DEPARTMENT OF ECOLOGY
State of Washington

Preliminary Determination to Issue a General Permit for Biosolids Management

Response to Comments

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Response to Comments

Solid Waste Management Program

Washington State Department of Ecology

Olympia, Washington

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Executive Summary

The current Statewide General Permit for Biosolids Management will expire on September 4, 2020. In December 2019, Ecology solicited public comments on the appropriateness of issuing a new general permit to replace the current one. Although this would be our fifth biosolids general permit since 1997, rules in Chapter 173-308 WAC require us to make this inquiry before proceeding with a general permit.

We received comments from seventeen individuals, six organizations, one local government agency, and one Indian tribe. The majority of commenters opposed the use of a general permit. The primary reason for opposition was the belief that a general permit could not address local or site-specific conditions. Ecology tried to address that concern in the public notice for our preliminary determination. Ecology wrote the rules implementing the biosolids general permit with flexibility in mind, specifically to address local circumstances.

After reviewing all comments received, Ecology determined that a general permit is still the best approach. The general permit saves a significant amount of time and resources for Ecology and permit applicants, without compromising protections for human health and the environment. Staff also sought a revised approach to the permit process, based on an internal assessment in response to Governor Inslee's Results Washington initiative. A consensus found that the current approach takes too long, on average, to issue a final approval of coverage to applicable facilities. Only about a third of facilities receive a final approval of coverage during the five-year permit cycle. Staff expect the number of facilities that receive a final approval of coverage to increase significantly under the general permit program, with better attention to permits where it is most needed and beneficial.

How the Response to Comments is Organized

Ecology reviewed all comments received during the comment period. We identified seven general topics for response. Some comments covered several topics. We took excerpts of comments around topics, and created an individual comment from each. That allowed us to see the general spectrum of concern around each topic. The topics for this response to comments are:

1. **General Versus Individual Permits**
2. **Biosolids Beneficial Use Should Not be Allowed**
3. **Recommends Incineration or Alternative Uses**
4. **Supports General Permit Approach**
5. **Opposes General or Prefers Individual Permit**
6. **General Permit Requires More Oversight**
7. **Other**

Ecology also identified an overarching area of interest regarding flexibility of the biosolids general permit program to address local or site specific issues. The response to comments leads off with an explanation on *Flexibility of the Statewide General Permit for Biosolids Management*. Understanding how the general permit program works is critical to the context of many of the individual responses that follow. Responses to individual comments follow, presented by order of topic (above).

Who Commented

We received comments from seventeen individuals, six organizations, one local government agency, and one tribe. Each commenter is identified by their general affiliation, and a specific number assigned to them. Comments submitted by individuals are preceded by the letter "I," organizations by "O", Native American tribes (T), and local government, "LG".

List of Commenters

Randy and Darlene Grant, Commenter: I-1

Constance Ibsen, Commenter: I-2

Michelle and James Brigham, Commenter: I-3

Natalie Molfino, Commenter: I-4

Phyllis Farrell, Commenter: I-5

Matthew Schubart, Commenter: I-6

Allan Guenther, Commenter: I-7

Diane Riley, Commenter: I-8

Chrys Ostrander, Commenter: I-9

Craig Baker, Commenter: I-10

Clay Anderson, Commenter: I-11

Judy O'Neal, Commenter: I-12

Walter White, Commenter: I-13

Venitia Ozols-Graham, Commenter: I-14

Carol Beckham, Commenter: I-15

Doris Cellarius, Commenter: I-16

Al Hultengren, Commenter: I-17

Northwest Biosolids (Maile Lono-Batura), Commenter O-1

Washington State Chapter Sierra Club (Elaine Packard) Commenter: O-2

Nisqually River Council (Emily McCarten), Commenter O-3

REsources for Sustainable Communities, (Kristen McDade) Commenter: O-4

PCC Community Markets (Aimee Simpson), Commenter: O -5

Preserve the Commons (Wyatt Golding), Commenter: O-6

Nisqually Indian Tribe (David Troutt), Commenter: T-1

Pierce County Planning and Public Works (Jane Vandenberg), Commenter: LG-1

Response to Comments

Flexibility of the Statewide General Permit for Biosolids Management

Many commenters perceived an inability to address site-specific conditions under a biosolids general permit. Ecology addressed this in the public notice for the preliminary determination, where we said**:** *Ecology retains the right to condition approval of coverage under the general permit in any case where additional or more stringent requirements may be necessary to ensure protection of public health and the environment.*

It is clear from a review of the comments received, that many commenters did not understand the biosolids permit process. This following response explains:

- The difference between a permitted facility and an approved land application site.
- How a general permit addresses individual circumstances.
- Where the opportunities are for public involvement in the permit process.

What is the Difference between a Facility and a Site

In the biosolids program, *facilities* receive permits. It is common to confuse the idea of a "facility" with a land application site. They are not the same. A facility may have a land application site as part of its permit. In most cases, the facility is a publicly owned wastewater treatment plant. There are other types of facilities. Washington recognizes one type referred to as *Beneficial Use Facilities*. A Beneficial Use Facility is not a wastewater treatment plant (or a treatment facility at all). It is really a collection of land application sites, but the operator assumes the same obligations for permitting and compliance under the state program, as a wastewater treatment plant would assume if it were engaged in land application. A wastewater treatment plant can send its biosolids to a Beneficial Use Facility, instead of maintaining and managing their own land application site. Some wastewater treatment plants do have their own land application sites. Although it would not change the management criteria, it is important for interested persons to understand that individual sites do not receive permits. Ecology approves individual sites based on specific plans and other information that are part of a facility's permit.

How Does the Biosolids Permit Program Allow Ecology to Address Local Conditions?

Commenters expressed concern that the general permit could not address all local conditions at each site where biosolids might be land applied. Commenters noted, for example, the difference between eastern and western Washington. Less precipitation is a generally recognized difference on the east side of the state. It follows that additional requirements such

as wider buffers to surface water, limits on timing of application, and other conditions may be necessary to ensure a positive outcome for sites on the west side. Other instances might merit some adaptation to a local condition. Ecology wrote the rule language that implements the biosolids general permit program, to address those situations. The baseline permit, however, establishes most requirements for most facilities in most circumstances.

Commenters also said they could not compare the merit of individual permits and general permits, because there were no regulations for individual permits. Regardless of the type of permit, the underlying rules in Chapter 173-308 WAC apply. Either type of permit can include additional or more stringent requirements beyond those in the rule. WAC 173-308-310(2) addresses this, and is excerpted below. Note that subsection (2) (c) specifically identifies that individual permits are issued using the same provisions as those applicable to general permits.

> **WAC 173-308-310 Permitting.**
>
> (2) General and individual permits. The department will issue permits for the treatment and final use or disposal of biosolids or sewage sludge.
>
> (a) The department will issue, modify, revoke and reissue, and terminate general permits in accordance with the provisions of Appendix 5.
>
> (b) The department will accept and consider applications for coverage under a general permit, modify conditions of coverage, revoke and reissue coverage, or terminate coverage under a general permit in accordance with the provisions of this section.
>
> (c) The department will issue, modify, revoke and reissue, or terminate individual permits in accordance with the provisions of this section.

Ecology's expectation is that the basic requirements would be the same for both permits, with additional requirements necessary to address circumstances applicable for the particular facility, regardless of the permit mechanism. Ecology can address facility or site-specific concerns as provided in the state biosolids rules in WAC 173-308-310.

> **WAC 173-308-310(19) Additional or more stringent requirements.**
>
> (a) On a case-by-case basis, the department may impose requirements for the beneficial use of biosolids that are in addition to or more stringent than the requirements in this chapter if the department believes that the additional or more stringent requirements are necessary to protect public health or the environment from any adverse effect of a pollutant in the biosolids or to ensure compliance with this chapter.
>
> (b) In addition to other considerations, failure of a generator, applier, or landowner to conform to any applicable requirements of this chapter may be cause to impose additional or more stringent requirements.

(c) The department will impose any additional or more stringent requirements in an individual permit issued to a facility, in general permits issued in accordance with Appendix 5 of this chapter, and in the issuance of final coverage under a general permit.

(d) Any additional or more stringent requirements imposed in accordance with this section are considered to be permit requirements, fully enforceable in accordance with the provisions of this chapter and the applicable permit.

(e) If known, any additional requirements must be disclosed at a public hearing if a public hearing is held, or if imposed subsequent to a public hearing, must become a part of the written record required under subsection (15)(b) of this section.

The general permit implemented under the state biosolids program secures *provisional* approval for applicable facilities. "Provisional" means that an application is subject to review, and additional or more stringent conditions may be included prior to a final approval of coverage. Applicable facilities have accepted this method of permitting four times previously, without objection.

Facilities that land apply are required to prepare plans, provide analytical information, document activities, and submit annual reports, along with many other requirements. The minimum content of a site specific land application plan is described in WAC 173-308-90003, and is excerpted below. The last criteria listed emphasizes the flexibility of the permit process and reads, "Any additional information requested by the department that is needed to evaluate the appropriateness of the site for biosolids application."

Appendix 3—Minimum content for a site specific land application plan.

(1) Whether or not it is known or can be determined that biosolids containing pollutants in excess of the values WAC 173-308-160 Table 3 have ever been applied to the site, and if so:

(a) The date(s) when the biosolids were applied (if known).

(b) The amount of biosolids applied (if known).

(c) The concentrations of the pollutants in the biosolids (if known).

(d) The area(s) of the site to which the biosolids were applied (if known).

(2) A discussion of the types of crops grown or expected to be grown, their intended end use (e.g., pasture grass for a feed crop, corn as a food crop), and the current distribution of crops on the site.

(3) An explanation of how agronomic rates will be determined during the life of the site, along with any currently available calculations. Whenever agronomic rates or the

method used to determine agronomic rates change, an update of the agronomic rate calculations must be filed with the department.

(4) Method(s) of application.

(5) Seasonal and daily timing of biosolids applications.

(6) Provisions for conducting any sampling of soils, surface waters, or groundwater and any available data collected from the site within the last two years.

(7) The name of the county and water resource inventory area where biosolids will be applied.

(8) A description of how biosolids will be stored at the site that also addresses related offsite storage.

(9) Map(s) for the site(s) must be submitted. Maps must be of an appropriate scale to show the detail necessary for evaluation of the proposed application areas and so that a person may reasonably be able to locate the sites and any application units within a site (for example, 1:7,920 (eight inches to the mile) for detailed information with an overview map at 1:63,360 (one inch to the mile)). Minimally, maps must provide the following information:

(a) A legend.

(b) The location and means of access.

(c) Specific areas of the site where biosolids may be applied. If there is more than one site or more than one application unit within a site, a site or unit ID number should be included.

(d) The number of acres in the site or in any distinct application unit within a site.

(e) Location and extent of any wetlands on the site.

(f) A topographic relief of the application site and surrounding area.

(g) Adjacent properties and uses and their zoning classification.

(h) Any seasonal surface water bodies located on the site.

(i) Any perennial surface water bodies located on or within one-quarter mile (402 meters) of the site.

(j) The location of any wells located on or within one-quarter mile (402 meters) of the site that are listed in public records or otherwise known to the applicant, whether for domestic, irrigation, or other purposes.

(k) Buffer zones to features such as surface waters, wells, property boundaries, and roadways and the width of the buffer zones.

(l) The presence and extent of any threatened or endangered species or related critical habitat.

(m) The location of any critical areas on site, as required to be identified under chapter 36.70A RCW in the county's growth management plan.

(n) The location and size of any areas that will be used to store biosolids.

(10) If the seasonal groundwater is three feet (0.91 meters) or less below the surface, a management plan describing how you will protect groundwater. For example, you may propose to limit applications to the time of year when groundwater has receded to less than three feet (0.91 meters) below the surface.

(11) A description of how access to the site will be restricted (e.g., signs posted around the site or other approved method of access restriction).

(12) A copy of the landowner agreement required under WAC 173-308-120(6).

(13) Any additional information requested by the department that is needed to evaluate the appropriateness of the site for biosolids application.

What is the Difference in Opportunity for Public Involvement between General and Individual Permits?

There is a difference in the public process for the two types of permits. There is one opportunity for the public to comment on a draft individual permit. After considering comments on the draft individual permit, Ecology would issue a final permit. After making the preliminary decision to issue a general permit, there are two opportunities for comment. The first occurs with the issuance of the draft general permit. There is a second opportunity when a facility applies for coverage under the general permit. In the event a facility already approved for coverage wishes to make a significant change in their coverage (which would include proposing a new land application site), there is an additional opportunity to comment on that specific site, under either type of permit.

Ecology plans to implement an online service that will allow interested parties to sign up for notifications of permit activities occurring on a county basis. Although one is not dependent on the other, we hope the new service will be available about the same time we issue the revised general permit.

Comments Organized by Topic

1. General versus Individual Permits

Comment	Response
I-5-1 Per the invitation for public comment regarding the permitting process for biosolids application as to the advisability of whether a general permit or individual permits should be employed....since there are no individual permit rules, it is difficult to recommend that course of action. [Commenter: I-5]	I-5-1 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. The rules for "issuing" a permit, are not the same thing as the "content" of a permit. The rules for issuing an individual permit are the same as those for issuing a general permit. If the agency had not asked about the merits of using a general permit, the next step would have been the issuance of a draft general permit, which would occur without the benefit of considering any preliminary input from stakeholders. If we were issuing an individual permit, we would collect an application, but we would not conduct public notice until we were satisfied the application was correct and complete, and a reasonable representation of the likely practices of the applicant. In either case, interested parties do have an opportunity to comment on the draft permit conditions. Ecology did not propose any content for the permit with the preliminary notice because that was not the purpose. However, the current general permit contains many criteria we expect to carry forward.

