

vendors; one such vendor has developed more than a dozen such systems ranging in size from 3 acres to almost 20 acres. Covered lagoon systems have been successfully implemented in areas with cold climates such as northern Illinois, South Dakota, and Wisconsin, and in high-rainfall areas such as South Carolina, North Carolina, and Georgia. These systems are routinely exposed to and resist freezing, high winds, and other extreme weather events. EPA believes the information in the record demonstrates the technological feasibility of covering lagoons, but is rejecting BPT/BCT/BAT requirements based on such technology because they are not economically achievable.

EPA is not including ground water controls and monitoring requirements, or surface water monitoring requirements for Subpart D facilities for the same reasons described in Section IV.C.2.c for beef and dairy operations. EPA also rejected basing the effluent guidelines for swine operations on anaerobic digesters for the same reasons given above for dairies, and as discussed in the preamble for the proposed rule.

(2) *New Large swine, poultry and veal CAFOs.* In today's rule, EPA is establishing effluent guidelines for new swine, poultry, and veal operations based on zero discharge from CAFO production areas, subject to the provision that if a new source's waste management and storage facilities are designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 100-year, 24-hour rainfall event, it will satisfy the requirements of the NSPS. In addition, today's rule requires Large CAFOs to comply with certain BMPs described above in Section IV.C.2.c for the reasons given in Section IV.C. The NSPS requirements are being established for the reasons discussed in this section, and consistent with the factors for consideration under the Clean Water Act, as discussed in Sections II.A.2 and IV.C.2.f of this preamble.

*What did EPA propose?* EPA proposed to establish production area requirements for new sources that would have required zero discharge, and that would also have required all new Large swine, poultry, and veal CAFOs with a direct hydrologic connection to surface waters to prevent discharges to the ground water beneath the production area (animal confinement areas, manure stockpiles, and impoundments).

*What were the key comments?* Most comments received focused on the

technological feasibility of total containment and the appropriateness of establishing ground water controls as part of the effluent guidelines. EPA received numerous comments in opposition to the proposed ground water requirements, stating that EPA lacks the authority to regulate ground water contamination in this rule and that the cost to comply with the proposed requirements would threaten the viability of these operations. The commenters also felt that EPA would need to define the term "direct hydrologic connection to surface water" if ground water requirements were to be implemented. EPA also received comments supporting the inclusion of ground water requirements in this rule, arguing that individual State programs are not always protective of these types of discharges.

Many commenters were also opposed to the proposed requirement that eliminates the allowance for overflows for swine, poultry, and veal CAFOs. Many commenters argued that the cost to comply with these requirements would threaten the viability of their operations. Some stakeholders felt impermeable lagoon covers in particular posed a number of operational challenges: Freezing, biogas collection, clean storm water management, wind shear, cover repair, and disposal of spent covers. For these reasons, these stakeholders concluded the proposed zero discharge standard was technologically infeasible.

*Rationale.* EPA has determined that the NSPS requirements included in this rule for the production area at new swine, poultry, and veal sources are technologically feasible and will not pose a barrier to entry, for the reasons discussed below and in the Technical Development Document.

A number of the comments opposed to establishing zero discharge limitations (with no allowance for the discharge of overflows) were related to concerns that unforeseeable events could eventually lead to a discharge from a facility and result, in the commenters' view, in a situation of noncompliance that the CAFO would be unable to prevent. EPA disagrees with these comments and believes the NPDES permitting regulations already address this concern. Consistent with existing provisions included in the NPDES regulations at 40 CFR 122.41, upset and bypass provisions are included as standard conditions in NPDES permits to address the potential for unforeseen circumstances and provide CAFOs with a reasonable defense. In other words, even though the NSPS for Subpart D operations

prohibits discharges from the production area, a CAFO can claim an upset/bypass defense for events that are beyond reasonable control, including extreme weather events as well as other uncontrollable or unforeseen conditions.

An upset is an unintentional noncompliance event occurring for reasons beyond the reasonable control of the permittee. The upset provision in the NPDES permit operates as an affirmative defense to prosecution for violation of technology-based effluent limitations, provided certain specified criteria are met. *See* 40 CFR 122.41(n). For example, flood damage or other severe weather damage to containment structures that cannot reasonably be avoided or controlled by the permittee could be a basis for an affirmative defense for an upset. A bypass, on the other hand, is an act of intentional noncompliance during which waste treatment facilities are circumvented under certain specified circumstances, including emergency situations. The bypass provision authorizes bypassing to prevent loss of life, personal injury, or severe property damage where there are no feasible alternatives to the bypass and where the permitting authority is properly notified. *See* 40 CFR 122.41(m).

EPA has added a reference at 40 CFR 412.46(3) to the existing regulatory provisions at 40 CFR 122.41(m) and (n) for upset and bypass. The upset and bypass provisions apply by existing regulation to all NPDES permits. In light of the more stringent requirements for new sources subject to Subpart D, EPA added this cross-reference to ensure that CAFO operators and permit writers were aware that the upset and bypass provisions are available. Upset and bypass conditions are applicable to all NPDES permits, for new and existing sources.

EPA has determined that total containment for the production area for new swine, poultry, and veal sources is technologically feasible and should not pose a barrier to entry for new sources subject to Subpart D. It is common for new poultry, veal, and swine operations to construct facilities that keep the animals in total confinement (covered housing) that is not exposed to rainfall or storm water runoff. In addition, many new operations are based on manure handling systems that greatly reduce or eliminate water use, such as hog and poultry high-rise houses, or that contain manure in covered or indoor facilities, such as underhouse pit storage systems and litter storage sheds. Other new facilities may choose flush systems with