66264.601 Environmental Performance Standards

A miscellaneous unit shall 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 shall 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 waste constituents from the unit. Permit terms and provisions shall include those requirements of articles 9 through 15 and articles 27, 28 and 28.5 of this chapter, chapter 20, 40 CFR Part 146, and article 5.5 of chapter 6.5 of division 20 of the Health and Safety Code (commencing with section 25100) that are appropriate for the miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to:

(a)

prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents, hazardous constituents, or reaction products, in the ground water or subsurface environment, considering: (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 ground water and soil-pore liquid and

gas, including other sources of pollution and contamination and their cumulative impact on the ground water and the normally unsaturated zone; (4) the quantity and direction of groundwater flow; (5) the proximity to and withdrawal rate 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, hazardous constituents, or reaction products, 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 constituents of concern; and (9) the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to constituents of concern;

(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 ground water and soil-pore liquid and gas, including other sources of pollution and contamination and their cumulative impact on the ground water and the normally unsaturated zone;

(4)

the quantity and direction of groundwater flow;

(5)

the proximity to and withdrawal rate 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, hazardous constituents, or reaction products, 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 constituents of concern; and

(9)

the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to constituents of concern;

(b)

prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents, hazardous constituents, or reaction products, in surface water, or wetlands or on the soil surface considering: (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 pollution and 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 constituents of concern; and (11) the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures

caused by exposure to constituents of concern;

(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 pollution and 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 constituents of concern;

and

(11)

the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to constituents of concern;

(c)

prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents, hazardous constituents, or reaction products, in the air, considering:(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 topographical characteristics of the unit and the surrounding area; (5) the existing quality of the air, including other sources of pollution and contamination and their cumulative impact on the air; (6) the potential for health risks caused by human exposure to constituents of concern; and (7) the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to constituents of concern.

(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 topographical characteristics of the unit and the surrounding area;

(5)

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

(6)

the potential for health risks caused by human exposure to constituents of concern; and

(7)

the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to constituents of concern.