I-6-2 In paragraph 3 of the notice, there is mention made of a new approach that emphasizes efficiency that will allow for '*expedited issuance of permits for facilities with minimal permit needs.'* As I have seen it, this is the root cause for serious lack of necessary project review for the purposes of protecting the public from hazardous conditions simply for the sake of a 'rubber-stamp' approach to giving the appearance of following generally predetermined guideline review standards. [Commenter: I-6]	I-6-2 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response discussing general versus individual permits. The commenter may be confused about the reasoning behind efforts to improve efficiency in the biosolids permitting program. Approximately half of the 375 treatment works subject to the permit program do not have an active beneficial use program. The majority of those operate wastewater treatment plants with lagoons, and most of them do not expect to remove solids from their lagoon during the life of the permit. Others only send their (typically smaller amount of) biosolids to a secondary facility for further treatment. The permit conditions necessary to ensure good performance of these facilities are minimal, as most of the regulatory obligation is deferred to the time when biosolids will be removed from the lagoon, or to another facility that assumes responsibility for treatment and any subsequent use of the biosolids. The applicable conditions for these types of operations can be established in the body of the general permit. This avoids for these facilities - many located in small communities with limited resources - the need to undergo a permit application process that is both costly and time consuming, and does not add real value as currently implemented. A few facilities in the state rely on incineration or landfill disposal. The circumstances are somewhat different between these facilities. Ecology does not support methods of disposal, and by law supports beneficial uses. We expect we can also address requirements and limitations for these facilities in the body of the baseline general permit. Ecology hopes this approach will help prioritize permitting, and focus staff resources where they are most needed. We can avoid time spent on administrative compliance that does not confer

	any specific environmental benefit. Ecology nor the communities where these facilities are located have the resources for an unnecessarily cumbersome permit process. As the permit process rolls forward, Ecology will verify the intentions of facilities. We have already establish this by collecting information through a Notice of Intent process. When we publish a draft general permit for review, we will list facilities subject to permitting, and identify the sections of the permit that we believe apply. If the public has some reason to believe that a facility should not benefit from the expedited approach, that input can be considered. This approach does not relieve any facility from having to meet public notice obligations or applicable criteria at a later date, if circumstances then warrant them pursuing an active beneficial use program.
I-6-13 Nowhere in this notice is there any indication of how those different types of facilities would be separated out making it very difficult to coherently comment on that process. [Commenter: I-6]	I-6-13 The question posed considers only the merit of the state's modified general permit approach versus the use of individual permits. We wanted to create some expectation for change from the current approach. Since we had not begun the process of writing the general permit at the time notice was given, it was difficult and seemed inappropriate to speculate on the exact division of management types within the permit. We also think it would be appropriate for interested parties to assess those divisions during the draft permit review. Ecology could entertain a different division within the permit, or might consider that a particular facility or facilities should be assigned to a different part of the permit. Our overarching goal is to minimize the burden for facilities where it is not justified, so that we can focus limited resources on those facilitates with programs where compliance will benefit from agency effort

I-6-15 As if to prove this point, the idea that *'all applicable facilities are subject to regulation under the same set of rules, and similar management practices apply to all facilities engaged in similar activities under the rules'* is precisely the premise that sets up the conditions for improperly predicated administrative review. The trend is always taken to over generalization. How can such a premise take into account any of the myriad of local conditions that relate to a specific application, probably in all cases. You at ecology are okay with that, but it is the very approach that virtually guarantees mis-management and violation of truly healthy disposal conditions. This has been long proven out historically. [Commenter: I-6]	I-6-15 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. The biosolids program regulates treatment works treating domestic sewage (TWTDS), a term defined in federal rules and captured in the state program. Generally, TWTDS are facilities that treat (change the quality of - biosolids). The state rules broaden the definition of TWTDS so that we capture beneficial use facilities (BUFs), which are facilities that provide only land application services. For land application, the permit program requires plans developed around uniform content that address site specific features (e.g. proximity to surface water, type of crop grown, seasonal conditions). The biosolids general permit implemented by Ecology allows for addition of requirements to any final approval of coverage, so that conditions particular to a specific facility or site can be addressed. In short, the general permit provides a baseline for coverage. Final approval of coverage is addressed after consideration of any requirements needed for a particular facility or site. Under the new approach, however, a significant number of facilities will be covered automatically, with the permit already written to address their needs. See also the response to comment I-6-2

I-9-1 Herein is my comment to the Washington State Dept. of Ecology regarding the question: "Is a statewide general permit appropriate for the regulation of biosolids under state rules?" As the Sierra Club points out in its comment sent to Ecology on Jan. 10, " ...because no individual permit language exists, nor do individual permits, we cannot make a comparison between the two types of permits. There is nothing to compare and no way to satisfactorily answer your questions. It is a Catch-22. For the public to adequately comment, it needs to see the individual permit regulations." The question cannot be answered without more Information from Ecology. You should re-frame your approach. [Commenter: I-9]	I-9-1 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. The purpose of this inquiry was to determine only whether the mechanism of the general permit process described in Chapter 173-308 WAC continues to be an appropriate approach. Or whether, for reasons the agency had not identified, individual permits might be required for some or all facilities. This question does not address the "content" of any permit. The content of the general permit will be subject to public review at a later date, as will the content of any final approval of coverage (including additional more stringent conditions for any facility or site where biosolids are applied to the land). Please see also the response to comment I-5-1.
O-2-1 Thank you for the notification of your request for public input on whether to continue with permitting under the umbrella general permit or switch to individual permits. Sierra Club understands that the response is centered around that question. And we understand Ecology prefers to continue using the general permit, in part due to the number (375) of permit applicants, the work load to switch to individual permits, and the timeliness of finalizing and distributing permits. We understand that if we believe biosolids cannot be properly managed under a general permit, we are to explain how an individual permit would result in better protections for public health and the environment, or be more efficient, less burdensome or less costly. However, because no individual permit language exists, nor do individual permits, we cannot make a comparison between the two types of permits. There is nothing to compare and no way to satisfactorily answer your questions. It is a Catch-22. For the public to adequately	O-2-1 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. The purpose of this inquiry was to determine only whether the mechanism of the general permit process described in Chapter 173-308 WAC continues to be an appropriate approach, or whether, for reasons the agency had not identified, individual permits might be required for some or all facilities. This question does not address the "content" of any permit. The content of the general permit will be subject to public review at a later date. That is also true for the content of any final approval of coverage (including additional more stringent conditions for any facility or site where biosolids are applied to the land). The parallel drawn with the shellfish permit described by the commenter is not applicable. The

comment, it needs to see the individual permit regulations. For staff to develop individual permit regulations, staff might see this as a waste of time if it does not intend to switch to individual permits. The general v. individual permit brings to mind shellfish aquaculture USACE permitting. The main USACE office was approving general permits. These were challenged in Washington State. A federal judge ruled the general permits were not protective of Washington State's natural resources and ruled they are illegal. (A further decision is pending on whether the previous general permits will be vacated.) The briefs and the judge's decision spelled out the inadequacies of the permits in holding the shellfish farmers to high standards. Indeed, the industry admitted to its lax regulations. From here forward, shellfish applicants will have to apply for individual permits. This will allow for more public oversight and understanding of the specifics of all new site applications. Is this a good analogy? In this case individual site regulations exist. Sewage applicants will want to retain the general permit process. But to answer your question responsibly, respondents need to see individual permit regulations created. Until then, we cannot determine whether which permit is appropriate. [Commenter: O-2]	regulations implementing the biosolids general permit are not the same as those implementing regulations under water quality laws and rules (shellfish permit). The regulations and process for issuing an individual permit under the state biosolids program are essentially same as for issuing a general permit. There is one less level of opportunity for public involvement with individual permits. Ecology wrote the biosolids general permit program to allow for public notice of facility applications for coverage, including any associated land application sites (concurrently, or at a later date if added). An application for coverage initially secures provisional approval for the applicant. Provisional means that final approval of coverage is subject to further review by Ecology, by which means Ecology may impose additional or more stringent conditions on a case-by-case basis, prior to issuing a final approval. The process provides for public notice and opportunity to comment before Ecology issues a final approval. Please see also the response to comment I-5-1.

2. Biosolids Beneficial Use Should Not be Allowed

Comment	Response
I-4-1 NO type of permit can properly manage the spreading of sewage sludge on farmland because the practice is patently unsafe. The spreading of sewage sludge of Washington farmland must not be permitted at all. Please, please read this informative and easy article about sewage sludge: https://www.beyondpesticides.org/assets/media/documents/infoservices/pesticidesandyou/documents/Biosolids.pdf As an organic homesteader and homeschooler, I would never want sewage sludge applied near where we live, work, or play. I would move before exposing my children to these toxins, and I expect the highest of standards in health from Washington state! [Commenter: I-4]	I-4-1 We have reviewed the cited article previously, but read it again at the request of the commenter. The article expresses wide-ranging arguments for mostly one side of a very complex issue. It is beyond the scope of the current question to respond to the details of the article. We respect the stated purpose of the authors to reduce pesticides in the environment. Decades of experience in Washington State and across the nation, backed by large amounts of peer-reviewed research, support that the beneficial use of biosolids is a safe practice. We will continue to examine matters of concern as they arise.
I-8-1 I do not believe any type of permit can properly manage the spreading of sewage sludge on farmland because the practice patently unsafe. The spreading of sewage sludge of Washington farmland must not be permitted at all. [Commenter: I-8]	I-8-1 Decades of experience in Washington State and across the nation, backed by large amounts of peer-reviewed research, supports that beneficial use of biosolids is safe. We note the commenter's opinion to the contrary, but it is not within the scope of this process to eliminate the beneficial use of biosolids.

I-9-3 Let me be clear: **NO type of permit can properly manage the spreading of sewage sludge on farmland because the practice is patently unsafe-- The spreading of sewage sludge of Washington farmland must not be permitted at all.** In support of my position I refer you to the 2018 audit report from the US EPA's Office of Inspector General which stated "The EPA's controls over the land application of sewage sludge (biosolids) were incomplete or had weaknesses and may not fully protect human health and the environment. The EPA consistently monitored biosolids for nine regulated pollutants. However, it lacked the data or risk assessment tools needed to make a determination on the safety of 352 pollutants found in biosolids." The OIG made thirteen recommendations, including requiring labeling of biosolids products to include information regarding the presence of up to 352 unregulated pollutants in sludge and statements of risks about biosolids. "...the EPA identified 352 pollutants in biosolids. The EPA does not have complete risk assessment information on these pollutants; therefore the agency cannot say, whether the pollutants are safe or unsafe when found in biosolids ...[including] sixty-one designated as acutely hazardous, hazardous or priority pollutants in other [Federal] programs." "...Existing biosolids data and studies do not fully examine the pollutants found in biosolids, especially unregulated pollutants. Until such research and data exist, the EPA cannot determine if any regulations should be issued. In over 20 years, no new pollutants have been regulated." In addition, in October of last year, Elizabeth Resek, Biosolids Lead, Health and Ecological Criteria Division,	I-9-3 We acknowledge the commenter's opposition to biosolids beneficial use. The remainder of the comment pertains to a 2018 report by the Office of the Inspector General (OIG) with which Ecology is familiar. EPA did not issue the report. The OIG is a separate federal agency that has a contingent assigned to EPA, and the report represents their opinion and advice. Ecology concurs with some findings of the report, which conclusions must be used advisedly. A detailed analysis of the report is not possible in this response to comments. The commenter's final remark citing the OIG report statement that EPA is not working on the assessments is incorrect. EPA is developing a screening tool to further assess the potential risk of pollutants in biosolids. That is the highest priority for the federal biosolids program at this time.

Office of Science and Technology, EPA/Office of Water wrote in response to a farmer's inquiry: "Right now, the EPA cannot say that the pollutants found in biosolids will not cause harmful effects to you, your crops or your livestock. We will know more when we assess these chemicals - something we are actively working on. You're asking important questions. Your decision to use (or not use) biosolids will have to be based on how comfortable you are with not knowing what harm the pollutants in the biosolids might cause." By the way, the OIG report points out that the EPA is NOT actively working on those chemical assessments. [Commenter: I-9]	
O-5-1 PCC Community Markets, a locally-owned community food market, appreciates the department's request for input on the issue of whether a statewide general permit is appropriate for biosolids regulation. We respectfully submit that it is not. As the nation's largest co-op grocery retailer with 13 stores and more than $288 million in revenue, PCC Community Markets has dedicated our triple bottom line business to providing local, organic and sustainable food to Washington state residents. Our shoppers care about the environment and how their food is grown, raised, and harvested. Our shoppers also care about what can be done to reduce the harmful impacts of our food system. Application of biosolids to agricultural lands, unfortunately, presents significant risks to both aquatic and land-based ecosystems through introduction of potential toxins and potential pathogens. Overall, we do not believe that biosolids application to agricultural lands should continue or be permitted - especially with the increasingly fragile state of our local environment and species, such as Chinook salmon. [Commenter: O-5]	O-5-1 The commenter did not say how the biosolids permit issued by Ecology is inadequate, or how individual permits would be better. The scope of this request for comments is focused on the permit mechanism, and does not extend to the question of whether there is beneficial use, or to limiting the kinds of beneficial uses. Biosolids are applied to a very small amount of farm and forestland in Washington, and on the whole, nationwide. There is a large volume of experience and peer reviewed research that supports the beneficial use of biosolids as a safe practice. There is no evidence at all of impacts to Chinook salmon. When the national organic program was formalized, there was considerable debate about the inclusion of biosolids as an approved fertilizer source for organic products. Ecology's recommendation at the time was to let the stakeholders driving the organics program, determine what would constitute organically grown foods. We did not oppose the exclusion of biosolids as an approved organic amendment. We continue to support the efforts of PCC and others to deliver organic products to consumers. There should be no concern about the inclusion of crops grown with biosolids products, since they are not included as approved amendments.

3. Recommends Incineration or Alternative Uses

Comment	Response
I-3-5 Many departments of DOE are demonstrated leaders of embracing meaningful technological change that IMPROVES environmental quality. Instead of making life easier for the biosolids stakeholders and most likely more challenging for the general public, why isn't the biosolids disposal department of the DOE considering implementation of proven alternative solutions to land application as demonstrated throughout Europe using Thermal Decomposition technology as a viable solution? [Commenter: I-3]	I-3-5 Incineration is a means of disposal, not beneficial use. Incineration is a source of greenhouse gas emissions that have a negative impact on climate change. Incineration also destroys valuable nutrients and organic matter that are needed to be returned to our soils as the pressure of agricultural practices increases with a growing population and decreasing land base. Treatment works engaged in beneficial use are designed for that purpose, and such design does not include incineration. The cost of constructing an incinerator is extremely high, making it generally economically infeasible for facilities that have viable and better approaches in place.
I-6-9 One of ecology's tasks when considering any land-use action is to consider alternatives. Let's stop investing all the effort on administering an unacceptable liability and start a discussion about today's most appropriate alternative, super-high-temperature incineration. I and many others have been having meetings and discussions with engineers and industry proponents that specialize in funding, setting up, and running extremely efficient world class industrial incineration plants. They are virtually non-polluting and pay for themselves. Now there's a case for efficiency and saving money. More rudimentary units like this have been set up in the state previously but are nowhere near the state-of-the-art technology. The setup and operation of these plants are actually not hard to understand. They have been built in many other places around the world and have proven themselves over time. The knowledge, know-how, and engineering personnel are here and ready. You have no excuse to continue doing what you have been for so long. Your notice is an effort to perpetuate an explosive liability now that EPA has removed the contaminant veil. [Commenter: I-6]	I-6-9 Ecology is not an agency charged with evaluating land-use actions. Land use is generally the province of local governments. Incineration is not considered a beneficial use since it destroys valuable nutrients and organic material. We do consider the range of options and alternatives for beneficial use that may be proposed in a permit application, or pursuant to seeking approval of a land application plan.

I-6-12 One foundational premise that is being assumed by ecology, is that the most economical, safe, and beneficial way of disposing of biosolids is by land spreading as an agricultural fertilizer product. Such a premise was only one of a number of options that the legislature offered up as choices for biosolids disposal. This, however, must not continue to be used as a final assumed premise. The other options of legislative policy don't ever seem to get responsibly reviewed and considered. This is the opportunity for that to be done correctly. This will be further discussed and developed in this letter. [Commenter: I-6]	I-6-12 Ecology views biosolids as a valuable commodity, with beneficial use as the preferred approach. We believe that is consistent with state law and legislative intent. We do not consider landfilling or incineration beneficial uses.
I-9-4 The State of Washington must see the writing on the wall and end the spreading of sewage sludge on forest and farmland. The State must now work proactively to research and implement alternative methods of sewage sludge disposal such a microwave-assisted thermal decomposition incorporating resource-recovery and energy extraction. Every truckload of sludge deposited by land-application is pollution and filth and has no place being spread where we grow our food or dumped willy-nilly all over our precious landscape. Stop it now. [Commenter: I-9]	I-9-4 Comment acknowledged. Incineration is not a beneficial use. It destroys valuable nutrients and organic matter that represent the bulk of the content in biosolids. Ecology supports beneficial use as the best and most sustainable management practice.

