

# NORTHWEST ENVIRONMENTAL ADVOCATES



May 30, 2014

Ranei Nomura  
Oregon Department of Environmental Quality  
811 SW Sixth Ave.  
Portland, OR 97204

William Matthews  
Oregon Department of Agriculture  
635 Capitol Street, NE  
Salem, OR 97301

*via email only:* wmatthew@oda.state.or.us; nomura.ranei@deq.state.or.us

**Re: Comments on Proposal to Renew NPDES General Permit #01 and Issue New WPCF General Permit #01 for CAFOs**

Dear Mr. Matthews and Ms. Nomura:

The following comments are submitted by Northwest Environmental Advocates and Jesse Hayes, Hayes Osyter Company, on your agencies' proposal to renew NPDES General Permit #01 and Issue a new WPCF General Permit #01 for CAFOs. We are, frankly, appalled by the poor quality of the NPDES permit, particularly in light of the U.S. Environmental Protection Agency's (EPA) new federal rules and the obvious fact that the CAFO permitting program is not functioning, as purported, to prevent nearly all discharges of animal wastes to state waters. Furthermore, it is both silly and confusing for Oregon to insist on using different language from federal requirements. Oregon calls a Notice of Intent an "Application to Register," Oregon calls a Nutrient Management Plan an "Animal Waste Management Plan." Does this make Oregon better? No, it just makes it more difficult to talk clearly about whether Oregon is meeting federal requirements.

In addition, while we recognize that the Oregon Department of Environmental Quality (DEQ) shares its permitting authority with the Oregon Department of Agriculture (ODA), we note that we object to this arrangement as it is wholly outside the Clean Water Act (CWA). We will refer to DEQ and ODA collectively as "the Oregon agencies" in these comments but this in no way condones this extra-legal arrangement. In addition, our comments are primarily concerned with the proposed NPDES permit. We do not believe, however, that the Oregon agencies have sufficient information upon which to conclude that the vast majority of AFOS in Oregon are not discharging. For this reason we believe that Oregon should maintain the current approach and place all animal operations under the NPDES permit. An alternative but less desirable approach would be to make the WPCF permit identical to the NPDES permit .

Overall we find the proposed permit disheartening. As the agencies say in the fact sheet regarding the heart of the NPDES permit, namely its discharge limitations and operating

requirements, “[m]inor clarifications [were] made throughout these requirements.” State of Oregon, Confined Animal Feeding Operation Permit Program Proposed Renewal CAFO NPDES General Permit #01 and New Permit Proposal CAFO WPCF General Permit #01 Evaluation Report and Fact Sheet (April 1, 2014) (“Fact Sheet”) at 4. Given the well documented contribution of CAFOs to widespread impairments of water quality, it is incomprehensible that the Oregon regulatory agencies would not look to the permit to make major adjustments to such an obviously flawed program. When something does not work, the response should be to fix it.

## **I. THE PROPOSED PERMITS MUST PROTECT GROUNDWATER**

As we read the NPDES permit, it does include some conditions to assure groundwater protection. *See, e.g.*, Proposed Permit at S2.A, S2.B.3, S2.B.4, S2.C.2. These are in the same nature as conditions in the permit applicable to surface waters, namely a purported prohibition on them. Although we do not discuss groundwater much in these comments, the comments should be read for the proposition that the failures of the CAFO permit to date apply equally to groundwater and surface water. We understand that, although groundwater protection is a matter of state law, according to EPA, “additional requirements [beyond federal CAFO rules] could address groundwater that has a direct hydrologic connection to waters of the U.S. In addition, states concerned with groundwater may require monitoring, liners, or other requirements in accordance with appropriate state authority. CWA § 510.” Accordingly, the Oregon agencies have included groundwater in the NPDES permit. It appears to us that the fact sheet should discuss what amounts to federalizing groundwater protection. It should also discuss the state of knowledge of groundwater impairment. As it stands now, the fact sheet contains three sentences on the matter:

Permitting options for CAFOs in groundwater management areas will be evaluated on a case-by-case basis. ODA expects that a majority of these operations will be adequately regulated by either the NPDES or WPCF general permit. In situations where a CAFO might affect groundwater quality, additional monitoring requirements or management practices may be required by ODA as allowed by the general permits or an individual permit may be required by ODA.

Fact Sheet at 6 (parenthetical omitted). There are several problems with this discussion. First, it is unclear why ODA alone is discussed when DEQ is responsible for protection of groundwater in the state. Second, it is utterly obscure as to what the first sentence means. What are the permitting options for groundwater management areas? Why doesn’t the fact sheet explain what a groundwater management area is and where they are currently? On what basis will the permitting options be evaluated “case-by-case”? Will the public have input in this case-by-case evaluation or will the process be entirely behind closed doors? Third, what is the basis for ODA’s belief that a majority of CAFOs are adequately regulated and will continue to be adequately regulated to protect groundwater? Fourth, on what basis will ODA decide to improve a general permit or opt, instead, for an individual permit? Will the public be allowed to weigh in on that decision and, if so, for both a source covered under the NPDES permit and the WPCF permit or just the former?

Groundwater contamination should be a growing concern for the Oregon agencies with regard to the efficacy of their CAFO permits. For example, DEQ has found that in the North Coast basin,

Drinking water concerns exist for both surface and ground water sources in the North Coast. Surface water pollutants of concern related to watershed activities are primarily turbidity and bacteria (intake contamination) and less frequently, organics, turbidity, and bacteria in treated water. *Groundwater concerns consist of potential region-wide nitrate and bacterial contamination, as well as, lead pollution in the Clatsop Plains and Tillamook aquifers.*

DEQ, Water Quality Status and Action Plan: North Coast Basin (March 2011) at 2 (emphasis added).<sup>1</sup> CAFOs contribute both bacteria and nitrates therefore it is reasonable to assume that current permit limits and conditions have not been adequate to prevent animal operations from contributing to the current and growing problem. *See e.g., U.S. Geological Survey, National Water-Quality Assessment (NAWQA) Program, Nutrients National Synthesis Project<sup>2</sup> (“Beneath agricultural lands, nitrate is the primary form of nitrogen. It is soluble in water and can easily pass through soil to the ground-water table. Nitrate can persist in ground water for decades and accumulate to high levels as more nitrogen is applied to the land surface every year.”)* (emphasis added).

Moreover, as with assigning greater protections for already-impaired surface waters, discussed *infra*, the Oregon agencies should provide greater protection for groundwater that is already at higher risk of nitrate contamination more than the references in the fact sheet discussed above. The USGS study cited immediately above provides one possibility for implementing this approach, as it has mapped areas of Oregon with high and low nitrogen input and high or low aquifer vulnerability. *See id.* The fact sheet states that the WPCF will “only allowed in certain circumstances provided groundwater quality standards are met.” It is irresponsible for the Oregon agencies to ignore major risk patterns generated by the nation’s most prestigious monitoring agency.

Providing greater groundwater protection may require establishing larger setbacks, stricter temporal limits on land application, reduced application rates, incorporation or injection of waste, or upgrading waste storage systems. The Oregon agencies should also require ground water monitoring by CAFOs that are in higher risk areas. The permit should incorporate requirements for stream fencing to be completed not later than the end of the permit cycle, with compliance schedules to ensure completion as soon as possible. Conditions in the WPCF must also apply to animal waste end users regardless of whether they are generators of animal wastes, where use of wastes is in higher risk groundwater areas.

---

<sup>1</sup> Available at <http://www.deq.state.or.us/wq/watershed/Docs/NorthCoastPlan.pdf>

<sup>2</sup> Available at [http://water.usgs.gov/nawqa/nutrients/pubs/wcp\\_v39\\_no12/](http://water.usgs.gov/nawqa/nutrients/pubs/wcp_v39_no12/)

## **II. THE PROPOSED PERMIT'S REQUIREMENT FOR AN ANIMAL WASTE MANAGEMENT PLAN IS FLAWED**

### **A. A Facility May Not Operate Without an ODA-Approved AWMP**

The existence of and compliance with an adequate and approved AWMP is a condition precedent to the operation of a CAFO under this permitting scheme. Proposed Permit, S3.A.2 (stating the AWMP is “incorporated into this permit by reference” and that “[f]ailure to comply with the ODA-approved AWMP constitutes a violation of the terms and conditions of this permit.”). As a result, if a facility does not have a current AWMP or ODA has not approved that plan, after the opportunity for public comment, the facility may not lawfully operate. Therefore, ODA must eliminate clause S3.A.3 from the proposed permit.

### **B. Grandfathering of AWMPs is Inconsistent with the Clean Water Act**

DEQ and ODA issued the existing NPDES CAFO permit in 2009. In 2012, having revised its final rule on CAFOs, EPA provided permit writers and CAFO operators with extensive guidance on how to meet the permitting requirements. *See generally*, EPA, General Information on Concentrated Animal Feeding Operations, National Pollutant Discharge Elimination System (NPDES); EPA, *NPDES Permit Writers' Manual for Concentrated Animal Feeding Operations* (Feb. 2012) (hereinafter “EPA Manual”). Despite the fact that this EPA Manual includes a sample nutrient management plan, *id.* at Appendix P, a CAFO Nutrient Management Plan Review Checklist, *id.* at Appendix H, etc., the Oregon agencies have concluded that permittees may grandfather their existing AWMPs without public comment. This is an incorrect conclusion. First, the reason that the Oregon agencies have included the AWMP as part of the NPDES permit and allowed for public comment on the AWMPs is the settlement agreement the agencies signed resolving *Northwest Environmental Defense Center et al. v. Oregon EQC et al.*, Oregon Court of Appeals No. A1228110, requiring as much, and because that a federal court has held such nutrient management plans constitute regulatory limitations. *Waterkeeper Alliance et al. v. EPA*, 399 F.3d 486 (2d Cir. 2005). The Oregon agencies are not free to claim that the old AWMPs are not a part of the proposed permit renewal and thus subject to the same opportunity for public comment as the proposed permit. In fact, the AWMPs are permit limitations and the Oregon agencies cannot withhold the opportunity for public comment on them as a subset of the proposed permitting action. It makes no difference if the AWMPs have been revised or not at the time of renewal.

In contrast, the agencies fact sheet states that “[t]he NPDES general permit continues to require public notice prior to approving new permit coverage, renewing permit coverage, or approving proposed substantial changes to AWMPs as detailed in *Table 5: NPDES General Permit #01 Public Notice Requirements* below.” *Id.* at 15. Table 5 includes a public notice with “summary of a AWMP” for new applications and is silent on the AWMP for permit renewal applications. Fact Sheet at 16. According to the agencies, public comment on the AWMP is only required when they have “[r]eceipt of proposed substantial change to CAFO’s AWMP[.]” While it is true that substantial changes to the AWMP require public notice and comment, it is not true that at the permit renewal stage only those AWMPs with substantial changes are open for such notice

and comment. The Oregon agencies grossly misconstrue the federal requirements. EPA's regulations are clear:

If the Director makes a preliminary determination that the notice of intent meets the requirements of §§ 122.21(i)(1) and 122.42(e), the Director must notify the public of the Director's proposal to grant coverage under the permit to the CAFO and make available for public review and comment the notice of intent submitted by the CAFO, *including the CAFO's nutrient management plan*, and the draft terms of the nutrient management plan to be incorporated into the permit.

40 C.F.R. § 122.23(h) (emphasis added). So, too, is EPA's guidance: "Thus, a second round of public notice and comment is necessary when providing coverage for CAFOs under a general permit, and it is then that *the public is provided an opportunity to review the CAFO's site-specific NMP* and comment on terms of the NMP to be incorporated into the permit." EPA Manual at 3-10 (emphasis added). There is no reference in the regulations or the guidance to this plan's having to be substantially revised in order for it to be subject to public comment.

The Proposed Permit is confusing. Under § S1.C a source seeking to renew its coverage must submit only an application for renewal, without a new or existing AWMP. Proposed Permit at 7. Under S3.B.2, a source seeking to renew coverage "may submit . . . for review and approval" its previously approved AWMP "according to the schedule provided in S1.c, p. 7." Proposed Permit at 13. There is no schedule in S1.C on page 7. There is, in fact, no requirement that a source seeking to renew coverage submit either a new or existing AWMP in that permit condition. Instead, it merely says that an application must be submitted.

**C. The Oregon Agencies Appear to Be Planning on Ignoring EPA Rules That Require Incorporation of AWMP Terms Into the Permit**

The federal regulations cited above make clear that the permitting agency must propose to the public and put out for public comment "draft terms of the nutrient management plan to be incorporated into the permit." 40 C.F.R. § 122.23(h). In contrast, the Oregon agencies' fact sheet states that "[a]ll new and renewal applications subject to public notice requirements" will be issued for public notice and comment and that there will be "[p]ublic notice of 'substantial' AWMP updates or changes required." Fact Sheet at 5. This is consistent with further statements that "[t]he NPDES general permit continues to require public notice prior to approving new permit coverage, renewing permit coverage, or approving proposed substantial changes to AWMPs as detailed in Table 5: NPDES General Permit #01 Public Notice Requirements below." *Id.* at 15. And further, that the contents of the public notice will only include for new applicants, a "[s]ummary of AWMP," and for existing permittees when an AWMP changes substantially, an "[o]verview of proposed substantial change." *Id.* at 16 (Table 5). In neither instance is the description consistent with federal regulations which require that both the AWMP and the "draft terms of the nutrient management plan to be incorporated into the permit" be subject to public notice and comment. To provide a "summary" or an "overview" or, worse, to provide nothing at all, simply does not comport with federal requirements.

#### **D. AWMP Elements**

As a threshold matter, the permit must make clear that the intent of the AWMP is to ensure compliance with the terms of the permit, state law and the Clean Water Act, and the implementing federal regulations. As written, the proposed permit requires that the permit registrant “ensure that its AWMP is adequate for the proposed or existing population of animals, reflective of the proposed or existing facility operation, and prepared in accordance with the terms and conditions of this permit and OARs 340-051 and 603-074.” Proposed Permit, S3.C.1. It should include, consistent with 40 C.F.R. § 122.42(e)(1), that the AWMP must contain practices to meet not only the requirements of the federally-defined NMP, but also “applicable effluent limitations and standards.”

Specifically, the AWMP must ensure compliance with EPA’s nine minimum criteria. 40 C.F.R. § 122.42(e)(1); EPA Manual, 5-2. The proposed permit falls well short of the meeting this requirement.

##### **1. Ensuring adequate storage of manure, including procedures to ensure proper operation and maintenance of the storage facility**

The proposed permit requires the AWMP to include a description of the “[p]rocedures to ensure collection, handling, and storage of contaminated storm water runoff from the production area, manure, litter, and process waste water in compliance with the requirements of S2,” and the “[c]alculations used to determine that storage capacity exists must be provided, including a demonstration that facilities are at least designed and constructed to contain all manure, litter, process waste water, and storm water runoff and direct precipitation from a 25-year, 24-hour rainfall event.” Proposed Permit, S3.3(a). While this establishes the correct general requirement, given the lack of specificity elsewhere in the permit, the AWMP must be required to include more detail.

