A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as necessary to 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 rules 3745-50-40 to 3745-50-235, 3745-55-70 to 3745-55-78, 3745-55-90 to 3745-55-99, 3745-57-02 to 3745-57-17, 3745-57-40 to 3745-57-51, and Chapters 3745-34 and 3745-56 of the Administrative Code; and 40 CFR Part 146 that are appropriate for the miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to the following:

(A) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the ground water or subsurface environment, considering all of the following:

1. The volume and physical and chemical characteristics of the waste in the unit, including the 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 ground water, including other sources of contamination and the cumulative impact of such contamination on the ground water;

4. The quantity and direction of ground water flow;

5. The proximity to and withdrawal rates of current and potential ground water 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 into the root zone of food-chain crops and other vegetation;

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

9. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
(B) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands, or on the soil surface, considering all of 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 the 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 ground water flow;
6. The proximity of the unit to surface waters;
7. The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;
8. The existing quality of surface waters and surface soils, including other sources of contamination and the cumulative impact of such contamination 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) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering all of 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 the cumulative impact of such contamination on the air.

(6) The potential health risks caused by human exposure to waste constituents.

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

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-50-11 of the Administrative Code titled "Incorporated by reference." ]
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CERTIFIED ELECTRONICALLY

Certification

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