Response to Comments on Proposed Permit Modification

Idaho Concentrated Animal Feeding Operation General Permit (IDG010000)

November 4, 2024

Summary

On July 18, 2023, the U.S. Environmental Protection Agency Region 10 (EPA) issued a public notice for the proposed modification (2023 proposed modification) of the existing National Pollutant Discharge Elimination System (NPDES) General Permit for Concentrated Animal Feeding Operations (CAFOs) in the State of Idaho (existing GP). The existing GP was issued on May 13, 2020, and became effective on June 15, 2020. The modification was necessary to address the Ninth Circuit Court of Appeals Order and Opinion filed on December 16, 2021, in *Food & Water Watch et al. v. U.S. Environmental Protection Agency* (No. 20-71554). The 45-day public comment period closed September 1, 2023. The public comment period focused on new and revised conditions including monitoring conditions for functionally equivalent subsurface discharges of pollutants from production areas and dry weather discharges from land application areas at these CAFOs to waters of the United States (WOTUS).

The EPA received comments during the 2023 comment period from the following:

- Idaho Dairymen's Association (IDA)
- South Dakota Department of Agriculture and Natural Resources, Division of Agriculture and Environmental Services (SDDANR)
- Food and Water Watch, Snake River Waterkeeper, Center for Biological Diversity, and Center for Food Safety (FWW)
- USDA-Natural Resources Conservation Service (NRCS-Idaho)

On June 6, 2024, the EPA issued a second limited public notice for 30 days, ending July 8, 2024 (2024 proposed modification). The 2024 proposed modification contained the following changes made to the permit due to comments received during the 2023 comment period:

- Removal of Section II.B.9.a in the draft permit modification, regarding land application on surface irrigated fields.
- Modification of Section II.B.9.b (now Section II.B.9.a of the draft permit modification), regarding required visual inspections of land application events and land application setbacks, buffers, or compliance alternatives.
- Modification of various elements of the nutrient management plan (Section III.A.2.a in the draft permit modification).

The EPA received comments during the 2024 comment period from the following:

- IDA

- South Dakota Department of Agriculture and Natural Resources, Division of Agriculture and Environmental Services (SDDANR)
- Idaho Cattle Association (ICA)
- FWW
- AgPROfessionals – Developers of Agriculture (AgPRO)

This document presents the EPA's responses to comments received during the 2023 comment period (listed first on pages 3-25) and the 2024 comment period (listed second on pages 25-37), and changes made to the General Permit in response to comments received (summarized on pages 2-3). In this document, the EPA has summarized similar comments from different entities, and omitted comment letter statements that do not include a comment on the permit. The full comments received can be viewed at https://www.epa.gov/npdes-permits/npdes-general-permit-concentrated-animal-feeding-operations-cafos-idaho.

The EPA received concurrence from the US Fish and Wildlife Service and the National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act (ESA) on the existing GP. Since the proposed modifications are more stringent than the existing GP, the EPA is not reinitiating ESA consultation on this permit modification. The EPA sought input from the Idaho Department of Environmental Quality (IDEQ) on the proposed modifications prior to public notice. On May 24, 2023, IDEQ stated that they do not need to recertify the permit modification and provided a memorandum to the EPA with updated agency contact information, as well as hyperlinks, to be included as an attachment to their 2020 final CWA Section 401 Certification, which is included as an appendix to the 2023 permit modification Fact Sheet.

Changes in response to public comment:

As a result of comments received during both comment periods, the following revisions were made to the permit:

- The EPA modified Section II.B.9.b (now Section II.B.9.a) to require visual inspections during and after land application regardless of INTRA or Phosphorus Site Index risk assessment rating.
- The EPA changed Permit Part II.B.9.a. to remove the outright prohibition of land application on fields with surface irrigation (See 2024 permit modification fact sheet).
- The EPA has modified Permit Part III.A.2.a(iii) and IV.D.6(b-c) to further clarify that the permit only covers *functionally equivalent* subsurface discharges.
- The EPA has removed Technical Note 23 as a tool for addressing deficiencies in waste storage pond evaluations.
- The EPA will include NRCS Code 521 (Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner) and Code 522 (Pond Sealing or Lining – Concrete) as appendices I and J to the permit as optional guidance regarding liners.

Editorial Corrections to the Permit

The EPA has corrected the following editorial errors in the permit.

- The EPA has corrected typos, formatting, and punctuation errors and added abbreviations in the permit.

Response to Comments Received During the 2023 Proposed Modification Comment Period

Functionally Equivalent Groundwater Discharges

Comment 1. (FWW)

CAFOs also discharge large quantities of pollutants to waters of the United States (WOTUS) via hydrologically connected groundwater. As the *FWW v. EPA* court found, "groundwater flow is the primary contributor of nitrate to surface water from agriculture." At production areas, animal manure and process wastewater are stored in impoundment structures, or "lagoons," that "are designed to leak" pollutants, which then discharge to WOTUS due to southern Idaho's hydrogeology. A 1-acre lagoon constructed to the Idaho Permit's permeability rate limit of 1 x 10^{-6} cm/sec discharges approximately 8,313 *gallons of waste* per day to the subsurface. This will result in over 3 million gallons of polluted wastewater seeping out from each acre of lagoon every year, year after year. Many CAFOs have between 2 and 10 acres of these lagoons. Additionally, many CAFOs stockpile composting manure, silage, and other materials in piles or silos with direct ground contact. These areas also leach pollutants into groundwater at rates likely far in excess of the 1 x 10^{-6} lagoon liner standard.

Response. Under the NPDES program, permitting authorities may issue NPDES permits that authorize discharges from point sources to WOTUS. 33 USC § 1342. In *County of Maui, Hawaii v. Hawaii Wildlife Fund, et al*., 140 S. Ct. 1462 (2020) (*Maui*), the Court held that a NPDES permit is required when there is a direct discharge of pollutants from a point source to WOTUS or when there is a functional equivalent of a direct discharge. There are a number of factors, including transit time, distance traveled, and the nature of the material through which the pollutant travels, that may be considered when determining whether there is a functional equivalent of a direct discharge. *Id.* at 1476-77.

This permit modification addresses the Court's Order issued in *FWW v. EPA* where the Court concluded that the Permit failed to include monitoring to ensure the detection of unpermitted discharges. As explained in the 2023 Fact Sheet, the Court found that the permit failed to contain monitoring provisions for underground discharges from production areas. While this modification addresses the Court's Order, it also takes into account the fact that the EPA only has jurisdiction to issue permits for discharges of pollutants that are either a direct discharge or a functional equivalent of a direct discharge to WOTUS. The commentor provided information to show that lagoons and stockpiles within production areas seep into groundwater; however, this information alone does not provide evidence that a specific lagoon or stockpile at a specific facility has a functional equivalent discharge to WOTUS.

The permit modification requires two main conditions to ensure that unauthorized functionally equivalent subsurface discharges are prevented. First, the permittee must ensure the proper operation and maintenance of each wastewater and manure storage structure by a qualified individual. Second, the permittee must develop and implement a subsurface discharge monitoring plan that identifies any unauthorized functionally equivalent subsurface discharges and provides a process for monitoring such discharges if they occur. The only exceptions to developing the subsurface discharge monitoring plan are if (1) there is documentation by a qualified individual that the wastewater or manure storage structure does not have an unauthorized functionally equivalent subsurface discharge or (2) the wastewater or manure storage structure is constructed of concrete or steel or with a double-layer synthetic liner with leak detection, and associated operation and maintenance requirements are met. (See Permit Part III.A.2.a.(ii-iii) and IV.D.6.). These new permit provisions address the lack of representative monitoring found by the Court associated with the production area discharge prohibition. The subsurface discharge monitoring plan ensures that if unauthorized functionally equivalent subsurface discharges were to occur, they will be identified through the plan and monitored until the facility can eliminate the discharge. Subsurface discharges to WOTUS that are the functional equivalent of direct discharges constitute ongoing permit violations. No changes were made to the permit in response to this comment.

Comment 2. (FWW)

As described above, Idaho's CAFOs discharge pollutants to surface waters via groundwater. CAFOs that meet the Idaho permit's lagoon permeability standard are discharging pollutants to underlying aquifers, and those pollutants are carried by rapidly moving groundwater and discharged into WOTUS. Mr. David Erickson, a hydrogeologist with years of experience working on CAFO matters and a leading expert in CAFO water pollution issues, states that "[l]agoons designed to the standards mandated by the draft modified Idaho CAFO Permit (seepage rate of 1×10^{-6} cm/sec) leak and seep substantial volumes of process wastewater" that contributes contamination to ground and surface water.

Lagoons designed to the standards mandated by the draft modified Idaho CAFO Permit (seepage rate of 1×10^{-6} cm/sec) leak and seep substantial volumes of process wastewater.

Response. See response to comment 1 regarding functionally equivalent discharges to WOTUS. No changes were made to the permit in response to this comment.

Comment 3. (FWW)

These facts appear to easily meet the test set forth by the Supreme Court to determine whether a subsurface discharge is subject to Clean Water Act jurisdiction. Under *County of Maui v. Hawaii Wildlife Fund*, an unpermitted discharge via groundwater is illegal if the discharge is the "functional equivalent of a direct discharge from the point source into navigable waters." The Supreme Court supplied several factors to determine whether a discharge via groundwater meets the functional equivalency test: (1) transit time, (2) distance traveled, (3) the nature of the material through which the pollutant travels, (4) the extent to which the pollutant is diluted or chemically changed as it travels, (5) the amount of pollutant entering the navigable waters

relative to the amount of pollutant that leaves the point source, (6) the manner by or area in which the pollutant enters the navigable waters, and (7) the degree to which the pollution (at that point) has maintained its specific identity.

Among these, transit time and distance traveled from the point source to the WOTUS are usually the most important factors. Another factor, "the nature of the material through which the pollutant travels," is related to the time and distance factors. The Court in *Maui* determined that a point source approximately 1 to 1.5 miles from WOTUS where the pollutants reached WOTUS in as little as 84 days was a jurisdictional discharge that resulted in Clean Water Act liability.

Response. See response to comment 1 regarding functionally equivalent discharges to WOTUS. No changes were made to the permit in response to this comment.

Comment 4. (FWW)

In *FWW v. EPA*, the Ninth Circuit identified two separate subsurface discharge risks stemming from CAFO waste storage structures. First, the risk of lagoon failure such as a rupture "always exists." Of equal concern, the Court discussed the potential for lagoons to leak or seep pollutants into groundwater that discharges to WOTUS. As the Court noted, when lagoon leakage occurs, it flows through either a rupture in a lagoon's seal or through an *intact but inherently permeable* liner. The allowable seepage rate of 1×10^{-6} cm/sec is a design feature of lagoons that are constructed to the Permit's pollution control standards. As explained above, many if not most CAFOs in Idaho are causing subsurface discharges that are the functional equivalent of direct discharges in this manner. By identifying both ways lagoons discharge to the subsurface and holding that the 2020 Permit lacked required monitoring for them, the Court plainly anticipated that its remand would be met by EPA modifying the Permit with monitoring provisions that address both lagoon failures and lagoon seepage.