Specifically, to ensure the proper standards are met, the permit must require the applicants to include the following information in the AWMP:

1. The size (in acres) of the production area;
2. An estimate of the annual animal waste production and the annual quantity of each type of animal waste produced by the operation;
3. The basis for the anticipates manure generation rates;
4. Identification of all sources of process wastewater and appropriate generation rates;
5. Identification of the structures used to provide adequate manure storage, including the number, type, and storage capacity of each structure;
6. The facility’s critical storage period-the time that would result in maximum production of manure and wastewater anticipated between emptying events;
7. The schedule for cleaning out the storage structures or solids removal for liquid storage structures the emptying schedules;
8. The total design volume-the volume generated during the critical storage period plus the 25-year, 24-hour storm event volume plus the storage structure freeboard and other

- required design components;
9. Calculation of the 25-year, 24-hour rainfall amount for the location, and the source of this information, and;
  10. Off-site transport practices, including frequency and amount of off-site transfers, to the extent that the practices are critical to ensuring adequate storage.
  11. The names, addresses, and telephone number of the operator and of the operation and of all owners of animals confined at the operation;
  12. The location, including latitude and longitude, and number of acres of the operation;
  13. A map indicating the general layout of the operation, including the location of each building or other structure, the location of all portions of the containment system, the location and flow of any surface water, the location of water supply wells, and the direction and degree of all grades within the property lines of the operation;
  14. A certification by the operator that the operator will be responsible for and will ensure compliance with the animal waste management plan and the requirements of the Clean Water Act; and a certification by each owner of 1 or more animals confined at the operation acknowledging the potential joint liability of the animal owner if the operator violates the terms of the permit or the requirements of the Clean Water Act with respect to a discharge from the operation;
  15. The crop or vegetative cover schedule for any agricultural lands owned or leased by the operator;
  16. Information necessary to determine the land area available to the operator for application of animal waste, including copies of deeds of title and written agreements for use of lands not owned by the operator for application of animal waste;
  17. If methods of disposal for animal waste other than land application by or on behalf of the operator will be used, a description of those methods and the annual quantity of animal waste to be disposed of by each of these methods;
  18. A description of the methods, structures, or practices that the operator will use to prevent soil loss, surface water pollution and ground water pollution while minimizing odors and pests caused by animal waste during collection, storage, and application;
  19. A description of contingency measures that the operator will use to minimize environmental pollution resulting from any unexpected waste leak or discharge;
  20. Any additional requirements on a county-by-county basis, imposed by state or local law; and
  21. All CAFOs, not just large CAFOs, should be required to use actual test data as condition of annual manure application rates.

In addition, the AWMP must adequately describe the operation and maintenance procedures to ensure the storage facilities work correctly. Again, the proposed permit fails to require the necessary detail in the AWMPs. To cure this, the permit must require AWMPs to identify and provide schedules for: (1) storage facility maintenance activities, (2) inspections of the facilities, and (3) solids and/or wastewater removal methods from storage structures. The permit must require that these elements are described insufficient detail to ensure the AWMP addresses the site specific requirements of the facility.

**2. Managing mortalities to ensure that they are not disposed of in a liquid manure, stormwater, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities**

The proposed permit fails to call for the necessary information to ensure the permittees will properly manage animal mortalities. Here, the permit must require the AWMP to describe the “schedules for collecting, storing, and disposing of carcasses”; the “on-site storage before disposal”; the “final disposal method”; any “additional management practices to protect waters of the U.S. for on-site disposal including composting or burial”; and the “[c]ontingency plans for things such as mass mortality or loss of contract transporter for rendering.” EPA Manual, at 5-18.

**3. Ensuring that clean water is diverted, as appropriate, from the production area**

To ensure that the facility meets the requirement to divert clean water from the production area, the AWMP must be required to describe not only the procedures for doing so, but also the inspection and maintenance schedule necessary to ensure continuous compliance. By not specifically requiring this information, the proposed permit fails to comply with the CWA and the implementing regulations.

**4. Preventing direct contact of confined animals with waters of the U.S.**

Similarly, to ensure that the facility meets the requirement to prevent animals from entering surface waters on the facility, the AWMP must be required to describe not only the procedures for doing so, but also the inspection and maintenance schedule necessary to ensure continuous compliance.

**5. Ensuring that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants**

The proposed permit fails to require the permittees to address the procedures for the handling and disposal of chemicals. This is a required element of the AWMP and the permit establish the information that must be included in the plan. For example, each AWMP must address the proper containers, storage, handling and disposal of all chemicals, the emergency procedures in case of spills and all other operations and maintenance tasks to ensure against the accidental release of chemicals.

**6. Identifying appropriate site-specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, that control runoff of pollutants to waters of the U.S.**

The permit must require the AWMP state not only the specific conservation practices the permittee has and/or will implement, but the schedule for the implementation of those measures and the operation and maintenance schedule to ensure the measures work as designed. Currently, the proposed permit merely quotes the regulatory language, stating that the AWMP must include “[i]dentification of appropriate site-specific conservation practices to be implemented, including buffers, setback areas, or equivalent practices, to control runoff of pollutants to surface water and groundwater.” Proposed Permit § S3.C.3.f. The ambiguity and uncertainty contained in this language is improper as a permit condition. Instead, the permit must make clear that the AWMP must provide the necessary detail, including specific conservation plan elements, implementation, inspections, and management schedules.

Moreover, in addition to the required setbacks identified in the proposed permit, as EPA recommends, the conservation measures should include other conditions such as prohibitions against applying manure in the following areas or under the following conditions:

1. Near or in wetlands, riparian buffer areas, water resources, wells, drinking water supplies, high slope areas, and high erosion areas.
2. Within concentrated water flow areas (vegetated or non-vegetated) such as ditches, waterways, gullies, swales, and intermittent streams.
3. When the hydraulic load/irrigation water exceeds the infiltration rate of the soil.
4. When crops are not being grown.
5. When the ground is frozen or snow-covered.
6. When measurable precipitation is occurring on the day of application.

EPA Manual, at 5-30. Of course, this list is not exhaustive. Each AWMP should include the appropriate site-specific conservation measures, in addition to the required setbacks, necessary to ensure compliance with the permit and to protect Oregon’s waters.

**7. Establishing protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater**

The Proposed Permit requires the AWMP to include “[p]rotocols to land apply manure, litter, or process waste water in accordance with site-specific nutrient management practices that ensure: 1) appropriate agricultural utilization of the nutrients in the manure, litter, or process waste water, and 2) application of nutrient at rates not to exceed the maximum agronomic application rate included in the ODA-approved AWMP.” Proposed Permit, S3.C.g. As discussed below, here the Oregon agencies diverge from the EPA’s terminology on how the permittee should describe the required land application protocols. Without some explanation from the Oregon agencies on how these approaches are related (or unrelated) it is difficult to provide meaningful comment on the appropriateness, and lawfulness, of the Oregon permit.

However, it is clear that the proposed permit's continued reliance on the underlying technical document is misplaced. The proposed permit requires the AWMPs to use the Oregon Agronomy Technical Note #26 (hereinafter "Note"). Proposed Permit s3.C.3.g.(i) ("The NRCS Phosphorous Index, USDA/NRCS Oregon Agronomy Technical Note #26, revised October 2001 or equivalent calculation must be completed for all fields or management units that receive manure, litter or process waste water to determine if nitrogen or phosphorous is the most limiting nutrient."). This Note, in turn, relies on the Revised Universal Soil Loss Equation (RUSLE2). *See, e.g.*, U.S.D.A., Natural Resources Conservation Service, Agronomy Technical Note 26, The Phosphorus Index (June 2008) at 6. The Universal Soil Loss Equation was first published in 1965 in Agriculture Handbook No. 537 by the U.S. Department of Agriculture. It was revised in 1978 and again in 1997 in Agriculture Handbook No. 703 as the Revised USLE (RUSLE). RUSLE has the same formula as USLE, but has several improvements in determining factors including: some new and revised isoerodent maps; a time varying approach for soil erodibility factor; a subfactor approach for evaluating the cover-management factor; a new equation to reflect slope length and steepness; and new conservation-practice values. While the RUSLE is widely accepted, it has limitations. It predicts long-term annual average erosion by water on disturbed slopes. It only predicts sheet and rill erosion. Sheet erosion is the uniform removal of soil from an area without the development of conspicuous water channels. Rill erosion refers to the removal of sod through the cutting of numerous small but obvious water channels where runoff concentrates. Gully erosion on the other hand, is a more dramatic and visible form of soil erosion, but is not predicted by the RUSLE (nor is stream bank erosion or mass wasting). Most of the data supporting the USLE and RUSLE were collected for standard agronomic cropping in the eastern half of the country, not the western part of Oregon. Therefore, the RUSLE is not adequately conservative when a source is near an impaired stream or there is other reason to believe that the source will cause or contribute to violations of water quality standards.

According to the Note, "RUSLE2 and [the Wind Erosion Equation] WEQ do not predict sediment transport and delivery to a water body" but, instead, quantify the potential for sediment and associated phosphorus to move "toward a waterbody." *Id.* at 3. Likewise, erosion rates in the prediction are evaluated using the Surface Irrigation Soil Loss (SISL) model. SISL, however, "does not predict sediment transport and delivery to a water body," instead it predicts delivery to the bottom of irrigated fields. *Id.* And, it is only used in the Eastern Oregon index. The reason for these limitations is that the equations were not developed to ensure the protection of water quality but, instead, were created to protect lands. There is no explanation in the fact sheet as to why these land values are sufficient to protect water quality and/or what adjustments need to be made to assure that they do.

Similarly, the Note discusses how to determine the "shortest distance from the edge of the field down slope to a perennial surface water body, which may include streams, lakes, and those irrigation and drainage ditches that contain water year around." *Id.* at 8. From a water quality perspective, the exclusive focus on protecting perennial surface waters is misplaced. In contrast, see the EPA and NMFS riparian buffers issued for Western Washington agricultural waters. EPA/NMFS, Interim Riparian Buffer Recommendations for Streams in Puget Sound Agricultural Landscapes (Originally proposed as federal Option 3 for the Agriculture Fish and Water (AFW) Process, March 2002) Guidance (Oct. 28, 2013). There the NMFS channel type of "Class I" is

identified by EPA as including “[c]onstructed Ditches, *Intermittent Streams and Ephemeral Streams* that are not identified as being accessed and were historically not accessed by anadromous or ESA listed fish species.” *Id.* (emphasis added). The habitat functions provided by the recommended minimum default width riparian buffer is 35 feet, in order to provide, *inter alia*, “sediment filtration.” *Id.* Therefore, at this point, the Note’s limitation to perennial waters is misplaced in the views of the EPA and NMFS.

A very troubling element is also inserted into the Note that suggests a loophole in the proposed permit. It states that the user of the Note should “[d]etermine the *average width* of existing *and planned* vegetated buffers adjacent to the perennial surface water.” *Id.* at 8 (emphasis added). There is no basis for calculations that are intended to assure protection of water quality to be based on purportedly “planned” vegetative buffers. If such buffers are planned, they must be included in a compliance schedule to ensure they are, in fact, installed and that the commitment to install them is fully enforceable. Otherwise there is no basis upon which the Oregon agencies can rely on such planned activities in establishing the allowable rate of animal wastes allowed to be used. In addition, the Note here also states that “[t]he buffer should meet NRCS technical standards in order to be considered in the rating.” *Id.* at 8. First, the use of the word “should” is overly ambiguous in the context of section 402 of the CWA. It must be “must.” Second, the NRCS technical standards are not intended to protect water quality but, instead, to protect soils and are not sufficient to protect water quality including designated uses. For example, NRCS Riparian Forest Buffers are intended to be limited to 35 feet. *See, e.g.*, NRCS Conservation Practice Standard; Riparian Forest Buffer, Code 291 (July 2010) at 2.<sup>3</sup> In contrast, the NMFS and EPA buffers for this class of waters include a 50-foot minimum for “[p]erennial waters that are not identified as being accessed and were historically not accessed by anadromous or ESA listed fish species” for water quality protection and sediment filtration and a 100-foot minimum buffer for class II fish bearing streams. The difference between buffer widths established by agencies concerned about water quality and designated uses and those that have developed conservation practices for the conservation of soil are stark. Given that an NPDES permit is intended to protect water quality, the minimum buffer widths for water quality protection should govern.

The Oregon agencies’ fact sheet does not discuss the justification for relying on the Note. For example, the Note states that “[t]he wider the vegetated buffer, the more effective it will be in reducing total P transport to surface water.” *Id.* at 4. It goes on to say that “[v]egetated buffers that are commonly used adjacent to perennial water include filter strips (NRCS Standard 393) and riparian forest buffers (NRCS Standard 391).” But there is no discussion in the Note about whether these vegetated buffers that are purportedly “commonly used” are in fact in use in Oregon waters. In fact, we would suggest that the likelihood that the riparian forest buffers are in place near Oregon waters on agricultural lands is close to not at all. Therefore, it is unclear what false assumptions are being used that underlie the outcome of the Note. And, the Oregon agencies have not addressed the precaution stated very clearly in the Note, which reads as follows:

---

<sup>3</sup> Available at [http://efotg.sc.egov.usda.gov/references/public/OR/391std\\_OR-July10.pdf](http://efotg.sc.egov.usda.gov/references/public/OR/391std_OR-July10.pdf)

The Phosphorus Index is an assessment tool to be used by planners and land managers to assess the risk of phosphorus transport toward a water body. It also can be used to identify the critical factors of soil, topography, and management that most influence the movement. Using these factors, the index can help in the selection of management alternatives that would significantly address the potential impact to surface water quality and reduce the risk. The index is intended to be part of the planning process that takes place between the land manager and resource planner.

*The Phosphorus Index is not designed to be used to determine whether land managers are in compliance with water quality regulations or standards that have been established by local, state, or federal agencies. Any attempt to use this index for regulatory purposes would be beyond the intent of the assessment tool and the concept and philosophy of the group that developed it.*

*Id.* at 10 (emphasis added). Yet, despite this very clearly stated precaution, the Oregon agencies proposed to do precisely what the authors state should not be done, to rely on the Note for regulatory purposes by requiring a portion of the permit, namely the AWMP, to include “protocols” for the application of manure, litter, or process waste water that “include” the Note or an equivalent calculation for all fields for the purpose of calculating the maximum nutrient application rate. It is unclear what the legal meaning of “include” is but it most certainly intends use of the Note for regulatory purposes.

In addition, the Oregon agencies have ignored, both in the fact sheet and in the proposed permits, some of the findings of the Note. For example, the Note states that,

Recent research has shown that P can leach through the soil profile, and the risk of leaching is directly related to the soil test P concentration in the soil. The higher the P concentration, the greater the potential for leaching. When subsurface drainage is present, such as perforated pipe tile drains, dissolved and sediment-bound P can enter the drains and be directly transported to surface water at the drain outlet. This factor therefore considers whether tile drains are present in the field, and the soil test P concentration.

*Id.* at 4. However, despite the widespread use of perforated pipe tile drains, immediately adjacent to Oregon waters, no conditions exist in the proposed permit to protect waters from wastes that are applied to those lands and enter waters through tile outlets.

The Note states that “[i]n eastern Oregon, soil test P levels should be determined using the Olsen (sodium bicarbonate) extraction method. In western Oregon, the Bray P1 extraction method should be used.” *Id.* There are no references to mandatory use of either method in the proposed permit.

**9. Identifying specific records that will be maintained to document the implementation and management of the minimum elements described above**

The AWMP must contain a description of the recordkeeping procedures the facility will implement to ensure compliance with the terms and conditions of the permit (including the elements described in the AWMP). As written the proposed permit fails to include this requirement.

