracy of  $\pm 1$  % of the temperature being monitored in  $^{\circ}\text{C}$  or  $\pm 0.5$   $^{\circ}\text{C}$ , whichever is greater. The temperature sensor will be installed at a location in the oxidation chamber downstream of the oxidation zone. Any necessary corrective actions will be implemented immediately to ensure that the thermal oxidizer is operated in compliance with the applicable regulations. Elcon will also conduct additional monitoring that is beyond the RCRA program requirements, such as installation of Continuous Emission Monitoring systems.

*For the closed vent system* – Each closed-vent system that is used to comply with 40 CFR Part 264, 1033(k)(2) (the negative pressure requirements of 40 CFR Part 264 Subpart AA) will be inspected and monitored in accordance with the following requirements:

- Elcon will visually inspect the closed-vent system for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.
- Elcon will perform an initial inspection of the closed-vent system on or before the start-up of the operation. Thereafter, Elcon will perform the inspections at least once every year.
- If a defect or leak is detected, Elcon will repair the defect in accordance with the requirements of 40 CFR Part 264.1033(1)(3): 1) Detectable emissions, as indicated by

visual inspection, or by an instrument reading greater than 500 ppmv above background, will be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as described in the bullet below related to delay of repairs; 2) Elcon will make its initial attempt at repair no later than 5 calendar days after the emission is detected; 3) Under 40 CFR 264.1033(l)(3)(iii) a delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if Elcon determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment will be completed by the end of the next process unit shutdown; 4) Elcon will maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 264.1035.

- Elcon will maintain a record of the inspection and monitoring in accordance with the requirements specified in 40 CFR 264.1035.

Elcon will develop and implement a written plan and schedule to perform the inspections and monitoring and incorporate these into the facility's inspection plan. Section F of this application provides additional information related to inspections. Appendix O-2 includes the written monitoring plan and schedule.

#### O-14 RECORDKEEPING AND REPORTING REQUIREMENTS

In general, Elcon will maintain the records required under Subpart CC for a minimum of three years. The exception to this is air emission control equipment design documentation that will be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by paragraphs 40 CFR 262.1089(i) and (j) is not applicable because Elcon is using a thermal oxidizer for air pollution control.

For the tanks that vent to the thermal oxidizer, Elcon will prepare and maintain the following records:

1. A tank identification number or other unique identification description.
2. A record for each inspection required by 40 CFR 264.1084 that includes the following information:
  - a. Date inspection was conducted.
  - b. For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of 40 CFR 264.1084 of this subpart, Elcon will also record the reason for the delay and the date that completion of repair of the defect is expected.

Elcon will prepare and maintain records related to the closed-vent system and thermal oxidizer that includes the following information:

1. Certification that is signed and dated by Elcon stating that the control device is designed to operate at the performance level documented by a design analysis as specified in 40 CFR 264.1089(e)(1)(ii) or by performance tests as specified in 40 CFR 264.1089(e)(1)(iii) when the tank is or would be operating at capacity or the highest level reasonably expected to occur.
2. If a design analysis is used, then the design documentation as specified in 40 CFR 264.1035(b)(4). The documentation will include information prepared by Elcon or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with 40 CFR 264.1035(b)(4)(iii) and certification by Elcon that the control equipment meets the applicable specifications and information from the vendor on the proposed system is provided in Section M of this application
3. If performance tests are used, then a performance test plan as specified in 40 CFR 264.1035(b)(3) and all test results.
4. Information as required by 40 CFR 264.1035(c)(1) and 40 CFR 264.1035(c)(2), as applicable, related to modifications to the closed-vent system or thermal oxidizer, and identification of monitoring locations.
5. On a semi-annual basis, the information specified below for those planned routine maintenance operations that would require the control device not to meet the requirements of 40 CFR 264.1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable. Note that Elcon intends to vent breathing losses from the tanks containing organic materials to a backup carbon adsorption unit during thermal oxidizer down time.
  - a. A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6-month period. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.
  - b. A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description will include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §264.1087(c)(1)(i) due to planned routine maintenance.
6. The information specified below for those unexpected control device system malfunctions that would require the control device not to meet the requirements of 40 CFR 264.1087(c)(1)(i):
  - a. The occurrence and duration of each malfunction of the control device system.

- b. The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.
  - c. Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.
7. Records of the management of carbon removed from the backup carbon adsorption system in accordance with 40 CFR 264.1087(c)(3)(ii).