Response. See response to comment 1 regarding functionally equivalent discharges to WOTUS. No changes were made to the permit in response to this comment.

Comment 5. (FWW)

Studies show that this aquifers has high transmissivity (*i.e.*, rate of flow through the aquifer). Another study found that "high transmissivity suggests that water may move rapidly from [areas near Idaho Falls] to mix with water in the Snake River Plain aquifer," and revealed that groundwater moved approximately 1,070 feet per day. At this rate, pollutants seeping from a CAFO 1 mile away from the Snake River or a tributary (such as the Big and Little Wood Rivers) could reach WOTUS in under 5 days, while pollutants from a CAFO 10 miles away would arrive in under 50 days. "The geologic makeup of the aquifer allows for extremely high ground-water transmissivity rates," with rates peaking near the center of the aquifer. While more granular details are available and continue to be studied, existing data indisputably show that groundwater flows very quickly from agricultural operations to the Snake River and its tributaries.

Response. See response to comment 1 regarding functionally equivalent discharges to WOTUS. No changes were made to the permit in response to this comment.

Comment 6. (FWW)

Given these characteristics, groundwater in this part of Idaho is intimately connected to the Snake River. Although variable conditions mean the precise flow from the aquifer to the river is never static, "the Eastern Snake River Plain Aquifer (ESPA) in southern Idaho is notable for . . . the high degree of interconnectivity with surface water resources in some areas."[71] Four reaches of the Snake are particularly noteworthy for their interconnectivity with the aquifer: Kimberly to King Hill (the Thousand Springs reach); Neeley to Minidoka; Blackfoot to Neeley; and the Henrys Fork and Upper Snake River reaches. Whether CAFO wastewater seeps into the aquifer or flows into surface waters, it carries CAFO pollutants along for the ride. After years of intensive factory farming, the relentless overload of CAFO pollutants is taking a toll on surface waters and contributing to water quality impairments.

There are several reaches of the Snake River, as well as small streams, that are hydraulically connected with the Snake River Plain aquifer.

Response. See response to comment 1 regarding functionally equivalent discharges to WOTUS. No changes were made to the permit in response to this comment.

Representative Monitoring

Comment 7. (FWW)

The Clean Water Act demands that all NPDES permits, including CAFO permits, require representative monitoring and reporting capable of assuring compliance with effluent limitations contained in the permit. Nothing in the Clean Water Act, EPA's regulations, or case law provides a special exemption for CAFOs. EPA "shall require" permitted point sources to "install, use, and maintain such monitoring equipment or methods" requisite to "determin[e] whether [they] are in violation" of an applicable effluent limitation or other effluent standard. EPA's regulations, in turn, state that all permits "shall include conditions" requiring representative monitoring "[t]o assure compliance with permit limitations." Further, permits "shall specify" the "type, intervals, and frequency [of monitoring] sufficient to yield data which are representative of the monitored activity." Such monitoring conditions are necessary to verify compliance with effluent limits and to facilitate permit enforcement. Monitoring requirements are in addition to, and separate from, permit conditions establishing the best management practices and technologies used to achieve compliance with permit limits.

Response. The EPA agrees that NPDES permits, including CAFO permits, are required to contain representative monitoring that ensures that the effluent limitations and conditions in the permit are met. See 40 CFR 122.41(j). As explained in the 2023 and 2024 fact sheets for the permit modification, the permit modifications ensure that the permit contains representative monitoring of the permitted activity as required by the Court Order in *FWW v. EPA*.

See response to comment 1 regarding the permit modifications that address monitoring for unauthorized functionally equivalent subsurface discharges from production areas.

Regarding land application areas, the permit prohibits dry weather discharges, and has associated visual monitoring during and after land application events to determine if there are unauthorized discharges to WOTUS (See Permit Part II.B.9.). The permit also contains water quality sampling in the event of an unauthorized discharge from the land application area (See Permit Part IV.E.1.). See response to comment 13 regarding the removal of risk rating in determining which land application fields require visual monitoring.

This comment does not propose a specific change to the permit. No changes were made to the permit in response to this comment.

Comment 8. (FWW)

CAFO waste also contains salts, heavy metals, and ions such as magnesium, sodium, potassium, and chloride. In fact, the Idaho Dairymen's Association has admitted to EPA that chemicals commonly used at its member CAFOs inevitably mix with manure and other process wastewater that is then leached into groundwater or disposed of on land application fields.

Response. See response to comment 1 regarding functionally equivalent subsurface discharges. With the exception of discharges from production areas during heavy storms, as defined in Permit Part II.A.1., and agricultural stormwater discharges from land application areas, discharges of CAFO waste to WOTUS are prohibited under the permit. See response to comments 1 and 7 regarding representative monitoring associated with these prohibitions. Any other discharges to WOTUS, including discharges of the pollutants set forth in this comment, are prohibited, and constitute ongoing permit violations until they are remedied. No changes were made to the permit in response to this comment.

Comment 9. (FWW)

As recently reiterated by the Ninth Circuit Court of Appeals, CAFO NPDES permits "fundamentally rel[y] on self-monitoring" because "[e]ffective self-monitoring reveals permit violations, thereby promoting enforcement of the [law]." Without representative monitoring, regulators and the public are left in the dark as to whether permitted CAFOs are actually complying with the Permit or whether particular CAFOs are causing or contributing to violations of Idaho water quality standards. To date, the Idaho Permit has not mandated representative monitoring of discharges to surface or hydrologically connected ground waters despite increasingly incontrovertible evidence that Idaho CAFOs are discharging substantial amounts of pollution and contributing to water quality violations.

Response. See responses to comments 1 and 7 regarding representative monitoring. No changes were made to the permit in response to this comment.

Comment 10. (FWW)

Under the Clean Water Act, mere assumptions that implementing technologies and practices will result in permit compliance are impermissible. In *Natural Resources Defense Council v. EPA*, the Second Circuit Court of Appeals struck down a NPDES permit for ballast water from vessels because compliance with that permit's water quality-based effluent limitations was merely assumed from compliance with other permit terms. Such assumptions are equally unlawful here;

the CAFO Permit must contain monitoring sufficient to assure compliance with the terms of the Permit, including water quality-based effluent limitations.

Response. The EPA agrees that NPDES permits must contain monitoring to ensure compliance with the conditions in a permit and has included such monitoring in this permit. See responses to comments 1 and 7 regarding representative monitoring. No changes were made to the permit in response to this comment.

Comment 11. (FWW)

Permitted CAFOs must monitor their facilities' discharge points to ensure compliance with the Idaho Permit's effluent limitations. This foundational principle of the NPDES program has been reaffirmed numerous times now by Commenters and multiple Federal and State courts. Yet, EPA now proposes to modify the remanded Permit *without mandating sufficient monitoring yet again*. This inexplicable response to *FWW v. EPA* is arbitrary, capricious, and contrary to law.

Response. See responses to comments 1 and 7 regarding representative monitoring. No changes were made to the permit in response to this comment.

Comment 12. (FWW)

The Ninth Circuit in *FWW v. EPA* made the flaws in the previous iteration of the Idaho Permit plain: (1) "[w]ithout a requirement that CAFOs monitor waste containment structures for underground discharges, there is no way to ensure that production areas comply with the Permit's zero-discharge requirements," and (2) "[t]he Permit has no monitoring provisions for dry weather discharges from land-application areas." The fundamental idea underpinning the Court's legal holdings and the cases the Court relied upon is that "NPDES permits must contain monitoring provisions sufficient to ensure compliance with the terms of a permit." Thus, although the Court's opinion did not explicitly touch on every conceivable production area or land application discharge activity, a NPDES CAFO permit that leaves any effluent limitation unmonitored is unlawful.

Response. See responses to comments 1 and 7 regarding representative monitoring. No changes were made to the permit in response to this comment.

Comment 13. (FWW)

Monitoring can take different forms so long as it is appropriately tailored to the monitored activity and generates representative, publicly reported data that assures compliance. Under no circumstances may the Idaho Permit simply forego monitoring that satisfies these requirements, even if EPA hopes and believes that certain best management practices are effective in preventing discharges or rendering CAFOs "low risk."

Response. See response to comment 7 regarding representative monitoring. Partially in response to this comment, in the 2024 permit modification, the EPA modified Section II.B.9.b (now Section II.B.9.a) to require visual inspections during and after land application regardless of INTRA or Phosphorus Site Index risk assessment rating. Thus, the permit now requires the permittee to conduct visual inspections to ensure that there are no discharges from the land

application area regardless of risk. If there is an unauthorized discharge from the land application area during a land application event, the permittee is required to monitor that unauthorized discharge in accordance with Section IV.E of the permit.

Comment 14. (FWW)

In all, the Idaho Permit takes important steps towards adequately monitoring CAFOs, but still falls short of satisfying the Clean Water Act and the Ninth Circuit's orders in *FWW v. EPA*. Commenters urge EPA to revise the Permit by requiring monitoring for compliance with all effluent limitations, including the relevant limits for both production and land application areas as well as the limit prohibiting contributions to water quality impairments. Further, Commenters urge EPA to ensure monitoring is sufficient to detect both direct and subsurface discharges, and to determine monitoring requirements based on what will generate representative data, not on what is cheapest for industry. In doing so, EPA can and should consider risk, but it must do so in a way that tailors the monitoring to the risk, rather than making the monitoring contingent on high or low risk – or the cost.

Response. See responses to comments 1 and 7 regarding representative monitoring. See response to comment 13 regarding changes made to the permit, partially in response to this comment, regarding the use of risk ratings in determining land application visual monitoring requirements. No changes were made to the permit in response to this comment.

Comment 15. (IDA)

Section IV.E. describes the monitoring and notification requirements in the event of runoff or discharge from a CAFO to waters of the United States. This section describes several sampling requirements, event logging requirements, monitoring requirements, and reporting requirements. While these provisions are important, during a discharge event, the most important task ought to be taking corrective action to stop or mitigate the discharge. IDA therefore suggests some leniency to these strict provisions for the limited purpose of discharge response. IDA suggests Section IV.E.1.f) be modified as follows (underlined text is added) –

If conditions are not safe for sampling or if the permittee is delayed in obtaining samples due to immediate response to stop or mitigate the discharge, the permittee must provide documentation of why samples could not be collected and analyzed. For example, the permittee may be unable to collect samples during dangerous weather conditions (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or while taking immediate action to stop or mitigate the discharge. However, once dangerous conditions have passed and once the permittee has completed immediate response to stop or mitigate the discharge, the permittee shall collect a sample of the discharge. If the discharge stops before dangerous conditions have passed or as a result of immediate response, and therefore cannot be sampled, the permittee shall record the estimated time, duration, and volume of the discharge, and the reason the sample could not be collected, and include this information in the Notification of Unauthorized Discharge submitted in accordance with Section IV.C of this permit.