To ensure compliance with the permit and the law, the permit must require the permittee to track and record the information necessary to understand and evaluate the operations at the facility. To this end, the permit should require the permittee's recordkeeping protocol to include at least the following parameters:

1. Inspections of stormwater and runoff diversion devices and devices for channeling contaminated stormwater to wastewater containment structures;
2. Inspections of manure, litter, and process wastewater impoundments;
3. The weekly storage facility wastewater level, as indicated on a depth marker;
4. Daily water line inspections;
5. Actions taken to correct deficiencies identified as a result of daily and weekly inspections;
6. Manure/wastewater storage—date of emptying, level before emptying, and level after emptying, or quantity removed (dry manure);
7. The date, time, and volume of any overflow ;
8. Records documenting that mortalities were not disposed of in any liquid manure or process wastewater system and that mortalities were handled to prevent the discharge of pollutants to surface water;
9. On-site precipitation;
10. Animal Inventory;
11. Manure and wastewater sample nutrient analysis test methods and results that will be used to calculate land application rates;
12. Soil sample analysis test methods and results that will be used to calculate land application rates;
13. Manure and wastewater application equipment inspections;
14. Maintenance of all equipment necessary to control discharge and meet permit requirements (e.g., maintenance of land application equipment);
15. Annual calculation of the maximum amount of manure or wastewater to be land applied, before application;
16. Crop planting/harvest dates by field;
17. Crop type and yield by field;
18. For each land application event, the date, rate (tons of manure or gallons of wastewater/acre or pounds of N and P per acre), weather conditions during and for 24 hours before and after application, application method, and equipment used by field or CMU (daily during application);
19. The total amount of N and P applied to each field, including calculations;

20. Lease/Rental/Access Agreements for all land not owned by the operator;
21. Date of each off-site transfer of manure and wastewater;
22. The name and address of the recipient for each transfer;
23. Quantity transferred for each transfer; and
24. Documentation that the most current nutrient analysis was provided to the recipient.

**E. The AWMP Must be Made Available to the Public Electronically**

Public comment is required before a prospective permittee is granted coverage under the general permit. In exchange for being granted a permit to pollute public waters, the permittee should be required to provide the application, which is subject to public review, in an electronic form. It is highly unlikely that a permittee or the consultant hired by the permittee will be typing the application and AWMP on a typewriter. Therefore, its having started its life in electronic form, it is not reasonable to assume that providing it to the Oregon agencies in an electronic form will present any form of hardship to the permittee. Moreover, any portions of a plan that are on paper only can easily be scanned at any photocopy shop at minimal expense. The cost to a permittee of a disk is likely less than printing the application and plan on paper and the is far outweighed by the time and expense of forcing concerned members of the public to visit Oregon state offices. AWMPs are intended to be incorporated by reference into the applicable permits upon approval by ODA, as permit conditions. Therefore, the Oregon agencies need to make the AWMPs as available to the public for review and comment as the language of the permits themselves. That means they need to be provided electronically.

It is unlikely that the Oregon agencies are complying with complying with 40 C.F.R. § 124.10(e), applicable to state programs pursuant to § 123.25, in mailing a copy of the fact sheet, permit application, and draft permit to all persons identified in § 124.10(c)(i)-(iv), namely a variety of state and federal agencies, by sending paper copies to those agencies. In any case, the Oregon agencies are required to provide “copies of the draft permit or draft general permit, as the case may be, statement of basis or fact sheet, and the application” to the public. 40 C.F.R. § 124.10(d)(iv). It would be less expensive for the Oregon agencies to provide these documents electronically than send paper copies to each member of the public who requests one. In contrast, ODA states that, “[a]pplication and permit documents (for example, ATR, renewal application, AWMP) will be available for public review at ODA headquarters and appropriate field offices. If available, electronic copies of documents will be provided upon request.” Proposed Permit S1.H. Making the application and permit documents “available for public review” is not consistent with allowing the public to “obtain . . . copies of the . . . application,” as required by federal rules.

The Oregon agencies have failed to meet federal public notice requirements. Agencies authorized by EPA to issue NPDES permits are required to maintain a mailing list of person who request to be included. 40 C.F.R. § 124.10(ix). DEQ, which is authorized, does maintain such a list. ODA, which is not authorized, has taken it upon itself to: conduct the public notice for approving new coverage under the general permit, renewing permit coverage, or approving proposed substantial changes to the AWMPs. Proposed Permit S1.H. ODA, however, is not

authorized to issue NPDES permits and it does not use the same mailing list that DEQ has compiled. Nor does DEQ tell the public that it must sign up for two mailing lists in order to obtain all of the permitting proposals related to CAFOs. The state is not in compliance with federal regulations.

**F. ODA Cannot Alone Authorize the Portion of the Proposed Permit that Includes the AWMP When Only DEQ is Authorized to Issue NPDES Permits**

The proposed permit includes numerous aspects that require ODA alone, without DEQ, to take actions that authorize discharges under the CWA. *See e.g.*, Proposed Permit at S1.E.1 (ODA approves AWMPs). ODA, however, does not have permitting authority granted by EPA. Therefore, it cannot take actions unilaterally without DEQ's having a role without circumventing the CWA. In addition, public notice requirements key to NPDES permit conditions are managed entirely by ODA. For example, public notice of comment periods for renewal applications and substantial changes to AWMPs are "[e]mailed to interested persons list maintained by ODA." Fact Sheet at 16. Since DEQ is the agency required to maintain lists of interested persons, and does maintain such lists without informing the public that it does not provide 100 percent of the available public comment notices regarding CAFO permits to the public, this provision is simply extralegal.

**III. ISSUES PERTAINING TO CAFO PERMITTING**

**A. The Agencies Must Make a Presumption of Discharge**

The current program of having all AFOs under the NPDES permit is the best approach. As EPA pointed out in the preamble to its proposed 2001 rule, at the time only about 2,500 of the 12,000 CAFOs that should have applied for permits had in fact done so. *See* EPA, National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960, 2963 (Jan. 12, 2001). Following that, based on the continued CAFO-related impairment of neighboring watersheds, EPA concluded that many of these large facilities were "actually discharging" and should have applied for a permit. EPA, National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations, 68 Fed. Reg. 7176, 7180 (Feb. 12, 2003). In response, on several occasions EPA attempted to establish a regulatory scheme that would ensure all facilities that in fact discharge are covered under NPDES permits. *See id.* and 73 Fed. Reg. 70,418 (Nov. 20, 2008). These attempts have failed, however. 77 Fed. Reg. 44,494, 44,495 (July 30, 2012). To be clear, the EPA's ill-fated regulations were undone by imprecise language, not improper intent.

While ODA should not make the same drafting mistake, it must not take the wrong message from EPA's earlier failures. Instead, ODA must regulate all CAFOs that discharge pollutants. To realize this goal, ODA must be certain that a CAFO will not discharge before it can allowed to operate without an NPDES permit. Thus, all CAFOs that are likely to discharge must be assumed to be dischargers, and be given the opportunity to rebut that presumption. This rebuttal can be made by the CAFO where it can demonstrate objectively that it is designed, constructed,

operated, and/or maintained such that it will not discharge, when considering the hydrology, topology, climate, and all other relevant factors of the individual facility.

While this rebuttable presumption should apply equally to all CAFOs, it must apply to those facilities that are likely to discharge. Such facilities include, but are not limited to:

- All Large CAFOs;
- CAFOs that land applying manure, wastes, and litter on fields that have been tilled;
- CAFOs that have discharged in the past;<sup>4</sup>
- CAFOs upstream of any closed or prohibited shellfish harvesting areas;
- CAFOs that may discharge to wastes covered by shellfish growing water criteria;
- CAFOs that may discharge to streams impaired for bacteria, pH, dissolved oxygen, nutrients, and;
- CAFOs with uncovered piles of manure.

**B. The Proposed Permit’s Agricultural Stormwater Exemption Conditions Are Not Adequate**

The discharge of manure, litter or process wastewater to waters of the United States from a CAFO as a result of the application of that manure, litter or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to NPDES permit requirements. 40 C.F.R. § 122.23(e). This is true except “where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, as specified in § 122.42(e)(1)(vi)-(ix), a precipitation-related discharge of manure, litter or process wastewater from land areas under the control of a CAFO is an agricultural stormwater discharge.” *Id.* Therefore, the “site specific nutrient management practices” are key, as well as the permittees’ application of wastewater in accordance with those practices. Without assurances that the practices are adequate and compliance with them is complete, Oregon has no basis upon which to issue an agricultural stormwater exception to discharges.

In order for CAFOs to both identify what parts of their operation qualify as exempt stormwater discharges and to receive that exemption, CAFOs must implement and document basic nutrient management practices. *See, e.g.*, EPA Manual at 1-3. Therefore, whether covered by a WPCF or an NPDES permit, each CAFO must demonstrate a sufficient AWMP and that actual land application of manure was consistent with the plan. The Oregon agencies, however, do not intend to allow public comment on vast majority of AWMPs, thereby undermining their sufficiency. *See also* discussion *supra* re AWMPs.

Proposed permit condition S1.E.4 states that:

---

<sup>4</sup> As EPA has noted, “CAFOs that have discharged in the past will discharge in the future, and are therefore expected to obtain a permit, unless the conditions that led to the discharge are fully remedied.” James Hanlon, EPA, to Water Division Directors, Memorandum Re: Concentrated Animal Feeding Operation Program Update after National Pork Producers Council v. EPA (Dec. 8, 2011) at 2.

precipitation-related discharges that qualify as agricultural stormwater discharges from land application areas are not subject to NPDES permit requirements. For discharges from the land application area to meet the definition of agricultural stormwater, manure and waste water must be applied in accordance with site specific practices listed in the ODA-approved AWMP that ensure appropriate agricultural utilization of nutrients.

Proposed Permit at 7. This condition includes only manure and wastewater, omitting “litter” as required in 40 C.F.R. § 122.23(e). In addition, because ODA does not have permitting authority, ODA is not authorized to approve AWMPs that provide for federal exemptions.

### **C. Renewal of Permit Coverage is Inconsistent with Federal Requirements**

The proposed permit requires that new applicants submit a Notice of Intent, called by Oregon an Application to Register, and an Nutrient Management Plan, called by Oregon an Animal Waste Management Plan. Proposed Permit § S1.C.1. However, sources seeking to renew permit coverage are only required to submit an application without also submitting a Nutrient Management Plan or AWMP, despite the fact that such a plan is both part of the required application, that the plan is subject to public notice and comment, and that it becomes part of the permit conditions. 40 CFR § 122.42(e)(5). In addition, there is no reference to the fact that the Oregon agencies are required to make a preliminary determination that the NOI meets the requirements of 40 C.F.R. §§ 122.21(i)(1) and 122.42(e) before it goes out to public comment. Instead, this section of the proposed permit just skips from submission of an application to “notification of permit coverage.” Proposed Permit at 7. Table 2 does not even hint at the two-step process. *Id.* at 9.

### **D. Oregon Has Ignored the Process of Designation as a CAFO**

As EPA summarizes, “[f]or an AFO to be designated as a CAFO, the Director must determine that the AFO is a significant contributor of pollutants to waters of the U.S. 40 CFR part 122.23(c). Once an operation is designated as a CAFO, it must seek coverage under an NPDES permit and, among other things, develop and implement an NMP.” EPA Manual at 2-13. In its guidance, EPA itemizes the factors set out in 40 C.F.R. § 122.23(c)(2) and the associated designation factors that can be assessed during a designation inspection. Of relevance to all CAFOs in Oregon is the designation factor “location of the operation relative to waters of the U.S.” EPA Manual at 2-14 (Table 2-3). EPA notes that factors for inspection focus include the following:

- Location of waterbodies
- Location of floodplain
- Proximity of production area and land application area to waters of the U.S.
- Depth to groundwater, direct hydrologic connection to waters of the U.S.
- Located in an impaired watershed

*Id.* Of particular importance to the western areas in Oregon where rainfall is high, is the factor “[m]eans of conveyance of animal wastes and process wastewaters into waters of the U.S.” This includes evaluating “existing or potential man-made (includes natural and artificial materials) structures that could convey waste.” *Id.* Such means of conveyance would include tile drains, used widely in former wetlands that now serve as pastures and locations for land application of manure. Similarly, the factor “[s]lope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of manure into waters of the U.S.” covers such items as “drainage controls,” “climate,” “amount of rainfall,” “high water table,” and “buffers.” *Id.*

Yet despite these considerations, which quite obviously apply to many areas of Oregon, the general permit fact sheet does not discuss any of these issues, including whether to incorporate them as prohibitions and conditions in the general permit, to identify them as flags for why sources are unlikely to be covered by the general permit, or, as they are set out here, to evaluate AFOs for designation as CAFOs. There is simply no recognition by the Oregon agencies that the process of designation pursuant to 40 C.F.R. § 122.23(c) even exists.

#### **E. The Proposed Permit’s Setback Requirement is Inadequate**

The proposed permit requires setbacks or vegetated buffers under certain circumstances, namely when land application areas are “adjacent to any surface waters, open tile intake structures, sinkholes, well heads, or other conduits to surface water or groundwater.” Fact Sheet at 20. This requirement is mirrored in the requirements for the AWMP which must include a descriptions of setbacks and vegetated buffers. *Id.* The permit evaluation states that “[a]cceptable setbacks, vegetated buffers, or equivalent measures include” either a 100 ft. non-vegetated, non-managed buffers or a 35 ft. vegetated, managed buffers “if approved by ODA.” *Id.* These setbacks are the federal minimums, not necessarily sufficient to ensure that discharges do not cause a violation of water quality standards as required for NPDES permits. 40 C.F.R. § 122.44(d). In fact, the “best” available science Oregon has access to now are buffer widths established by the National Marine Fisheries Service (NMFS), subsequently adopted by EPA and the Washington Department of Ecology as a requirements for National Estuary Program (NEP) funding in Puget Sound for any “agricultural land owner whose property borders fresh or estuarine waters must establish and maintain a riparian buffer on all water courses on the property” who seeks to be eligible for NEP implementation funding. *See* EPA, Riparian Buffer Term and Condition and FAQs (Dec. 3, 2013)<sup>5</sup>. These riparian buffers range from a minimum of 35 feet for constructed ditches and non-anadromous intermittent and ephemeral streams to 100 feet for fish-bearing waters. *See* EPA, Interim Riparian Buffer Recommendations for Streams in Puget Sound Agricultural Landscapes (Originally proposed as federal Option 3 for the Agriculture Fish and Water (AFW) Process, March 2002) Guidance (Oct. 28, 2013).<sup>6</sup> Unlike

---

<sup>5</sup> Available at [http://www.ecy.wa.gov/puget\\_sound/docs/grants/2013\\_riparian\\_faq.pdf](http://www.ecy.wa.gov/puget_sound/docs/grants/2013_riparian_faq.pdf)

<sup>6</sup> Available at <http://www.ecy.wa.gov/programs/wq/council/AFWFedBufferRecommendations.pdf>

the buffers discussed in the proposed permit, the riparian buffers in this document are all vegetated. This agricultural buffer matrix is based on work set out in a NMFS Science Center memorandum. Memorandum from Usha Varanansi, Northwest Fisheries Science Center, to Robert Lohn, Re: Review “Efficacy and Economics of Riparian Buffers on Agricultural Lands” (March 17, 2003). The Oregon agencies need to reconcile the use of 100-foot non-vegetated buffers and 35-foot vegetated buffers proposed for use in this permit with the EPA/NMFS riparian buffer matrix. Likewise, the Oregon agencies must address the EPA review of peer-reviewed scientific literature on use of riparian buffers for nitrogen removal. Mayer, P.M., *et al.*, *Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness: A Review of Current Science and Regulations*, EPA/600/R-05/118 (2006). This review demonstrated that “[w]hile some narrow buffers (1-15 m) removed significant proportions of nitrogen, narrow buffers actually contributed to nitrogen loads in riparian zones in some cases. Wider buffers (>50 m) more consistently removed significant portions of nitrogen entering a riparian zone.” *Id.* at iv. Moreover, EPA concluded that “[p]roper design, placement, and protection of buffers are critical to buffer effectiveness. To maintain maximum effectiveness, buffer integrity should be protected against soil compaction, loss of vegetation, and stream incision.” *Id.* This finding is consistent with EPA’s recommendations for nutrient plans: “Where applicable, O&M should also be included as part of the site-specific terms. Specific O&M procedures are often required for a practice to function efficiently throughout its expected life span.” EPA Manual at 5-30. In particular, the Oregon agencies need to justify the use of the federal minimum CAFO buffers where the receiving waters are water quality limited for bacteria, pH, dissolved oxygen, sedimentation, biocriteria, and nutrients.