4. Supports General Permit Approach

Comment	Response
I-10-1 As long as the new permitting process does not impose a risk that standards for these facilities, or the permitting of them, is not diminished, I see no problem with the new process. I feel allowing the Dept of Ecology to be more efficient will allow them to address concerns in other areas, and facilities with more complex cases, better. [Commenter: I-10]	I-10-1 The new permit will not decrease established standards of performance for any treatment works or land application site. The revised permit process will reduce or postpone to a more appropriate time, the administrative burden of permitting for many facilities in the state. We expect the new process will allow Ecology to focus limited staff resources on projects where our attention will have the most benefit.
I-11-1 Thank you for your email, I believe that the general permits are working well. You folks do an amazing job of managing the permits And responding when there are questions. I will be a supporter of the DOE on their preferred choice. As always thank you for what you do to keep all of safe. [Commenter: I-11]	I-11-1 Thank you for your comment. We hope the revised approach to permitting will improve the ability of staff, treatment works, and land appliers to focus on areas with the highest potential for return on ensuring compliance with regulations and good management practices.
I-17-1 Thanks for informing me about the development of a new Biosolids General Permit. I'm going to trust you and your co-workers to be using good judgement on this. My experience back 40 years ago at Pack Forest, near Eatonville, made me aware of the potential hazards of biosolids. Much progress has been made in reducing the amount of hazardous components in the biosolids of 2019/2020. As long as the new permitting policy assures that there will be adequate inspection and monitoring of the permitee to abide by all environmental health and safety standards, I won't have any objections. [Commenter: I-17]	I-17-1 Thank you for your comment. We recall the early days of the program and activities at Pack Forest. Yes, there have been many changes and improvements, and we think it is good policy to continue asking questions and refining the program. Ecology believes the revised approach under the new general permit will increase our ability to apply limited staff resources where they will return the most benefit for assuring compliance and environmental protection.

LG-1-1 The Pierce County Planning and Public Works -Sewer Division has been a Biosolids General permit holder since the inception of the program in 2010. We believe that a general permit is the appropriate tool to regulate the beneficial use or disposal of biosolids in Washington State. The requirements that are defined within the general permit protect public health and the environment in an efficient and cost-effective manner. We would like to express our continued support of the use of a general permit for biosolids management in Washington State and look forward to being an active stakeholder in the development of a new statewide general permit for biosolids management in 2020. [Commenter: LG-1]	LG-1-1 Ecology acknowledges the commenter's support for the general permit approach.
O-1-1 For the past 30 years, Northwest Biosolids has worked to advance wastewater management and environmental sustainability through the beneficial use of biosolids in the Pacific Northwest. Northwest Biosolids believes that Ecology's General Permit for Biosolids has been an effective tool in regulating biosolids activities throughout the state. The general permit has been used to implement similar management requirements at similar facilities and has allowed the state to make efficient use of limited resources. [Commenter: O-1]	O-1-1 Comment acknowledged.

O-1-2 When facilities propose to apply biosolids to the land that do not meet the most stringent standards of the state rule, the basic requirements of the general permit are augmented by a requirement to incorporate a general and/or site-specific land application plan. Additional or more stringent requirements may then be established in the plans on a case-by-case basis for individual sites if the basic requirements of the general permit are not adequate. In this way the general permit is not only efficient but protective of the environment and human health as well. [Commenter: O-1]	O-1-2 The commenter is correct. This aspect of the permit program is overlooked or misunderstood by many commenters.
O-1-3 Northwest Biosolids continues to support Washington State Department of Ecology's (Ecology) 173-308 WAC state-wide general permit as it creates a level playing field for all wastewater treatment facilities. The general permit framework also allows Ecology the efficacy of carrying out the robust program it has upheld for over 30 years. 47% of our regional membership has been operating under Ecology's Biosolids management program since its inception, and many of our members actively worked for the passage of RCW 70.95j, which was the legislation upon which the current biosolids program was based. Northwest Biosolids membership includes 152 members that include wastewater utilities (70%), private companies (22%) and supporting organizations (8%) from Alaska, California, Idaho, Montana, Ohio, Oregon, Washington, Alberta and British Columbia. Membership includes small wastewater treatment plants that produce 10 dry tons of biosolids annually to large agencies that generate 30,000 dry tons annually, recycling nearly 91% of the biosolids produced in our region. Together, our membership has leveraged our collective to fund biosolids research end use options and ensure quality biosolids programs across the region. [Commenter: O-1]	O-1-3 Ecology also acknowledges the longstanding contributions of NW Biosolids and its membership to biosolids research, outreach and education, and improved management of biosolids, not only in Washington State, but regionally and nationally as well.

O-4-1 We support general permits as appropriate to regulate the final use or disposal of biosolids in Washington state. We also support: • Reorganizing the permit to create efficiencies, so long as these efficiencies don't overlook pollution problems and free up Washington State Department of Ecology (Ecology) staff and resources to ensure that the permit is properly regulated and human and environmental health is protected; • Ecology maintaining "the right to condition approval of coverage under the general permit in any case where additional or more stringent requirements may be necessary to ensure protection of public health and the environment"; • Preserving public opportunity for hearings and/or to comment on the draft general permit and when new requests to apply biosolids are proposed; • Maintaining the right for Ecology to require an individual permit when the practices of an applicant may not reasonably be covered under the general permit, so long as human health and the environment are still protected; [Commenter: O-4]	O-4-1 Ecology believes our modified approach to implementing a general permit for biosolids captures the best of both permit types. We believe the approach under the new permit will reduce the administrative burden for staff and many treatment works. Staff will be able to better focus efforts on facilities with active biosolids management practices, where those efforts will have the greatest potential for return on compliance and environmental protections.

5. Opposes General or Prefers Individual Permit

Comment	Response
I-1-1 Each case should be decided separately as to application, amount and affects on the surrounding area, therefore, we feel individual permits should be required. We do not believe biosolids should be used anywhere that it can get into floodways, floodplains or streams. Human waste contains metals and bacteria which are dangerous. [Commenter: I-1]	I-1-1 Ecology generally concurs that permit conditions need to reflect local conditions. The biosolids general permit program was designed to provide that flexibility. The potential for impact to surface and groundwater is considered when evaluating a proposal, and in developing additional or more stringent conditions prior to final approval of coverage. Ecology concurs that our water resources must be protected. The biosolids that come out of a treatment plant are not the same as the sewage solids that entered the plant. The design of a treatment plant determines how it will treat wastewater and the solids produced from wastewater treatment. The treatment plant grows microorganisms to consume the waste that enters the plant. Those microorganisms are removed and further treated to become the biosolids. The danger related to the presence of bacteria and metals is minimal. Metals in biosolids are in forms that are generally not bioavailable, and in Washington, typically well below the lowest thresholds set by the U.S. Environmental Protection Agency. Biosolids have been successfully used to reclaim sites that would not support healthy vegetation due to impacts from past activities such as mining. Pathogens are significantly reduced by treatment processes (Class B), and in some cases to below detectable limits (Class A) before biosolids are used. There are also additional site management and access restrictions for Class B biosolids that provide an extra measure of protection. Please see also the separate explanation of general versus individual permits.

I-3-1 In reference to a letter received from the Department of Ecology (DOE), dated December 26, 2019 requesting public opinion regarding WSR 19-24-091: Notice of Preliminary Determination to Develop New Biosolids General Permit, we understand the point of discussion to be whether the DOE will proceed with a new statewide general permit for biosolids management, or pursue the development of an alternative procedure for individual permitting. Our opinion is the following: In mid-January 2019, my husband and I were informed of an application by Fire Mountain Farms (FMF) to deposit biosolids on a site less than 1/4 mile from our two jointly owned rural residential properties. We were devastated, as were many others who would have felt the significant impacts had the landowner not withdrawn his consent, leading to the DOE reluctantly withdrawing their Determination of Non-significance (DNS) for this site. The potential impacts that would have resulted from this one case alone should demonstrate the need for individual permitting of biosolids dispersal. The proposed site was situated directly above the Yelm Aquifer Recharge, our own well aquifers, and approximately one mile from the Nisqually River. Any and all runoff would have a direct effect on drinking water and salmon runs in the river. The site also neighbored a critical wildlife conservation basin and migration area. Yet amazingly, the DOE issued a Determination of Non-significance for this site based on generic boilerplate supplied by FMF. His DNS required no site specific environmental, hydrogeological, or other studies, was issued with no public input, and seemingly was not subject to any internal or other peer review of his obviously flawed conclusion. And had the application proceeded, this same individual was solely positioned as judge and jury to evaluate the merits of his own decision. Had only a Biosolids General Permit governed this site, it is our belief that the city of Yelm and neighboring	I-3-1 Ecology withdrew the Determination of Nonsignificance on the Fire Mountain Farms proposal after the landowner withdrew his consent. It was simply a matter of administrative protocol since there was no longer any proposal subject to evaluation. The DNS was not issued without public comment. A DNS is issued for the purpose of obtaining public comment, and a comment period was provided for the entire proposal, including the DNS. Ecology invested a significant amount of time and resources evaluating the proposal, including potential for impacts to surface and groundwater, which included review by a licensed hydrogeologist. Ecology respects the concerns of any individual who takes time to respond to a proposal, but not agreeing with those concerns is not an indication of a flawed conclusion.

residents would have had difficulty defending the health of our environment from the toxins said to be associated with this industry. We would have been forced to bear reduced property values as the quality of life in our community diminished due to a contaminated water supply, fouled air, noxious odors, health concerns from dust and disease carrying vectors, cancers, traffic, and other related concerns that were documented in over 250 complaints submitted to the DOE regarding this proposal, and as has been reported from nearby Lewis and Mason counties. In addition, the Nisqually river water quality would have been negatively affected further diminishing habitat for salmon and other aquatic life. This proposed and failed site demonstrates that citizens are waking up to the dangers of land applied biosolids and that a General Permit covering all applications would pose further danger and less recourse to the general public. Having recently lived through this threat on the outskirts of Yelm, and the battle to convince the DOE of the significance of this poorly chosen site, we beg to differ with the assumption that biosolids can be safely introduced to our communities under the umbrella of a *statewide general permit.* ANY future DNS determinations MUST be available for public and peer review by interested and affected parties, with the issuing agency subject to normal checks and balances, just like the rest of us. Since this did not occur in the case cited above, it is highly unlikely that the current flawed process could be improved by "streamlining". [Commenter: I-3]	

I-3-2 The DOE has stated that "The new biosolids general permit will apply to public and private entities that treat, store, transfer, apply, or dispose of biosolids in the state. **This permit is the primary regulatory mechanism for approving the final use or disposal of biosolids in the state.** "In addition to revising requirements in the general permit, ecology plans to reorganize the permit to support **a more efficient permitting process.** The new general permit will be divided into three sections that will group facilities by similar operations. **This new approach will allow for expedited issuance of permits for facilities with minimal permit needs, freeing up ecology resources to dedicate time to facilities with more complex permit requirements.** **"The department continues to believe a general permit is appropriate because all applicable facilities are subject to regulation under the same set of rules, and similar management practices apply to all facilities engaged in similar activities under the rules."** [emphasis added] . We believe there are enormous risks involved in a new *statewide general permit for biosolids management b*ecoming the only permit required for managing biosolids, even broken out into three categories, and that these risks far outweigh any potential benefits that may be gained in reduced government costs and staff time. Perhaps when one's own family is not directly confronted with the potential hazards of biosolids land application impacting water, air, and soil through such toxic content, it's easier to believe an individual permitting process redundant and unnecessary. "Ecology has not identified any reduction in regulatory burden or costs that might be conferred by issuing individual permits." What about the reduction in costs to the environment and citizens where every potential damaging site (these days presumed to be most land	I-3-2 Ecology does not agree that there are enormous risks involved in the proposed approach to permitting. Ecology issued the first general permit for biosolids management in 1997. This will be the fifth. Ecology is to finding less costly and more efficient means of accomplishing business, to the benefit of all the people of the state. The benefits of the new approach will confer directly to facilities without active biosolids management programs. Such as facilities with lagoons where clean out is not contemplated during the permit cycle, and those that only send their biosolids to another facility for further treatment. The benefit to implementation of the permit program is that staff will be better able to focus on those permits where attention is most likely to yield a benefit. Ecology has not identified any aspect of protecting public health or the environment that would be compromised by the general permit approach as opposed to issuing individual permits.

application sites for biosolids) is instead rigorously investigated under an individual permitting process? "Ecology has identified significant efficiencies in the general permit process and with the envisioned structure and approach to issuing the new general permit. Achieving those efficiencies is a key goal for the program." The key goal for such a program should be considering the best practices in maintaining the health and well-being of the environment and communities. Not in saving time, effort, or money. For too long finance has interfered in the crucial public and environmental health responsibility of biosolids disposal. [Commenter: I-3]	
I-3-3 "Ecology retains the right to condition approval of coverage under the general permit in any case where additional or more stringent requirements may be necessary to ensure protection of public health and the environment." If there is only one general permit the industry must operate under, how will exceptions to the rule be determined and regulated? The DOE had considered the Yelm location a site of Non-significance until the applicant, followed by the DOE's poor land use determination, were withdrawn due to intense public pressure. Even under a semi-individual permitting process the public was gravely endangered by this ill-chosen site. "Finally, ecology retains the right to require an individual permit when the practices of an applicant may not be reasonably addressed within the construct of the general permit." In other words, a permit that would become obsolete under a new law would be resurrected in certain cases? How would that be possible? Under what conditions? Where would the law exist that defines unusual practice in order to require an individual permit? [Commenter: I-3]	I-3-3 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. Ecology has the ability to impose additional or more stringent requirements for any permit holder. Those determinations are made after a careful, fact-based review of an application or site specific proposal, and include consideration of public comments. Our general permit is designed to capture common beneficial uses which include land application and the manufacture of compost and similar products. As technology evolves, so do opportunities. It is possible that a use for biosolids could be proposed that simply does not fit within the scope of the general permit. Many years ago we saw an example of bacon manufactured from biosolids outside the U.S. We are glad it did not gain traction. Another example sometimes offered is making of bricks. Those latter types of ideas could require the development of individual permits since they really aren't envisioned in the current general permit approach.