Response. The EPA agrees that the most important goal is to mitigate or avoid discharges. However, any discharge, whether authorized or unauthorized, must be sampled in accordance

with the permit requirements, and the permitting authority must be notified. If the permittee fails to collect a sample for any reason, the permittee must provide documentation of why the samples could not be collected and analyzed (See Permit Part D.4. and E.1.). Permitting authorities have enforcement discretion with regard to penalties associated with a lack of notification and sampling. No changes were made to the permit in response to this comment.

Subsurface Monitoring Requirements.

Comment 16. (FWW)

As established above, the Permit's minimum requirements for lagoon construction and other materials storage allows pollution discharges to WOTUS that are the functional equivalent of direct discharges at nearly all Idaho CAFOs. The starting point must be that any such CAFO requires a Subsurface Discharge Monitoring Plan. Commenters refer EPA to Mr. Erickson's report for our specific recommendations for what a Subsurface Discharge Monitoring Plan for those CAFO production areas must include: "a full groundwater monitoring plan with 2 upgradient and 3 downgradient wells and routine sampling." Monitoring subsurface discharges using a series of up and down gradient wells is a "simple and well-established process" that has been and is currently used by CAFOs and similar waste impoundments elsewhere. In fact, at least one CAFO in Idaho already has such a monitoring system in place and has been able to continue operating their business.

Available monitoring methodology/system: Groundwater monitoring is a simple and well established process. Monitoring wells are placed upgradient and downgradient of the field or lagoon to be monitored. Typically, 1-2 upgradient monitoring well(s) and 2-5 downgradient monitoring wells are installed using standard drilling technology. If ground water flow direction and seasonality are already understood at the site, fewer wells can be used to effectively monitor each area (i.e., upgradient wells for 1 field can be downgradient wells for the next field). Sampling is conducted quarterly or semiannually according to the SAP to establish seasonal fluctuation in ground water quality or quantity, to collect representative data, and to establish statistically significant background data. Semiannual sampling is typically sufficient for detection monitoring, with sampling occurring a high ground water and low ground water conditions or prior to application in the spring and after harvest in the fall. If other fluctuations that directly affect ground water flow and transport are identified, more frequent monitoring may be required.

Response. The permit provides discretion regarding the protocol that the permittee will establish in the subsurface discharge monitoring plan to identify and monitor unauthorized functionally equivalent subsurface discharges. One possible approach for such sampling could include the use of wells as described in this comment. Whatever approach is selected, a permittee will need to explain how it will identify and monitor any unauthorized functionally equivalent subsurface discharges. The subsurface discharge monitoring plan is required to be submitted as part of the Nutrient Management Plan (NMP), which is submitted by the permittee along with their Notice of Intent (NOI) for coverage. The permitting authority will have the ability to request additional information "to complete the NOI and NMP or to clarify, modify, or supplement previously

submitted material". If the EPA makes a preliminary determination that the NOI is complete, the NOI, NMP, and draft terms of the NMP to be incorporated into the permit will be made available for a thirty (30) day public review and comment period (See Permit Part I.B.4.). No changes were made to the permit in response to this comment.

Comment 17. (FWW)

If a CAFO has documented and can substantiate more protective waste storage activities, EPA may require less demanding monitoring protocols. For example, if a CAFO lagoon is constructed with "synthetic liners with 2' compacted clay subbase" it may only need "an abbreviated monitoring scenario (1 upgradient and 2 downgradient [wells]) and routine sampling." If a CAFO installs the gold standard for discharge mitigation—a "double synthetic liner with leak detection or a sump and pump design"—EPA might reasonably include appropriate inspection monitoring requirements in lieu of a system of groundwater monitoring wells. Such inspection requirements must include documentation and ensure continuous and effective operation of the leak detection or sump pump features, appropriate inspections and repairs during cleanouts, and regular maintenance and repairs to sump pump and/or leak detection systems.

Response. The 2023 permit modification included a new condition that requires the permittee to develop and implement a subsurface discharge monitoring plan to identify and monitor unauthorized functionally equivalent subsurface discharges. The only permittees who are exempt from developing and implementing a subsurface discharge monitoring plan are (1) facilities who have a qualified individual develop documentation that shows no unauthorized functionally equivalent subsurface discharges or (2) the wastewater or storage structure is constructed of concrete or steel or with a double-layer synthetic liner with leak detection (See Permit Part III.A.2.a.iii.(a-b)). In addition, the permittee is required to ensure the proper operation and maintenance of storage structures by confirming compliance with NRCS Appendix 10D and IDAPA 02.04.14.030.01 and identifying measures to address deficiencies through an evaluation conducted by a Professional Engineer (P.E.). (See 2023 Fact Sheet part IV.A [page 15]; See Permit Part III.A.2.a.(ii-iii)). In the final permit modification, the EPA removed the use of Technical Note 23 risk ratings in determining the necessity of a subsurface discharge monitoring plan. The EPA removed the completion of a Technical Note 23 evaluation as a means of identifying measures to address operation and maintenance deficiencies. This change was made in response to comments received during the 2024 modification public comment period that question the direct applicability of Technical Note 23 for CAFOs located in Idaho. In addition, NRCS clearly states that the Technical Note 23 assessment "should not be construed to provide ANY regulatory certainty" from regulatory agencies. No changes were made to the permit in response to this comment.

Comment 18. (FWW)

EPA can and must require each Idaho CAFO sited in the Snake River basin to conduct monitoring along the lines described above unless it demonstrates that it is not discharging to groundwater hydrologically connected to a WOTUS. Such a demonstration must be certified by a qualified professional and be included in a CAFOs application for permit coverage, open to public comment, and evaluated and approved or disapproved by EPA.

Response. See response to comment 1 regarding *Maui* and monitoring for discharges associated with production areas, and the limited exceptions from the requirement to develop a subsurface discharge monitoring plan. See response to comment 17 regarding inspection and maintenance of storage structures, and regarding the removal of Technical Note 23 in the final permit modification. See response to comment 16 regarding the permitting authority review and public comment period associated with NOIs and NMPs prior to permit coverage being granted. No changes were made to the permit in response to this comment.

Comment 19. (FWW)

As for other production area activities, such as storing solid manure, composting manure, and silage, EPA must ensure that the Permit contains representative monitoring of these as well. Again, a progressively more stringent approach could be appropriate. But storing manure or silage on bare earth causes seepage of highly concentrated pollutants into groundwater and certainly requires both inclusion in a CAFO's Subsurface Discharge Monitoring Plan and the rigorous monitoring described above regarding lagoons with a 1×10^{-6} seepage rate.

Response. See response to comment 1 regarding discharges to WOTUS, including functionally equivalent discharges. The ELGs for the production area that are included in the permit apply to the whole production area, including solid manure storage areas, composting areas, and silage storage areas. Discharges from these areas that do not comply with Section II.A.1. of the permit are unauthorized. As explained in the response to comment 1, the EPA has included a requirement to prepare a subsurface discharge monitoring plan to detect these unauthorized functionally equivalent discharges. No changes were made to the permit in response to this comment.

Comment 20. (FWW)

Lastly, the Permit states that "[s]ubsurface discharges shall be sampled at the point of discharge to the receiving water. If the point of discharge to the receiving water is inaccessible, samples of subsurface discharges shall be collected at a point that provides a sample that is representative of the discharge to the receiving water. While this sampling protocol could be appropriate for specific situations, would bolster a "functional equivalent" determination under *Maui* factor 5, and would assist in ascertaining more precisely how a CAFO is causing or contributing to a water quality standards violation, it also presents practical problems in some situations. For example, in the case of a CAFO located near the receiving water where no intervening sources of pollution exist, this would be an acceptable approach. But in other circumstances, such as where pollution from multiple CAFOs or other sources of contamination mingles prior to the point of discharge (a common complication given the extreme concentration of CAFOs in certain parts of the Snake River basin), applying this approach raises concerns regarding whether sampling at such points would be representative of a specific CAFO's discharge or sufficiently facilitate enforcement. The CAFO industry is notorious for pointing fingers at any other possible source of pollution to avoid liability.

The logical and effective alternative in these situations is for EPA to require monitoring wells and sampling at CAFO production area boundaries. This approach has several benefits including

ease of implementation, accuracy of sampling results, and the ability to distinguish a single CAFO's pollution load from other sources polluting the same groundwater pathway. Some CAFOs already have such monitoring in place, showing that such an approach is effective and affordable. Where permittees are unable to monitor at both the CAFO boundary and point of discharge, they should be required to model their discharge using a scientifically sound approach to estimate how much discharge will reach a WOTUS. A monitoring scheme that does not enable enforcement against particular permittees is not aligned with the Clean Water Act's mandate that EPA provide for, encourage, and assist public participation in enforcement actions.

Response. As explained in response to comment 17, with limited exceptions, all permittees are required to submit a subsurface discharge monitoring plan to identify and monitor unauthorized functionally equivalent subsurface discharges. The subsurface discharge monitoring plan is submitted as part of the NMP to the permitting authority by the permittee when applying for coverage under the permit. If there are numerous CAFOs or other sources of contamination in the area, then the EPA expects that the permittee will need to take this into consideration when developing the appropriate monitoring protocols for any unauthorized functionally equivalent subsurface discharges. See response to comment 16 regarding monitoring wells. No changes were made to the permit in response to this comment.

Comment 21. (FWW)

A secondary problem with the Idaho permit's risk-based monitoring scheme lies in the alternatives the permit allows CAFO operators to choose between to demonstrate their lagoons are low-risk enough to forego a Subsurface Discharge Monitoring Plan. As written, the Permit allows CAFOs to forego monitoring if they provide documentation either (1) certifying compliance with NRCS Appendix 10D and IDADA 02.04.14.030.01 or (2) showing they did not receive high risk ratings on either the site or structure assessment portions of Washington NRCS Engineering Technical Note 23. Aside from the fact that simply not monitoring is never a permissible option, these alternative compliance pathways are inadequate to assess risk even for the purpose of tailoring representative monitoring requirements. Specifically, only Technical Note 23 even begins to consider the factors necessary to inform subsurface discharge risk analyses.

Response. In response to comments received during the 2024 permit modification comment period, the EPA removed the reference to Technical Note 23 (see response to comment 17). The requirement to develop a subsurface discharge monitoring plan to identify and monitor unauthorized functionally equivalent subsurface discharges is now required unless the exceptions in III.A.2.a.(iii) are met. No changes were made to the permit in response to this comment.