Additionally, monitoring and reporting of compliance with this setback requirement is necessary. We urge the Oregon agencies to adopt an approach of requiring photographic demonstration of compliance. Nearly every person in the United States has the capacity to take electronic photographs, whether with cameras, cellphones, or tablets. It is, therefore, a simple method for permittees to demonstrate compliance. The permit should require that the applicant write or place arrows on the “topographic map of the geographic area in which the CAFO is located showing the specific location of the production area,” required by the proposed permit, demonstrating the locations and directions of the photographs taken. In addition, the permit should require maps of the “total number of acres under control of the applicant available for land application of manure, litter, or process waste water,” and require the same information be provided to demonstrate riparian buffers are in place for those acres that conform to the permit requirements. The Oregon agencies should provide in the permit for options to demonstrate the measurements of the riparian buffers in the photographs. Finally, if riparian buffers in compliance with permit requirements are not currently in place, a permittee must be provided with a compliance schedule to come into compliance by a date certain.

In addition, the Oregon agencies must ensure that setbacks are applied where they are required. Setbacks are required “from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied.” 40 C.F.R. 412.4(b)(1). Examples provided by the federal regulations of “conduits to surface waters include but are not limited to: Open tile line intake structures, sinkholes, and agricultural well heads.” *Id.* The proposed permit must require that permittees identify on maps the locations of these and other conduits

and demonstrate photographically that the applicable buffers are being used to ensure the setbacks around these conduits. In addition, photographic evidence must be provided that tile intakes are in fact closed.

According to EPA, CAFOs should not apply manure in the following areas or under the following conditions:

- Near or in wetlands, riparian buffer areas, water resources, wells, drinking water supplies, high slope areas, and high erosion areas.
- Within concentrated water flow areas (vegetated or non-vegetated) such as ditches, waterways, gullies, swales, and intermittent streams.
- When the hydraulic load/irrigation water exceeds the infiltration rate of the soil.
- When crops are not being grown.
- When the ground is frozen or snow-covered.
- When measurable precipitation is occurring on the day of application.

EPA Manual at 5-30. In order to ensure that the permittee understands where these prohibitions apply as well as to incorporate the prohibitions as conditions of the permit, the AWMP must provide a map identifying wetlands, riparian buffers, water resources, wells, drinking water supplies, high slope areas, high erosion areas, ditches, waterways, gullies, swales, and intermittent streams on the property of the permittee and the lands used for land application. The map should also identify waters that are impaired by pollutants that are present in the discharges the CAFOs are not supposed to have.

**F. The Proposed Permit's Reliance on DEQ's Water Quality Standards for Nutrients Undermines its Efficacy**

The fact sheet summarizes the Oregon agencies' requirements for an AWMP:

ODA will typically require an agronomic balance for nitrogen and a phosphorus balance if the NRCS phosphorus index for the soil in land application field(s) indicates that phosphorous is the most limiting nutrient. A phosphorus balance may also be required if a CAFO is within a watershed that is designated by the state as water quality limited for phosphorus.

Fact Sheet at 22. The likelihood that DEQ will designate a watershed as water quality limited for phosphorus is not high regardless of the current state of water quality. That does not mean that there are no problems with high levels of phosphorus. Oregon has no numeric criteria for nutrients and as a result, has very few listings on the 303(d) list of impaired waters for excess nutrients. As pointed out in a letter to federal agencies,

A review of the Oregon 2010 integrated report database demonstrates either that Oregon is unique among states in not having a nutrient problem or it simply lacks the regulatory structure and data required under the Clean Water Act to identify and solve nutrient pollution. As the following table illustrates, DEQ has

concluded that the vast majority of samples it has evaluated are inadequate to determine whether there is a nutrient problem in Oregon’s waters – precisely mirroring the federal agencies concerns about lack of nutrient data – and resulting in almost no findings that Oregon waters are impaired by nutrients, which is an extremely unlikely proposition. The lack of findings on nutrient impairment has a direct effect on the ability of ODA to enforce its own rules because those rules are tied to DEQ’s water quality standards.

Letter from Nina Bell, NWEA, to Michael Bussell, EPA, and John King, NOAA, Re: Oregon Coastal Nonpoint Pollution Control Program; EPA and NOAA’s Interim Approval of Agricultural Management Measures for Oregon (May 2, 2012) at 23 (footnotes omitted). The following chart was included in the letter to illustrate the underlying problem with Oregon’s nutrient standards:

	Potential concern/ insufficient data	TMDL completed	attaining	303(d) list
nutrients	224	0	0	0
nitrates	9	3	0	1
chlorophyll a	approx. 250	19	approx. 125	16
phosphorus	2	55	5	0
phosphate phosphorus	approx. 750	0	0	0

In other words, the statement that a phosphorus balance may be required if DEQ designates water as impaired for phosphorus is a hollow, and regulatorily meaningless, statement.

**G. CAFO Permits Must Cover Transfer of Animal Wastes to Third Parties**

The proposed permit requires that sources of animal waste maintain manure, litter, and process waste water transfer or export records and that prior to making such transfers, a large CAFO provide the recipient of such wastes with a manure nutrient analysis conducted within the last 12 months. Proposed Permit at S2.K. The permit, however, does not hold the CAFO operator responsible for discharges associated with those wastes. As such, the proposed permit encourages permitted sources to send their wastes to unpermitted lands where the wastes can be disposed of without regard to the conditions the permit has placed on their disposal to ensure that water quality is protected. While requiring transfer or export records is a good first step, it is by itself not sufficient. In addition to such manifests, the Oregon agencies should require one of the following options: (1) recipients’ being covered by a CAFO permit; (2) recipients signing a contract with the CAFO producer stating they will comply with the permit terms and providing the same reporting required by the permit; (3) a third party certification that the terms of the permit with regard to use of manure were met on the recipient’s property; (4) a signed document

attesting to the belief of the CAFO producer that the recipient will properly apply the wastes and that he or she has no knowledge that the recipient has a history of improperly applying wastes.

#### **H. The Proposed Permit Should Eliminate the Allowance for Waste Disposal on Frozen Soil**

ODA should eliminate the allowance for permittees to apply manure, litter, or process wastewater to frozen soil. *See* Proposed Permit, S2.C(3) (stating that a permittee may apply manure to frozen soil so long as the land application complies with state water quality standards, the process of such application is addressed in the permittee's AWMP, and unauthorized discharges will not occur). Winter is the least efficient time to fertilize the soil and is the season where permittees are at the highest risk of unauthorized discharges. It is also the time that river flows are high and violations of water quality standards are common. Manure does not easily infiltrate frozen soil because of its impermeability. There is no plant growth to constitute "agronomic" use. When combined with increased precipitation or the thawing of snow, the likelihood of runoff being discharged into protected waters dramatically increases. Application of manure to frozen soil significantly increases pollutant discharge and is the reason for the common prohibition on application to frozen ground. Indeed, EPA has taken the position that there should be no application on frozen or snow covered ground, except in very limited circumstances. *See, e.g.*, EPA Manual at 5-30; 6-15. ODA recognizes this risk. *See, e.g.*, ODA, Manure Spreading Advisory, Confined animal feeding operations at [http://www.oregon.gov/ODA/NRD/pages/cafo\\_front.aspx#CAFO\\_program\\_documents](http://www.oregon.gov/ODA/NRD/pages/cafo_front.aspx#CAFO_program_documents)<http://www.oregon.gov/> ("Other High Risk Factors Include: Soils are saturated, the water table is within 24-inches of the surface and/or flowing tiles, is frozen more than one inch down, has thin vegetation (<70% density), and/or has high risk areas. High risk areas are swales, trenches, ditches, ponded areas, or other conduits that would channel water from the field to adjacent water way. Do not apply to high risk fields! Wait for them to become more suitable before applying.") The proposed permit fails to adequately mitigate this risk of discharge.

If ODA chooses to keep this provision and take the environmental gamble, the agencies should conduct a field-by-field inspection before winter applications, such as Michigan's CAFO general permit requires. The state then prioritizes the most environmentally appropriate fields for winter application if it must occur. ODA proposes no such provisions and leaves this determination to the individual producers via their AWMPs. This self-regulation and the exception to the prohibition on frozen soil application is inadequate to protect our waters in the colder months. Given the known contributions of Oregon CAFOs to water quality impairment, this policy is unsupported and contrary to law.

#### **I. The Proposed Permit Cannot Avoid the Need for Compliance Schedules**

As the fact sheet explains, "[l]anguage [was] added to clarify that a schedule for improvement projects is allowed provided permit compliance is maintained." Fact Sheet at 4; Proposed Permit at S3.C.2. The language of this provision leaves unclear precisely what it means. If improvement projects are required to meet permit conditions, including AWMP elements, the permittee should be issued a compliance schedule consistent with federal and state law. Only a

compliance schedule can provide both permit shield protection to the permittee and protect the public by ensuring that a fully enforceable schedule of actions is taken as soon as possible. By not terming the “schedule for improvement projects” a compliance schedule, the Oregon agencies appear to be by-passing legal requirements and leaving ambiguous how a pollution source can be both in compliance with a permit (and AWMP) and in need of the improvement projects simultaneously. We urge use of the formal term that will provide clarity and guarantee performance.

#### **IV. THE PROPOSED PERMIT DOES NOT MEET FEDERAL REQUIREMENTS TO ENSURE THAT DISCHARGES DO NOT CAUSE OR CONTRIBUTE TO VIOLATIONS OF WATER QUALITY STANDARDS**

##### **A. NPDES Permits Must Not Allow a Covered Discharger to Cause or Contribute to Violations of Water Quality Standards**

##### **1. The Legal Definition of a Water Quality Standard**

All NPDES permits including general permits must meet federal requirements that prohibit pollution sources from causing or contributing to water quality standards violations. Such standards are defined as the designated beneficial uses of a water body, in combination with the numeric and narrative criteria to protect those uses and an antidegradation policy that, *inter alia*, protects “existing uses.” 40 C.F.R. § 131.6. The CWA requires numeric criteria adopted in water quality standards to protect the “most sensitive use.” 40 C.F.R. § 131.11(a)(1).

However, since it is not always possible to establish numeric criteria, the task of evaluating whether standards have been met also requires an assessment of the impacts to designated beneficial uses, protection of existing uses, and the application of narrative criteria. In *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 114 S. Ct. 1900, 1912 (1994), the U.S. Supreme Court underscored the importance of protecting beneficial uses as a “complementary requirement” that “enables the States to ensure that each activity – even if not foreseen by the criteria – will be consistent with the specific uses and attributes of a particular body of water.” The Supreme Court explained that numeric criteria “cannot reasonably be expected to anticipate all of the water quality issues arising from every activity which can affect the State’s hundreds of individual water bodies.” *Id.*<sup>7</sup> In short, a permitting agency cannot

---

<sup>7</sup> EPA regulations implementing section 303(d) of the CWA reflect the independent importance of each component of a state's water quality standards:

For the purposes of listing waters under §130.7(b), the term "water quality standard applicable to such waters" and "applicable water quality standards" refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements.

40 C.F.R. § 130.7(b)(3). When EPA adopted these regulations it clearly stated the expectations it

ignore the narrative criteria and use only numeric criteria where numeric criteria do not exist or where the numeric criteria fall short of providing full support for designated uses.

## **2. Narrative Criteria Ensure Full Protection of Designated Uses Particularly Where Oregon Does Not Have Numeric Criteria for the Protection of Aquatic Life and Human Health**

EPA regulations mirror the statute's prohibition on point sources causing or contributing to violations of water quality standards. The regulations clearly specify that narrative criteria must be evaluated and must be met, and that limits must be established to ensure they are met. *See* 40 C.F.R. §§ 122.44(d)(1), 122.44(d)(1)(i), 122.44(d)(1)(v), 122.44(d)(1)(vi). In contrast to the legal definition of a water quality standard and the EPA permitting regulations, the fact sheet does not even mention narrative criteria. This failure to evaluate compliance with narrative criteria, along with designated uses and the antidegradation policy, is plainly inconsistent with legal requirements. Instead, the Oregon agencies must also ensure compliance with Oregon's narrative criteria, which include the following:

Toxic substances may not be introduced above natural background levels in waters of the state in amounts, concentrations, or combinations that may be harmful, may chemically change to harmful forms in the environment, or may accumulate in sediments or bioaccumulate in aquatic life or wildlife to levels that adversely affect public health, safety, or welfare or aquatic life, wildlife, or other designated beneficial uses.<sup>8</sup>

---

had of states:

In today's final action the term "applicable standard" for the purposes of listing waters under section 303(d) is defined in § 130.7(b)(3) as those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses and antidegradation requirements. In the case of a pollutant for which a numeric criterion has not been developed, a State should interpret its narrative criteria by applying a proposed state numeric criterion, an explicit State policy or regulation (such as applying a translator procedure developed pursuant to section 303(c)(2)(B) to derive numeric criteria for priority toxic pollutants), EPA national water quality criteria guidance developed under section 304(a) of the Act and supplemented with other relevant information, or by otherwise calculating on a case-by-case basis the ambient concentration of the pollutant that corresponds to attainment of the narrative criterion. Today's definition is consistent with EPA's Water Quality Standards regulation at 40 CFR part 131. EPA may disapprove a list that is based on a State interpretation of a narrative criterion that EPA finds unacceptable.

<sup>8</sup> OAR 340-041-0033(2).

Notwithstanding the water quality standards contained in this Division, the highest and best practicable treatment and/or control of wastes, activities, and flows must in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dissolved chemical substances, toxic materials, radioactivity, turbidities, color, odor, and other deleterious factors at the lowest possible levels.<sup>9</sup>

The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or that are injurious to health, recreation, or industry may not be allowed;<sup>10</sup>

The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shellfish may not be allowed;<sup>11</sup>

The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry may not be allowed;<sup>12</sup>

Objectionable discoloration, scum, oily sheens, or floating solids, or coating of aquatic life with oil films may not be allowed;<sup>13</sup>

Aesthetic conditions offensive to the human senses of sight, taste, smell, or touch may not be allowed;<sup>14</sup>

Runoff contaminated with domesticated animal wastes must be minimized and treated to the maximum extent practicable before it is allowed to enter waters of the State;<sup>15</sup>

Bacterial pollution or other conditions deleterious to waters used for domestic

---

<sup>9</sup> OAR 340-041-0007(1).

<sup>10</sup> OAR 340-041-0007(9).

<sup>11</sup> OAR 340-041-0007(10).

<sup>12</sup> OAR 340-041-0007(11).

