**Section 725.983 Standards: General**

a) This Section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this Subpart CC.

b) The owner or operator must control air pollutant emissions from each hazardous waste management unit in accordance with the standards specified in Sections 725.985 through 725.988, as applicable to the hazardous waste management unit, except as provided for in subsection (c).

c) A tank, surface impoundment, or container is exempted from standards specified in Sections 725.985 through 725.988, provided that all hazardous waste placed in the waste management unit is one of the following:

1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration must be determined by the procedures specified in Section 725.984(a). The owner or operator must review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit;

2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

A) The process removes or destroys the organics contained in the hazardous waste to such a level that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (Ct) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process must be determined using the procedures specified in Section 725.984(b);

B) The process removes or destroys the organics contained in the hazardous waste to such a level that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 725.984(b);

C) The process removes or destroys the organics contained in the hazardous waste to such a level that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process must be determined using the procedures specified in Section 725.984(b);

D) The process is a biological process that destroys or degrades the organics contained in the hazardous waste so that either of the following conditions is met:

i) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (Rbio) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process must be determined using the procedures specified in Section 725.984(b); and

ii) The total actual organic mass biodegradation rate (MRbio) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process must be determined using the procedures specified in Section 725.984(b);

E) The process is one that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

i) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is continuously managed in waste management units that use air emission controls in accordance with the standards specified in Section 725.985 through Section 725.988, as applicable to the waste management unit;

ii) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere;

BOARD NOTE: The USEPA considers a drain system that meets the requirements of federal subpart RR of 40 CFR 63(National Emission Standards for Individual Drain Systems) to be a closed system.

iii) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual hazardous waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual hazardous waste stream at the point of waste origination must be determined using the procedures specified in Section 725.984(a). The average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 725.984(b);

F) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination must be determined using the procedures specified in Sections 725.984(b) and 725.984(a), respectively;

G) A hazardous waste incinerator for which either of the following conditions is true:

i) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart O of 35 Ill. Adm. Code 724; or

ii) The owner or operator has designed and operates the incinerator in accordance with the interim status requirements of Subpart O;

H) A boiler or industrial furnace for which either of the following conditions is true:

i) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

ii) The owner or operator has designed and operates the industrial furnace or incinerator in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726; and

I) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of subsections (c)(2)(A) through (c)(2)(F), the owner or operator must account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

i) If Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), is used for the analysis, one-half the blank value determined in the method at Section 4.4 of Reference Method 25D or a value of 25 ppmw, whichever is less; and

ii) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8 x 10-6 atmospheres/gram-mole/m3) at 25 °C;

3) A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of subsection (c)(2)(D);

4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit fulfills either of the following two conditions:

A) It meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in Table T to 35 Ill. Adm. Code 728; or

B) The organic hazardous constituents in the waste have been treated by the treatment technology established by USEPA for the waste, as set forth in 35 Ill. Adm. Code 728.142(a), or treated by an equivalent method of treatment approved by the Agency pursuant to 35 Ill. Adm. Code 728.142(b); or

5) A tank used for bulk feed of hazardous waste to a waste incinerator, and all of the following conditions are met:

A) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under federal subpart FF of 40 CFR 61(National Emission Standards for Benzene Waste Operations), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams (11 tons) per year;

B) The enclosure and control device serving the tank were installed and began operation prior to November 25, 1996; and

C) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator must perform the verification procedure for the enclosure as specified in Section 5.0 of"Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" annually.

d) The Agency may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container that is exempted from using air emission controls under the provisions of this Section as follows:

1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination must be performed using direct measurement in accordance with the applicable requirements of Section 725.984(a). The waste determination for a hazardous waste at the point of waste treatment must be performed in accordance with the applicable requirements of Section 725.984(b);

2) In performing a waste determination pursuant to subsection (d)(1), the sample preparation and analysis must be conducted as follows:

A) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in subsection (d)(2)(B); and

B) If the Agency determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Agency may choose an appropriate method;

3) Where the owner or operator is requested to perform the waste determination, the Agency may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis;

4) Where the results of the waste determination performed or requested by the Agency do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of subsection (d)(1) must be used to establish compliance with the requirements of this Subpart CC; and

5) Where the owner or operator has used an averaging period greater than one hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Agency may elect to establish compliance with this Subpart CC by performing or requesting that the owner or operator perform a waste determination using direct measurement, based on waste samples collected within a 1-hour period, as follows:

A) The average VO concentration of the hazardous waste at the point of waste origination must be determined by direct measurement in accordance with the requirements of Section 725.984(a);

B) Results of the waste determination performed or requested by the Agency showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw must constitute noncompliance with this Subpart CC, except in a case as provided for in subsection (d)(5)(C); and

C) Where the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than one hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of Sections 725.984(a) and 725.990 must be considered by the Agency together with the results of the waste determination performed or requested by the Agency in establishing compliance with this Subpart CC.

(Source: Amended at 42 Ill. Reg. 23725, effective November 19, 2018)