Comment 22. (FWW)

Contrary to the Ninth Circuit's mandate, the Idaho Permit still fails to require monitoring provisions capable of assuring that subsurface discharges from waste and other material storage areas to WOTUS do not occur. As written, the Permit only requires CAFOs undertaking pollution management activities EPA deems "risky" to prepare and execute Subsurface Discharge Monitoring Plans. However, this risk-based approach ignores that the lagoon

standards mandated in the Permit—and that EPA apparently considers not risky—are exactly what the Ninth Circuit considered and determined must have representative monitoring. Impoundments with seepage rates of 1 x 10^{-6} are "designed to leak." All EPA has done is require documentation that only this discharge activity is occurring and not some higher discharge rate. This does not respond to the Court's remand.

Response. See response to comment 17 regarding the removal of Technical Note 23 and the limited exemptions from the requirement to develop a subsurface discharge monitoring plan to identify and monitor unauthorized functionally equivalent subsurface discharges. No changes were made to the permit in response to this comment.

Comment 23. (FWW)

As for Subsurface Discharge Monitoring Plans, Commenters agree that such a Plan could be an effective method to monitor the zero-discharge effluent limitation, but only if it entails effective monitoring protocols tailored to the on-site characteristics of covered facilities. As proposed, the Permit is impermissibly vague; it does not set forth any framework for how such Plans must be developed. EPA must remedy this shortcoming by supplying CAFOs with explicit instructions for developing effective monitoring and requiring all CAFOs to implement the Plans. Commenters provide expert opinion on how EPA can accomplish that in subsection 2 below.

Response. Each CAFO is unique, so overly prescriptive requirements may not apply to all CAFOs. Permit Part IV.D.6. of the permit provides general requirements and guidance for the subsurface discharge monitoring plan. See response to comment 16 regarding permitting authority review of subsurface discharge monitoring plans along with NOIs, prior to permit coverage being granted, and associated public comment periods of these plans. No changes were made to the permit in response to this comment.

Comment 24. (FWW)

While compliance with Technical Note 23 cannot excuse a CAFO from statutory monitoring requirements, this tool at least considers factors relevant to the Supreme Court's functional equivalency test. Unlike NRCS Appendix 10D and IDAPA 02.04.14.030.01, Technical Note 23 considers the distance to the nearest body of water as well as the hydraulic conductivity of the soils below the lagoon. Beyond confirming that lagoons are designed to leach pollutants to groundwater, neither NRCS Appendix 10D nor IDAPA 02.04.14.030.01 assess the type of information necessary to determine whether groundwater discharges are functionally equivalent to direct discharges to a WOTUS. Therefore, only Technical Note 23 can help determine whether a subsurface discharge constituting a violation of the Permit will occur. Thus, only Technical Note 23 is even useful as a tool to determine whether a permit is required based on subsurface discharges in the first place, and if so, the type of monitoring protocols a CAFO must include in its Subsurface Discharge Monitoring Plan. While compliance with NRCS Appendix 10D and IDAPA 02.04.14.030.01 may be useful best management practices, they do not prevent seepage, cannot take the place of monitoring, and have no bearing on what type of monitoring is appropriate.

Response. Technical Note 23 was removed from the permit in response to comments received during the 2024 permit modification comment period (see response to comment 17). See response to comment 17 regarding the limited exemptions from the requirement to develop a subsurface discharge monitoring plan. No changes were made to the permit in response to this comment.

Dry Weather Discharge Monitoring Requirements.

Comment 25. (FWW)

All land application events must be monitored. If a CAFO can substantiate that a land application area is low risk, perhaps according to the INTRA or P-Index in addition to a metric to inform risk from other pollutants, EPA could consider less rigorous monitoring regimes tailored to the specific area (such as fewer visual monitoring locations). But under no circumstances can the Permit leave out at least visual monitoring of a land application activity followed by sampling and in-stream water quality testing when a discharge occurs. This visual monitoring must generate results representative of both the land application area and the method of application.

Response. Partially in response to this comment, the EPA made changes in the 2024 permit modification to the land application requirements in Section II.B.9.b (now Section II.B.9.a) to require visual inspections regardless of INTRA or Phosphorus Site Index risk assessment rating (see response to comment 13).

Comment 26. (FWW)

When CAFO waste is applied to fields in liquid form, it travels as water does through the environment; and when solid manure is applied to a field that is subsequently irrigated, the CAFO pollutants sorb to and travel with the irrigation water.

Response. See response to comment 1 regarding functionally equivalent subsurface discharges to WOTUS from production areas, and response to comment 7 regarding representative monitoring for discharges associated with land application. No changes were made to the permit in response to this comment.

Comment 27. (FWW)

The Permit's requirement that land application equipment be inspected "periodically" is vague and ineffective. (*See* Permit at II.B.7.). EPA must strengthen this inspection requirement and ensure that inspection results are recorded and reported if it intends equipment inspections to play the role of representative monitoring. Additionally, the Permit should require monthly land application equipment inspections during any month when the equipment is in use (including infrastructure or vehicles necessary to transport CAFO waste from a production area or stockpile to the land application area).

Response. The EPA is only accepting comments on changes made to the permit during this permit modification. The land application equipment inspection requirements were not addressed in this permit modification. Therefore, this comment is outside of the scope of this comment period. To provide clarification to the commentor regarding the land application equipment

inspection requirement, the requirement referenced above is a direct reference to 40 CFR 412.4(c)(4) and must be included as a component of the NMP. See the response to comment 16 regarding permitting authority review, and associated public comment, on facility specific NMPs. Through review of the NOI, NMP, and associated documents, the permitting authority will establish the enforceable schedule for the inspection of land application equipment. No changes were made to the permit in response to this comment.

Comment 28. (FWW)

Again, EPA's approach of requiring monitoring only when a specific risk factor is present runs afoul of the Ninth Circuit's confirmation that land applying CAFO waste always requires monitoring to ensure compliance with the no dry weather discharge effluent limitation. As with production areas, the question for EPA is not whether the risk of discharge from the land application area is high or low, but rather what monitoring methods will generate representative data capable of ensuring compliance with the Permit. The draft Permit's proposal to use these assessments to allow CAFOs to avoid visually monitoring all land application areas is both legally deficient and practically arbitrary.

Even if a low-risk rating could eliminate the need for monitoring—which it cannot—the P-Index and INTRA are too narrowly focused on nutrients to accurately assess the land application direct discharge risk on their own. Thus, these tools are not even adequate to inform how monitoring at all land application areas can be tailored appropriately. While the risk of nutrient transfer is undoubtedly a problem in Idaho, CAFO waste contains other harmful pollutants like pathogens, pesticides, pharmaceuticals, and heavy metals. Neither the P-Index nor INTRA is intended to assess the risks posed by these pollutants. As such, EPA's proposal to only require visual monitoring of fields during and after land applications under what EPA deems "high risk" circumstances is legally deficient and untethered to the plethora of pollutants disposed of on land application areas.

For *all* land application activities, EPA must include monitoring that generates representative data sufficient to assure compliance with the Permit. Instead, EPA has determined that only a subset of land application activities require monitoring, apparently assuming that lower risk land application is categorically incapable of resulting in a discharge to WOTUS. As demonstrated herein this is incorrect. This does not satisfy the CWA's monitoring requirements nor the Ninth Circuit's mandate that the Idaho Permit require CAFOs to representatively monitor land application activities for direct discharges.

Response. Partially in response to this comment, in the 2024 permit modification, the EPA modified Section II.B.9.b (now Section II.B.9.a) to require visual inspections during and after land application regardless of INTRA or Phosphorus Site Index risk assessment rating. See response to comment 13.

Comment 29. (FWW)

Similarly, the Permit's requirement to visually monitor when a field is within 100 feet of a down-gradient surface water is unlawful. Monitoring is always required, and as with EPA's other risk factors, 100 feet is an arbitrary metric even to inform what type of monitoring is

representative in a given situation. Because EPA has provided no justification or evidence indicating waste streams do not enter surface waters that are further than 100 feet away or that adjacent, technically upgradient surface waters cannot receive CAFO pollution. Indeed, CAFOs frequently dispose of waste on fields that are adjacent to culverts, ditches, and other infrastructure or atop tile drains that are conduits to WOTUS, even over low gradient landscapes; EPA's inspection results demonstrate that these conveyances are found adjacent to land application fields.

Response. The EPA is only accepting comments on changes made to the permit during this permit modification. The land application setback was not addressed in this permit modification. Therefore, this comment is outside of the scope of this comment period. To provide clarification to the commentor, the 100-foot setback referenced above are related to where land application is prohibited – the setback does not relate to whether or not visual monitoring is required (See Permit Part II.B.8). Visual monitoring is required during and after all land application events (See Permit Part II.B.9.a.). See response to comment 13 regarding the removal of risk ratings in determining visual monitoring requirements. No changes were made to the permit in response to this comment.

Comment 30. (FWW)

Location and frequency are critical to determining whether visual monitoring will generate data representative of a CAFO's discharge activities. EPA must include more detail in the Permit to ensure that CAFOs are not allowed to game the system by conducting monitoring at locations or at times that will not discover discharges. Each field will have certain characteristics that will help identify appropriate monitoring locations, and this monitoring scheme should be incorporated into each CAFO's permit alongside its identification of land application fields.

Response. Dry weather discharges to WOTUS are prohibited as a result of land application (See Permit Part II.B.9.). Representative monitoring during and after land application events is established to ensure compliance with this prohibition (See Permit Part II.B.9.a.). The permit requires the permittee to visually inspect "the downgradient edge of the field and any other potential discharge locations (e.g., tile drains, ditches, or other conveyances) […] during and after land application events" (See Permit Part II.B.9.a.). These visual inspections are required regardless of risk rating (see response to comment 13). Permittees are required to keep records of these visual inspections (See Permit Part IV.2.). In the event of a discharge, samples must be collected (See Permit Part IV.E.1). These visual monitoring and associated water quality sampling requirements are sufficient and reasonable in determining whether dry weather discharges will occur. Any further specificity would not be appropriate for a general permit which must accommodate a range of potential CAFO characteristics. The land application NMP requirements in Permit Part II.B. (i.e. nutrient transport potential assessment, setback requirements etc.), when implemented correctly, are designed to avoid discharges during and after land application, and the associated monitoring is to ensure compliance with the discharge prohibition. No changes were made to the permit in response to this comment.

Comment 31. (FWW)

EPA could consider creative solutions such as requiring CAFOs to install relatively cheap and durable cameras at appropriate locations, as well as along the down-gradient edges of a field, to generate representative visual monitoring results. Of course, such footage must be either monitored contemporaneously enough to enable water sampling of any discharges and to enable mitigation of environmental harm or utilize motion sensing technology to indicate when a discharge is occurring. Motion sensors would reduce the time it takes to review footage, since motion sensing cameras need not be continuously recording to achieve continuous monitoring. Edge-of-field monitoring is a perfectly feasible activity that crop farmers already undertake. There is no reason CAFOs cannot be held to the same standard. Using cameras has the added benefit of detecting discharge events later in time than immediately after land application activities are completed, or when a field is subsequently irrigated with non-CAFO waste but still contains CAFO pollutants capable of discharging.