<sup>13</sup> OAR 340-041-0007(12).

<sup>14</sup> OAR 340-041-0007(13).

<sup>15</sup> OAR 340-041-0009(3).

purposes, livestock watering, irrigation, bathing, or shellfish propagation, or otherwise injurious to public health may not be allowed;<sup>16</sup>

Waters of the State must be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities.<sup>17</sup>

In addition to federal prohibitions on causing and contributing to violations of water quality standards, Oregon's antidegradation policy prohibits the further degradation of water quality limited waters. OAR 340-041-0004(7).

**B. The Proposed Permit Unpermissibly Relies Upon an Assumption CAFOs Do Not Discharge**

The fact sheet explains how no aspect of meeting water quality standards is an issue for CAFOs covered under the proposed permit. In its section on antidegradation, the fact sheet states that sources covered under the permit

will not degrade existing water quality because: 1) the permit prohibits discharge in most cases and, when discharges are allowed, they must not cause or contribute to a violation of state water quality standards, and 2) there is no on-going discharge allowed by the permit.

Fact Sheet at 8. Likewise, the manure spreading coverage of the proposed permit is not a standards issue because

the NPDES General Permit #01 requires that wastes be applied on land at agronomic rates and discharge is essentially prohibited, there will be no environmentally significant increase in discharge load. . . . Application on land at agronomic rates is not considered an increase in wasteload pursuant to OAR 340-041-0350(5)(c).

*Id.* Finally, in a similar vein, there are no concerns about meeting the requirements of TMDLs because the proposed permit "does not allow this type of discharge" that would "allow the discharge of pollutants that could affect parameters for which a water body may be water quality limited." *Id.* While the agencies recognize that the receiving streams for "many" of the CAFOs that will be covered under the proposed permit are "listed as water quality limited for dissolved oxygen, temperature, and bacteria," there is purportedly no concern about meeting any TMDL requirements because

ODA and DEQ do not expect water bodies to fail to meet water quality standards

---

<sup>16</sup> OAR 340-041-0009(4).

<sup>17</sup> OAR 340-041-0011.

as a result of CAFO discharges during large rainfall events because of high flows in the receiving water body and the diluted nature of discharges should they occur. Discharges are also not expected during summer months, when water bodies are typically limited for dissolved oxygen, temperature, and bacteria, because of fewer rain events.

As provided in the 2009 NPDES General Permit #01 and maintained in the renewal, permit coverage may be terminated if TMDLs are established that identify a CAFO's discharge during large rainfall events as a contributor to a stream that is water quality limited.

*Id.* at 9. All of these assertions are based on the fact that the permit's prohibition is all the analysis that is required by the Oregon agencies. In other words, by saying that the permit does not allow a violation, that makes it so. If this proposition were true, DEQ would not need to analyze the discharges of any source or consider appropriate permit conditions for any permit because it could merely assert the same: DEQ includes boilerplate language that prohibits a covered discharge from causing or contributing to violations of water quality standards. By asserting this as the basis for not evaluating the operations and their effects on water quality, the Oregon agencies in essence attempt to eviscerate the Clean Water Act and its implementing regulations.

A fact sheet is not the place for the agencies to discuss expectations but rather for the agencies to discuss facts. *See infra*. This fact sheet does not discuss any facts. There are plenty of facts available to the Oregon agencies that demonstrate that the assumptions asserted above that CAFOs already comply with permit limits and, therefore, will continue to comply with permit limits in the proposed permit, are false. For example, the Oregon agencies assert their expectation that discharges from CAFOs will not occur during summer months when more receiving waters are violating standards. Yet a study that evaluating the use of antibiotic-resistant bacteria as a means of identifying pollution sources concluded that “[b]acteria concentrations can be high during late summer low flow periods.” James Moore, Robert Bower, Oregon State University, *Identifying Sources of Fecal Coliform Delivered to Tillamook Bay* (July 2000) at 21. Specifically this study found that “[t]he dairy contributions, as concentrations of ~ 30 and ~ 40 CFU/100 ml, were highest during the June and September sampling. By this time the rains have tapered off and the soils are drying up.” *Id.* at 14.

In another example, a study of data from 1996 and 2002 on the Tillamook, found that:

Concentrations of [fecal coliform bacteria] tended to be *highest by a considerable margin* in the Tillamook River, which has a relatively small watershed area, a high proportion of agricultural land use within the watershed, *and more dairies and dairy waste per unit area than any of the other watersheds* (Jackson and Glendening, 1982). The Trask River, which contributes the *largest bacterial loads*, has *the largest number of dairies, confined animal feedlot operation (CAFO) permits*, and human population (Sullivan et al., 1998a). The forest/agriculture interface generally did not exhibit FCB concentrations that were

above the 200 cfu/100 ml standard, supporting the earlier findings that the major sources of FCB contamination are found in the agricultural/ urbanized portion of the basin (Jackson and Glendening, 1982).

Timothy J. Sullivan, et al., *Assessment of Water Quality in Association with Land Use in the Tillamook Bay Watershed*, Oregon, USA (Feb. 2005) (emphasis added). Likewise, a study on genetic markers on fecal coliform bacteria in the Tillamook basin concluded that “the values for four sampling sites along the Tillamook River, affected by rural residential areas and more than 30 CAFO facilities, exceeded the Oregon *E. coli* standards more than 75% of the time, suggesting that this portion of the river is severely polluted throughout the year.” Orin C. Shanks, et al., *Basin-Wide Analysis of the Dynamics of Fecal Contamination and Fecal Source Identification in Tillamook Bay, Oregon* (May 2006) at 5543-5544. This study also concluded that,

this source of fecal material from the 185 permitted CAFO facilities and other animal-feeding operations consistently affected receiving waters, producing a basin-wide probability of detection of [ruminant origin bacteria] that was near 75%. This percentage rose to more than 90% during periods of moderate precipitation in the spring and fall[.]

*Id.* at 5544.

This is not a new problem. A study on attempting to control manure runoff from dairy operations in the Tillamook that took place in 1980-1990 demonstrated that “[t]raditional BMPs were not adequate to solve manure runoff problems.” North Carolina State University, Water Quality Group, Oregon Tillamook Bay (RCWP 18).<sup>18</sup> Then, as now, “[b]acteria concentrations continue to exceed water quality standards at both bay and tributary sites. Concentrations remain significantly higher downstream of farm operations than upstream.” *Id.* at 6.

The age of this report is not consequential because if there is one thing that characterizes the Tillamook it is the persistence of the dairy waste problem. Just days ago, on May 21, 2014, the Food Safety and Animal Health Program of the Oregon Department of Agriculture reported that the most recent annual review of the Tillamook Bay “revealed that the Upper Bay management area had a station failing to meet the minimum water quality standards.” Email from Alex Manderson, ODA, to Will Fargo, ODA et al., Re: Revised Tillamook Management Plan (May 21, 2014). As a result of this management plan change,

The Upper Bay and Flower Pot management areas will be **closed a minimum of 14 high tides** for any closure (river height or rainfall). The closure length was formerly a minimum of 10 high tides. This extended closure period is intended to ensure water quality returns to an acceptable level following a closure before harvesting can occur.

---

<sup>18</sup> Available at <http://www.water.ncsu.edu/watershedss/info/rcwp/orprof.html>

*Id.* (emphasis in original). In light of evidence that dairies, dairy wastes, and sources covered by CAFO permits are associated, not only with high levels of bacteria, but the highest levels of bacteria, the Oregon agencies cannot choose to not evaluate the efficacy of the current CAFO permit in achieving the presumed ends of the proposed permit. Nor can the Oregon agencies maintain that they need not evaluate the efficacy of the proposed permit because they simply jump to the end of the analysis and claim the permit's terms will achieve the permit's stated ends. In light of the evidence that the very same permit conditions are not achieving those ends, the permit conditions that have been tried and used must be evaluated and must be amended to achieve the stated goals of the Act and implementing regulations. Yet the Oregon agencies' fact sheet proudly notes that "[t]he general permit requires the same or similar monitoring requirements, effluent limitations, and operating conditions for the categories." Fact Sheet at 6.

These studies focus on bacterial pollution of the Tillamook. The Oregon agencies, however, are not permitted to focus exclusively on bacteria just because the Tillamook Bay National Estuary Project (TBNEP) has chosen to do so. As they note in the fact sheet, many receiving waters are water quality limited for dissolved oxygen and temperature, as well as bacteria. This fact is supported by the TBNEP – "Reducing bacteria inputs, enhancing key habitat, and addressing erosion and sedimentation problems will also reduce other water quality problems, such as excessive nutrients and low dissolved oxygen."<sup>19</sup> – but the NEP's rationale cannot be used to ignore pollutions that are limited or of concern in developing NPDES permits. And, in addition, there are indications of other parameters not meeting water quality standards, such as nutrients. See Sullivan *et al.* ("Extensive information about TSS and nutrient levels has not previously been collected, but available data suggested that nutrient levels were moderately high in some areas of the Tillamook Basin (TBNEP, 1997). These are of concern, since estuarine eutrophication is an increasing problem nationwide (National Oceanic and Atmospheric Administration, 1996)."). This was confirmed several years later:

There is a need to continue monitoring for N and P in the watershed because of the importance of eutrophication as a potential threat to any estuary, including Tillamook Bay. In addition, analyses conducted for the Wilson and Miami Rivers within the context of recent watershed assessments by E&S for the TCPP show historical trends of increasing NO<sub>3</sub> concentrations in both of these rivers.

Tillamook Estuary Project, "2001 Storm Sampling,"<sup>20</sup> at 6. As was stated then, the following remains true:

It is not known, however, how large wetland or riparian filters need to be in order

---

<sup>19</sup> Tillamook Bay National Estuary Project, *Restoring the Balance: Comprehensive Conservation and Management Plan for Tillamook Bay, Oregon* (Dec. 1999).

<sup>20</sup> Formal title and author not provided. Available at <http://www.tbnep.org/reports-and-publications.php>

to optimize removal efficiencies for bacteria, sediment, or nutrients. Optimal design features such as buffer widths, hydrologic retention, and plant species mixes are poorly known. These issues are important because farmers are rightfully reluctant to remove large portions of their farms from productivity in order to improve water quality. What is needed is better information regarding the extent to which effective filtration can be provided with minimal loss of productive land.

*Id.* at 16.

While the bulk of nutrients may be coming from upstream forestry operations, the downstream contributions of permitted operations must be controlled to account for the total levels of pollution so that the permitted sources do not “contribute” to water quality standards violations. There is no discussion in the fact sheet concerning levels of nutrients in receiving waters.

**C. Monitoring and Limitations to Discharge of So-Called “Emerging Pollutants,” Namely Pharmaceuticals Are Required**

As set out above, the Oregon agencies must evaluate compliance with Oregon’s narrative criterion and designated use support. In evaluating compliance with this narrative criterion, the Oregon Agencies must assume the discharge of pollutants known to be discharged by the covered sources. For CAFOs this includes drugs, such as antibiotics, that are frequently a part of the feed used in the operation. The lack of numeric criteria does not excuse avoiding regulation of many pollutants, such as microbials and other so-called emerging pollutants.

EPA recently evaluated technical information on pathogens, antimicrobials, and hormones insofar as they may affect water quality. *See* EPA, Literature Review of Contaminants in Livestock and Poultry Manure and Its Implications (July 2013). As a consequence of that review, EPA notes that 60-80 percent of livestock and poultry routinely receive antimicrobials. *Id.* at 37. EPA states that “[t]he occurrence of antimicrobials in soils, sediment, surface water, and ground water has been documented, particularly in close proximity to livestock and poultry operations.” *Id.* at 36. It cites one study that found “antimicrobial compounds present in 67% of ground water and surface water samples collected near poultry operations and 31% of ground water and surface water samples collected near swine operations.” *Id.* And EPA cites another study where “tetracyclines were detected in soils, and sulfonamides were detected in shallow ground water near large dairy livestock production facilities,” noting that dairy operations generally use fewer microbials than other CAFOs. *Id.*

EPA has estimated that “720,000 pounds of natural and synthetic hormones were excreted by livestock and poultry in 2000.” *Id.* at vi. Hormones are a water quality issue, according to EPA, because they are “biologically active at very low levels and are classified as endocrine disruptors. In aquatic ecosystems, hormones may affect the reproductive biology and fitness of aquatic organisms.” *Id.* Specifically with regard to CAFOs, EPA notes that “[l]imited recent research suggests that exposure to hormones from livestock operations and manure may adversely impact the reproductive endocrinology of some fish.” *Id.* And, EPA finds that “recent studies have

detected hormones in manure, runoff, and in surface waters near livestock and poultry operations.” *Id.* at 44.

On the basis of significant information that facilities proposed to be covered by the CAFO general permit will discharge antimicrobials and hormones to receiving streams, the Oregon agencies must comply with the requirements to

control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.

40 C.F.R. § 122.44(d)(1)(i). At a minimum, applicable portions of Oregon’s water quality standards include the use designations for each basin set out at OAR 340-041-0101 to 3040 and the narrative criterion at OAR 340-041-0007(1). Federal regulations further require that in determining whether there is reasonable potential, “the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent[.]” 40 C.F.R. § 122.44(d)(1)(ii). If reasonable potential is found, “the permit must contain effluent limits for that pollutant.” 40 C.F.R. § 122.44(d)(1)(iii).

The proposed permit requires discussion of this issue in the fact sheet, reporting of the use of antimicrobials and hormones by applicants, and monitoring and reporting.

#### **D. The Proposed Permit Includes An Impermissible Permit Shield**

The proposed permit purports to ensure that sources authorized to discharge pursuant to the permit will not discharge except in extenuating circumstances. The Oregon agencies point to the permit’s provisions that allow discharges “only...in rare circumstances provided water quality standards are met. *See, e.g.,* Fact Sheet at 5 (Table 4); Proposed Permit at S2.A (“The permit registrant is prohibited from discharging manure, litter, or process waste water to surface water and groundwater of the state except as allowed in S2.B and S2.C *and provided these discharges do not cause or contribute to a violation of state water quality standards.*”) (emphasis added). As discussed above, the assertion that the permit will actually achieve this prohibition is the basis upon which the Oregon agencies have failed to meet federal permitting requirements. Yet at the same time, the proposed permit includes the following language:

Except for any toxic effluent standards and prohibitions imposed under section 307 of the federal Clean Water Act (CWA) and groundwater protection requirements established under OAR 340-040, *a permit registrant in compliance with this permit during its term is considered to be in compliance, for purposes of enforcement, with state water quality laws and relevant sections of the CWA, as provided in 40 CFR § 122.5.* The specific effect of permit compliance on enforcement authority is set out in OAR 340-045-0080.

Proposed Permit at S1.E.3. This statement, however, is not what 40 C.F.R. 122.5 says. The federal regulation is limited to section of the statute that do not include section 303, water quality standards. As written by the Oregon agencies, this provision of the permit could be read to provide a permit shield to sources violating “state water quality laws” that include the state’s water quality standards, inconsistent with the federal rule and with the terms of the permit itself.

