**Section 724.701 Environmental Performance Standards**

A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure adequate protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as are necessary to adequately protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions must include those requirements of Subparts I through O and AA through CC; 35 Ill. Adm. Code 702, 703, and 730; and federal subpart EEE of 40 CFR 63, incorporated by reference in 35 Ill. Adm. Code 720.111(b), that are appropriate for the miscellaneous unit being permitted. Adequate protection of human health and the environment includes, but is not limited to the following:

a) Preventing any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the groundwater or subsurface environment, considering the following:

1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

2) The hydrologic and geologic characteristics of the unit and the surrounding area;

3) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;

4) The quantity and direction of groundwater flow;

5) The proximity to and withdrawal rates of current and potential groundwater users;

6) The patterns of land use in the region;

7) The potential for deposition or migration of waste constituents into subsurface physical structures and the root zone of food-chain crops and other vegetation;

8) The potential for health risks caused by human exposure to waste constituents; and

9) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

b) Preventing any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, in wetlands, or on the soil surface, considering the following:

1) The volume and physical and chemical characteristics of the waste in the unit;

2) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

3) The hydrologic characteristics of the unit and surrounding area, including the topography of the land around the unit;

4) The patterns of precipitation in the region;

5) The quantity, quality, and direction of groundwater flow;

6) The proximity of the unit to surface waters;

7) The current and potential uses of the nearby surface waters and any water quality standards in 35 Ill. Adm. Code 302 or 303;

8) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

9) The patterns of land use in the region;

10) The potential for health risks caused by human exposure to waste constituents; and

11) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

c) Preventing any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering the following:

1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols, and particulates;

2) The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;

3) The operating characteristics of the unit;

4) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

5) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

6) The potential for health risks caused by human exposure to waste constituents; and

7) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by waste constituents.

(Source: Amended at 42 Ill. Reg. 22614, effective November 19, 2018)