Response. See response to comment 30 regarding when and where visual monitoring is required during and after land application. While the EPA acknowledges that the use of cameras is one method for determining whether there are discharges off a land application area, the EPA declines to require the use of such technology to monitor land application areas for unauthorized discharges to WOTUS. Instead, the EPA is providing permittees with flexibility to determine the best way to monitor land application areas for unauthorized discharges. See also response to comment 7. No changes were made to the permit in response to this comment.

Comment 32. (IDA)

Section II.B.9.a) of the Draft Permit modification provides as follows –

There shall be no application of manure, litter, or process wastewater on fields with surface irrigation (e.g., flood or furrow irrigation).

This outright prohibition goes too far and fails to recognize proper agronomic practices that include use of surface irrigation in harmony with land application of manure, litter or process wastewater. For example, a farm may have tailwater recovery and a pumpback system whereby returns flows from surface irrigation direct to a waste containment system. Other farms employ BMPs to guard against surface irrigation runoff reaching WOTUS. IDA proposes Section II.B.9.a) be modified to provides as follows (underlined text is added) –

There shall be no application of manure, litter, or process wastewater on fields with surface irrigation (e.g., flood or furrow irrigation) <u>unless runoff from the field drains to a wastewater or manure storage structure, or unless runoff from the field does not have the possibility to reach water of the United States and BMPs are employed to prevent the same.</u>

Response. Partially in response to this comment, during the 2024 permit modification, the EPA changed Permit Part II.B.9.a. to remove the outright prohibition of land application on fields with surface irrigation (See 2024 permit modification fact sheet). The permit states "There shall be no dry weather discharge of manure, litter, or process wastewater to a water of the United States from a CAFO as a result of the application of manure, litter or process wastewater to land areas

under the control of the CAFO". This prohibition includes discharges to WOTUS through tile drains, ditches or other conveyances, and irrigation return. Manure, litter, or process wastewater discharged into WOTUS as a result of land application on a surface irrigated field is a dry weather discharge and is prohibited by the permit.

Land Application Functionally Equivalent Subsurface Discharge Monitoring.

Comment 33. (FWW)

Land application of CAFO waste can result in seepage that can constitute a functional equivalent of a direct discharge just as production area subsurface discharges do. Any such discharges constitute a violation of the Permit's zero dry weather discharge limitation. Thus, this effluent limitation needs accompanying monitoring to assure compliance. Yet the Permit entirely ignores subsurface discharges from land application areas, and thus contains no monitoring provisions for this discharge pathway to ensure compliance with the no dry weather discharge limitation. This is unlawful for the same reasons discussed in Section IV.A, *supra*.

CAFO pollution from land application areas can reach surface water directly in several ways in addition to transport via ground water. If CAFO waste is overapplied it can runoff into nearby surface water features such as ditches, canals, rivers, and streams. Also, if CAFO waste is applied on frozen ground or prior to a precipitation event there is a much higher probability of direct discharge to surface water. If waste application equipment malfunctions, for example if an irrigation center pivot malfunctions during application, CAFO waste can reach surface waters as runoff or directly. CAFO waste can also reach surface waters if an operator improperly conducts waste application, such as not observing setbacks, mis-calibrating application equipment, applying to saturated soil, or overapplying.

Response. The NMP requirements in Permit Part II.B. and III.A.2. require permittees to establish land application rates that ensure appropriate agricultural utilization, identify site-specific conservation practices, and prohibit land application to frozen, snow covered and saturated soils, among other requirements. Collectively, these practices are designed to prevent discharges from land application areas, including functionally equivalent subsurface discharges. If NMPs are developed and implemented correctly, there should be no discharge from the land application area to WOTUS, including functionally equivalent subsurface discharges, unless that discharge is an agriculture stormwater discharge. Visual monitoring is required during and after land application events to ensure compliance with this provision. See response to comment 13 regarding the land application visual inspection requirements being applicable regardless of INTRA or Phosphorus Site Index risk assessment rating. No changes were made to the permit in response to this comment.

Comment 34. (FWW)

The draft Permit's lack of monitoring for subsurface land application areas fails to acknowledge that land application areas seep pollutants into groundwater that discharges to WOTUS, just as production areas do. The Permit's failure to monitor for these types of subsurface discharges—

which visually monitoring cannot identify—is especially problematic because the acreage of land application areas overlying Snake River Plain aquifers far exceeds the acreage occupied by production areas. Indeed, the monitoring model provided as Figure 1 above shows that nutrients applied at supposedly agronomic rates actually seep to the subsurface where they form significant nitrate plumes that emanate to surface waters. Mr. Erickson's extensive experience has further established that land application areas leach pollutants into groundwater that discharges into WOTUS. As the INTRA explains, "the primary loss mechanism of nitrogen in agricultural systems is leaching of nitrate below the root zone." The P-Index further notes that phosphorus leaching can be especially significant in "shallow soils overlying basalt," as is the case in large swaths of the Snake River Plains Aquifer. Therefore, the Idaho Permit is not ensuring compliance with the no dry weather discharge effluent limitation with representative monitoring.

CAFO pollution from land application areas can reach surface water directly in several ways in addition to transport via ground water. If CAFO waste is overapplied it can runoff into nearby surface water features such as ditches, canals, rivers, and streams. Also, If CAFO waste is applied on frozen ground or prior to a precipitation event there is a much higher probability of direct discharge to surface water. If waste application equipment malfunctions, for example if an irrigation center pivot malfunctions during application, CAFO waste can reach surface waters as runoff or directly. CAFO waste can also reach surface waters if an operator improperly conducts waste application, such as not observing setbacks, mis-calibrating application equipment, applying to saturated soil, or overapplying.

Response. See response to comment 33 regarding NMP requirements. No changes were made to the permit in response to this comment.

Comment 35. (FWW)

Feasible and representative options to monitor direct discharges from land application areas exist. The simplest and most effective way to obtain representative monitoring data for land application area subsurface discharges is to require CAFOs to monitor fields using soil moisture probes or lysimeters in conjunction with regular soil sampling. The Permit disallows land application to fields when the top two inches of soil are saturated, and application to an unsaturated field should never overwhelm the field's capacity thereby leaching nutrients below the root zone. If this happens, the CAFO is not abiding by the regulatory requirement to apply waste at a rate that "ensure[s] appropriate agricultural utilization of the nutrients" because once nutrients go below the root zone plants are unable to utilize them. Phosphorus may adsorb to soil particles until the soil reaches capacity (at which point excess phosphorus will travel to groundwater, which is already happening in Idaho as described above), but nitrogen and nitrate will not and will instead travel with the leaching water to reach groundwater. Thus, soil moisture probes or lysimeter monitoring is necessary both to ensure CAFOs are not causing discharges via groundwater and to provide valuable feedback about agronomic rates that actually comply with EPA's regulations requiring that CAFOs ensure appropriate agronomic utilization of nutrients.

Soil probes are a simple technology "that indicate when the soil moisture is above field capacity and leaching of nutrients is occurring. The soil moisture data, combined with routine soil nutrient

sampling . . . provide a more accurate assessment of a field's ability to receive and retain CAFO waste than soil sampling alone." If done correctly, this data collection should provide an operator with the information necessary to identify whether nutrients are leaching to groundwater.

Commenters request that EPA include the following changes to the Permit to include effective and representative monitoring of land application areas. First, the Permit's annual soil sampling requirement should be replaced with the soil sampling protocols outlined in Mr. Erickson's expert report. This includes appropriate densities and locations of soil samples to ensure that results are representative of the field. Second, soil moisture probes or lysimeters must be required and operational during land application events or during irrigation of fields that have received CAFO waste to ensure that contaminated water is not leaching below the root zone and therefore reaching groundwater where it will be transported and discharged to WOTUS.

Where this initial monitoring indicates that pollutants are leaching from the field into groundwater, the Permit must require a network of monitoring wells akin to the monitoring scheme presented above for production areas using earthen liners with a 1 x 10^{-6} cm/sec seepage rate.

[Commenter provided proposed detailed approach to soil sampling, see comment letter for details]

Response. The use of soil probes and appropriate nutrient management can ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater on permitted land application areas. While EPA encourages the use of soil probes for irrigation water management, the requirement to purchase, install, operate, and maintain soil probes is beyond the scope of this permit. The expert opinion provided in the comment recommends a specific soil sampling protocol. The EPA has determined that the University of Idaho soil sampling guidance included as Appendix G of the permit is appropriate for soil sampling. No changes were made to the permit in response to this comment.

Affordability.

Comment 36. (FWW)

The Permit Fact Sheet states that the Idaho Dairymen's Association ("IDA") raised concerns that requiring land application monitoring could result in "more manure being applied to smaller areas to minimize the monitoring cost." Commenters are puzzled by this statement, as Federal law limits land application of CAFO waste to amounts authorized by NMPs and requires application in line with agronomic need. If IDA means to say that its member CAFOs will violate the law to avoid monitoring costs, such threats warrant investigation and enforcement, and certainly do not justify reducing the Idaho Permit's monitoring requirements to below the legal minimum. CAFOs are required to have a plan in place for disposing of the waste they generate, including sufficient acreage for field applications that comply with NMPs and ensure agronomic utilization.

Response. As described in the responses to comments 7 and 33, the permit requires representative visual monitoring during and after land application events. As described in the response to comment 13, the EPA is not allowing for exceptions to visual monitoring for land application based on risk rating. While the EPA considered cost in developing the effluent limitation guidelines found in 40 CFR Part 412, the EPA did not specifically take the IDA concerns into account in the development of the land application monitoring requirements in the permit. The EPA sought input from numerous different individuals, groups, and organizations regarding the cost of compliance. No changes were made to the permit in response to this comment.

Comment 37. (FWW)

EPA improperly prioritized affordability in establishing the Permit's monitoring approach. As demonstrated above, feasible, representative, and affordable monitoring methods exist to assure compliance with CAFO permit production and land application area effluent limitations. Nonetheless, EPA has failed to include representative monitoring in several circumstances. It appears that it did so in part due to concern over the affordability of monitoring. This undue weighting of cost is an additional deficiency in EPA's decision making because the Clean Water Act does not permit EPA to consider affordability in establishing monitoring in NPDES permits.

In the Permit Fact Sheet, EPA essentially concludes that CAFOs cannot possibly monitor their discharges because feasible and affordable monitoring options do not yet exist. EPA references the CAFO industry's unsubstantiated claims that pollution monitoring is "prohibitively expensive." But these claims cannot justify foregoing provisions that are mandated by the Clean Water Act, especially where monitoring is necessary to safeguard public and environmental health. The Clean Water Act's provisions on monitoring are plain. In carrying out the NPDES program, EPA "shall require" permitted point sources to "install, use, and maintain such monitoring equipment or measures (including where appropriate, biological monitoring methods)" that are necessary to determine whether the permittee is violating the terms of the permit. EPA's regulations echo this mandate, requiring permit writers to include monitoring of pollutant masses, effluent volumes, and the frequency of discharges for facilities that do not discharge continuously. Permits must specify the type, interval, and frequency of monitoring "sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring." Nowhere in either the statutory or regulatory language is there any authorization for EPA to consider affordability in developing monitoring requirements for NPDES permits. EPA retains discretion to determine what is appropriate, but the relevant factors are whether monitoring yields data representative of the monitored activity and can demonstrate compliance with the Permit, not cost.