**E. A Single General NPDES Permit Cannot Meet Clean Water Act Requirements for the Entire State and the Provisions for Use of Individual Permits are Vague and Not Incorporated Into the General Permit**

The most fundamental requirement of an NPDES permit is that it not authorize a discharge that will cause or contribute to violations of water quality standards. Therefore, where a pollutant is already causing a violation of water quality standards, restrictions in addition to those that otherwise would be sufficient are required, whether the receiving water is water quality limited without a Total Maximum Daily Load (TMDL) or with a TMDL. Therefore, a general permit can be appropriate for all dischargers of similar quality only if the permit takes into consideration the most stringent requirements that might be needed to meet the statute and EPA’s implementing regulations. EPA, in its CAFO guidance, suggests that an alternative approach might be desirable, namely to address receiving water quality in the general permit: “Alternatively, states may choose to develop their NPDES general permits so that they identify certain facilities as a separate class of CAFOs (*e.g., very large, impaired waters*) that need to meet additional permit conditions identified in the general permit.” EPA Manual at 3-7 (emphasis added). Similarly, EPA suggests that use of an *individual permit* might be the most appropriate approach to CAFOs that discharge into water quality limited waters:

Water quality-based effluent requirements must also be included in permits where technology-based requirements are not sufficient to ensure compliance with state water quality standards or where required to implement a Total Maximum Daily Load (TMDL). If water quality concerns are associated with discharges from a CAFO seeking coverage under an individual NPDES permit, the permitting authority should take special steps to ensure that it has the necessary information needed to prepare the draft permit and fact sheet. Such information might include information on receiving water impairments, ambient water quality data, TMDL wasteload allocations, or facility-specific discharge data, design specifications, or operational plans. The permitting authority may use its CWA section 308 authority or corresponding state authorities to obtain additional information or conduct a site inspection while developing the draft permit. For CAFOs that are covered under an existing NPDES permit, the standard permit condition for Inspection and Entry, at 40 CFR part 122.41(i) also provides authority to obtain additional information or conduct a site visit to support draft permit development.

*Id.* at 3-6.

Oregon, however, has chosen to use neither approach. Instead, as discussed above, it has simply

relied on unsubstantiated assertions that its CAFOs will not discharge and therefore they cannot possibly cause or contribute to violations of water quality standards. As explained above, this level of analysis, which flies in the face of facts and numerous federal regulations, is not adequate. The Oregon agencies will have to revise their approach and choose, as EPA has stated, between making their general permit adequate for all discharges to all waters or to use individual permits. Oregon, no doubt will argue that it has suggested some sources may need individual permits, pointing to its discussion on “When is an individual permit necessary?” of its fact sheet. Fact Sheet at 6. This is a fallacious approach, however, for several reasons including, first, because the situations or conditions are not a part of the general permit itself.

The fact sheet sets out the following situations when an individual permit “may” be required:

- The discharge or activity is a significant contributor of pollution or creates other environmental problems.
- The operator is not in compliance with the terms and conditions of the general permit, submitted false information or is in violation of any applicable law.

\* \* \*

- Circumstances have changed so that the discharge or activity is no longer appropriately controlled under a general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.
- Any other relevant factors. For example, the CAFO operator proposes a new or unproven treatment or utilization technology that ODA believes should be initially regulated by an individual permit to demonstrate that the technology will work.

*Id.* The second reason is that clearly the Oregon agencies have included this information in the fact sheet in order to create the appearance of conformity with federal regulations and guidance. In fact, if the Oregon agencies fully intend to apply the rules set out above, they would: (1) include prohibitions and conditions in the proposed permit; (2) use the word “shall” rather than the word “may” in their description of the process; (3) have already established a transparent and public process by which the agencies will determine whether a source is a “significant contributor,” whether a source is already not sufficiently in compliance with the existing permit, and identified the “circumstances,” e.g., water quality conditions of the receiving water, under which the general permit is inadequate to meet its goals. There are already examples of significant contributors, operators not in compliance, and circumstances that require more than the general permit offers yet there is no indication that the Oregon agencies have any intent to require individual permits under the existing permit or the proposed permit. For this reason, the proposed permit must be written with sufficient conditions to ensure it meets federal regulations for all CAFOs that may seek its coverage.

In short, we agree with the restrictions set out in the fact sheet so long as they are prohibitions on use of the general permit. We disagree that the discharge need be “significant” if the discharge is to water quality limited waters, however, because there is no *de minimis* exception to the

prohibition on discharges to water quality limited waters.

There are also process questions that are not answered by the permit as proposed, besides not making clear how the Oregon agencies will ensure proper coverage under an individual permit. A source may seek an individual permit, Proposed Permit at S1.a.2, ODA will cancel coverage under the general permit in the event that an individual permit is issued, *id.* at S1.F.1 and G7.4, ODA may transfer a permittee to an individual permit in the event of two or more discharges within a 24 month period, *id.* at S4.E.2, but there is no clear statement in the permit as to when a source must apply for an individual permit in the event that one is deemed to be needed. Not only should this timeframe be specified, but the general permit should be clear that if a source fails to submit an individual permit application by that deadline, coverage under the general permit will cease.

#### **F. The Oregon Permit Should Better Assure Control of Toxics**

We urge the Oregon agencies to use the language adopted by EPA in its Idaho General CAFO Permit to protect against toxic contaminants being discharged. That language states, that the nutrient management plan (NMP) must

[e]nsure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals or contaminants. All wastes from dipping vats, pest and parasite control units, and other facilities utilized for the management of potentially hazardous or toxic chemicals shall be handled and disposed of in a manner sufficient to prevent pollutants from entering the manure, litter, or process wastewater retention structures or waters of the United States. The NMP shall include references to any applicable chemical handling protocols.

Idaho Draft Permit at 17.

#### **G. The Oregon Permit Must Have Arsenic Limits**

The proposed permit should also include requirements for monitoring and controlling arsenic where permitted sources use arsenic in their operations. The U.S. Geological Survey has estimated that between 250,000 and 350,000 kg of arsenic stemming from poultry litter are annually applied to land in the U.S. *See* Nachman, Kevin E. et al., Arsenic: a Potential Roadblock to Animal Waste Management Solutions 1123 (citing D.W. Rutherford et al., Environmental Fate of Roxarson In Poultry Litter Part II: Mobility of Arsenic in Soil Amended with Poultry Litter, 37 ENVTL SCI TECH. 1515 (2003)). Not surprisingly, scientific studies report elevated soil arsenic levels in fields where poultry litter has been applied. *Id.* (citing G. Gupta & S. Charles, Trace Elements in Soils Fertilized with Poultry Litter, 78 Poultry Sci. 1695 (1999)). This form of arsenic leaches readily and threatens to contaminate groundwater resources. *Id.* (citing D.W. Rutherford et al., Environmental Fate of Roxarson In Poultry Litter Part II: Mobility of Arsenic in Soil Amended with Poultry Litter, 37 ENVTL SCI TECH. 1515

(2003)). Arsenic is a known carcinogen and is recognized as such by myriad government agencies, including the EPA, *id.* at 1124, and, of course, Oregon has arsenic criteria for protection of human health and aquatic life.

Because of the importance of arsenic to human health and the environment, the Natural Resources Conservation Service (NRCS) has specifically addressed the concern in guidance for developing Comprehensive Nutrient Management Plans (CNMP):

Build up of salt and heavy metals (i.e., arsenic, selenium, cadmium, molybdenum, zinc) in soils can create a potential for human and animal health problems and threaten soil productivity and crop marketability. Federal and State regulations do not address the heavy metal content associated with agricultural by-products. In developing a CNMP, the build-up of salt and heavy metals should be tracked through soil testing.

NRCS, National Planning Procedures Handbook (NPPH), Amendment 4 (March 2003).<sup>21</sup> While fertilizers often contain such heavy metals, the levels of arsenic in poultry feed far exceeds this concern. Even so, the proposed permit ignores the need for identification of whether arsenic is likely to be included in the discharges, monitoring and reporting where it is, and appropriate conditions to prevent any discharge of arsenic. Such conditions would be additional management practices or treatments, land and water monitoring, as well as special rules on transfer of arsenic-laden wastes to third parties. The proposed permit fails to incorporate this NRCS guideline or to otherwise address arsenic contamination. We urge the Oregon agencies to require CAFOs to provide information in their applications for permit coverage on their use of arsenic and to include permit conditions for such permittees.

#### **H. Oregon's General Permit is Not Adequate to Ensure Discharges Do Not Cause or Contribute to Violations of Water Quality Standards**

The fact sheet describes the relationship between TMDLs and the proposed permit, noting that “permit coverage may be terminated if TMDLs are established that identify a CAFO’s discharge during large rainfall events as a contributor to a stream that is water quality limited.” The Oregon agencies cannot defer the regulatory requirements associated with issuing a legal NPDES permit to an analysis in a TMDL that may or may not occur, depending on whether DEQ issues a TMDL, when DEQ issues a TMDL, and how DEQ issues a TMDL. Many TMDLs issued by DEQ fail to identify the loads associated with individual sources, particularly when they are not covered by individual NPDES permits and even some in the latter category. DEQ’s regulatory obligations under the NPDES permit program exist independent of any TMDL.

##### **1. CAFOs Are a Significant Contributor to Water Impairments**

As EPA notes, “[t]he increasing concentration of animal production can lead to concentrations of

---

<sup>21</sup> Available at [https://nutrientmanagement.tamu.edu/content/resources/nrcs\\_handbook.pdf](https://nutrientmanagement.tamu.edu/content/resources/nrcs_handbook.pdf)

manure that exceed the beneficial needs of the farmland where it was produced. A 2001 report from the USDA's Economic Research Service found that 60%-70% of the manure nitrogen and phosphorus may not be able to be assimilated by the farmland on which it was generated." EPA, *Literature Review of Contaminants in Livestock and Poultry Manure and Implications for Water Quality* (July 2013) at v<sup>22</sup>; see also EPA Manual, at 6-9 – 6-10. It is 'Oregon exceptionalism' at its worst for the Oregon agencies to believe that Oregon alone amongst the states does not produce more manure nitrogen and phosphorus than can be assimilated on the farmland where it was generated.

The Tillamook subbasin in Oregon's North Coast Basin, is an excellent example of the combined failures of the joint permitting programs of DEQ and ODA to restrict manure generated by CAFOs from entering surface waters. The dairy farms in the Tillamook are largely based on former wetlands under which tile drainage has been installed, creating a direct conduit to waters of the U.S. for land-applied manure. About eight percent of the Tillamook watershed is used for agriculture and while the human population has remained stable over the last few decades, the dairy cow population doubled between 1990 and 2005 to a total of approximately 30,000 animals. The ruminant population generates 325,000 tons of manure annually, which is seven times more than that of the human population in solid tons. Orin C. Shanks et al., *Basin-Wide Analysis of the Dynamics of Fecal Contamination and Fecal Source Identification in Tillamook Bay, Oregon*, *Applied and Environmental Microbiology*, 72: 5537–5546 (Aug. 2006).<sup>23</sup> There are approximately 185 permitted CAFOs in the Tillamook that have caused continuing problems with attainment of beneficial uses such as shellfish harvesting. At best, over the years the shellfish closures have not improved and perhaps they have worsened.<sup>24</sup> Very recently, as reported elsewhere in these comments, they have worsened. Years with 100 days of closures are not atypical.

Despite the significant infusion of federal money through the Clean Water Act's section 320 National Estuary Program (NEP) to the Tillamook Estuaries Partnership (TEP), beginning in 1994 – two decades ago – bacterial pollution of the Tillamook Bay has not improved over the years. See, e.g., TEP, 2010 Tillamook Bay Watershed Health Report<sup>25</sup> (“[o]yster harvests are regularly closed due to unsafe fecal coliform levels in the Bay.”). Curiously, the TEP does not

---

<sup>22</sup> Available at <http://water.epa.gov/scitech/cec/upload/Literature-Review-of-Contaminants-in-Livestock-and-Poultry-Manure-and-Implications-for-Water-Quality.pdf>

<sup>23</sup> Available at [http://www.tbnep.org/images/stories/documents/resource\\_center\\_docs/water\\_quality/Source%20Identification%20-%20Field.pdf](http://www.tbnep.org/images/stories/documents/resource_center_docs/water_quality/Source%20Identification%20-%20Field.pdf)

<sup>24</sup> Shellfish closures in the Tillamook Main shellfish management area from 2004 to 2011, measured in days closed: 64, 63, 91, 78, 107, 76, 117, 99. Shellfish closures in the Tillamook West management area: 17, 31, 53, 45, 55, 16, 54, 49. Information provided by Alex Manderson, Food Safety Division, Oregon Department of Agriculture by email on March 19, 2012.

<sup>25</sup> Available at [http://www.tbnep.org/images/stories/documents/sob\\_final\\_2010.pdf](http://www.tbnep.org/images/stories/documents/sob_final_2010.pdf)

monitor bacterial levels in the bay, but only in the watershed. There, the TEP finds that the Tillamook River watershed has “some of the highest *E. coli* levels in the region” and that levels are increasing at a number of enumerated sites. The TEP quotes Dr. Orin C. Shanks, a researcher on Tillamook bacteria, that “a watershed manager’s best strategy for decreasing indicators of fecal pollution in this watershed is to mitigate runoff from ruminant sources[.]” Yet, despite the studies, the special federal funding, the educational programs and outreach, the decades of analyzing the problem, the AWQMAP and ODA basin rules, and the assurances of no fewer than two state agencies in charge of regulating the discharges of permitted CAFOs, no progress in reducing bacteria pollution has been made and water quality standards have not been met.

In addition, bacteria contamination of the watershed has been the subject of a TMDL issued by DEQ. In 1998, DEQ determined that the lower reaches of the Miami, Kilchis, Wilson, Trask, and Tillamook rivers were water quality limited for bacteria, with two segments of the bay and 65 miles of waterway listed as violating the bacteria standards. DEQ, *Tillamook Bay Watershed TMDL* (2001).<sup>26</sup> In 2001, the completed TMDL for bacteria in the watershed found “[c]oncentrations are particularly high during storms and tend to be highest in the lower elevations of each of the basins; the areas associated with the greatest concentrations of agriculture, urban development, and roads.” *Id.* at 3. DEQ also concluded that “[c]oncentrations in the Bay are also commonly elevated above the [water quality standards] in the Bay, especially when river flows increase in response to rainfall and runoff.” *Id.* The TMDL noted that “the association of high bacterial concentrations during high-flow storm events” was responsible for closure of shellfish beds on a rainfall basis specified in the Tillamook Management Plan for Commercial Shellfish Harvesting and that “[d]ata support the closure of these areas during high flow events, as concentrations during closures typically exceed the standard and are higher than during open periods.” *Id.* DEQ concluded that to attain water quality standards, “allocated instream concentrations reflect reductions ranging from 90% to 99% relative to current conditions.” *Id.* at 5. In other words, a massive load reduction is required to meet Oregon’s water quality standards for bacteria and to ensure protection of the designated uses. This massive load reduction can only come about by stopping the spreading of manure on lands that wash off during the rainfall events, preventing illegal midnight dumping, and taking many other significant steps to control manure from entering surface water, all of which are directly regulated activities under CAFO permits. Despite the passage of over a decade since DEQ developed the TMDL, however, no improvements have been made to ensure the claim that Oregon’s CAFO permits are essentially no-discharge permits. And no effort has been made to determine that any individual CAFO covered under the general permit is a “contributor to a stream that is water quality limited” and thus have permit coverage terminated as set out in the fact sheet’s description of the relationship of TMDLs and this general permit.