For units exempt from standards in accordance with the provisions of §264.1082(c), such as acid or caustic tanks with less than 500 ppm, by weight, of VO, Elcon will prepare and maintain information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility's operating log. If analysis results for waste samples are used for the waste determination, then Elcon will record the date, time, and location that each waste sample is collected in accordance with applicable requirements of 40 CFR 264.1083. 40 CFR 264.1089(g), (h), (i), and (j) are not applicable to Elcon's operations.

#### O-14a Reporting Requirements

##### *O-14a(1) Units Exempted from Using Air Emission Controls*

For units exempted from using air emission controls under the provisions of 40 CFR 264.1082(c), such as those containing waste with less than 500 ppm, by weight, of VO, Elcon will report each occurrence when hazardous waste is placed in the waste management unit that is not designated for handling waste with less than 500 ppm, by weight, of VO. Elcon will submit a written report within 15 calendar days of the time that it becomes aware of the occurrence. The written report will contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report will be signed and dated by an authorized representative of Elcon.

##### *O-14a(2) Level 1 Air Emission Controls on Tanks*

This section is not applicable as it applies to facilities using Level 1 controls on tanks. Elcon is proposing to use the more stringent Level 2 controls for the tanks.

##### *O-14a(3) Use of a Control Device*

For the thermal oxidizer, Elcon will submit a semi-annual written report to the Department except as discussed in the paragraph below. The report will describe each occurrence during the previous 6-month period when the thermal oxidizer is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in 40 CFR 264.1035(c)(4), related to removal efficiency. The written report will include the EPA identification number, facility name and address, and an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance. The report shall be signed and dated by an authorized representative of Elcon.

The report described in the first paragraph is not required for a 6-month period during which all control devices subject to this subpart are operated such that during no period of 24 hours or longer did a control device operate continuously in noncompliance with the applicable operating values defined in 40 CFR 264.1035(c)(4).

O-14b Emission Monitoring Plan

Appendix O-2 includes an emission monitoring plan. The plan includes monitoring points, monitoring methods for the thermal oxidizer, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

O-14c Subpart CC Implementation Plan

Elcon will comply with Subpart CC by the startup of the facility. An implementation plan is not required.

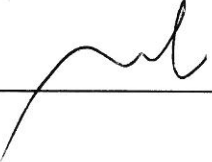
APPENDIX O-1

CERTIFICATION PER 40 CFR PART 270.27



OWNERS CERTIFICATION PER 40 CFR 270.27  
RELATED TO DOCUMENTATION OF COMPLIANCE WITH 40 CFR 264 SUBPART CC

I, Zvi Elgat, certify that the requirements of 40 CFR Part 264 Subpart CC as they pertain to containers are not applicable to the Falls Township, Pennsylvania facility. Elcon will not store materials in containers with a volatile organic content of more than 500 parts per million, by weight, for more than 24 hours.

  
\_\_\_\_\_  
Signature

Jan 15 2017  
\_\_\_\_\_  
Date

Dr. Zvi Elgat  
\_\_\_\_\_  
Typed Name

CEO  
\_\_\_\_\_  
Title

APPENDIX O-2  
EMISSION MONITORING AND INSPECTION PLAN

**40 CFR SUBPART CC  
EMISSION MONITORING AND INSPECTION PLAN**

**ELCON RECYCLING FACILITY**

**FALLS TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA**

**OWNER / OPERATOR OF FACILITY:**



**ELCON RECYCLING SERVICES, LLC  
100 DEAN SIEVERS PLACE  
FALLS TOWNSHIP, PA**

**PREPARED BY:  
IES ENGINEERS, INC.  
1720 WALTON ROAD  
BLUE BELL, PA 19422**

**IES PROJECT NO. EV161065.01**

**FEBRUARY 2017**

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## 1.0 INTRODUCTION

The information in this plan is being submitted to address the written monitoring and inspection plan requirements of 40 CFR Subpart CC, specifically 40 CFR Part 264.1088 and the emission monitoring plan required under CFR Part 270.27(a)(6) as they apply to Elcon's operations. Elcon's operations include a number of tank systems and containers. Elcon will perform the inspection, monitoring, and repairs required in 40 CFR 264.1084 through 264.1087, excluding 264.1085, related to surface impoundments. This plan delineates the monitoring plan as it pertains to tanks, containers, and the closed vent system.

40 CFR 264.1088 requires Elcon to develop and implement a written plan and schedule to perform the inspections and monitoring required by 40 CFR 264.1084 (tanks), 264.1086 (containers), and 264.1087 (control devices and closed vent systems). Elcon will incorporate this plan and schedule into the facility's inspection plan required under 40 CFR 264.15, related to general inspection requirements. Additionally, 40 CFR 270.27(a)(6) requires the preparation of an emission monitoring plan for both Method 21 in 40 CFR 60, Appendix A and control device monitoring methods for units subject to 40 CFR Subpart CC requirements. This plan is required to include the following information: monitoring point(s), monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

The monitoring and inspections described in this section are designed so that emission controls are operating as intended under 40 CFR Subpart CC, thereby minimizing air emissions.