In considering affordability, EPA appears to be conflating the Clean Water Act's requirements for monitoring with the requirements used to guide the agency's development of effluent limitation guidelines. To develop effluent limitation guidelines, Congress instructed EPA to identify "the degree of effluent reduction attainable through the application of the best practicable control technology currently available." This standard explicitly requires that EPA

consider the cost of applying a particular technology when deciding which effluent limits should apply. The lack of a similar instruction in the Clean Water Act's standards for developing NPDES monitoring requirements indicates that cost is not an appropriate consideration to inform those provisions. When Congress uses qualifying language in one part of a statute but not another, Congress intended the latter to have broader application. And this makes sense given the central role of monitoring in ensuring effluent limits are effective and enforceable: absent monitoring, the Clean Water Act is rendered little more than a paper tiger.

Response. The monitoring in the permit is representative of the discharge (see responses to comments 1 and 7). The EPA received feedback from different individuals, organizations and groups during the development of this permit, but ultimately did not consider cost and established representative monitoring for all discharges to WOTUS. No changes were made to the permit in response to this comment.

Comment 38. (FWW)

That compliance with the law may involve additional operational expenses is no excuse for allowing permittees to operate without accountability, especially given that noncompliance shifts costs onto local communities and the environment. Allowing CAFOs to continue polluting Idaho's waters with impunity comes at the price of lost fishing revenues, lost recreational and aesthetic opportunities, the cost of water treatment, and the cost of healthcare to treat ailments caused by pollution exposure. Idahoans should not be forced to subsidize an industry that is externalizing its pollution costs onto their environment. Yet, that is the outcome if EPA fails to require adequate monitoring in the final Permit based on a concern that CAFOs may have to spend money to bring their facilities into compliance.

Response. See response to comment 37 regarding representative monitoring being applied in this permit. No changes were made to the permit in response to this comment.

Reporting Requirements.

Comment 39. (FWW)

Discharge monitoring reports are an essential piece of the Clean Water Act's regulatory framework. Ordinarily, permitted entities regularly submit these reports to the permitting agency to facilitate agency enforcement as well as citizen suits. Once again, however, CAFOs have inexplicably been treated as the exception to normal environmental oversight rules. In addition to improperly shielding CAFOs from enforcement actions, the Idaho Permit's inadequate reporting provisions also deprive EPA and Idaho regulators of valuable data that should be used to inform future permit conditions. However, EPA can easily remedy this deficiency by requiring that permitted CAFOs regularly submit their monitoring results to the permitting agency (EPA and/or the Idaho Department of Environmental Quality).

Response.

The EPA is only accepting comments on changes made to the permit during this permit modification. The mechanism for submitting data and reports to the permitting authority was not

addressed in this permit modification. Therefore, this comment is outside of the scope of this comment period. To provide clarification to the commentor regarding data submittal, in general, CAFO permits only authorize discharges from facilities in limited circumstances. Given the sporadic nature of discharges from CAFO facilities, monthly discharge monitoring reports are not necessary. Regarding the production area, visual inspection results are logged by the permittee and are required to be kept on site for a period of 5 years, and the permitting authority can inspect these reports at any time. See Permit Part II.A.2.e. Any authorized or unauthorized production area discharges to WOTUS discovered through visual inspections or otherwise must be monitored and reported to the permitting authority, along with analytical monitoring results, within 30 days of the discharge (See Permit Part IV.D.). Regarding land application, visual inspection results will be maintained by the permittee and made available to the permitting authority upon request (See Permit Part IV.A.2.g.). In the event of a land application discharge, monitoring will take place in accordance with Permit Part IV.E. and results will be submitted to the permitting authority within 30 days (See Permit Part IV.E.1.g.). All materials submitted to the EPA can be made available to the public upon request. In addition, the permit requires the permittees to submit additional discharge information in the annual reports. See Permit Part IV.B. No changes were made to the permit in response to this comment.

Comment 40. (FWW)

The draft Permit's reporting scheme is deficient because CAFOs do not have to report the results of those monitoring efforts to the permitting agency. Rather, CAFOs are allowed to retain these inspection results on-site unless the permitting agency specifically requests the records. As noted above, monitoring that does not enable enforcement against particular permittees is not aligned with the Clean Water Act's mandate that EPA provide for, encourage, and assist public participation in enforcement actions.

Response. The EPA is only accepting comments on changes made to the permit during this permit modification. The mechanism for submitting data and reports to the permitting authority was not addressed this permit modification. Therefore, this comment is outside of the scope of this comment period. To provide clarification to the commentor regarding the mechanism for submitting data and reports to the permitting authority, see the response to comment 39 regarding CAFO reporting to permitting authorities. With limited exceptions, the majority of the discharges that occur from a CAFO facility will be unauthorized discharges. In addition, monitoring is required for any discharge that occurs from a permitted facility and those monitoring results must be sent to the EPA within 30 days of the discharge event. Further, the EPA can obtain any document/information from the facility upon request. As such, the EPA will have all the information necessary to take an enforcement action, if appropriate. No changes were made to the permit in response to this comment.

Comment 41. (FWW)

Although the Idaho Permit requires permittees to report any detected discharges, this does not include many of the provisions now serving as "in effect, monitoring." For example, CAFOs must report the results of visual monitoring of production area infrastructure as blessed by the *Food & Water Watch* court. This is crucial to ensuring compliance and creating accountability

because if a permittee report fraudulent monitoring records or tampers with monitoring devices they incur separate violations of the Clean Water Act that carry independent liability. Accordingly, EPA must revise the Idaho Permit to require that CAFOs report all monitoring results, including well tests, soil moisture probes, lysimeter readings, grab samples, and visual monitoring results. In the case of visual monitoring, records should include a log of who or what (in the case of camera placements) conducted the monitoring, where it was conducted, what the monitored activity was specifically, and the results of the monitoring. Where a discharge does occur, the subsequent monitoring results should be reported immediately. If no discharge occurs over the reporting period, visual monitoring results stating so serve the same function as a Discharge Monitoring Report listing "no discharge" for a monitoring period.

Response. See response to comment 39 regarding CAFO reporting to permitting authorities. No changes were made to the permit in response to this comment.

Comment 42. (FWW)

In general, the Idaho Permit's reporting provisions could be brought into compliance with the Clean Water Act by clearly listing all the monitoring results that must be submitted to the permitting authority on a regular basis. To enforce the Idaho Permit's general prohibition on any production area discharges not caused by a 25-year, 24-hour storm event, EPA should require—at minimum—that CAFOs regularly report weekly lagoon waste depth readings (including certification about whether wastewater levels are below those required to contain precipitation from a 25-year, 24-hour storm), any deficiencies discovered during lagoon inspections, and the results obtained via Subsurface Discharge Monitoring Reports. Likewise, to enforce the Permit's restrictions on land applications of manure and wastewater, the EPA should require CAFOs to regularly report the details of all land application monitoring as explained above.

Response. See response to comment 39 regarding CAFO reporting to permitting authorities. See response to comment 40 regarding enforcement of the permit. No changes were made to the permit in response to this comment.

Response to Comments Received During the 2024 Proposed Modification Comment Period

Functionally Equivalent Groundwater Discharges

Comment 43. (AGROprofessionals; IDA)

The liner specifications mentioned should adhere to NRCS standards and the industry-accepted permeability rate of 1 x 10'-6 cm/sec. The imposition of double liner standards is neither practical nor economically feasible in Idaho operations. Engineers and regulatory bodies should work with clear and achievable standards rather than broad statements like "the pond cannot leak," which can lead to ambiguous interpretations and compliance challenges.

Response: There are specific liners (i.e., double synthetic liners) that, if properly operated and maintained, will meet the exception to developing a subsurface discharge monitoring plan (See

Permit Part III.A.2(iii)). The EPA is not requiring the use of these liners, as the commentor states. The NRCS standards referenced above, including the permeability rate, are still applicable and could meet one of the exceptions to developing a subsurface discharge monitoring plan. No changes were made to the permit in response to this comment.

Representative Monitoring

Comment 44. (IDA)

Courts have made clear that the EPA may only regulate actual discharges, and not a CAFO's potential to discharge or proposal to discharge. *Nat'l Pork Producers Council v. United States* EPA, 635 F.3d 738, 751 (5th Cir. 2011). EPA seems to be attempting to do the very same thing in the currently proposed rule, by requiring a subsurface discharge monitoring program and insinuating that just because a waste containment structure has the potential to discharge, that it is discharging.

Response: The NPDES permitting program is a self-reporting program. A NPDES permit is required if there are discharges, including functionally equivalent subsurface discharges, to WOTUS. If a facility determines that no discharges to WOTUS are occurring, then the facility does not require a NPDES permit. Once a facility applies for and obtains permit coverage, the facility is required to develop and implement a subsurface discharge monitoring plan, unless they meet the exceptions in Permit Part III.A.2(iii), to determine whether there are functionally equivalent subsurface discharges from manure and wastewater containment structures. The EPA has modified Permit Part III.A.2.a(iii) and IV.D.6(b-c) to further clarify that the permit only covers *functionally equivalent* subsurface discharges.

Comment 45. (FWW)

The permit should prohibit pollution stockpiling on production area corrals and drylots. EPA must ensure that CAFO production areas that receive manure but may not meet the definition of "wastewater or manure storage structure" are not allowed to become default manure stockpiling areas. Without this safeguard, Commenters question whether the Permit will be able to satisfy the Clean Water Act's monitoring mandate for the production area zero discharge effluent limitation.

Response: The permit states that there must be no discharge of manure, litter, or process wastewater from the production area except as provided in Part II.A.1 and Part II.A.2. All other discharges from the production area to WOTUS, including those from "stockpiles" on production area corrals and drylots, are prohibited (see the definition of 'production area' in the definitions section of the permit). No changes were made to the permit in response to this comment.

Subsurface Monitoring Requirements.

Comment 46. (AgPRO)

AGROprofessionals agrees with the inclusion of an evaluation by a professional engineer, hydrologist, engineer, or other qualified individual. However, they do not believe that the

requirement to use the Washington NRCS Engineering Technical Note 23 is appropriate for CAFO's in Idaho. AGROprofessionals instead believes that Idaho's CAFO operators should be allowed to rely on NRCS standards tailored to Idaho and existing testing parameters that are widely accepted and used across the United States.

Response: See response to comment 43 regarding the continued general applicability of NRCS standards. Based on this comment, and other comments received during the 2024 permit modification public comment period, the EPA has removed Technical Note 23 as a tool for waste storage pond evaluations (See response to comment 17).