	Chapter 173-308 WAC specifically authorizes Ecology to issue general permits, and or individual permits. Ecology could issue an individual permit if a proposal fell outside the boundaries and ability of the general permit to address it. Ecology could also require an individual permit if necessary to ensure compliance for a particular facility. In those cases the general permit would not apply at all.
I-3-4 It is obvious to many, and an absolute necessity given the variance in topography, precipitation, wildlife, wetland, community, and habitat in Washington State that individual site permits must be a prerequisite in order to protect our valuable natural resources, wildlife habitats, farming communities, and human health. ANY future DNS determinations MUST be available for public and peer review by interested and affected parties, with the issuing agency subject to normal checks and balances, just like the rest of us. Since this did not occur in the case cited above, it is highly unlikely that the current flawed process could be improved by "streamlining." [Commenter: I-3]	I-3-4 Ecology's approach under the biosolids general permit addresses these concerns. Please see also the separate explanation of general versus individual permits. When Ecology is the lead agency for a SEPA action, the threshold determination and related documents, including the checklist are made available for public review and comment as appropriate.
I-6-11 The use of the 'general permit' as a *'primary regulatory mechanism for approving the final use or disposal of biosolids in the state'* has given the biosolids industry a 'free pass' to operate under a foregone conclusion that what they are doing will be safe and good for the public purposes. It also represents a final acceptance of what has been considered as an acceptable state legislative policy for the final disposal of biosolids in the state. The question that ecology ought to be asking itself is, *Are the criteria that were used in crafting the conditions of the current general permit, still valid, lawful, applicable, or even relevant to current circumstances regarding the disposal of biosolids?*	I-6-11 Ecology does not agree that the biosolids program constitutes a "free pass" to regulated entities. To characterize it as such fails to recognize the substantial process and obligations facilities must engage to obtain approval and continue in compliance. Also, this not a matter of policy. The state biosolids program is codified in statute and operates under laws as given by the legislature. Ecology is always open to information that derives from documented work and especially peer-reviewed science. Decades of experience in Washington State, and across the nation support that beneficial use of biosolids is safe.

In this comment letter, I want to call attention to various factors of evolution in the biosolids disposal topic that make the aforementioned question an imperative for ecology. Your published notice requesting public comments gives no indication that ecology understands these factors. Instead, the status quo basis of applying the existing basic general permit theory is being rolled out here with very little change other than some 'streamlining'. [Commenter: I-6]	
I-6-19 It has been shown that individual chemicals within biosolids recombine and produce other toxins and chemicals that have not been accounted for in the original makeup of the product. There is no accounting for this in the general permit with regard to testing. The requirement is only for testing a very small amount of what may actually be in the product. [Commenter: I-6]	I-6-19 EPA identified the substances in biosolids that were a cause of concern as part of adopting national rules in 1993. They looked at hundreds of analytes, and have done several additional evaluations. The presence of a substance alone, does not constitute a risk. EPA is developing a screening tool that will provide an improved means for evaluating these concerns. The commenter may wish to submit data that has been validated, or peer reviewed literature or references that identify specific concerns.
I-6-20 The third bullet point makes an obtuse statement that you have not identified any useful reasons to use individual permits by making it sound as if there is nothing gained by such regulation and that it just costs more to do so because it doesn't reduce costs. That is a preposterous proposition considering what your job is and what the substances are that we're talking about here. Why should we even bother to regulate and waste time and money on this topic? In fact, why don't you just say that public comment should now be discontinued because it is a burdensome regulation and doesn't save money? There's no bottom to that type of reasoning. Get off it. It's clear to me, from all the combined bullet points, that ecology is insinuating that there should henceforth no longer be any individual permitting, and that all biosolids will be handled by administrative wrote without the usual need for extensive review and possible obstruction by members of the public that	I-6-20 Ecology does not believe that any of the efficiencies we expect to recognize from a revised approach to permitting will come at the cost of public involvement or environmental protections. Please see also the separate explanation of general versus individual permits.

care. We should be happy about this because it will cut through all the hassles and save money. Incredible! [Commenter: I-6]	
I-9-2 Barring that, I would advocate for individual permits in hopes that individual sewage sludge permits could allow for more public involvement in and scrutiny of each new permit application submitted by a sludge hauling and spreading operation. This might cost the Department more, but you are forgetting to factor in the public health and ecological costs to Washington residents of the continued toxic pollution of our farm soils, food stuffs and waterways because of dangerously misguided practice. [Commenter: I-9]	I-9-2 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. Ecology cannot identify a basis for more scrutiny under individual permits, as opposed to a general permit. The regulatory criteria, research, and underlying guidance that inform Ecology's decisions are the same in both cases. Regarding the degree of public involvement, there has been an opportunity to comment on the concept of using the general permit. There will be an opportunity to comment on a draft general permit, and an opportunity to comment on the terms of coverage for any facility applying for coverage under the general permit. The latter case will include any specific sites proposed for land application with the permit application, or at a later date if a site is proposed after an application for coverage is approved. Following the preliminary notice that generated this round of comments, the remaining public notice is virtually the same. Ecology does plan to implement a web-based service that will allow interested parties to register to be notified of any permit activity in selected counties. Again, that service would be the same regardless of permit form. The greater costs anticipated by the commenter would not be borne by Ecology. The biosolids program is supported by fees, and the cost of all staff and resources cannot exceed revenues or the amount appropriate by the legislature. No monies would be diverted from another source to increase funding for the biosolids program. Ecology must implement the program within the limits of our appropriation. Increases in fees or staff must be approved

	through the Office of Financial Management, ahead of the legislative session. At best, increases are expected to keep up with increased costs of operating the current program. Ultimately, increased fees would be passed to the public in the form of higher sewer rates and increased costs for septic system services. Decades of experience in Washington and across the nation, back by large amounts of peer-reviewed research support that the beneficial use of biosolids is a safe practice. Changes in the approach to permitting should improve Ecology's ability to focus staff time where it will return the greatest benefits to operators and the public.
I-12-1 I do not wish a General Permit allowing biosolids! There would be too much of a chance of a lot of permits allowing these toxins to be put on locations everywhere without the knowledge of the public. Individual permits should be posted and the public should be made aware of these requests. I think this is an attempt to push the agenda of biosolids on the public and it is shameful. [Commenter: I-12]	I-12-1 Biosolids are created by the public, and produced almost entirely from publicly owned wastewater treatment facilities. The beneficial use of biosolids has occurred in Washington for perhaps forty years, and the general permit process in place since 1998, provides for public notice, including posting of sites where class B biosolids will be land applied, and for up to a year after they have been applied to a site.

I-13-1 I have concerns about a general permit for Biosolids. I am opposed to this. I prefer that each site be managed under individual permits. We had a violator of their Biosolids permit in my area of Thurston County that the Dept of Ecology didn't catch for many years. We also had a recent application that was withdrawn in Yelm, WA. That application had no requirements regarding the transportation plan for the massive influx of trucks into the already overloaded 2-lane roads in/out of our area. This application also was within 1/4 mile of a protected Salmon river. Thank you for seeking public comment on a general permit. I am completely opposed. [Commenter: I-13]	I-13-1 Ecology acknowledges the commenter's opposition to a general permit. The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response discussing general versus individual permits. The general permit and rules underlying the state biosolids program have provisions for buffers to surface water, supported by guidance developed with the assistance of Washington State University. Ecology is confident the project would have had no impact on surface water in the area. The landowner withdrew support after opposition that developed as a result of the public notice required under the general permit process. We believe potential traffic impacts of the proposed project were not well understood, and local transportation officials did not comment.
I-14-1 I saw the posting about considering making permits for biosolids applications general instead of individual. I strongly oppose tat, seeing what we in Yelm just went through with the farm that wanted to get paid to handle Seattles wastes in our backyard! An individual permit will require more information and transparency to the public. Please don't let this subject be made less important by lumping the permits together! [Commenter: I-14]	I-14-1 Ecology is not proposing to change individual permits for biosolids to a general permit. Ecology has issued only general permits since 1998. The commenter did not explain what additional information or transparency would be achieved under a different permit approach. The project in question had a robust opportunity for input under the current general permit process, including an extension of the public comment period. The current public notice process began with the original preliminary determination to issue a general permit (this document is a response to questions from that notice). There is arguably more public notice and opportunity for involvement with the general permit than there would be if individual permits are issued. As a point of clarification, the proposal in Yelm did not involve biosolids from the City of Seattle. Yelm currently sends its biosolids to Shelton.

	Please see also the separate explanation of general versus individual permits.
I-15-1 We live in the Yelm - Clearwood area and feel very strongly that any permit applications re bio solids should remain as individual permits not an umbrella one. [Commenter: I-15]	I-15-1 Thank you for your comment. Please see the separate explanation of general versus individual permits.
O-2-2 But if a choice is needed, it would seem that after 15 years of general permitting, it is timely for staff to take a fresh look at each of the applicant's activities under an individual permit. [Commenter: O-2]	O-2-2 Each new permit cycle is an opportunity for a fresh look at existing facilities. Ecology will consider an approach that would provide for or emphasize an evaluation of existing sites at the start of each general permit cycle, prior to issuing a renewed final approval of coverage.
O-3-1 Thank you for the opportunity to comment on WSR 19-24-091: Notice of Preliminary Determination to Develop New Biosolids General Permit. We understand the scope of this Determination to be whether the Department of Ecology will proceed with a new statewide general permit for biosolids management, or pursue the development of an alternative procedure for individual permitting. Based on the history of biosolids use in the Nisqually Watershed and current research on chemicals of concern and their impacts on our waters and ecosystems, the Nisqually River Council (NRC) believes that individual permitting would provide the best adaptive strategies for protecting natural resources and human health. [Commenter: O-3]	O-3-1 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. We acknowledge the commenter's preference for individual permits. We appreciate the dedication of the council to protecting the watershed. Ecology is not aware of any documented incidence of adverse impacts to the Nisqually River from the land application of biosolids. Releases of substances of concern can be traced to many products in common use and often socially acceptable activities that occur on a regular basis within the watershed, and throughout the country. That being said, Ecology believes we should be vigilant of these substances and continue to evaluate the best approaches to managing biosolids within the watershed and statewide.

O-3-2 The NRC has several concerns with the current general permitting process, calling for further evaluation prior to renewal. In particular, the general permit lacks the flexibility to appropriately manage biosolids applications for highly variable site-specific conditions, and to account for rapidly changing scientific knowledge about chemicals of concern and best practices for monitoring and controlling them. The Nisqually Watershed, like all watersheds in Washington, has a unique set of local circumstances, including diverse hydrogeologic conditions and protected species habitat, which can significantly affect the environmental impacts of biosolids. It has been difficult to pursue higher standards for screening and monitoring biosolids in areas of greater sensitivity when those actions are not universally required under the general permit. We hope instead to see individual permitting or a more flexible general permit that allows greater control over the appropriate level of testing and monitoring when warranted for a specific site. [Commenter: O-3]	O-3-2 The commenters remark that, "...the general permit lacks the flexibility to appropriately manage biosolids applications for highly variable site-specific conditions." This is incorrect. Please see the separate explanation of general versus individual permits. The commenter's also say, "...it has been difficult to pursue higher standards for screening and monitoring biosolids in areas of greater sensitivity when those actions are not universally required under the general permit." It is important not to confuse a disagreement of opinion on specific conditions for any particular permit, with a lack of flexibility in the permit mechanism.
O-3-3 Likewise, the five-year renewal schedule for the general permit does not keep pace with developing science around water quality and chemicals of concern in biosolids. Current research in the Nisqually Watershed and elsewhere shows high levels of flame retardants and pharmaceuticals occurring in our waters. Threatened Nisqually steelhead contain the highest levels of PBDEs in Puget Sound. Many of these chemicals of concern are not tested for or regulated under current biosolids management practices. As our understanding of the sources and effects of these substances on human and wildlife health improves, the NRC believes individual permits can provide better and more timely ability to safeguard public and environmental health than a long-term statewide general permit. [Commenter: O-3]	O-3-3 Ecology has not seen any data to support that biosolids are responsible for the levels of polybrominated diphenyl ethers (PBDEs) found in steelhead, or the levels of pharmaceuticals in our environment. Those substances are released from many sources. A Chemical Action Plan on PBDEs previously published by Ecology found the predominant form of BDE in biosolids was not the form of greatest concern, and was more susceptible to degradation. However, Ecology is always concerned with persistent, bioaccumulative, or toxic substances, and we will pay attention as information evolves on PBDEs (and other substances of concern). We understand the commenter's concern about the five-year permit cycle. A shorter cycle would not improve agency attention to issues of concern, and in fact would likely mire staff, treatment works, and land appliers in administrative burdens. Further, the general

	permit is adaptable to local circumstances as discussed in other responses. Our general permit or any individual approval of coverage can be modified if new information becomes available during its effective term.
O-5-2 However, should the department continue its permitting program for biosolids, we believe that it should be under a program offering more individualized assessments of whether the application of biosolids can occur without negative impacts to the many at-risk ecosystems and species. We also believe that a move to individual permits would ensure greater accountability and transparency should these risks not be properly assessed or violations of the permit occur. [Commenter: O-5]	O-5-2 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. Ecology appreciates the commenter's desire more accountability and transparency. We cannot identify how issuing individual permits would improve accountability or transparency. The biosolids general permit, applications for coverage thereunder, and the development of additional or more stringent requirements for treatment works or land applications sites are all accomplished with public notice and opportunity for comment. All of the work is a matter of public record. The general permit process is flexible and allows Ecology to address circumstances particular to the local situation. We also believe the new approach will enable us to focus our resources on facilities with active programs. We hope that will actually support the commenter's desire for better assessment and monitoring of compliance.

O-6-1 Please accept these comments submitted on behalf of Preserve the Commons, a volunteer non-profit organization dedicated to protecting public resources from contamination associated with biosolids application in Washington State. Local residents formed Preserve the Commons following a proposed application by Fire Mountain Farms on land located near Yelm, Washington and the Nisqually River. The application has since been rescinded. Through studying and commenting on that project, consulting with attorneys and experts in the field, and researching prior enforcement actions against biosolids applicators (including Fire Mountain Farms) we learned a great deal about the risks of biosolids ground application. Based on that research, we strongly believe that a general permit is inadequate to regulate biosolids application, and urge the Department of Ecology to require individual permits with comprehensive State Environmental Policy Act (SEPA) analysis. An individual permitting regime is most appropriate because environmental conditions, resources, and affected public vary greatly from site to site across the large and ecologically diverse State of Washington. The amount and manner of precipitation, permeability of soils, content of biosolids, nature of surrounding aquatic resources, and groundwater connection and flow can be significantly different not just from site to site but within a given site. The efficacy of regulatory measures to protect public resources from biosolids application is therefore highly variable. For example, at the proposed application site in Yelm, studies indicated that for certain areas of the site there is extreme soil permeability which results in deep groundwater contamination, outside the scope of what the general permit considered. Concerns were heightened because of the local community's use of groundwater for drinking water, the high degree of interchange between groundwater and surrounding surface waters, potential impacts to threatened and endangered species, and impacts to Treaty fishing rights of the Nisqually Tribe. [Commenter: O-6]	O-6-1 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. Under the biosolids general permit approach, local conditions such as precipitation and soils are addressed when evaluating land application sites. Review also includes assessment under the State Environmental Policy Act. A great deal of misinformation was spread with regard to the site proposed near Yelm. The site was ultimately withdrawn from consideration by the landowner. A licensed geologist/hydrogeologist on staff with Ecology evaluated the proposal. In part, Ecology found that arguments about the permeability of soils were based on inappropriate hydraulic conductivity data, and incorrect.