In 2006, Dr. Shanks published a report on the widespread fecal contamination of the Tillamook Bay. While there are human sources of *E. coli* in the bay, animal sources remain the significant

---

<sup>26</sup> Available at <http://www.deq.state.or.us/wq/tmdls/docs/northcoastbasin/wilsontrasknestucca/tillamook/tmdl.pdf> at 57.

sources of fecal contamination:

More than one-quarter of all sampling sites were in violation of the Oregon water quality standard for *E. coli* counts. All of these sites are situated near known human point sources or agricultural operations. For example, the values for four sampling sites along the Tillamook River, affected by rural residential areas and more than 30 CAFO facilities, exceeded the Oregon *E. coli* standards more than 75% of the time, suggesting that this portion of the river is severely polluted throughout the year. *E. coli* counts were also very high at two sites that were affected by urban and agriculture activities, including sampling sites that were the farthest downstream along the Kilchis River (Kilchis-5; 446 MPN/100 ml) and the Trask River (Trask-4; 345 MPN/100 ml) near a slough adjacent to the city of Tillamook. The values for two bay sites (Bay-1 and -2) routinely exceeded the recreational use standard; these sites are near the confluence of the Tillamook and Trask rivers, two of the most polluted rivers according to the *E. coli* counts.

Shanks at 5543-44 (internal citations removed). According to the Shanks' paper, the point and nonpoint animal sources of fecal material produced "a basin-wide probability of detection of [ruminant fecal matter] that was near 75%. This percentage rose to more than 90% during periods of moderate precipitation in the spring and fall[.]" *Id.* at 5544. Put another way, "[t]he probability of detecting a human marker (approximately 35%) was less than one-half the probability of detecting a ruminant marker for the rivers." Again, this should come as no surprise in a basin where manure is routinely spread on fields in amounts well in excess of agronomic rates and on tiled fields that have direct outlets to waterbodies. Neither the passage of time nor the adoption of a TMDL by DEQ has improved bacteria levels in the Tillamook. This underscores one thing: the Oregon CAFO permit program has failed.

The DEQ's Tillamook TMDL dances around the CAFO permit, putting the lie to the assertion in the fact sheet concerning the relationship between TMDLs and the proposed general permit. In a table of point source dischargers set out in the TMDL, DEQ omits the sources covered under the general CAFO permit. See TMDL at 97 (Table 24). It states, in a passing fashion, that "(f)acilities that confine and feed animals for specified periods and manage accumulated manure also operate as point sources under CAFO (confined animal feeding operations) permits administered by the Oregon Department of Agriculture," *id.*, as if that explains the omission of CAFOs from its list of point sources. However, mirroring the assertion that the CAFO permit does not allow discharges, the TMDL states that "CAFO wasteload allocations have been reduced to zero (0) to reflect the permit requirement that no discharge is allowed from the confinement and manure management areas." *Id.* at 98, 100 (Table 29). This, of course, is the same fiction presented in the fact sheet for the proposed permits and all permits that have come before it. Likewise, in reporting the "daily wasteloads," DEQ reports those from CAFOs as zero because "CAFO loads are limited by permit requirements." *Id.* at 99 (Table 26). In other words, DEQ did not evaluate anything but the face value of the CAFO permits and then proceeded to establish that CAFOs should not discharge. Despite the glaring inconsistency between the reality of high bacteria levels downstream of CAFOs and the CAFO permit conditions that have done nothing to achieve bacteria reductions, the Oregon agencies continue to use the permit to

establish the federal minimum in content and conditions. The evidence points overwhelmingly to the need for more permit restrictions and far more monitoring and reporting of various kinds described in these comments. In addition, DEQ cannot both issue TMDLs that assert a truth based on the fiction of an NPDES permit and issue an NPDES permit based on the fiction of a TMDL, in both instances avoiding the analysis of CAFO discharges that are causing and contributing to water quality standards violations. And then assert, moreover, that in future permittees identified as contributors in TMDLs will be denied permit coverage.

In addition, DEQ has failed to issue a TMDL that addresses the nutrient-related pollution from CAFOs and other sources that impair these waters of the North Coast basin. The 2003 TMDL states that “dissolved oxygen concentrations [and], nutrient concentrations” may be the cause of biological impairments, TMDL at 104, but no TMDL was completed for these two parameters. Nonetheless, DEQ is aware that nutrients are a significant form of pollution in the North Coast: “At the broader Coastal Coho ESU scale (results were not summarized specifically for the North Coast), the most extensive stressors were temperature, sediments (total solids and fines), and nutrients (phosphorus and nitrogen).” DEQ, Water Quality Status and Action Plan: North Coast Basin (March 2011). And DEQ has conceded that there are biological impairments, violations of narrative criteria that the proposed permit and fact sheet have failed to address, as explained in these comments.

## **2. The General Permit Does Not Include Conditions to Assure the Sources Covered Do Not Cause or Contribute to Violations of Water Quality Standards**

In addition to waters covered under TMDLs, the fact sheet fails to address any differences in water quality of receiving streams. Instead, it simply justifies the use of one general permit in a single conclusory sentence: “The use of a general permit for regulating Oregon CAFOs is appropriate because the waste characteristics from different CAFOs and the management practices to control these wastes are similar.” Fact Sheet at 6. Elsewhere, the agencies take more words to say the same thing. The waste characteristics may, indeed, be very similar. That is not the same as the loading to surface waters from individual sources covered under the general permit’s being the same or even similar. The problem stems from the fact sheet’s glib reference to “ODA estimates that these CAFOs generate approximately 10 million tons of waste on a yearly basis.” *Id.* at 7. The total waste for the entire state says nothing about how much of the waste enters Oregon streams, how much enters streams that are water quality limited, and how much of the waste enters specific water quality limited waters from specific sources. It is a fact without any value. Without further detail, as appropriate to a permit authorizing pollution of public waters, the Oregon agencies cannot, in fact, ascertain whether “the management practices to control these wastes are similar,” the basis for issuing a general permit. Why should management practices be the same if the quality of the receiving water is different? That is the purpose of the water quality-based approach of the Clean Water Act, as implemented through NPDES permits: to adjust the level of discharge from individual sources based on the quality of the receiving water and the quality of the discharge. Instead of a logical explanation of how a general permit can meet the requirements of the Act, the Oregon agencies give us a tautology.

The Oregon agencies also appear to not recognize that federal law applies to the issuance of NPDES permits and, instead, only cite to the requirements of OAR 340-045-0035(3). *Id.* at 8. They conclude that since the CAFO permits allows no discharge, they have nothing to explain, despite the fact that CAFO sources discharge to streams “many” of which are identified as water quality limited for dissolved oxygen, temperature, and bacteria. *Id.* Then, the agencies provide two sentences to explain why rain, or the absence of rain, makes it impossible for CAFOs to cause or contribute to violations of water quality standards:

ODA and DEQ do not expect water bodies to fail to meet water quality standards as a result of CAFO discharges during large rainfall events because of high flows in the receiving water body and the diluted nature of discharges should they occur. Discharges are also not expected during summer months, when water bodies are typically limited for dissolved oxygen, temperature, and bacteria, because of fewer rain events.

*Id.* at 9. We are not aware that an agency authorized to issue NPDES permits can meet its obligations under 40 C.F.R. § 122.44(d)(1) to evaluate reasonable potential for a permittee to cause or contribute to violations of water quality standards by simply asserting, without analysis, that discharges will be diluted by high flows nor that discharges are not expected during other parts of the year. Not only does this “analysis” not discuss the transitional seasons of fall and spring, but it does not adequately address winter or summer.

The Oregon agencies go on to state that their permitting authority and obligations are apparently transferred to their TMDL program: “permit coverage may be terminated if TMDLs are established that identify a CAFO’s discharge during large rainfall events as a contributor to a stream that is water quality limited.” Fact Sheet at 9. There is, however, no reference to the obligations associated with § 122.44(d)(1) being held in abeyance unless or until a TMDL is completed. Instead, it is the opposite, with the rules requiring that a permitting authority taken into account “existing controls on point and nonpoint source pollution.” 40 C.F.R. § 122.44(d)(1)(ii).

In fact, CAFOs as sources of “biochemical oxygen demand (BOD), total suspended solids (TSS), nutrients (nitrogen and phosphorous compounds), and bacteria,” Fact Sheet at 7, have the reasonable potential to cause or contribute to instream excursions above ambient concentrations allowed by state water quality standards. As such, “the permit must contain effluent limits for that pollutant.” 40 C.F.R. § 12.44(d)(1)(iii). The same is true for narrative criteria. 40 C.F.R. § 122.44(d)(1)(vi).

As EPA makes clear in its guidance, the permitting authority is obligated to look past the assumption that a CAFO permit does not allow discharges. For example, EPA observes that where

a TMDL or other watershed analysis for nutrients has been completed . . . to achieve the overall nutrient loading requirements for the watershed, CAFOs in an impaired watershed might be required to implement enhanced management

practices for land application that are *demonstrated to provide greater reduction of nutrient loadings than the requirements* imposed on CAFOs in a non-impaired watershed.

EPA Manual at 3-9 (emphasis added). In fact, EPA specifically notes that the non-discharge assumption should be ignored:

Even for CAFOs subject to a no-discharge, technology-based standard for the production area, situations could arise where the permitting authority needs to impose more stringent requirement for allowable discharges. Specifically, more stringent discharge limitations are necessary in instances where CAFOs discharge from a production area to a waterbody listed under CWA section 303(d) as impaired due to nutrients, dissolved oxygen or bacteria, or where an analysis of frequency, duration and magnitude of the anticipated discharge (consisting of potential overflows of manure, litter, or process wastewater) indicates the reasonable potential to violate applicable water quality standards.

*Id.* at 4-36. EPA even provides some examples of the types of approaches a permitting agency can take to further assure that a CAFO does not cause or contribute to violations: “Examples of such practices include additional storage capacity beyond that required by technology-based limits, monitoring the water quality of the waterbody and monitoring the extent of impairment where a discharge occurs, and installing an impermeable lining in a lagoon or storage pond.” *Id.* We believe that one of the most important conditions that will enhance the purported non-discharge quality of the CAFO permit is the use of monitoring and reporting, as described below. Apparently EPA agrees, saying that “where there is a discharge from the production area to an impaired water, a permit writer may impose more restrictive water quality-based effluent limitations that could include additional monitoring requirements.” EPA Manual at 4-38.

In addition, because the Oregon agencies have taken the position that no animal operation can have reasonable potential to cause or contribute to violations of water quality standards, even in light of TMDLs and studies that have found to the contrary, it follows that the agencies will never determine that such an operation requires NPDES coverage as a CAFO based on on-site inspection for designation pursuant to 40 C.F.R. § 122.23(c), based on a determination that a source is “a significant contributor or pollutants to waters of the United States.” However, in order to meet the permitting agency’s obligations under § 122.44(d)(1), the Oregon agencies have an affirmative obligation to evaluate CAFOs under § 122.23(c), not to assume that that portion of the EPA regulations is dormant. There is, however, no reference to the designation process in the fact sheet either at the stage of issuing the proposed general permit or at the stage of authorizing coverage for individual applicants.

Contrary to the Oregon agencies view, they have an obligation to determine if these permitted sources are causing or contributing to water quality standards violations or have the reasonable potential to do so. 40 C.F.R. § 122.44(d)(1). Having made that determination, various requirements must flow. One is additional monitoring, which EPA recommends. *See* EPA Manual at J-28 (“For example, facilities with historical compliance problems, especially large

facilities, facilities with significant environmental concerns, or facilities impacting impaired waterbodies [require additional monitoring as high risk operations]. *[The permitting authority should establish appropriate ambient surface and groundwater monitoring requirements in the NPDES permit.]*” (emphasis in original).

Similarly, EPA requires that a CAFO general permits include the following limitation on its coverage of certain new sources:

The following CAFOs are not eligible for coverage under this NPDES general permit and must apply for an individual permit:

\* \* \*

6. New dischargers to water quality impaired water (CWA, 303d list) unless the operator performs one of the following:
  - a. Prevents any discharge that contains pollutant(s) for which the waterbody is impaired, and includes documentation of procedures taken to prevent such discharge in the NMP.
  - b. Documents that the pollutant(s) for which the waterbody is impaired is not present at the facility, and retains documentation of this finding with the NMP.
  - c. In advance of submitting the NOI, provides to the permitting authority data to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data onsite with the NMP. To do this, the operator must provide data and other technical information to the permitting authority sufficient to demonstrate one of the following:
    - i. For discharges to waters without an U.S. Environmental Protection Agency approved or established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody.
    - ii. For discharges to waters with an U.S. Environmental Protection Agency approved or established TMDL, that there are sufficient remaining wasteload allocations in an U.S. Environmental Protection Agency approved or established TMDL to allow the facility’s discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

EPA Manual at O-3 to O-4. This requirement is consistent with 40 C.F.R. § 122.4(i). A limitation along these lines is included in the EPA Idaho general permit for CAFOs. *See* EPA, Authorization to Discharge under the National Pollutant Discharge Elimination System For Concentrated Animal Feeding Operations (CAFOs), NPDES Permit No. IDGOIOOOO, § I.D.5. Likewise, EPA recommends permit conditions to cover dischargers from existing CAFOs

to impaired waters. *See* EPA Manual at O-10. Proposed language includes the following:

The permitting authority has established the following permit conditions to protect water quality standards.

- a. Discharges to Water Quality Impaired Waters
  - i. If the CAFO discharges to an impaired water with an EPA approved or established TMDL, EPA will inform the facility if any additional limits or controls are necessary for the discharge to be consistent with the assumptions of any available wasteload allocation in the TMDL, or if coverage under an individual permit is necessary in accordance with Part I.F of this permit. Any additional limits or controls shall be included in the NMP.
  - ii. If the CAFO discharges to an impaired water without an EPA approved or established TMDL, EPA will inform the facility if any additional limits or controls are necessary to meet water quality standards, or if coverage under an individual permit is necessary in accordance with Part I.F of this permit. Any additional limits or controls shall be included in the NMP.
  - iii. If a CAFO's authorization for coverage under this permit relied on Part I.D.6 of this permit for a new discharge to an impaired water, the facility must implement and maintain any control measures or conditions on its site that enabled the CAFO to become eligible under Part I.D.6 of this permit, and shall include these control measures or conditions in its NMP.
  - iv. If at any time the facility becomes aware, or EPA determines, that a discharge to an impaired water has occurred and the requirements of Part II.A.3.a.i-ii this permit have not been addressed, the facility must take corrective action to fulfill the requirements of Part II.A.3.a.i-iii of this permit. Any changes to the NMP required to fulfill the requirements of Part II.A.3.a.i-iii of this permit shall be done in accordance with Part III.A.7 of this permit.

EPA Manual at O-10 to O-11. EPA's general permit in Idaho has similar limitations. *See* EPA CAFO Permit at § II.A.5.

While we believe that the above quoted language recommended by EPA is a significant improvement over the proposed Oregon permit, we urge the Oregon agencies to go further. For example, subsections i and ii above state that EPA "will inform the facility if any additional limits or controls are necessary." We believe that this process is too ambiguous. First, it is unclear when the permitting agency will inform the facility and what prevents a facility from being covered whilst the permitting agency goes through this process. Second, while Oregon must make the same commitment to inform a facility, as has EPA, the permit should establish a transparent process by which the agencies will determine if any additional limits or controls are necessary. As written, the suggested EPA permit language does not assure that a permit will

ensure that all covered sources will in fact meet the requirements of federal law. In fact, the burden of proof is on the permitting agency to demonstrate that additional requirements are needed when, in many if not most cases, the rebuttable assumption should be that additional controls and conditions are required. Third, it is unclear to what degree the permitting agency findings will be available to the public at the time the AWMP is open for public comment. The public should have the right to comment on the agency findings at this time.