Comment 47. (AgPRO)

AGROprofessionals agrees with the prescribed methods for evaluation found in NRCS Appendix 10D and IDAPA 02.04.14.030.01. However, they do not believe that they should be explicitly listed in the permit as the methods could change in the future, leading to administrative challenges. AGROprofessionals believes that, if necessary, NRCS Appendix 10D and IDAPA 02.04.14.030.01 should be incorporated by reference and not specific rule numbers.

Response: The EPA considered this concern with regard to NRCS references and state codes cited in the permit. NRCS documents cited in the permit may be updated, but their references are unlikely to change (i.e., Technical Note 6, Appendix 10D, Conservation Practice Standard Code 360 etc.). References to state code (i.e., IDAPA 02.04.14.030.01) may change but are unlikely to. If state codes do change, an associated minor modification to the permit would realign the reference. The EPA has determined that the alternative, generally referencing alignment with 'Idaho state code', would be too broad. No changes were made to the permit in response to this comment.

Comment 48. (AgPRO)

Instead of a discharge monitoring plan, AGROprofessionals recommends a maintenance plan with continual inspections to the liner that identify any deficiencies within the clay liner. These inspections would be carried out by on site operators and documented. During the cleaning of impoundments, additional documentation, and verification that the liner was protected during the cleaning should be included. If the liner has not been disturbed, it can be certified as still meeting the minimum seepage requirements of 1 x 10^-6 cm/sec.

Response: Operation and maintenance in accordance with NRCS standards pursuant to Permit Part III.A.2.a.ii is generally consistent with the maintenance and inspection requirement set forth in this comment. See response to comment 17 regarding exceptions to the requirement to develop a subsurface discharge monitoring plan, as proposed in this comment. The inclusion of the subsurface monitoring plan in the permit is necessary to address the court order described in the introduction to this document. See response to comment 43 regarding the applicability of the seepage requirement of 1 x 10^-6 cm/sec. No changes were made to the permit in response to this comment.

Comment 49. (DANR)

DANR foresees the subsurface no discharge evaluation and documentation requirement in Section III.A.2.a)(iii)(a) will be highly difficult to scientifically determine. DANR urges EPA to consider including an exclusion for structures a certain distance from navigable waters and including a timeframe to complete this evaluation after permit issuance for any existing permitted operations. Additionally, it is unclear how any subsurface discharge will be addressed, permit limits developed, and the discharge be monitored.

Response: See response to comment 44 regarding changes made to the permit clarifying that coverage is only required for *functionally equivalent* subsurface discharges. The EPA agrees that this is a challenging scientific evaluation, which is why the permit requires a PE or other qualified individual to perform the evaluation. The current subsurface discharge monitoring plan requirements will result in information that will inform the next permit cycle. No changes were made to the permit in response to this comment.

Comment 50. (DANR)

DANR's experience indicates EPA should also address the design, construction, and construction administration of manure storage structures constructed of concrete or steel, or with a double-layer synthetic liner with leak detection, as that will be just as important if not more important than their operation and maintenance**.**

Response: The EPA will include NRCS Code 521 (Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner) 12 and Code 522 (Pond Sealing or Lining – Concrete) as an appendix to the permit as optional guidance regarding liners.

Comment 51. (ICA)

Section III.A.2.a)(iii) of the draft permit should clearly state that it is only in reference to subsurface discharge to Waters of the United States *through groundwater with a direct hydrological connection to Waters of the United States* as that is the only type of subsurface discharge that the EPA has jurisdiction over.

Response: See response to comment 44 regarding EPAs clarification of this point in the permit which was made partially in response to this comment.

Comment 52. (ICA)

It should also acknowledge that compliance with Appendix 10D and IDAPA 02.04.14.030.01. prevents such a discharge through liner requirements that vary based on siting considerations that include:

- Underlying soil permeability;
- The presence or large voids or fractured bedrock;
- Distance to wells and streams;
- Location in regards to a recharge area for a sole surface aquifer; and

- minimum separation requirements for high water tables, bed rock, gravel, and permeable soils

Additionally, the liner requirements in both Appendix 10D and IDAPA 02.04.14.030.01 are more stringent than the liner requirements for wastewater treatment facilities under IDAPA 58.01.16 – Wastewater Rules.

Response: Appendix 10D and IDAPA 02.04.14.030.01 already take the bulleted list set forth in the comment into account. The comparison to liner requirements for wastewater treatment facilities is not meaningful since they are a different permitting category than CAFO facilities. No changes were made to the permit in response to this comment.

Comment 53. (ICA)

We propose Section III.A.2.a.(iii) be modified as follows (underlined wording)

(iii) The permittee must include a subsurface discharge monitoring plan to identify and monitor any subsurface discharges from each wastewater or manure storage structure in accordance with the specifications in Section IV.D.6. The NMP must include the subsurface discharge monitoring plan and the results of all subsurface monitoring from each wastewater and manure storage structure. The permittee must develop a subsurface discharge monitoring plan as part of the NMP unless the exceptions in (a) or (b) below are met:

(a) Each wastewater or manure storage structure must be evaluated by a Professional Engineer,
geologist, hydrogeologist or another qualified individual documenting that each wastewater or manure storage structure does not have a subsurface discharge to Waters of the United States <u>through groundwater with a direct hydrological connection to Waters of the United States.</u>

<u>Wastewater and manure storage structures that have been constructed and maintained in accordance with the liner requirements in NRCS Appendix 10D and IDAPA 02.04.14.030.01. and Part III.B shall be considered to prevent such a discharge provided that documentation of compliance is maintained in the NMP for each wastewater and manure storage structure.</u>

(b) Confirm, and maintain documentation in <u>the</u> NMP, that each wastewater and manure storage structure is constructed of concrete or steel, or with a double-layer synthetic liner with leak detection, and is properly operated and maintained in accordance with III.A.2.a.ii.

Response: See response to comment 44 regarding changes the EPA made to the permit, partially in response to this comment, specifying coverage of *functionally equivalent* subsurface discharges. The proposal in this comment for facilities to avoid the development of a subsurface discharge monitoring plan if they construct and maintain their liner in accordance with NRCS and state standards is similar to the permit language in the 2020 permit which stated "CAFOs constructing new wastewater or manure storage structures or modifying existing wastewater or manure storage structures shall have a liner that is constructed and maintained in accordance

with Idaho NRCS practice standards." According to the court order associated with the 2020 permit, the permit lacked the necessary monitoring to ensure that functionally equivalent subsurface discharges will not occur. To address the court's order, the EPA proposed the current modification. No changes were made to the permit in response to this comment.

Comment 54. (IDA)

IDA suggests that subsections (a) and (b) of section III.A.2(ii) be stricken so that it reads as follows:

(ii) The permittee must ensure the proper operation and maintenance of each wastewater and manure storage structure by evaluating compliance with NRCS Appendix 10D and IDAPA 02.04.14.030.01. If the evaluation of the wastewater or manure storage structures identifies deficiencies in the operation or maintenance of the structures, the permittee must identify measures to address those deficiencies in its NMP. ~~This evaluation must be completed in one of the following ways:~~

~~(a) By a Professional Engineer, geologist, hydrogeologist, or another qualified individual, in which case the NMP must include the results of the evaluation;~~

~~or~~

~~(b) By completing the Washington NRCS Engineering Technical Note #23, January 2013 (Appendix D), in which case the NMP must include the results of the evaluation~~

IDA's proposed change above allows for flexibility in compliance evaluations and common-sense cost saving measures when appropriate because some deficiencies may be readily apparent to an untrained eye.

Response: See response to comment 17 regarding the removal of Technical Note 23. "Qualified individual", as defined in the permit, includes more than just a professional engineer. This definition was made intentionally broader than a professional engineer to allow more flexibility for the permittees. Given the technical nature in determining whether there is a functionally equivalent subsurface discharge, a qualified individual is needed to conduct these evaluations. Aside from removing Technical Note 23 as described in the response to comment 17, no changes were made to the permit in response to this comment.

Comment 55. (IDA)

IDA also proposes the removal of Washington NRCS Engineering Technical Note #23 should not be included as a resource whatsoever, as it was not developed to address Idaho's specific conditions and regulations. Instead, Idaho permittees should rely on NRCS standards tailored to Idaho, in addition to generally accepted testing parameters that are used across the United States.

IDA believes that permit should not go one step further and dictate specifically how to identify those deficiencies and mandate costly assessments by engineers, geologists, or hydrogeologists

when they are not always needed.

Permittees should be allowed some latitude and discretion in determining how to identify and rectify deficiencies in a cost-efficient manner, while keeping in mind that if they do not do so properly, they do so at the risk of violating their permit and the Clean Water Act.

Response: See response to comment 17 regarding the removal of Technical Note 23, partially in response to this comment. Also see response to comment 60 regarding the need for qualified individuals to conduct this technical assessment.

Comment 56. (IDA)

IDA believes that the subsurface discharge monitoring program proposed is inconsistent with Idaho regulations, is outside the regulatory authority of the EPA without evidence of an actual discharge, is unworkable, and is cost prohibitive. The EPA is attempting to regulate a waste containment structure's "potential to discharge".

EPA's use of the term "subsurface discharge" as used in this proposed modified section is imprecise and states a legal conclusion. Even though there may be a small and regulatorily acceptable amount of permeability of a containment structure liner, it does not necessarily mean that an actual "discharge" into a water of the United States is occurring as defined by the Clean Water Act.

Response: See response to comment 1 regarding functionally equivalent subsurface discharges from production areas and regarding the exceptions from developing subsurface discharge monitoring plans. See response to comment 44 regarding changes to the permit, partially in response to this comment, clarifying the permits prohibition of functionally equivalent subsurface discharges. The EPA is making these permit modifications in response to a court order as discussed in the introduction to this document. Aside from the changes made to the permit described in the response to comment 44, no changes were made to the permit in response to this comment.

Comment 57. (IDA)

IDA believes that no professional engineer, geologist, hydrogeologist, or other qualified individual will certify that earthen manure storage structures have absolutely no permeability.

Response: See response to comment 44 regarding language clarifying the permits prohibition of functionally equivalent subsurface discharges. The evaluation is not required to certify zero permeability; instead, the evaluation is required to evaluate whether there are any functionally equivalent subsurface discharges. The permittee is required to develop a subsurface discharge monitoring plan except in two limited circumstances. The EPA is making these permit modifications in response to a court order as discussed in the introduction to this document. Aside from the changes made to the permit described in the response to comment 44, no changes were made to the permit in response to this comment.

Comment 58. (IDA)

IDA proposes that section III.A.2.a(iii) be stricken in the general permit and replaced by a new section which references Idaho specific regulations and NRCS standards, and national testing parameters for acceptable permeability rates.

Response: The subsurface discharge monitoring plan requirement is necessary to address the court order described at the beginning of this document. See response to comment 53. No changes were made to the permit in response to this comment.