O-6-2 Individual permitting is also necessary because of the rapidly developing scientific understanding of the contaminants present and biosolids and their impacts. As detailed in Preserve the Commons' comments on the proposed Yelm application, microplastics and nanoplastics, contaminants of emerging concern, a variety of biological pathogens, and "forever chemicals" polyfluoroalkyl substances all present significant environmental risk. These issues are gaining increasing study and attention at the national, state, and local level. In addition, rapidly declining salmon populations and imperiled resident orca populations have created the need for increased rigor in evaluating and preventing cumulative effects of water pollution. A general permit would likely extend for at least five years, which would render it outdated or require repeated updated analysis. [Commenter: O-6]	O-6-2 The conditions in the final general permit can be modified for cause during the term of the permit. Regardless, if individual permits were issued, they would be issued for five years as well. There is no benefit for an individual permit over a general permit, based on the term of the permit. Context is important to evaluating risk. For example, biosolids are treated to reduce pathogens. Where appropriate, site management and access restrictions remain in place after application. Ecology is currently developing two initiatives to address per and polyfluroalkyl substances, the presence of which has declined for those forms of most concern, since their use was phased out starting more than fifteen years ago. There is no linkage of biosolids to any impacts on Puget Sound or the decline of salmon or Orca populations. To the extent that the substances responsible for those impacts may be present in biosolids, efforts to eliminate them from use in manufacturing and society in general, will also reduce their concentration in biosolids. That is certainly something the biosolids program can support.
O-6-4 An individual permitting scheme would not only be more protective of public resources, it would ultimately provide a more efficient regulatory process. Issuance of a general permit, which would likely be applied hundreds of times across the State, would have significant probable adverse environmental impacts, which should lead to preparation of a detailed environmental impact statement (EIS) under SEPA. RCW 43.21C.030. Under the Department's regulations, non-project programmatic SEPA review is required because "[t]he SEPA process shall be integrated with agency activities at the **earliest possible time** to ensure that planning and decisions reflect environmental values, to avoid delays later in the process, and to seek to resolve potential problems." WAC 197-11-055(1) (emphasis added). The EIS process would be lengthy and could result in wide-reaching	O-6-4 The department cannot identify a basis for the belief that individual permits will be more protective or more efficient. This would be the fifth in a series of biosolids general permits, and there is no evidence of adverse environmental impacts based on the use of a general permit. Ecology will prepare a non-project, programmatic SEPA checklist for the general permit. We will make a threshold determination based on that checklist, and proceed according to the decision at that time. Project specific environmental review occurs at the appropriate time for individual facilities and site proposals, when information is available. We note the commenter's remark, "...consolidating review into one meaningful review at the site level... with tailored

litigation. Then, given high site variability, the Department and applicators would also have to conduct extensive site-specific SEPA review, with a likely "mitigated determination of non-significance" or additional EIS. With a rapidly developing understanding of contaminants and their impacts, adequate site-level review is likely to require significant analysis. Given this repetitive process, consolidating review into one meaningful review at the site level via individual permits, with tailored protections and mitigation, would provide a more streamlined approach that better protects public resources than a tiered approach. Individual permits would also allow for timely approval of truly low-impact proposals that did not present public concern. [Commenter: O-6]	protections and mitigation, would provide a more streamlined approach that better protects public resources than a tiered approach." That is exactly what occurs under the biosolids general permit. The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits.
O-6-5 An additional benefit of individual permits is that it allows the affected public to have site-specific, meaningful input on <u>all</u> environmental impacts of biosolids application, and would provide the Department adequate discretion on how to minimize and mitigate such impacts. In contrast, in a tiered permitting structure, a general permit is issued which sets forth presumptive protections for most impacts. Then, often years from general permit issuance, an applicator would apply for permit coverage at a given site. The agency will have to justify deviation from general terms, rather than simply applying the appropriate protections for the site. The affected population will likely pay attention for the first time to biosolids regulation, but the basic permitting scheme and environmental impact evaluation will be functionally predetermined and agency discretion will be greatly constrained. There is a significant environmental justice concern, as affected low-income rural communities (where biosolids application is likely to be targeted) are unlikely to participate in the general permit process and then will have constrained input and protections on the site level. The most appropriate and effective means of ensuring meaningful public input is to independently tailor protections to the needs of a given site, rather than starting with the presumption that certain protections are adequate.	O-6-5 Yes, the general permit establishes a baseline for the program. Requirements extend from the generating/treating facility, to expectations for individual land application sites. The agency does not approach proposals from the standpoint of justifying deviations from the terms of the general permit. The focus for any proposed site is whether the baseline of the general permit, combined with any proposed additional management strategies proposed by the applicant, are appropriate and adequate as whole. Or if not, what additional information or management requirements are needed. All land application sites require plans. That plan provides detailed information on the proposed site, as well as a means for public notice and input. That approach assures that public notice occurs for baseline coverage of a facility, as well as any later additions (such as a new land application site) or significant changes in the permit.

[Commenter: O-6]	
O-6-6 Preserve the Commons understands that the Department's preference is to issue a general permit in part to allow for "expedited issuance of permits for facilities with minimal permit needs, freeing up ecology resources to dedicate time to facilities with more complex permit requirements." For the reasons set forth above, individual permits would be more protective and efficient. If the Department pursues a general permit, we request that the Department prepare an EIS. Any general permit should be narrowly tailored to the aspects of biosolids application that are truly shared across applications. [Commenter: O-6]	O-6-6 We note the commenter's request for an Environmental Impact Statement. Ecology will prepare an environmental checklist, and make a threshold determination at that time. The outcome of the threshold determination will determine the next steps under the State Environmental Policy Act, as well as for the general permit process. Ecology will publish the SEPA checklist and threshold determination in the State SEPA Register.
T-1-1 The Nisqually Indian Tribe provides the following comments to the Department of Ecology's request for comments on whether a general permit is appropriate to regulate the final use or disposal of biosolids in Washington State under WSR 19-24-091, "Notice of Preliminary Determination to Develop New Biosolids General Permit." Ecology intends to issue a statewide general permit for the management of biosolids, although it recognizes individual permits could better protect public health and the environment and could be more efficient, less burdensome, and less costly. Nisqually has seen historic, ongoing, and proposed future applications of biosolids in the Nisqually watershed. Our experience informs us that individual, site-specific permits written to the unique physical and biological conditions of a proposed site best protect the resources needing our common stewardship. Nisqually has significant concerns about the adverse impact the inadequate management of biosolids in the Nisqually Watershed will have on our treaty rights and trust resources. Each watershed in the State is unique in multiple ways, and capturing that in a general permit, even with the ability to condition, is challenging at best and inadequate far too often. We have invested a tremendous amount of tribal, State, and Federal resources into protecting and restoring habitat in the	T-1-1 Ecology does not concur, and has not said that, "individual permits could better protect public health and the environment and could be more efficient, less burdensome, and less costly." To the contrary, Ecology believes that the biosolids general permit program implemented under WAC 173-308-310 is more efficient, less costly, and equally protective of public health and the environment. The commenter observes that, "Each watershed in the State is unique in multiple ways..." Ecology concurs. The commenter goes on to say that capturing that in a general permit, even with the ability to condition, is challenging at best and inadequate far too often. Permitting can be challenging using either approach. The commenter says that a general permit has far fewer protections than an individual permit, and that problems are only corrected after they are found. The goal of either permit approach is to be protective, and the final conditions of approval under the general permit can (and should be) the same as those that might be written directly into a final individual permit. Either approach provides an opportunity for assessment of a facility

Nisqually to benefit the ecosystem and to support multiple listed species' recovery. In many cases, these protected and restored lands and waters represent the last best hope for critical species to survive the rapidly changing climate and, in the case of Nisqually steelhead, from going extinct. The location and connection of these lands and waters, and the future work to improve baseline conditions in the Watershed, is unique to the Nisqually, and simply cannot be addressed in a general permit that applies statewide. We have observed that a conditioned general permit offers far fewer protections than an individual permit. A general permit allows a certain level of risk to be applied to the surrounding environment; it is only after the impacts have been discovered that remediation and risk reduction occur. On the other hand, an individual permit written to address local conditions and needs greatly reduces the risk to the environment from unintended consequences before those unintended consequences occur. This precautionary approach is most protective of the environment and of the Tribe's treaty rights. [Commenter: T-1]	application or site proposal. Of course problems should be corrected if they are found, but that would be true under either approach. Please see also the separate explanation of general versus individual permits.
T-1-2 As one particular example, only individual permits can presently require that the risk factors associated with the source and content of bio-solids be clearly identified and monitored on site. If a general permit does not require certain actions, such as source identification and complete toxic screening, conditions on an application to the general permit cannot require them. [Commenter: T-1]	T-1-2 The commenter may misunderstand the biosolids permit process. We believe this was the case for many commenters. Please see our separate response, discussing general versus individual permits. The commenters are incorrect in saying that if a general permit does not require certain actions, conditions on an application to the general permit cannot require them. Ecology reserved that ability within the structure of the permit system. To be clear, anything proposed by an applicant can become a permit condition if it is not contrary to biosolids program rules or other conditions of the general permit. Ecology can add requirements as a condition of approval. That is accomplished in a final letter of approval. It is also typical, however, to resolve those questions and incorporate them in the body of a final application.

	Ecology has not developed the content of the next general permit, although much of what is in the current permit will roll forward. If Ecology intends to broadly control some aspect of operations, it should be described in the body of the general permit. However, we can modify the baseline general permit at a later date, for cause. Nothing prohibits Ecology from implementing requirements to evaluate any aspect of a source of biosolids or activities that occur at any permitted site, but such requirements are then subject to appeal. Source identification is likely better managed through Ecology's Water Quality Pretreatment Program. We would need a description of what constitutes "complete toxic screening" in order to respond. Generally, Ecology requires analysis in order to determine compliance with a standard. Standards are based on related human health or ecological data. The commenter may wish to make specific recommendations later in the permit development process.
T-1-3 This is a critical issue for the Tribe, particularly because our ESA-listed steelhead suffer from the highest observed levels of toxic loading of polybrominated diphenyl ethers (PBDEs) in the Puget Sound region. Adding biosolids from unknown sources likely containing elevated levels of PBDEs to the Watershed would increase the risk of extinction to this incredible biological and treaty-protected resource. The Nisqually Watershed cannot withstand this risk, even though other watersheds in the State with much lower loading might be able to. Individual permits tailored to a site's unique physical and biological conditions offer the only solution for ensuring the areas of our State requiring our protection the most, such as the Nisqually Watershed, receive it. [Commenter: T-1]	T-1-3 Past review of PBDEs by Ecology found other sources of release to the environment to be more significant than biosolids. EPA is developing a new tool to help screen pollutants of concern. The new tool will allow EPA to set aside those substances that attract concern without merit, and focus on those that may require further regulation. Ecology is monitoring progress at EPA and looks forward to reviewing the EPA tool. Please see also the response to comment O-3-3.

T-1-4 We have observed that individual permits can offer the same ease in management as general permits if individual permits begin from a common set of best management practices (BMPs). There are likely some common application standards based on Ecology's many years of experience in this issue that can be captured in BMPs. If these BMPs serve as the basis for each individual permit, Ecology could have some uniformity in management while having the opportunity to consider each particular biosolid source in the context of the surrounding ecosystem and to protect each unique aspect of each site. [Commenter: T-1]	T-1-4 Ecology concurs with the idea that a permit can start from a common set of management practices. That is accomplished in under the general permit system with the issuance of the baseline general permit. Ecology has published Biosolids Management Guidelines (WDOE 93-80) and Managing Nitrogen from Biosolids (WDOE 99-508). Ecology also relies on a numerous other sources to inform permit development and decision-making, including federal guidance documents, university studies, and cooperative extension publications. The general permit provides exactly the uniform starting point the commenter values. Ecology has not identified any limitation conferred for the management of individual sites under the general permit approach.
T-1-5 If Ecology is disinclined to utilize individual permits statewide, it should consider requiring individual permits for any facilities in the Nisqually Watershed. Under WAC 173-308-90005(1)(b), the Director has the authority to issue a general permit for facilities within appropriate geographic areas. The Nisqually Watershed is an "inappropriate geographic area" given its high loading of PBDEs and the risk the inadequate management of biosolids poses to the Watershed's ESA-listed steelhead. The Nisqually Watershed requires the protection only an individual permit can offer. If Ecology utilizes a general permit for the management of biosolids throughout most of the State, it should exempt facilities in the Nisqually Watershed from that coverage and should require those facilities to apply for individual, site-specific permits. [Commenter: T-1]	T-1-5 Ecology firmly believes that issuing individual permits will be more costly and time consuming. Issuing them in the Nisqually River Basin would require shifting resources from other projects, and again, it is the belief of the agency that no value would be added. The commenters may wish to provide validated data, or peer-reviewed research in support of additional or more stringent requirements, if there is a proposal within the boundaries of the watershed. That information could be used to inform related permit decisions.

6. General Permit Requires More Oversight

Comment	Response
I-2-1 A General Permit for Biosolids could work if the process included: 1. Separate General Permits for the east and west sides of Washington State. [Commenter: I-2]	I-2-1 Ecology appreciates the idea behind the recommendation. We have considered this numerous times since before the first permit was issued in 1997. We have also considered issuing different permits for specific types of beneficial uses. We are not strictly ruling out such an approach. We have not been able to identify a benefit that would outweigh the burden. We believe multiple permits are not necessary because the current general permit program allows us to condition an individual site, based on local conditions. That means we can address, for example, the difference in rainfall between a site in the drier clime of eastern Washington, and an otherwise comparable site with much higher precipitation in western Washington. There are other challenges with issuing multiple general permits. Doing so would increase the administrative workload on staff, and divert resources from site-specific work that is important. Some jurisdictions generate biosolids on the west side of the state, and transport them to the east side of the state. They could be required to apply for coverage under multiple permits, creating confusion and further administrative burden, without benefit. Please see also the separate explanation of general versus individual permits.

I-2-2 A General Permit for Biosolids could work if the process included: 2. Upon a second renewal of a biosolids permit, Ecology would conduct a thorough site evaluation to determine if the site is still functioning as originally described and if any modifications are necessary. [Commenter: I-2]	I-2-2 Ecology will consider an approach that would provide for or emphasize an evaluation of existing sites at the start of each general permit cycle, prior to issuing a renewed final approval of coverage. A goal under the revised permit approach is to free up staff time that has been spent on administrative duties. This will allow more time for evaluating and ensuring that site management requirements are appropriate and being met. It is the intention of the program to have inspections of sites throughout the life of a permit, so that issues can be addressed as they arise, rather than simply at the conclusion of a five-year cycle. If additional criteria are needed beyond those in expiring permit coverage, they can be added in the next approval process. Those needs may be recognized through inspections and permit reviews, but also from input by interested parties at the time the general permit is reissued, and also following the application of a facility to renew its coverage under the permit. It is also possible to modify a permit mid-term, if new information comes to light that was not previously available. It is also possible to deny continued approval of coverage if a site has proven to be inappropriate or has been poorly managed.

I-5-2 My experience with two biosolids application permits allow me to conclude that system is not protecting the environment or public health. Haulers with records of violations, untested biosolids potentially harboring toxic and biological wastes, unsecured sites and examples of spreading during rainy, prohibited times leading to documented runoff into neighboring waterways....these problems make it obvious that current rules and enforcement are inadequate. [Commenter: I-5]	I-5-2 The commenter did not provide details regarding the specific sites of concern, although this would not be an appropriate mechanism to analyze them individually. Violations of rules and permit conditions do happen. As with many of our laws, transgressions can fall somewhere on a scale from minor to severe, and magnitude and frequency are also considerations. It is regrettable that non-compliance occurs at all. The concerns outlined by the commenter can all be addressed within the construct of the current program and a general permit. If they are not addressed to the satisfaction of the commenter, it may be that the agency does not agree on the relative severity of a situation. Or, it may be that the commenter or the agency have different information upon which to base their conclusions. The transportation of biosolids is subject to regulation by the Utilities and Transportation Commission. Regardless of the number of violations, Ecology has no jurisdiction to address violations of haulers related to transportation issues (other than spills, which occur infrequently). The biosolids program ensures that all required testing is performed, which includes the biosolids product and soils sampling at land application sites to demonstrate adherence to agronomic rates. Ecology understands that the commenter may want more testing. That concern would be appropriate to express in response to the draft general permit, and for any specific instance of coverage under the general permit, We are unsure about the reference to site security. A requirement to post sites is made based on the quality of biosolids that are applied to the land. Site access may be restricted for up to a year after the last application. Fencing or physical barriers are not required, although they could be in certain limited circumstances where the potential for unknowing entry by the public is particularly high.