In addition to the emission monitoring prescribed under Subpart CC, Elcon will implement additional monitoring that is beyond the RCRA requirements, such as the use of continuous emission monitoring systems (CEMS) on the thermal oxidizer, which provides real time monitoring of emissions from the main exhaust stack. The air quality permit will also include extensive testing, monitoring, recordkeeping, and reporting requirements to demonstrate continuous compliance with the applicable air quality regulations.

## 2.0 METHOD 21 IN 40 CFR PART 60 APPENDIX A

The use of Method 21 is required in several places in 40 CFR Part CC. Method 21 is required for tanks using Level 1 controls, tanks operating above atmospheric pressure, and containers that do not meet the US Department of Transportation (DOT) container shipping requirements. Since Elcon is using Level 2 tank controls, has tanks that operate under a slight negative pressure, and the containers will satisfy DOT shipping requirements, Method 21 is not applicable to Elcon in the context of 40 CFR Part 264 Subpart CC.

### 3.0 CONTROL DEVICE MONITORING AND INSPECTION METHODS

This section includes monitoring point, monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances for the following equipment: 1) tanks containing organic materials, 2) incoming containers containing organic materials, 3) the thermal oxidizer, and 4) the closed vent system.

Prior to startup, Elcon will prepare detailed, site-specific forms for each required inspection. As discussed with the Department during a pre-application meeting for this Part B application, Elcon does not need to prepare inspection forms prior to construction of the facility. Additional information on inspections and an example of an inspection form are provided in Section F of this application.

#### 3.1 Tanks Containing Organic Materials

This section addresses the specific control device for the tanks – the closed roof system. Additional information on the monitoring and inspections specifically for the thermal oxidizer and the closed vent system are provided below in Sub-sections 3.3 and 3.4.

##### 3.1.1 *Monitoring Points*

The tanks subject to 40 CFR Part 264 Subpart CC regulation are either horizontal tanks or fixed roof vertical tanks. No floating roofs will be used in any of the Elcon tanks. The tanks vary in size and wastewater composition. Tank Level 2 controls under 40 CFR 264.1084 will be applied to the tank systems, which in Elcon's case, are closed vent systems vented to a thermal oxidizer.

For each fixed roof tank subject to Subpart CC, the monitoring points are the fixed roof and its closure device.

##### 3.1.2 *Monitoring Methods for Control Devices*

The control device for the tanks is the roof of the tank, in addition to the closed vent system. The fixed roof and its closure devices will be visually inspected to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on the closure device; and broken or missing hatches, access covers, caps, or other closure devices.

##### 3.1.3 *Monitoring Frequency*

The monitoring frequency for the tanks containing organic materials is a daily visual inspection of the physical structure of the tanks, closure devices, and the closed vent system.

### 3.1.4 *Procedures for Documenting Exceedances*

Records of the daily visual inspections and any observations will be maintained in the Operating Facility logs.

### 3.1.5 *Procedures for Mitigating Non-compliances*

Elcon will repair all detected defects as follows:

- Elcon will make its first attempt at repair no later than 5 calendar days after the defect is detected. The first attempt at repair will be to take action for the purpose of stopping or reducing the leakage of organic material using best practices.
- The repair will be completed as soon as practicable, but no later than 45 calendar days after detection except as provided in the bullet below.
- Repair of a defect may be delayed beyond 45 calendar days if Elcon determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, Elcon will repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect will be completed before the process or unit resumes operation.
- Elcon will maintain records of all defect repairs in accordance with the requirements specified in 40 CFR 264.1089.

## 3.2 Incoming Containers Containing Organic Materials

### 3.2.1 *Monitoring Points*

Upon receipt of containers, Elcon will visually inspect the containers and their covers and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

### 3.2.2 *Monitoring Methods for Control Devices*

The control device for containers containing organic materials is the DOT-approved shipping container, including the container closure device(s). Elcon will perform a visual inspection of the container and their covers and closure devices.

### 3.2.3 *Monitoring Frequency*

The monitoring frequency for the incoming containers containing organic materials is a visual inspection upon receipt of the physical structure of the containers and their closure devices.

### 3.2.4 *Procedures for Documenting Exceedances*

Records of the visual inspections upon receipt of any containers and any observations will be maintained in the Operating Facility logs.

