

advantage of this type of system is the real-time warning it can provide the CAFO owner or operator that a lagoon or impoundment is in danger of overflowing. It can provide the CAFO operator an opportunity to better manage operations and prevent catastrophic failures. These sensors are more expensive than depth markers; however, the added assurance they provide in preventing catastrophic failures might make them attractive to some operations.

Today's rule prohibits the disposal of dead animals in any liquid impoundments or lagoons and requires operations to handle dead animals in ways that prevent contributing pollutants to waters of the United States, except as provided for by alternative performance standards using technologies designed to handle mortalities. Improper disposal of mortalities can lead to surface or ground water contamination, or both, as well as noxious odors and the potential for disease transmission by scavengers and vermin. Historically, burial was the most common method of carcass disposal, but it is now prohibited in many States. By prohibiting the disposal of dead animals in liquid impoundments, this rule will eliminate the discharge of pollutants from carcasses in overflows and in the runoff from land application areas.

Weekly inspections ensure that any storm water diversions at the production area, such as roof gutters or any devices that channel storm water to the wastewater and manure storage and containment structure, are free from debris. Daily inspections of the automated systems providing water to the animals ensure they are not leaking or spilling, which by increasing the rate at which process wastewater is generated can lead to discharge of pollutants to surface water. The manure storage or treatment facility must be inspected weekly to ensure structural integrity. For surface and liquid impoundments, the berms must be inspected for leaking, seepage, wind or water erosion, excessive vegetation, unusually low or high liquid levels, reduced freeboard, depth of the manure and process wastewater in the impoundment as indicated by the depth marker, and other signs of structural weakness. EPA believes these inspections are necessary to ensure proper maintenance of the production area and prevent discharges of manure, litter, and other process wastewater to surface waters.

Records of these inspections must be maintained on-site, as well as records documenting any problems noted and

corrective actions taken, the design basis for the structures, and the estimated volume of any overflows that occur. The depth of all liquid manure storage impoundments must be noted during each week's inspection. Production area inspection data allow operators to actively manage and maintain their surface and liquid impoundments to ensure the structural integrity of the system and avoid catastrophic failure of such systems. These records also assist the CAFO operator to minimize discharges to the extent possible and demonstrate that any overflows that do occur are consistent with the proper operation and maintenance of storage structures to contain all process wastewater including the runoff from a 25-year, 24-hour rainfall event.

As with the land application requirements, effluent limitations in the form of BMPs are particularly suited to the regulation of CAFOs. For many CAFOs, controlling discharges to surface waters is largely associated with controlling runoff and controlling overflows from manure storage structures. CAFO runoff can be highly intermittent and is usually characterized by very high flows occurring over relatively short time intervals. Whether the runoff or overflow will lead to a discharge, as well as the volume of any discharge that does occur and the nature of the pollutants present in the discharge, can vary substantially depending on the operating practices and physical characteristics of the operation (e.g., paved vs. unpaved surfaces, manure handling practices, climate, amount of area exposed to the precipitation). For these reasons, EPA has determined that relying exclusively on numeric ELGs to control these discharges is infeasible.

EPA believes the production area BMPs included in this rule are necessary to ensure proper maintenance of the production area and prevent discharges, except whenever precipitation causes an overflow of process wastewater from a facility designed, constructed, and operated to contain all manure, litter, and process wastewaters plus the runoff from a 25-year, 24-hour rainfall event. There are numerous reports of operations discharging pollutants from the production area during dry weather; discharges from CAFOs that failed to maintain the required storage capacity to contain the 25-year, 24-hour rainfall; and instances of leakage and catastrophic failure of lagoons and other manure storage structures. Information in the record for this rule indicates that many of the discharges could have been

avoided if CAFOs had practiced the BMPs in this rule frequently enough to detect and correct discrepancies before they led to discharges.

The proposed rule would have imposed explicit national requirements for certain CAFOs to address possible discharges to surface water via ground waters that have a direct hydrologic connection to surface waters. These operations would have been required to sample groundwaters to demonstrate that there is no discharge through a direct hydrologic connection to surface waters, unless they determined to the satisfaction of the permitting authority the absence of a direct hydrologic connection. Where a direct hydrologic connection to surface waters exists, controls on discharges to groundwater would have been required.

In today's effluent limitation guidelines, EPA is rejecting establishing requirements related to discharges to surface water that occur via ground water with a direct hydrologic connection.

Pollutant discharges from CAFOs to surface water via a groundwater pathway are highly dependent on site-specific variables, such as topography, climate, distance to surface water, and geologic factors such as depth of groundwater, soil porosity and permeability, and subsurface structure. The factors affecting whether such discharges are occurring at CAFOs are so variable from site to site that a national technology-based standard is inappropriate. Further, given the site-specific nature of these situations, quantifying the pollutant reduction associated with nationally-established requirements would be difficult. Imposing requirements through a national ELG could divert resources from other technologies and practices that are more effective at controlling CAFO discharges to surface waters. Therefore, EPA believes that requirements limiting the discharge of pollutants to surface water via groundwater that has a direct hydrologic connection to surface water are beyond the scope of today's ELGs.

Furthermore, EPA recognizes there are scientific uncertainties and site-specific considerations with respect to regulating discharges to surface water via groundwater with a direct hydrologic connection to surface water. EPA also recognizes there are conflicting legal precedents on this issue. Nothing in this rule shall be construed to expand, diminish, or otherwise affect the jurisdiction of the Clean Water Act over discharges to surface water via groundwater that has