I-5-3 My understanding is the development of individual permits would place an undue burden on staff and create backlogs. Stricter general permits and better monitoring and enforcement at sites are recommended. [Commenter: I-5]	I-5-3 Ecology would like to improve the current permit process by taking steps to relieve agency staff and permit applicants from unnecessary administrative burdens. This will allow us to focus limited resources where they are most needed. The development of individual permits would definitely create a much greater burden for staff, and permit applicants. We believe the increase in burden would occur without benefit to anyone. A conversion to individual permits would result in a reduction in the speed of permit processing statewide. Federal law requires that facilities with National Pollutant Discharge Elimination System (NPDES) permits must apply for, and operate under permits, but there is no mandate for the time frame to complete the review and issuance of a permit. Existing permits continue in effect until an affirmative action is taken by the agency - a permit may be modified, revoked and reissued or terminated during its defined term of coverage, or upon expiration be replaced by a new permit. If we were to convert to individual permits, coverage for facilities would continue under the expired general permit until Ecology could review and approve each of 375 facilities in their own turn. Ecology does not believe that is in the best interest of anyone.
I-7-2 Since the Department of Ecology is asking for comments on a Statewide general permit for Biosolids I would like to point out that this state has several eco regions and they are different. A general Statewide permit might be OK but the department should take into consideration the climate of the regions that they would like to permit. Areas that have rainfall of over 35 inches and water near the surface applications should be limited unless the material can be tilled into the ground the same day as applied. The problems we are having here in Lewis County is the material has to be stored until the groundwater is 12 inches below the surface. Since a good share of the application sites are in wet areas that means the material must be stored in	I-7-2 We agree with the commenter regarding observations about the diversity of conditions across Washington State. The biosolids general permit process allows Ecology to address local conditions by conditioning the approval of any facility or site. By design, the program intends that runoff from application sites does not impact nearby surface waters. If that occurs at any site, then permit conditions are improper for the site, there is a violation of permit conditions, or some aspect of modeling prior to approval of permit conditions is incorrect. Ecology will consider an approach that would provide for or emphasize an evaluation of existing

bunkers or lagoons until it can be applied. Lori Davies, Kyle Dorsey, Peter Lyon, (Win Hoffman retired) and others from the DOE have stated there is very little smell to the class B material when it comes to the Fire Mountain Farms bunkers or lagoons. I would say if this material could be applied when it comes in then it would be less offensive to the neighbors. The problem is that it sits and goes aerobic and when applied is very offensive. If the DOE would go around to the areas that applications are made and talk to folks living those areas you would hear the complaints. As pointed out in reference to the eco areas of the state I believe you could till in the material as it arrives in a region that only gets a few inches of rain per year and ground water is very deep. In the case of the Newaukum Site and the Hanford site heavy applications are applied in September and October of the year ask yourself is that material been uptaken by the time the fall rains come, NO I CONTEND much goes right to the Chehalis River basin. Art Blum who lived on the West side of the Newaukum site told me the ditch ran black during the first heavy rains of the year. When the field had heavy applications. (all the fir trees on the west side of Newaukum Site died and all my cedar trees next to the lagoon on my place are dead) TMDL I don't believe is measured during a period of 2 inches of rain per day. By the time spring rolls around the solid material is gone for sure. [Commenter: I-7]	sites at the start of each general permit cycle, prior to issuing a renewed final approval of coverage.
I-7-3 In regard to monitoring of applications statewide I believe the individual counties should have better control and better knowledge of what material is coming to their respective counties. The DOE should fund a person from each county to have a better handle on what is being dumped in their counties. AGRONOMIC RATES OF APPLICATIONS NEED TO BE MORE CLOSELY MONITORED	I-7-3 We appreciate the commenter's support for land application of biosolids to be done responsibly, despite expressing concerns with a neighboring site. Ecology assess fees for facilities subject to permitting. Revenue is subject to appropriation (requires authorization of the legislature to spend), and supports about eight biosolids positions statewide, plus agency overhead costs. Funding a position in each county, or even in a

I believe biosolids could be properly managed under a general permit if the eco regions of the state are considered and with more monitoring from the individual counties, in the past I believe DOE has good folks attempting to monitor the disposal of material HOWEVER you must have enough people and have systems in place to hold contractors accountable for their actions. In the case of Lewis County it is my opinion that DOE could use some help. As an example I remember Win Hoffman coming down to Newaukum to inspect application of material the ground was black with material when she was inspecting, the next day after she left more material was being applied, she was only one person for many sites. I am interested in the applications of biosolids to be done in a responsible way and without the input of the counties in implementing the procedures besides monitoring the health standards it is lacking. [Commenter: I-7]	single county, is not within the scope of state authority, and seems unlikely at the local level as well. Development of the state authorized program began in 1992, although biosolids were land applied in Washington as early as the 1970s. As the state program developed, local jurisdictional health authorities expressed strong interest in being involved with program implementation. Ecology did establish memorandums of understanding with some local jurisdictions. There was never anything close to full funding for those local efforts, and over time, state funding dwindled against an increasing workload in other areas for local jurisdictions, while the ability to muster increased local funding also diminished. Biosolids management is not an activity that can be easily understood, even by knowledgeable local health and environmental officials when it is not their primary focus. It requires a commitment of time and resources to develop necessary expertise, and a continuity of resources that cannot be overstated. Ecology recognizes the potential interest of local officials, and has always encouraged their review of any proposed permit action. Often times there simply are not enough resources to address the many other concerns and obligations local officials face.

O-6-3 We are also concerned that general permit coverage appears to be regularly extended with limited additional review. This practice seems to be leading to the soil and/or groundwater contamination of established biosolids sites over time. In our neighboring Mason and Lewis counties there are at least five sites showing such contamination, and those sites cover hundreds of acres. In contrast, site specific permitting would more likely result in analysis based on best available science, and require timely resubmittal and analysis to prevent long-term contamination. [Commenter: O-6]	O-6-3 Permit coverage must be in place to facilitate regulation of facilities and activities. There would be no difference in the time frame for submitting permit applications or analysis of data under an individual permit as compared to a general permit. A goal under the revised permit approach is to free up staff time that has been spent on administrative duties. This will allow more time for evaluating and ensuring that site management requirements are appropriate and being met. We have focused significant resources on issues in Mason and Lewis Counties. Progress has been made, and we will continue to apply scrutiny until each situation is resolved. Ecology will consider an approach that would provide for or emphasize an evaluation of existing sites at the start of each general permit cycle, prior to issuing a renewed final approval of coverage.

7. Other

Comment	Response
I-2-3 A General Permit for Biosolids could work if the process included: 3. Each site needs to establish a contingency fund adequate for any future land and groundwater remediation and restoration. [Commenter: I-2]	I-2-3 We appreciate the idea behind this recommendation - essentially creating an insurance mechanism. Under the authorizing statutes, Ecology may collect permit fees, which are deposited in the state treasury. Money from the treasury account can be appropriated for the purpose of implementing the permit program. Our authority does not extend to financial assurance mechanisms.
I-2-4 A General Permit for Biosolids could work if the process included: 4. Establish a Biosolids General Permit Committee to develop the General Permit The committee would include: Federal government - *USGS, NOAA; Fish & Wildlife*, state government - *Departments of Agriculture, Health, Natural Resources, Ecology,* the Tribes, local government, septic system providers, wastewater treatment facility operators, biosolids land application operators, nongovernment organizations, university, aqua culture and agriculture growers and citizens participating in watershed issues.... As a citizen with a long history of following the issues of regulating biosolids land application sites, I would be interested in serving on this committee. If you have any questions, do not hesitate to contact me. [Commenter: I-2]	I-2-4 We appreciate the commenter's willingness to participate. We do not plan on assembling an advisory committee for this general permit process, but there will be further opportunities to comment. There may be an opportunity to participate in an advisory process in the future. We do want to note that many states and federal agencies were involved with the development of the federal rule, and have been involved since that time.
I-6-1 Thanks for giving notice to me of the agency intention to renew, with changes, the state general permit for biosolids disposal in accordance with WAC 173-308-90005 Appendix 5,ÄîProcedures for issuing general permits. I wish to continue as an 'interested party' on your mailing list for updates on all related actions taken. [Commenter: I-6]	I-6-1 Please contact us with an email address and we will confirm your addition to the biosolids general permit ListServ.

I-6-3 Giving only one example, the 2018/2019 Fire Mountain application review was a good example of a grossly incomplete review. The final summary of that review was described in the DNS as following all the requirements of the state laws and regulations for biosolids review so, as you put it in your current notice under review here, *'to assure that conditions in the biosolids general permit protect human health and the environment.'* That was proven to be far from the truth, and that DNS had to be withdrawn after receiving a rightful beat-down by an indignant local population, local governments, the Nisqually Tribe, and astounded environmental groups. The reason that such a review condition can play out to such an outcome is that the normal process of ecology review is much too vague and generalized and doesn't involve adequate consideration of what the local circumstances are. In so doing, it substantially undermines any valid local government review or recommendations about environmental circumstances. As a result this has created a special class of industry that is immune to the health and safety requirements of review. The fact is, ecology is not itself qualified to perform a proper review of local conditions. Could that really be construed as the legislative intent of laws and regulations governing the disposal of biosolids? Not by my reading. It has become a built-in obfuscation of the protections necessary to administer the protection of the health and safety of the public. That form of obfuscation must not be allowed to happen. [Commenter: I-6]	I-6-3 Ecology disagrees with this comment. Ecology staff performed a thorough review of the site proposed by Fire Mountain Farms near Yelm. The landowner withdrew following intense public opposition that developed directly as the result of the public notice process required under state rules and the general permit.

I-6-4 Other considerations: Has ecology used Chapter 173-333 WAC PERSISTENT BIOACCUMULXTIVE TOXINS (biosolids are specifically not included in the list of exclusions under WAC 173-333-130 which cites RCW 15.54 that specifies RCW 15.54.270 Definitions.,; see (36)) in their criteria for inclusion under the general permitting? [Commenter: I-6]	I-6-4 Chapter 173-333 is not applicable to biosolids per se. The chapter applies to substances meeting criteria to be classified as persistent bioaccumulative toxins. Ecology can develop Chemical Action Plans (CAPs) for these substances, some of which may be found in biosolids. Biosolids are part of a CAP under development that will address per and polyfluorinated alkyl substances. Biosolids have also been considered in the development of other CAPs that addressed different substances of concern. Chapter 15.54 RCW regards the regulation of commercial fertilizers. Most biosolids produced in Washington, and for that matter the United States, do not argue to be classified as commercial fertilizers. If a generator wants to meet the criteria to be classified as a commercial fertilizer, they may do so, and would then be subject to those laws. The exemption in Chapter 173-333 is not otherwise relevant for biosolids.
I-6-5 Over all, what I have seen characteristically done regarding permitting of proposals for disposal of biosolids, septage sludge, solid waste, etc., is for the DOE to work with favoritism towards applicants for disposal. It appears the call of agency duty is to see the application through at the expense of what the local residents want and are able to cope with. I understand that you feel that you are doing a necessary job of working to execute a legislative mandate to 'get rid of this stuff" by calling it names that are less offensive and putting on a good show of following the rules. I won't go on and on describing a past that you and everyone else is already familiar with. Much of what has gone by over the years with this little game has hinged around the ability of the collective powers-that-be to make such an incomprehensible legal labyrinth that noone could penetrate such that everyone is left scratching their head wondering how an agency given the task of protecting the environment and health conditions could be obviously poisoning their public against their will. On top of that, all you have to do is point to what your legislative mandate is in spreading stinky black poisonous goo around the	I-6-5 Ecology attempts to work cooperatively with all parties subject to, and interested in, the outcomes of its biosolids permit process. We believe good working partnerships produce better results. Small businesses and landowners interested in developing a partnership with treatment works are also entitled to fair consideration.

countryside. I have seen how this baffles the public, government officials, and lawyers. Well, the times have changed. You can't do that anymore. The hoards are catching up to you. [Commenter: I-6]	
I-6-6 Let's go back to the question that I brought up at the beginning of this letter; *Are the criteria that were used in crafting the conditions of the current general permit, still valid, lawful, applicable, or even relevant to current circumstances regarding the disposal of biosolids?* Something really significant finally happened in 2018 after decades of negligence and denial. And though your agency has publicly denied the significance of it, the EPA published its findings about what is in biosolids and what it's probable effects are on human health. The effect this has on the program that you're wanting to administer with this general permit renewal is substantial. From a purely legal perspective, it means that if you permit these activities to continue as you have under past criteria / predication, you will be condoning the probable serious contamination of land and probably people, with full knowledge. To my knowledge, the EPA has not yet quantified specific classification / definition of acceptable contaminant levels for these previously-unlisted toxins, and probably won't for several years. However it has become well known and accepted in science circles that many of these newer contaminants have serious, bio-accumulative effects on human health and the environment. They are proven to be present in biosolids in significant amounts that do cause harm and will not be acceptable. If you re-read the EPA report on this, with this in mind, you might see it in a different light. What the EPA has indicated is that 40 CFR part 503 can no longer be used as the standard of safety for the disposal of biosolids. You have serious responsibilities with the handling of this fact written directly into your mandates related to protecting the	I-6-6 EPA did not publish the findings in question. The Office of the Inspector General (OIG) - a separate federal entity - published the report, which represents their opinion about the EPA program. EPA took strong exception to the findings of the draft report. After a protracted dispute, the OIG revised their draft report and EPA accepted the remaining recommendations. Ecology did agree with some points made by the OIG. In other cases, the bias of the authors or lack of technical knowledge was evident. The OIG refused to meet with stakeholders to defend or discuss its findings. EPA is working on addressing the various aspects where improvements were agreed to, and has said a risk-screening tool is their highest priority for the national biosolids program. That remains a federal concern until the results can be translated to implementation at the state level. Ecology has periodic contact with EPA and expects to remain informed. Regarding the relevance of current criteria, they are the criteria we have to work with. Excess amounts of the nine pollutants regulated under WAC 173-308-160 and the corresponding federal rules, is so rare in Washington that Ecology could argue continued analysis is not warranted. The requirement exists at the federal level, and so Washington will continue to require that monitoring as appropriate. The commenter states, regarding unspecified newer contaminants, "They are proven to be present in biosolids in significant amounts that do cause harm..." The commenter may wish to present properly obtained and validated data and/or peer reviewed literature showing this to

health, safety, and welfare of the public and the environment. You can no longer hide from this. In fact, your first bullet point in your notice specifically refers to *'where additional or more stringent requirements may be necessary to ensure protection of public health and the environment.'* [Commenter: I-6]	be the case.
I-6-7 The second bullet point refers to the preservation of the public's ability to comment. Obviously I have included some recommendations and comments on your normal permitting structures, but I, and many, do not condone or accept the continued fashion in which biosolids disposal is permitted and handled. [Commenter: I-6]	I-6-7 Comment acknowledged.
I-6-8 Let's take a tour around a few of the statutory and rule mandates that you are tasked with upholding and have not been serious about adhering to. Instead, you just see your job as one of enabling the hauling and spreading industry to proceed wherever and however they want without hindrance or consequence. I've been watching this charade go on for over 30 years around here. Now the game is over. The legislature in Washington State left the door open for you to look to other methods of disposal. It has been decided in the courts that you can continue being protected in permitting the land spreading of biosolids as long as it is economical. But now, these types of contaminants that the EPA has shown the light on must be removed from any land applied materials or you will have to be held responsible for contaminating the countryside with them. Obviously they cannot be removed by any economical means. **Trucking and spreading biosolids is then no longer economically feasible.** If that will no longer work, let's start up a discussion about new methods of disposal that the legislature also talked about. We better do this now and not waste any more time. You have an emergency on you hands now.	I-6-8 Ecology is always serious about carrying out its mandates, and does not concur that the program can be fairly characterized as allowing, "...industry to proceed wherever and however they want without hindrance or consequence." Ecology does not agree with the commenter's assessment as regards the applicability or use of the cited statutes.