Comment 59. (FWW)

There is inadequately rigorous and well-tailored maintenance and inspection regimes for concrete, steel, or double-lined synthetic wastewater or manure storage structures with leak detection when no Subsurface Discharge Monitoring Plan ("SDMP") is required. Draft permit should include stipulations for regular inspections on all types of facilities and utilize NRCS Code 521 (Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner)12 and Code 522 (Pond Sealing or Lining – Concrete) rather than NRCS Appendix 10D and IDAPA 02.04.14.030.01

Response: Regardless of whether a structure meets an exemption from developing a subsurface discharge monitoring plan (See Permit Part III.A.2.a.iii.), permittees are required to ensure proper operation and maintenance of storage structures by evaluating compliance with NRCS Appendix 10D and IDAPA 02.04.14.030.01, and must identify measures through a qualified individual to address deficiencies in the NMP (See Permit Part III.A.2.a.ii.). The NMP is available for permit authority review and public comment prior to permit coverage being granted as explained in the response to comment 16. Compliance with NRCS Appendix 10D and IDAPA 02.04.14.030.01, as evaluated by a qualified individual, for structures constructed of concrete or steel, or with a double-layer synthetic liner with leak detection, sufficiently reduces the risk of functionally equivalent subsurface discharges. Given this, the EPA allowed those two exceptions from developing a subsurface discharge monitoring plan. In response to this comment, the EPA has included NRCS Code 521 and Code 522 as appendices to the permit as optional guidance regarding the operation and maintenance of double-line synthetic lagoons and concrete or steel storage structures (See response to comment 50).

Comment 60. (FWW)

The permit should tailor the individuals qualified to determine whether a CAFO structure has a subsurface discharge to WOTUS. Commenters believe that not all "Professional Engineers" have the necessary expertise to make determinations involving hydrogeological analysis, and the catchall "another qualified individual" creates far too much ambiguity. Draft permit section III.A.2.a.iii.a should read as follows:

- "Each wastewater or manure storage structure must be evaluated by an individual or individuals with the expertise necessary to determine that each wastewater or manure storage structure does not have a subsurface discharge to Waters of the United States. This expertise includes at a minimum an understanding of specific seepage rates, soil

> hydrology, hydrogeology, groundwater flow and transference, and any other specialized knowledge needed to assess site-specific characteristics in relation to Waters of the United States."

Commentors also believe that the permit should tailor the individuals qualified to conduct operation and maintenance evaluations and subsurface discharge determinations in Permit Part III.A.2.a.ii.a. EPA should limit this list of acceptable evaluators to "a Professional Engineer or another qualified individual with sufficient experience in the construction, operation, and maintenance of wastewater and manure storage structures."

Response: The knowledge and experience necessary to conduct both analyses referenced above is specific and unique and there is no standard certification to dictate who is "qualified". Whether an individual is a PE or not, individuals will need to consider the specific analysis required and whether they are qualified to complete it based on their education and experience. No changes were made to the permit in response to this comment.

Comment 61. (FWW)

There is insufficient guidance to ensure that SDMPs are effective and produce representative compliance data; the Permit lacks detail needed to ensure that monitoring plans are effective and produce data that are representative of the monitored activity.

Response: Permit Parts III.A. and IV.D.6. include specific direction on required components of the Nutrient Management Plan as well as the subsurface discharge monitoring plan. The EPA acknowledges that there is some flexibility in those requirements to account for different types of operations. See response to comment 16 regarding the submittal of the NMP and SDMP with the NOI for permitting authority review and comment, and subsequent public notice. Permitting authority review and public comment on facility-specific subsurface discharge monitoring plans is a more appropriate mechanism to ensure a given plan will produce representative compliance data. The commentor did not provide any suggested items to be added to the subsurface monitoring plan requirements. No changes were made to the permit as a result of this comment.

Comment 62. (FWW)

Washington Technical Note #23 should be removed; it is not an appropriate tool. Tech Note 23 itself clearly states that it "should not be construed to provide ANY regulatory certainty from State regulatory agencies".

Response: See response to comment 17 regarding the removal of Technical Note 23, partially in response to this comment.

Dry Weather Discharge Monitoring Requirements.

Comment 63. (DANR)

DANR supports the removal of Section II.B.9.a. in the proposed general permit as long as flood or furrow irrigation is uniformly distributed, or any non-uniform distribution of nutrients is accounted for in the nutrient management plan.

Response: This comment appears to focus on a provision that was proposed for public comment during the 2023 permit modification public comment period. That provision prohibited the application of manure, litter, or process wastewater on fields with surface irrigation (e.g., flood or furrow irrigation). This section was removed prior to the 2024 permit modification comment period, which addresses the concern in this comment. The permit no longer prohibits this practice; however, discharges to waters of the United States associated with this practice are not permitted. Aside from the change made as part of the 2024 public comment period, no changes were made to the permit in response to this comment.

Comment 64. (DANR)

DANR supports the inspection requirements in the modification of Section II.9.b. (now section II.9.a.) in the proposed general permit. However, DANR has concerns with samples being required even if they are not representative of the regulated activity on the field under the control of the producer. Examples,

- Where a drainage begins in a larger upstream commercially fertilized area outside the nutrient management plan and crosses a smaller NMP field
- A NMP field naturally sloped to receive sheet runoff from an adjacent upgradient non-NMP field on a downgradient part of the NMP field
- Field tile draining area(s) outside a NMP field that outlet on the downgradient edge of the NMP field

Samples collected in these instances are unlikely to be representative of the regulated land application activity and sample results cannot prove discharge is coming from the land application field. DANR also has concerns that the required instream sampling may not provide meaningful information and will be costly to producers.

Response: The permit requires representative monitoring of the discharge. If the permittee determines that there are commingled discharges, the permittee can choose to collect samples upgradient from their discharge to determine whether there are upgradient influences on the discharge. No changes were made to the permit in response to this comment.

Comment 65. (FWW)

The permit should contain guidance to ensure that visual monitoring of land application areas generates data that is representative of the monitored activity;

Response: See response to comment 30 regarding the direction currently included in the permit for visual monitoring, including record keeping requirements. Any further specification would be inappropriate given the varying characteristics of CAFOs. No changes were made to the permit in response to this comment.

Comment 66. (FWW)

The prohibition on land applying to surface irrigated fields should be reinstated, or in the alternative, specifically identify such fields' return flow conduits as discharge location needing visual monitoring. Commenters recommend that EPA reinstate the prohibition but qualify it and

allow land application to such fields only when a return flow/tailwater capture system is in place. If EPA does not reinstate this prohibition, Commenters request that return flow conduits from surface irrigated fields be explicitly included in the "other potential discharge locations"

Response: Any discharge of manure, litter, or process wastewater from a surface irrigated field to WOTUS is an unauthorized discharge and in violation of the permit (See Permit Part II.B.9.). The permit does not prohibit land application on surface irrigated fields; however, discharges to WOTUS associated with the practice would be a violation of the permit (See Permit Part II.B.9.). If CAFOs land apply on a surface irrigated field, visual monitoring must occur during and after the land application, and any discharges to WOTUS from that field must be monitored in accordance with IV.E.1. No changes were made to the permit in response to this comment.

Land Application Functionally Equivalent Subsurface Discharge Monitoring.

Comment 67. (FWW)

Monitoring of subsurface discharges at land application areas should be modified in the permit. We request two improvements to ensure that this monitoring regime for above ground discharges is effective in practice.

1. Commenters recommend EPA require CAFOs to develop a visual monitoring plan and integrate the plan into its permit coverage.
2. EPA needs to provide guidance on how to conduct visual monitoring that is representative of a given field.

Commenters suggest that EPA require the land application monitoring plans requested above describe the methodology used to determine representative monitoring locations. The Permit must require subsurface discharge monitoring for land application areas as well or, at a minimum, soil moisture monitoring for liquid manure applications to ensure that moisture is not penetrating below the root zone.

Response: See response to comment 33 regarding NMP requirements designed to prevent functionally equivalent subsurface discharges at land application areas. See response to comment 30 regarding existing guidance in the permit for land application visual monitoring. See response to comment 35 regarding soil moisture monitoring. CAFO owners/operators will have the best knowledge of their own unique operations to determine where to visually monitor their land application areas for discharges to WOTUS. No changes were made to the permit in response to this comment.

Affordability

Comment 68. (IDA)

Maintaining a subsurface discharge monitoring plan and the installation of concrete, steel, or double-layer synthetic liners in all manure containment structures are both extremely cost prohibitive for Idaho Dairymen.

Response: The permit does not require the installation of concrete, steel or double-layer synthetic liners as implied in this comment. See response to comment 1 regarding functionally equivalent subsurface discharges. The EPA required the subsurface discharge monitoring plan in response to a court order requiring representative monitoring, including for functionally equivalent subsurface discharges. No changes were made to the permit in response to this comment.

Comment 69. (AgPRO)

AGROprofessionals believes that the inclusion of a requirement for a SDMP could impose significant financial burdens on CAFO operators without necessarily providing corresponding environmental benefits. AGROprofessionals propose that the requirement for an SDMP should be based on evidence of risk rather than a blanket requirement for all structures.

Additionally, the imposition of double-liner standards, as practiced in Washington, is neither practical nor economically feasible for Idaho operations.

Response: See response to comment 1 regarding functionally equivalent subsurface discharges to WOTUS. The EPA required the subsurface discharge monitoring plan in response to a court order requiring representative monitoring. See Permit Part III.A.2.a.iii. for the exemptions to the subsurface discharge monitoring plan requirement. See response to comment 68 – the EPA is not imposing double-liner standards as implied in this comment. No changes were made to the permit in response to this comment.

Reporting Requirements.

Comment 70. (FWW)

The Permit here should require covered CAFOs to report all monitoring and inspection data to state regulators and EPA. Commenters request that EPA establish a reporting schedule so that permitted CAFOs submit Discharge Monitoring Reports on a periodic basis in relation to the intensity of the monitored activity. The Annual Report currently has a section for reporting discharges from production areas, but it only asks for the date, time, and approximate volume of a discharge. This section needs to be expanded to include the full suite of production area monitoring required under the Permit. Additionally, any changes to the operation and maintenance evaluation submitted with a CAFO's NMP should be disclosed in the Annual Report. Commenters request that EPA include a new section in the Annual Report to capture all land application monitoring data.

Response: The EPA is only accepting comments on changes made to the permit during this permit modification. The mechanism for submitting data and reports to the permitting authority was not addressed in this permit modification. Therefore, this comment is outside of the scope of this comment period. To provide clarification to the commentor regarding data submittal, see response to comment 39 regarding the retention and submittal of data and reports to permitting authorities. In addition, CAFOs must submit any change of their NMPs to the permitting authority and if those changes are determined to be substantial, the EPA will public notice those changes as well as the updated NMP. Regardless of whether the changes to a NMP are

substantive, the general public can request to view the NMPs from the permitting authority. No changes were made to the permit in response to this comment.