**I. Monitoring, Recordkeeping, and Reporting Requirements in the Proposed Permit Are Grossly Inadequate**

In light of the fact that CAFOs have long been a source of pollution causing and contributing to water quality standards violations and, concurrently, have been covered by an ostensible no-discharge permit, one can deduce that the conditions of the permit are inadequate and/or compliance has been lacking. The probability that a significant part of the problem is compliance is high and, therefore, the monitoring and reporting aspects of the proposed permit must be significantly improved.

Federal regulations require that monitoring “type, intervals, and frequency” be “sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring[.]” 40 C.F.R. § 122.48(b). Reporting is key to the efficacy of permit conditions. For this reason, federal regulations require that “[r]eporting shall be no less frequent than specified in the [monitoring] regulation.” 40 C.F.R. § 122.48(c). Reporting must also be “based upon the impact of the regulated activity[.]” *Id.* Further monitoring requirements “to assure compliance with permit limitations” include:

- (i) The mass (or other measurement specified in the permit) for each pollutant limited in the permit;
- (ii) The volume of effluent discharged from each outfall;
- (iii) Other measurements as appropriate including pollutants in internal waste streams under § 122.45(i); . . . frequency, rate of discharge, etc., for noncontinuous discharges under § 122.45(e); pollutants subject to notification requirements under § 122.42(a); . . . or as determined to be necessary on a case-by-case basis pursuant to section 405(d)(4) of the CWA.

40 C.F.R. § 144(i)(1). Finally, in addition, “requirements to report monitoring results shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but in no case less than once a year.” 40 C.F.R. § 144(i)(2). EPA’s guidance suggests that “where there is a discharge from the production area to an impaired water, a permit writer may impose more restrictive water quality-based effluent limitations that could include additional monitoring requirements.” EPA CAFO Manual at 4-38.

The proposed permit monitoring requirements are triggered by “a discharge to surface water or groundwater occurs that is not allowed by S2.B or S2.C.” Proposed Permit at S4.A.1. These two references are for discharges other than from 25-year/24-hour rainfall events and discharges

from manure application in excess of agronomic rates. Neither the fact sheet nor the proposed permit explain how the permittee is expected to determine whether these prohibited discharges have taken place. First, how will an operator know that there was a 25-year/24-hour rain event whilst the event is underway? Second, how will an operator know whether discharges have occurred over agronomic rates other than from either (1) advance knowledge that he or she has applied manure in excess of agronomic rates, in which case he or she is highly unlikely to report this violation, or (2) random monitoring of discharges of the quality of the effluent (e.g., from tile drain outlets). The permit does not require any random monitoring, therefore the operator will not learn whether the quality of the effluent is in excess of what is expected had he or she conformed with the requirements of the permit. In other words, this is a hollow requirement that in no way assures the prohibited discharges will not take place and that if they do, they will be identified and subject to enforcement. Moreover, the information required to be recorded is not “monitoring” but best guesses as to the cause of the discharge, its duration, and its estimated volume. Such photographic monitoring meets federal requirements that monitoring be of the type that will yield data representative of the monitored activity. 40 C.F.R. § 122.48(b).

The last item in the list of required information associated with these prohibited discharges is “[c]orrective steps taken, if appropriate, to reduce, eliminate, or prevent reoccurrence of the discharge.” Proposed Permit at S4.A.1.e. It is unclear what the point of this exercise is. First, why would there ever be a situation where a corrective steps would not be appropriate to address prohibited discharges? Second, if the discharges are prohibited why is a reduction, rather than elimination, of future prohibited discharges acceptable? Third, why would not corrective steps automatically trigger an amendment of the AWMP?

We object to analytical monitoring set out in section S4.A.2 being limited to only large CAFOs. There is no basis for distinguishing between the water quality impacts of large and not-large CAFOs on Oregon’s waters, including impaired waters. For example, on what basis should depth markers be required for waste storage facilities for large CAFOs but not required for not-large CAFOs? We further object to the 5-year frequency of monitoring of soil from land application areas. Again, there is no basis for such infrequent monitoring whereas there is a respectable basis for more frequent monitoring. As discussed *supra*, nutrient levels are going up in some waters, such as the Tillamook.

The Oregon agencies should adopt basic modern technology to increase the efficacy of the proposed permit. Specifically, for the types of inspections set out in section S4.B.1 – including devices, lines, equipment, and storage – the permit should require photograph monitoring and reporting. Nearly every person has at least one electronic camera these days. Most people have multiple cameras, stand-alone cameras, cellphone cameras, and tablet cameras. Photographs can easily be taken at virtually no extra time expended and at no cost. Likewise, photographs can be submitted electronically to increase compliance rates. If the Oregon agencies do not choose to have all inspected items photographed, they should choose some of the most important. We would suggest that liquid impoundments with depth markers be photographed to avoid midnight dumping and assure sufficient storage facilities. Likewise, equipment used for land application of manure and equipment related to tile lines, such as tile line intake structures and points of discharge. And photographs of the required setbacks pursuant to S2.J should be a required part

of monitoring and reporting. Likewise, photographs that demonstrate that animals have no direct access to surface water, as required by permit condition S2.D, should be required. All procedures set out in the AWMP and incorporated into the permit should require photographic monitoring unless it would not be useful for assessing compliance. The same is true of any work being completed pursuant to a compliance schedule (e.g., installation and growth of vegetated buffers). The AWMP should spell out what is necessary to ensure photographic monitoring is effective, e.g., location of regularly scheduled photographs, measuring instruments.

The permit should not include discretionary decisions by the permitting agencies, particularly by ODA alone given that it is not authorized to issue NPDES permits. Section S4.E.2 calls for the possibility (“ODA may”) of surface water and/or groundwater quality monitoring for bacteria, total suspended solids, total Kjeldahl nitrogen, biochemical oxygen demand, and other nutrient indicators. But not only does it not mandate additional monitoring in the triggering event of this section, two or more prohibited discharges within a 24-month period, but the permit reserves the right of ODA to “waive[] the additional monitoring requirements because such monitoring would be impracticable or not likely to produce useful information[.]” *Id.* This is followed by the statement that “ODA will set out the basis for the decision in writing and make the decision available to interested persons,” but this is a meaningless exercise and not worthy of a regulatory program. The permit should state that the AWMP will be reopened for modification in the event of two or more prohibited discharges within a 24-month period and monitoring will be required. Anything less demonstrates the fallacy of the no-discharge assertion of the permit.

We further object to the reporting requirements set out in the proposed permit at section S4.D.2. This report is annual. The CAFO permit has been demonstrated to not stop the discharge of untreated animal wastes to Oregon’s surface waters. Therefore, as discussed above, either the conditions of the permit are not adequate and/or compliance is less than complete. Compliance will be increased with more attention to reporting. As EPA notes in its guidance, “the permit writer should consider those [requirements applicable to large CAFOs] as a starting point when establishing BPJ requirements for other permitted CAFOs.” EPA Manual at 4-37.

In sum, the monitoring, record-keeping, and reporting requirements set out in the proposed permit are, at best, the required federal minimum. But Oregon has a long history of experience with failed CAFO permits and impaired waters and it is required to address that information in the fact sheet to explain how its proposed permit conditions will address the discharges and to prepare a permit that will ensure sources do not cause or contribute to violations of water quality standards, the way they have been doing for decades. Oregon must present a rationale for doing the federal minimum.

The proposed permit is focused on permittees’ reporting discharges they have perceived in volume or quality may violate permit conditions. Not only is this impossible and subjective but it continues to place the burden on public waters rather than on the pollution sources themselves. In addition to the conditions included in the permit, we urge the Oregon agencies to require CAFO operators to conduct monitoring upstream and downstream of their production and land application areas. Such monitoring must be reported in order to provide the agencies and the public with information on the presumption of no discharge that underlies the entire CAFO

permitting program in Oregon.

**J. The Proposed Permit Does Not Discuss the Implications of Discharges to Waters Covered by Oregon’s Shellfish Growing Waters Criteria**

The fact sheet and proposed permit generically discuss “water quality standards” and waters impaired as compared to such standards without considering the implications of those criteria. Specifically, DEQ has two sets of bacteria criteria, one that applies to areas where designated uses are other than shellfish growing waters, E. coli at 340-041-0009(1)(a), and more stringent criteria that apply to shellfish growing waters, fecal coliform at 340-041-0009(1)(b). As DEQ has noted, “there is a high degree of complexity in determining the exact boundary between estuarine and fresh waters.” DEQ, Oregon Bacteria Rule: Bacteria Criteria for Marine and Estuarine Waters (Feb. 18, 2011) at 2. This guidance document goes on to discuss the procedures to use for NPDES permitting, as well as federal bacteria criteria pursuant to the BEACH Act. Yet nowhere in the CAFO permit or the fact sheet for the proposed permit is there a discussion of the bacteria criteria and how – other than the fiction that CAFOs do not discharge – the Oregon agencies distinguish between the conditions required to meet one set of criteria versus another.

**K. Site-Specific Conditions Are Needed for Bacteria in the AWMP**

The site-specific conditions established in the AWMP, and in CAFO permits, pertain to nutrients. The basis for establishing site-specific conditions related to nutrients is, presumably, the potential for CAFOs to discharge nutrients. The exact same concern relates to the discharge of human pathogens measured by indicator bacteria. Therefore, the AWMP must include analysis and conditions that pertain to the discharge of bacteria from manure disposal from an individual facility covered under the general permit. Just as phosphorus binds to sediments, some bacteria are also bound to sediments, making limiting sediment runoff one key to limiting the entry of both human pathogens and phosphorus to surface water. For example, EPA notes that:

Studies of stormwater as well as stream and estuarine settings have reported 15% to 35% of bacteria to be associated with particles (Characklis et al. 2005, Cizek et al. 2008, Suter et al. 2011). Also, large fractions of Giardia and Cryptosporidium (60% and 40%, respectively) have been found to be bound to sediment in streams (Cizek et al. 2008).

EPA, Literature Review of Contaminants in Livestock and Poultry Manure and Its Implications (July 2013) at 23.

**V. THE FACT SHEET DOES NOT MEET FEDERAL REQUIREMENTS**

Federal rules require a statement of basis set out in a fact sheet for every draft general NPDES permit. 40 C.F.R. § 124.8. These requirements apply to states, such as Oregon, authorized to issue NPDES permits. 40 C.F.R. § 123.25(a)(27). The fact sheet is required to “set forth the

principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit.” 40 C.F.R. § 124.8(a). In addition, the fact sheet must include the “type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged” and a “brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions.” 40 C.F.R. § 124.8(b)(2) - (4). And, a “sketch or detailed description of the location of the discharge or regulated activity described in the application” is required “when appropriate.” 40 C.F.R. 124.56(c).

The fact sheet prepared by the Oregon agencies falls far short of these requirements. The fact sheet does not discuss the type and quantity of wastes and pollutants that are proposed for treatment, storage, and various types of disposal. There is no discussion of the water quality of the waters that will receive these wastes, whether there is assimilative capacity remaining, and what effect the pollution will have. There are, in short, no principle facts other than the repetition that this permit is more or less exactly like the existing one. There is no discussion of the major policy question involved in that fact, that is to say since the existing permit has not actually achieving its purported goals and conditions the operating assumption should be that it needs radical improvements. There is no discussion of the history of compliance collectively or individually, the status of nutrient management plans and how well they are working or, indeed, if there are even data to evaluate whether they are working. There are virtually no references to EPA regulations, for NPDES permits or CAFOs, and certainly no references to the EPA Manual on issuing CAFO permits. There is no discussion of why use of the Agronomy Technical Note 26 is sufficient to meet water quality goals. A detailed sketch should be required for all lands covered in the operations subject to the permit and the permit should clarify what is expected to be included in that sketch (e.g., locations of potential discharges, locations of ongoing discharges purportedly within permit limits, topography, storage facilities, etc.). Finally, there is no discussion of the policy questions inherent in a permit that purports to prohibit discharges but clearly is being used to allow discharges, a discussion that would lead to an evaluation of whether the monitoring, record-keeping, and reporting requirements used in the past are sufficient for the future.

Likewise there is no discussion of the new EPA regulations, the EPA guidance, and the matters that are included in the new rules. For example, there is no discussion of the two-step process by which the permitting agency must identify the terms of the AWMP that become a part of the permit. This failure leads to others, such as the Oregon agencies’ failure to discuss how the site-specific terms of the AWMP can be incorporated into the permit. As EPA points out in its guidance, the “approaches may include (1) incorporation by reference of the NMP in its entirety; (2) incorporation of only the terms of the NMP by reference, using language that parallels the regulatory provisions for the terms of the NMP; and (3) a specific, detailed identification of each of the terms of the NMP in the text of the permit.” EPA CAFO Manual at 4-25. While it appears clear that the Oregon agencies have chosen the “blanket incorporation” method, because they have disavowed the requirement to take public comment on the AWMPs it is unclear what they are doing and how it is consistent with federal regulations.

Likewise, the EPA guidance discusses two approaches that operators can use in developing their

AWMPs, the “linear approach” and the “narrative approach.” *See, e.g., id.* And this choice about rates of application has ramifications for the method used to establish the site-specific terms:

For rates of application, *this method of incorporation by reference is most suitable where the permittee is using the linear approach for rates of application*, where the only factor of the NMP that is variable is the amount of manure to be applied. . . . The conditions that determine the actual amount of manure to be land applied can be specifically articulated either in the permit or in the NMP itself. It is not necessary to filter out elements of the NMP that are not actually conditions of the permit, unless there is a specific concern that there could be confusion as to whether some of the content of the NMP is considered a term of the NMP. If the concern is limited to only a few issues, this form of incorporation by reference can be used effectively, as long as clarification is provided.

*Incorporation of the NMP in its entirety may also be used where the permittee follows the narrative rate approach, as long as any factors that can vary during the period of permit coverage are explicitly discussed in the NMP and the conditions, range, and other appropriate limitations concerning such variables are clearly described in the NMP.* Where a permittee chooses to use the narrative rate approach, it could be problematic if the permit incorporates the NMP in its entirety, because the permittee believes that the plan is intended to allow changes to occur at the facility during the period of permit coverage and that adjustments can be made in the implementation of the plan, which will be allowed by the permit. *If the NMP is incorporated as written, it must be clear to anyone reviewing the NMP what the terms are that will apply to the CAFO throughout the period of permit coverage.* An NMP incorporated in this fashion will need to specifically describe the variations that may occur during the period of permit coverage and the conditions and implications associated with such variations so that changes to the NMP will not require reopening the plan for review. In those situations, EPA strongly recommends that the NMP itself clearly describe to the extent possible the array of variables that are anticipated during the period of permit coverage. Given the complexity of factors associated with rates of application, however, it might be difficult to specifically identify all the conditions that could vary within the allowable framework of the narrative rate approach.

*Id.* at 4-26 (emphasis added). The Oregon agencies simply ignore all this complexity of the interaction between the AWMPs and the site-specific conditions of the permit, rendering the fact sheet both of little utility and inconsistent with federal regulations.

We look forward to the Oregon agencies’ making significant changes in the proposed permits that will ensure the full protection of Oregon’s designated uses and rapidly move away from the status quo of the last many decades in which little or no progress has been made in keeping animals wastes out of Oregon’s waters.

Sincerely,

A handwritten signature in black ink that reads "Nina Bell". The signature is fluid and cursive, with the first name "Nina" being more prominent than the last name "Bell".

Nina Bell  
Executive Director

*and on behalf of*

Jesse Hayes, Owner  
Hayes Oyster Company  
hayesoyster@yahoo.com

Attachments sent via e-mail (8).