Now that the EPA has made it's position known, and we all know where this is headed, think about the following regarding statutory and rule mandates: Distribution of biosolids will now become a violation of: RCW 90.54.010 Purpose.; RCW 90.54.020 General declaration of fundamentals for utilization and management of waters of the state.(refer to (3)(b); RCW 90.54.090 State, local governments, municipal corporations to comply with chapter.; RCW 90.54.140 Protection of groundwater aquifers if sole drinking water source. Chapter 90.71 RCW PUGET SOUND WATER QUALITY PROTECTION , specifically (in part) of RCW 90.71.310 - Action agenda It's not hard to see that SEPA rules governing the 'economical' use of bio-solids for fertilizer will conflict with the statutes governing pollution in state WPCA or federal CWA. Statute RCW 90.48.035 (rule making authority) give, and direct the DOE to change regulations to be consistent with anti-pollution provisions of WPCA. [Commenter: I-6]	
I-6-10 I remember all the decades that went by fighting government agencies about whether smoking cigarettes was harmful to humans even though such had been thoroughly proven. Now the state has latched onto that cause to make huge reimbursement from the tobacco companies. Now that the world finally got the message, smoking cigarettes is generally frowned upon by society as not only unhealthy, but as a detriment to society. Monsanto / Bayer is now having their turn with the same type of harmful behavior. Johnson & Johnson is now having their turn... The list is long. The only reason these eventualities take so long is on account of politics, corporate profits, convenience,	I-6-10 Comment acknowledged.

momentum, and perhaps enough sand to stick one's head into. It's only a matter of time. You too could have your turn... But it's not necessary. All the climate is set now, to make a change. You can no longer consider the path you have been on to be acceptable from either a legal / lawful, or moral standpoint. [Commenter: I-6]	
I-6-14 Unfortunately, the purposes of this program always appear to favor streamlining and reduction of review because of the most lenient and past interpretation of state legislative policy. This has led to unsafe, hazardous, and irresponsible environmental conditions. [Commenter: I-6]	I-6-14 Ecology follows statutory directives in RCW 70.95J, and elsewhere, that are a matter of law, not policy. We believe the state program meets or exceeds federal requirements. Overall compliance with program requirements is good. The current effort to implement more efficient permitting is in part intended to allow Ecology more time to focus more attention on the most complex operations, and those where there are questions of compliance or permit adequacy.
I-6-16 **Change #1** of the rules governing the general permit writing must be a substantial change to how ecology must interface with local population, government, citizen groups, etc. To that end, I suggest considering that section 1.6 of the general permit be altered such that ecology **must** make a **mandatory** agreement of how a local government must act in implementing and reviewing under Chapter 173-308 WAC in concert with ecology. Doing this will greatly increase the benefits of review intended under WAC 173-308-030 (6) - Relationship to other laws, regulations, and ordinances. [Commenter: I-6]	I-6-16 Ecology will request and respond to comments regarding the content of the general permit, later in the permit process. Ecology invites local governments to review and comment on any biosolids proposal within their jurisdiction. We cannot, however, mandate the involvement of local governments, nor assign them duties for which they are not adequately prepared or funded. Please see also the response to comment I-7-3

I-6-17 **Change #2** that should be considered has to do with required modes of public notice under section 2.5 of the existing general permit. The requirements listed are quite standard but do not reflect the level of notice that should be afforded to people in the vicinity of these proposals. My observation has been that the land owners / occupiers in the area of the proposed project don't generally know what is about to be done in their area. The idea of notice is to notify the likely-to-be-affected people. In order to accomplish that more openly, the proponents should be additionally compelled to give mailed notice to land owners and residents within a minimum of 1 mile of the boundary of land proposed to be used. This is not unreasonable, and is actually sensible on account of the expected possible effects such an operation might have on the surrounding community. Giving minimum notice requirements is like a cruel joke, with a punch line one gets to laugh at for possibly many years. [Commenter: I-6]	I-6-17 Ecology established the requirements for notice in rule, and believes they are reasonable and appropriate. Requirements are characterized as minimum, to allow for additional requirements when appropriate. Appropriate public notice requires consideration for each case, but Ecology does not generally consider direct notification of all property owners within a mile of a proposed site, reasonable or practical. Experience has shown that well-placed signs are effective for the surrounding area. Depending on the nature of the proposal, additional notice is placed in the State SEPA Register and published in a newspaper used for legal notices in the area of the proposal. Ecology hopes to implement an online service that will allow interested parties to register to be notified of significant biosolids permit activities within any county(ies) of their choosing. We believe the online registration service will be an effective enhancement.
I-6-18 Show that the new statewide general permit will take all the considerations necessary as described in RCW 90.48.280 Sewage drainage basins--- Comprehensive plans for sewage drainage basins ; and thence in consistency - Chapter 372-68 WAC WATER POLLUTION CONTROL AND ABATEMENT PLANS FOR SEWAGE DRAINAGE BASINS WAC 372-68-060 at WAC 372-68-060 Outline of minimum plan requirements. [Commenter: I-6]	I-6-18 RCW 90.48.280 requires the operation or construction of sewage collection, treatment or disposal systems or plants to be consistent with an approved comprehensive plan. It does not address biosolids management directly. Permits issued to wastewater treatment plants require compliance with biosolids rules and permit requirements. Ecology staff coordinate internally as necessary. The scope of the plan requirements in WAC 372-68-060 is broad and beyond the scope of biosolids management, which is regulated by permit under a separate program where protection of water quality remains an integral part.

I-6-21 Unfortunately, the purposes of this program always appear to favor streamlining and reduction of review because the agency wants to save money and be 'more efficient'. These are very subjective concepts and don't specifically fit within the legislative mandate that you are serving in the way of protections and enforcement. More important is to understand that the agency is blindly, habitually working to exercise authority over the most lenient and past interpretation of state legislative policy. This has led to unsafe, hazardous, and irresponsible environmental conditions. Those conditions have now been made plain and must be prevented by using a different path to resolve the enormous challenge of safely disposing of biosolids. I know that I have ranted on here in a somewhat plebeian fashion but the facts remain whether delivered in eloquence or coarseness. This subject matter is very serious and must be given a careful and fresh thought. Be forewarned. The hoards are coming. [Commenter: I-6]	I-6-21 Ecology believes the current biosolids program is a responsible implementation of our obligations under laws of the state. We think efficient government processes are to the benefit of all. We expect our revised approach will accomplish compliance with applicable rules at a lesser cost to all, and enable the agency to focus resources where they are most needed.
I-7-1 I am writing in response to the notification I received from you in regard (Determination of a new biosolids general permit. I have had many years of bad experiences with the Newaukum Site in Lewis County. I have met several folks about the problems at the department including Peter Lyon, Lori Davies, Kyle Dorsey, Win Hoffman and several others. Fire Mountain Farms have several dump sites to dispose of biosolids here in Lewis County, The DOE has known for several years two of the sites lagoons have been leaking. Burnt Ridge and Newaukum. (Material mixed with Kalama Chemical Waste) Several years ago I stood at the lagoon on the Newaukum site and told Lori Davies, Kyle Dorsey and Win Hoffman that the lagoon would leak. Bob Thode who owns Fire Mountain made the statement that this lagoon is lined with and IMPERVIOUS CLAY LINER and would not	I-7-1 We appreciate the commenter's perspective and understand his many years of experience as a neighbor to the Newaukum Prairie site. The comment is more about an experience with an individual site, and the commenter's wish that past circumstances not repeat under a renewing permit. Ecology concurs.

leak. That liner leaked and prompted Fire Mountain to install a plastic liner. As far as I know there was no contaminated soil removed prior to installation of the plastic liner. As far as I know we are not sure if that liner is leaking because since the shutdown of the applications at Newaukum site no ground water testing has been done as per Peter Lyon (DOE) he didn't have a contract for the site. I also want to point out that since the shut down at the Newaukum site the first year I saw tanker trucks haul the excess water (rainfall) collected being trucked off the site but for the last two years have not observed any water being hauled off the site, what has happened to the 84 inches of rainfall that has filled the lagoon? Since as per Peter Lyon no water testing has been done at that site do we know? Bill Teitzel from Lewis County told me that he observed very cloudy water from the top of the lagoon indicating action in the lagoon from the biosolids within. Where has the overflow gone, this material has been applied for many years here in Lewis County. The Fire Mountain Sites, Hannaford, Burnt Ridge and Newaukum, contain material that was not approved by the Department of Ecology resulting in the shutdown of those sites for that material to be dumped. (I am sure you recognize I use the word dumped rather than applied in my opinion they are just that) I understand there an agreement has been made with EPA, and DOE to transport nearly 20 thousand cubic yards out of the county to a landfill when a delisting of the Kalama Chemical mixed material is completed. Lewis County officials have been notified of this intention. As stated by the DOE public health and the environment is very important, in the case of no testing being done at the Fire Mountain Farms Newaukum, Hanaford Burnt Ridge is a problem and my understanding that lagoons have leaked and High Nitrates were present this cannot happen with a new permit. As Dennis Haddler former Lewis County Commissioner said : I believe in property rights as long as it doesn't affect my neighbor after he vomited in the ditch while observing biosolids applications at the Newaukum site:	

[Commenter: I-7]	
I-7-4 I spoke to Peter Lyon and he indicates Ecology is not required to test sites. I believe that a new policy should require testing ground water at all sites by Ecology. [Commenter: I-7]	I-7-4 Defensible groundwater monitoring requires a minimum of one up-gradient and three down-gradient wells, with evaluation by a licensed hydrogeologist. Existing wells (e.g. domestic supply wells) are not necessarily a substitute for a properly installed resource monitoring well. Few sites currently used have wells that could suffice for the purpose, and land appliers generally look for sites where groundwater is less vulnerable. A requirement to require groundwater analysis would have a significant impact on costs. That does not mean it cannot be required, but it does have to be justified. This is not a requirement Ecology could implement on an overarching basis by policy. Ecology can require monitoring at any site as a permit condition, if the agency believes it is justified, and would be defensible on appeal. We also note that the commenter emphasized that Ecology should be required to perform the monitoring. Ecology simply does not have the staff to implement this requirement, nor the budget for sampling.
I-16-1 I have studied the Notice of Preliminary Determination to Develop New Biosolids General Permit" and see that I can ask you questions and send a comment. My question is- Are or will sewage treatment plants in Washington state be required to test biosolids for per-and poly-fluoroalkyl substances (PFAS). This family of about 4000 synthetic, persistent, bioaccumulative, and toxic chemicals has been linked to adverse effects on human health, wildlife and ecosystems? This is an emerging issue that could affect discharges to sewage plants because many kinds of facilities are known to use, release or dispose of PFAS. Facilities that may use,	I-16-1 We hope the commenter appreciates that wastewater treatment plants are not the root source of per and polyfluoroalkyl substances (PFAS) in their systems, and that PFAS are also found in septage from onsite wastewater treatment systems. PFAS are the substances that make our food not stick to packages and cooking pans, our outdoor clothes shed water, and our carpets resist staining (among many other uses). Individuals are far more exposed to PFAS on a daily bases from many sources and activities that are common and socially acceptable, than they are to PFAS in biosolids. Ecology is aware of current research and regulatory efforts to address concerns about PFAS. Ecology has two related efforts under way. The first is development of a Chemical Action Plan (CAP) under Chapter 173-333 WAC. A CAP does not constitute a regulation. It

process or release PFAS chemicals include: waste and sewage management; aerospace; automotive; aviation; building and construction; cable and wiring; cookware; electronics; energy; food processing; inks; paints; polishes; stain and water repellant coatings for paper, packaging, textiles, footwear, furniture and carpeting; and firefighting products. According to the report "Nationwide occurrence of PFASs in U.S. biosolids" https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3776589/: "Ten out of thirteen PFASs analyzed were consistently detected in all composite biosolids samples except for PFBA, PFHpA, and PFBS (Table2). The most abundant PFAS in biosolids was PFOS, detected at a concentration of 403 ¬± 127 ng/g dw, followed by PFOA (34 ¬± 22 ng/g dw). The remaining eleven PFASs ranged between 2 and 26 ng/g (Table 2) and the mean total concentration of PFASs (SPFAS) detected in the five composite samples was 539 ¬± 224 ng/g dw. The levels detected in U.S. biosolids are more than an order of magnitude higher than levels detected in sewage sludge samples collected from Spain and Germany." The Interstate Technical Regulatory Council 2017 Factsheet "History and Use of Per- and Polyfluoroalkyl Substances (PFAS)" reported that "PFAS (measured as PFCAs and PFSAs) have been found in domestic sewage sludge (Higgins et al. 2005). USEPA states that more than half of the sludge produced in the United States is applied to agricultural land as biosolids, therefore biosolids application can be a source of PFAS to the environment (USEPA 2017n). The most abundant PFAS found in biosolids (PFOS end PFOA) are the same as in WWTP effluent; however, biosolids may also contain other long chain PFAS (Hamid and Li 2016). Application of biosolids as a soil amendment can result in a transfer of PFAS to soil (Sepulvado et al. 2011). These PFAS can then be available for uptake by plants and soil organisms. There are indications that PFAAs can enter the food chain through the use of biosolids-amended soil (Lindstrom et al.	establishes a strategy to address a particular substance of concern (in this case PFAS). Biosolids have also been evaluated for other CAPs developed in the past. Ecology has committed in the PFAS CAP process to testing of biosolids, once EPA approves a method. EPA is also working on a screening tool to further assess the potential risk of substances of concern in biosolids. We expect the result of that effort to help inform future efforts by Ecology. The second effort under way comes the Safer Products for Washington program, as authorized by the legislature in the Pollution Prevention for Healthy People and Puget Sound Act. Under the new program, Ecology will assess PFAS and other substances of concern, and assessment can lead to regulation or banning the use of those substances, depending on the outcome of the evaluation and the availability of alternative approaches. Ecology just published a Report to the Legislature on Priority Consumer Products implementing Chapter 70.365 RCW, Pollution Prevention for Healthy People and Puget Sound Act (Safer Products for Washington). We also want to remark about the study cited by the commenter. It is the kind of information that often leads to misunderstanding. The samples analyzed for the study were taken in 2001, nearly twenty years ago. Ecology is not surprised at the results because the substances in question were in widespread use at the time. Shortly after the 2001 sampling event, the use of PFAS substances of greatest concern began to be phased out, in favor of other products. More recent analyses show lower levels in biosolids. Localized contamination from PFAS has been heavily associated with the manufacture of those products. Locations where PFAS-containing fire suppressing foams have been used in firefighting drills over the years, are a particular concern. We continue to think that further attention and analysis is warranted. We don't expect biosolids sampling results to reflect those from the 2001 study.