### 3.2.5 *Procedures for Mitigating Non-compliances*

If a defect is detected for a container, cover, or closure device, Elcon will unload the contents to an appropriate tank or treatment vessel or another suitable container. Elcon does not intend to store materials in containers for more than 24 hours. If, for some reason, Elcon needs to store materials in containers for more than 24 hours, Elcon will visually inspect the container, its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection will be conducted on or before the date that the container is accepted at the facility. For these purposes, the date of acceptance is the date of signature of Elcon on the Uniform Hazardous Waste Manifest. If the container used for managing hazardous waste remains at the facility for a period of one year or more Elcon will repeat the visual inspection at least once every twelve months.

## 3.3 Thermal Oxidizer

### 3.3.1 *Monitoring Points*

Elcon will install, calibrate, maintain, and operate in accordance with the manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder. The device will have an accuracy of  $\pm 1$  % of the temperature being monitored in  $^{\circ}\text{C}$  or  $\pm 0.5$   $^{\circ}\text{C}$ , whichever is greater. The temperature sensor will be installed at a location in the oxidation chamber downstream of the oxidation zone. Any necessary corrective actions will be implemented immediately to ensure that the thermal oxidizer is operated in compliance with the applicable regulations.

Temperature monitoring on oxidizers is the standard method for determining whether the unit is functioning as expected. The temperature probe is placed downstream of the oxidation zone to document that the required temperature is achieved for the designed residence time of the unit.

### 3.3.2 *Monitoring Methods for Control Devices*

The control device is the oxidizer itself in addition to the closed vent system. Elcon will inspect and monitor the thermal oxidizer in accordance with 40 CFR 264.1087 by performing visual inspections to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping, or loose connections.

Additionally, a temperature that is below the set point will indicate a potential problem with the thermal oxidizer system. Through an interlock system, low temperature in the oxidation



chamber, will cause the unit to stop the feed of the organic materials to the process, shutting the process down until the temperature issue is addressed. The readings from each monitoring device i.e. the temperature monitoring device for the thermal oxidizer, will be inspected at least once each operating day to check control device operation. Any necessary corrective measures will be immediately implemented to ensure the control device is operated in compliance with the requirements of 40 CFR Part 264.1087.

### 3.3.3 *Monitoring Frequency*

Elcon will perform an initial inspection of the oxidizer and the closed-vent system on or before the startup of the operation. Thereafter, Elcon will perform the inspections at least once every year. Additionally, Elcon will conduct a daily check of the unit for defects, including, but not limited to, visible cracks, holes, or gaps in the ductwork or piping, and loose connections. Elcon will inspect the readings from the temperature monitoring device for the thermal oxidizer at least once each operating day.

### 3.3.4 *Procedures for Documenting Exceedances*

Records of the initial and annual inspections and any observations will be maintained in the Operating Facility logs. Additionally, records from the daily temperature reading inspections will be recorded in the Operating Facility logs.

### 3.3.5 *Procedures for Mitigating Non-compliances*

Elcon will repair all detected defects as follows:

- Detectable emissions, as indicated by visual inspection, will be controlled as soon as practicable, but not later than 15 calendar days after the defect is detected, except as described in the bullet below related to delay of repairs.
- Elcon will make its initial attempt at repair no later than 5 calendar days after the emission is detected.
- Per 40 CFR 264.1033(l)(3)(iii), a delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if Elcon determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment will be completed by the end of the next process unit shutdown.
- Elcon will maintain records of all defect repairs in accordance with the requirements specified in 40 CFR 264.1035.

### 3.4 Closed Vent System

#### 3.4.1 *Monitoring Points*

Elcon will install, calibrate, maintain, and operate in accordance with the manufacturer's specifications, pressure monitoring gauges to ensure the closed vent system is operated at a negative pressure. The primary pressure monitoring gauge is on the inlet duct to the thermal oxidizer. There are also pressure monitoring devices throughout the closed-vent system to ensure that negative pressure is maintained throughout the system.

The piping and instrumentation diagrams (P&IDs) in Appendix D-7 of Section D of this application show the locations of the pressure indicators on the ventilation system. Table 1 summarizes the pressure indicators on the various blowers exhausting to the thermal oxidizer.

**TABLE 1  
SUMMARY OF PRESSURE INDICATORS ON BLOWER SYSTEMS**

<b>Blower Description</b>	<b>Blower ID</b>	<b>Pressure Indicator ID</b>	<b>P&amp;ID No.<sup>1</sup></b>
Unit 20 vent blower from production area	B-20144 <sup>2</sup>	PI-201401	USA-20100-01-004
Unit 20 biological tank farm blower	B-20145 <sup>2</sup>	PI-201501	USA-20100-01-005
Unit 20 tank farm blower – acidic waste	B-20146 <sup>2</sup>	PI-201601	USA-20100-01-006
Unit 20 tank farm blower	B-20147 <sup>2</sup>	PI-201701	USA-20100-01-007
Unit 20 tank farm blower – organic waste	B-20148 <sup>2</sup>	PI-201801	USA-20100-01-008
Unit 20 main blower to thermal oxidizer	B-20149	PI-201901	USA-20100-01-009

<sup>1</sup> P&IDs are provided in Appendix D-7 in Section D of this application.

<sup>2</sup> Vents to B-20149, the main blower to the thermal oxidizer.

#### 3.4.2 *Monitoring Methods for Control Devices*

The control device is the closed vent system itself. Elcon will inspect and monitor the closed vent system in accordance with 40 CFR 264.1087 by performing visual inspections to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping, or loose connections.

#### 3.4.3 *Monitoring Frequency*

Elcon will perform an initial inspection of the closed-vent system on or before the startup of the operation. Thereafter, Elcon will perform the inspections at least once every year. Additionally,

Elcon will conduct a daily check of the unit for defects, including, but not limited to, visible cracks, holes, or gaps in the ductwork or piping, and loose connections.

#### 3.4.4 *Procedures for Documenting Exceedances*

Records of the initial and annual inspections and any observations will be maintained in the Operating Facility logs.

#### 3.4.5 *Procedures for Mitigating Non-compliances*

Elcon will repair all detected defects as follows:

- If a defect or leak is detected, Elcon will repair the defect in accordance with the requirements of 40 CFR Part 264.1033(1)(3): 1) Detectable emissions, as indicated by visual inspection, will be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as described in the item 3 below related to delay of repairs; 2) Elcon will make its initial attempt at repair no later than 5 calendar days after the emission is detected; 3) Per 40 CFR 264.1033(1)(3)(iii) a delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if Elcon determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment will be completed by the end of the next process unit shutdown; 4) Elcon will maintain a record of the defect repair in accordance with the requirements specified in 40 CFR 264.1035.
- Elcon will maintain a record of the inspection and monitoring in accordance with the requirements specified in 40 CFR 264.1035.

APPENDIX O-3

LISTING OF TANKS SUBJECT TO 40 CFR PART 264 SUBPART CC

### APPENDIX O-3

#### SUMMARY OF P&ID AND PFD ID NUMBERS FOR STORAGE TANKS SUBJECT TO 40 CFR PART 264 SUBPART CC

<b>Storage Tank IDs</b>	<b>PI&amp;D No.<sup>1</sup></b>	<b>PFD No.<sup>2</sup></b>
T-20121A and T-20121B	USA-20100-01-002	USA-20100-01-100
T-20122A and T-20122B	USA-20100-01-003A	USA-20100-01-100
T-20120A and T-201120B	USA-20100-01-003B	USA-20100-01-100
T-21101A and T-21101B	USA-21100-01-001A	USA-21100-01-100
T-21100A and T-21100B	USA-21100-01-001B	USA-21100-01-100
T-23101 and T-23100	USA-23100-01-001	USA-23100-01-100
T-23341	USA-23300-01-002	USA-23300-01-100
T-20357	USA-20300-01-002	USA-20300-01-101

<sup>1</sup> See Appendix D-7 for P&IDs in Section D of this application.

<sup>2</sup> See Appendix D-8 for PFDs in Section D of this application.

**SUMMARY OF P&ID AND PFD ID NUMBERS FOR MISCELLANEOUS UNITS  
SUBJECT TO 40 CFR PART 264 SUBPART CC**

<b>Equipment IDs</b>	<b>PI&amp;D No.</b>	<b>PFD No.</b>
R-20206	USA-20200-01-003	USA-20200-01-101
R-20210	USA-20200-01-004	USA-20200-01-101
R-20214	USA-20200-01-005	USA-20200-01-101
D-20220, T-20224, T-20221	USA-20200-01-002	USA-20200-01-100
T-20392	USA-20300-01-011	USA-20300-01-101
T-20401	USA-20400-01-001A	USA-20400-01-100
T-20411	USA-20400-01-001B	USA-20400-01-100
R-23201	USA-23200-01-001	USA-23200-01-100
T-23341	USA-23300-01-002	USA-23300-01-100
R-90208 and R-90209	USA-90200-01-001B	USA-90000-01-101B
R-90220A, R-90220B, R-90221A, R-90221B, T-90222A, and T-90222B	USA-90200-01-002	USA-90000-01-102
T-90226	USA-90200-01-003	USA-90000-01-103