2011; Blaine et al. 2013; Blaine et al. 2014; Navarro et al. 2017). My comment is: Because it is known that some facilities in Washington state use and may release PFAS compounds to sewage plants, the Washington state Biosolids Program should address PFAS contamination in its General Permit requirements. Specifically the review required in the SEPA component of the permit application should ask for information about potential problems posed by PFAS. [Commenter: I-16]	Ecology looks forward to a more current assessment on which to base program actions. In summary, Ecology will implement sampling for PFAS in biosolids when an approved method is available, and then proceed consistent with our commitment in a final Chemical Action Plan. We will also be watching the outcome of efforts under Safer Products for Washington as well as related developments at the federal level (particularly EPA's development of a risk-screening tool for biosolids).
O-3-4 The NRC understands and appreciates the Department's mandate to limit regulatory burdens and implement the most efficient strategies for permitting and oversight. However, "efficiencies" in permitting that lead to an increased likelihood of contamination, health and ecological impacts, and remediation needs are not, ultimately, the most efficient or effective way to protect public health, protected species, and public confidence in the process. We appreciate the opportunity to provide our feedback at this stage and hope to stay engaged in a productive and transparent discussion with you as this process moves forward. [Commenter: O-3]	O-3-4 Ecology does not agree that the proposed approach to permitting increases the likelihood of contamination and health and ecological impacts. We disagree that being efficient in the administration of a permit is a negative. The efficiencies gained here derive largely from the reduction (or postponement) of administrative processes for facilities that do not have active biosolids management programs. The more efficient we can be in the administration of the biosolids permit, the more time we will have to invest in addressing issues of concern where our efforts can be most meaningful. Please see also the response to comment I-6-2.

O-4-2 We also support: • Allocating additional funds to be used to continue researching the safety of using biosolids on land especially those used to grow crops for human consumption. Locally, our City of Bellingham is considering biosolids as an option for our waste water treatment plant and many citizens have raised concerns over the safety associated with biosolids as we know our wastewater treatment systems are unable to treat many pollutants, including byproducts from pharmaceuticals, personal care products, and industrial waste. Generally, we encourage Ecology to ensure that biosolids are regulated above the existing weak Environmental Protection Agency standards. Thanks so much for your time and consideration. [Commenter: O-4]	O-4-2 Ecology appreciates that any large capital decision by a community is one to be taken seriously. There are costs to incineration - social, environmental, and economic, just as there are for options that support beneficial use. We also understand being in the position where citizens and ratepayers are unconvinced of the merit of one approach, or the other. Ecology does not believe the beneficial use of biosolids poses a significant risk the human health or the environment. We do believe we should continue to ask questions and make adjustments in our approach, as necessary. We have been successful over the years in maintaining good working relationships with area universities. Through the contributions of its membership, Northwest Biosolids has been able to support research by area universities. Permit fees are deposited in the state treasury, and must be appropriated for use by the legislature. Fee revenues are at best able to sustain the current program, and simply are not sufficient to support research. We have been critical of EPA's disinvestment from the biosolids program for many years. In the last couple of years, EPA has reengaged in a limited, but positive way. EPA's highest priority for the national biosolids program is the development of a risk-screening tool. The new tool will allow EPA to take a fresh look at substances of concern in biosolids. EPA will be able to set aside substances that may attract attention and resources without technical merit, and focus on those that may require further scrutiny. Ecology will be paying close attention as the new tool develops.

O-6-7 While we anticipate submitting further comments as appropriate at later stages of commenting, we specifically request that a general permit impose far more stringent standards for screening of microplastics and nanoplastics, testing and standards for a broader variety of pollutants beyond the current list focused on heavy metals, and define when application of so-called "exceptional quality biosolids" requires review due to a conclusion "that the requirements are necessary to protect public health and the environment from any adverse effect that may occur from a pollutant in the bulk biosolids." WAC 173-308-200(2). There is a minimal difference between exceptional quality biosolids and other biosolids, and we believe that the exemption from permitting should be only rarely applied. Thank you for your consideration. [Commenter: O-6]	O-6-7 Microplastics are an evolving area of concern. We plan to continue monitoring research and other relevant activities. To establish more refined standards for pollutants, we need quantifiable evidence of risk in the context of beneficial use. The simple presence of a substance in biosolids does not constitute a risk. Ecology hopes the screening tool being developed by EPA will allow EPA and states to focus resources where additional analysis or regulations could benefit. Ecology has not proposed to exempt any applicable facility from the permitting process. Facilities producing Exceptional Quality biosolids must meet all applicable treatment standards.

Appendices

Appendix A. (Comments Received)

The following pages include the complete text of all comments received during the comment period.

From:	Darlene P Grant
To:	Kijowski, Emily (ECY)
Subject:	Biosolids
Date:	Tuesday, January 7, 2020 7:54:19 PM
Attachments:	Biosolids.docx

Emily,

Please see the attached letter.

Thanks,

Yakima River RV Park
791 Ringer Loop
Ellensburg WA 98926-8481
www.yakimarv.com
yakimarvpark@yahoo.com
509 925-4734

January 7, 2020

State of Washington

Department of Ecology

PO Box 47600

Olympia WA 98504-7600

Attn: Emily Kijowski

Re: Biosolids

Dear Ms Kijowski

Each case should be decided separately as to application, amount and affects on the surrounding area, therefore, we feel individual permits should be required.

We do not believe biosolids should be used anywhere that it can get into floodways, floodplains or streams. Human waste contains metals and bacteria which are dangerous.

Sincerely,

Randy and Darlene Grant

Yakima River RV Park

791 Ringer Loop

Ellensburg WA 98926-8481

www.yakimarv.com

yakimarvpark@yahoo.com

From:	ibsen@hcc.net
To:	Kijowski, Emily (ECY); Dorsey, Kyle (ECY)
Subject:	Biosolids General Permit Comments due Jan. 10
Date:	Thursday, January 9, 2020 9:11:32 AM
Attachments:	cic GP biosolids 1919F.pdf

THIS EMAIL ORIGINATED FROM OUTSIDE THE WASHINGTON STATE EMAIL SYSTEM - Take caution not to open attachments or links unless you know the sender AND were expecting the attachment or the link

Emily,

I am attached my comments in a pdf document. Just in case you cannot open, I pasted the comments below. The pdf format is much easier to read than the comments copied below.

Constance Ibsen

TO Emily Kijowski, Ecology, Solid Waste - Emily.kijowski@ecy.wa.gov
Kyle Dorsey, Solid Waste, Ecology - kyle.dorsey@ecy.wa.gov

FROM Constance C. Ibsen, citizen, 6500 E State Route 106, Union. 98592

DATE January 9, 2019

SUBJECT Comments on Biosolids General Permit

Though I am a member of the Hood Canal Improvement Club and the Lower Hood Canal Watershed Coalition, the timeline for submitting comments precludes the development of a response from these organizations. My comments below are solely my own.

A General Permit for Biosolids could work if the process included:

1. Separate General Permits for the east and west sides of Washington State.

2. Upon a second renewal of a biosolids permit, Ecology would conduct a thorough site evaluation to determine if the site is still functioning as originally described and if any modifications are necessary.

3. Each site needs to establish a contingency fund adequate for any future land and groundwater remediation and restoration.

4. Establish a Biosolids General Permit Committee to develop the General Permit.
The committee would include: Federal government - USGS, NOAA, Fish & Wildlife, state government - Departments of Agriculture, Health, Natural Resources, Ecology, the Tribes, local government, septic system providers, wastewater treatment facility operators, biosolids land application operators, nongovernment organizations, university, aqua culture and agriculture growers and citizens participating in watershed issuesâEUR¦.

As a citizen with a long history of following the issues of regulating biosolids land application sites, I would be interested in serving on this committee.

If you have any questions, do not hesitate to contact me.

TO Emily Kijowski, Ecology, Solid Waste - Emily.kijowski@ecy.wa.gov
Kyle Dorsey, Solid Waste, Ecology - kyle.dorsey@ecy.wa.gov

FROM Constance C. Ibsen, citizen, 6500 E State Route 106, Union. 98592

DATE January 9, 2019

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3. Each site needs to establish a contingency fund adequate for any future land and groundwater remediation and restoration.

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   As a citizen with a long history of following the issues of regulating biosolids land application sites, I would be interested in serving on this committee.

If you have any questions, do not hesitate to contact me.

From:	Michelle Horkings
To:	Kijowski, Emily (ECY)
Cc:	Jim Brigham
Subject:	Notice of Preliminary Determination - Biosolids General Permit
Date:	Friday, January 24, 2020 5:19:03 AM
Attachments:	1-22-20 Brigham Response to Emily Kijowski.docx

Dear Emily,

In response to the Department of Ecology's **Notice of Preliminary Determination to Develop New Biosolids General Permit** please see our letter attached.

Sincerely,

Michelle and James Brigham

To: Emily Kijowski
Department of Ecology
Solid Waste Management
P.O. Box 47600
Olympia, WA 98504-7600
emily.kijowski@ecy.wa.gov

From: Michelle and James Brigham
19392, 19500 128th Ave SE,
Yelm WA 98597

January 22, 2020

Dear Ms. Kijowski,

In reference to a letter received from the Department of Ecology (DOE), dated December 26, 2019 requesting public opinion regarding WSR 19-24-091: Notice of Preliminary Determination to Develop New Biosolids General Permit, we understand the point of discussion to be whether the DOE will proceed with a new statewide general permit for biosolids management, or pursue the development of an alternative procedure for individual permitting. Our opinion is the following:

In mid-January 2019, my husband and I were informed of an application by Fire Mountain Farms (FMF) to deposit biosolids on a site less than ¼ mile from our two jointly owned rural residential properties. We were devastated, as were many others who would have felt the significant impacts had the landowner not withdrawn his consent, leading to the DOE reluctantly withdrawing their Determination of Non-significance (DNS) for this site.

The potential impacts that would have resulted from this one case alone should demonstrate the need for individual permitting of biosolids dispersal. The proposed site was situated directly above the Yelm Aquifer Recharge, our own well aquifers, and approximately one mile from the Nisqually River. Any and all runoff would have a direct effect on drinking water and salmon runs in the river. The site also neighbored a critical wildlife conservation basin and migration area. Yet amazingly, the DOE issued a Determination of Non-significance for this site based on generic boilerplate supplied by FMF. His DNS required no site specific environmental, hydrogeological, or other studies, was issued with no public input, and seemingly was not subject to any internal or other peer review of his obviously flawed conclusion. And had the application proceeded, this same individual was solely positioned as judge and jury to evaluate the merits of his own decision.

Had only a Biosolids General Permit governed this site, it is our belief that the city of Yelm and neighboring residents would have had difficulty defending the health of our environment from the toxins said to be associated with this industry. We would have been forced to bear reduced property values as the quality of life in our community diminished

due to a contaminated water supply, fouled air, noxious odors, health concerns from dust and disease carrying vectors, cancers, traffic, and other related concerns that were documented in over 250 complaints submitted to the DOE regarding this proposal, and as has been reported from nearby Lewis and Mason counties. In addition, the Nisqually river water quality would have been negatively affected further diminishing habitat for salmon and other aquatic life.

This proposed and failed site demonstrates that citizens are waking up to the dangers of land applied biosolids and that a General Permit covering all applications would pose further danger and less recourse to the general public.

The DOE has stated that "The new biosolids general permit will apply to public and private entities that treat, store, transfer, apply, or dispose of biosolids in the state. **This permit is the primary regulatory mechanism for approving the final use or disposal of biosolids in the state.**

"In addition to revising requirements in the general permit, ecology plans to reorganize the permit to support **a more efficient permitting process**. The new general permit will be divided into three sections that will group facilities by similar operations. **This new approach will allow for expedited issuance of permits for facilities with minimal permit needs, freeing up ecology resources to dedicate time to facilities with more complex permit requirements.**

"The department continues to believe a general permit is appropriate because all applicable facilities are subject to regulation under the same set of rules, and similar management practices apply to all facilities engaged in similar activities under the rules." [emphasis added]

.

We believe there are enormous risks involved in a new *statewide general permit for biosolids management* becoming the only permit required for managing biosolids, even broken out into three categories, and that these risks far outweigh any potential benefits that may be gained in reduced government costs and staff time. Perhaps when one's own family is not directly confronted with the potential hazards of biosolids land application impacting water, air, and soil through such toxic content, it's easier to believe an individual permitting process redundant and unnecessary.

Having recently lived through this threat on the outskirts of Yelm, and the battle to convince the DOE of the significance of this poorly chosen site, we beg to differ with the assumption that biosolids can be safely introduced to our communities under the umbrella of a *statewide general permit*.

"Ecology retains the right to condition approval of coverage under the general permit in any case where additional or more stringent requirements may be necessary to ensure protection of public health and the environment." If there is only one general permit the industry must operate under, how will exceptions to the rule be determined and regulated?
The DOE had considered the Yelm location a site of Non-significance until the applicant, followed by the DOE's poor land use determination, were withdrawn due to intense public

pressure. Even under a semi-individual permitting process the public was gravely endangered by this ill-chosen site.

"Ecology has not identified any reduction in regulatory burden or costs that might be conferred by issuing individual permits." What about the reduction in costs to the environment and citizens where every potential damaging site (these days presumed to be most land application sites for biosolids) is instead rigorously investigated under an individual permitting process?

"Ecology has identified significant efficiencies in the general permit process and with the envisioned structure and approach to issuing the new general permit. Achieving those efficiencies is a key goal for the program." The key goal for such a program should be considering the best practices in maintaining the health and well-being of the environment and communities. Not in saving time, effort, or money. For too long finance has interfered in the crucial public and environmental health responsibility of biosolids disposal.

"Finally, ecology retains the right to require an individual permit when the practices of an applicant may not be reasonably addressed within the construct of the general permit." In other words, a permit that would become obsolete under a new law would be resurrected in certain cases? How would that be possible? Under what conditions? Where would the law exist that defines unusual practice in order to require an individual permit?

It is obvious to many, and an absolute necessity given the variance in topography, precipitation, wildlife, wetland, community, and habitat in Washington State that individual site permits must be a prerequisite in order to protect our valuable natural resources, wildlife habitats, farming communities, and human health. ANY future DNS determinations MUST be available for public and peer review by interested and affected parties, with the issuing agency subject to normal checks and balances, just like the rest of us. Since this did not occur in the case cited above, it is highly unlikely that the current flawed process could be improved by "streamlining".

Many departments of DOE are demonstrated leaders of embracing meaningful technological change that IMPROVES environmental quality. Instead of making life easier for the biosolids stakeholders and most likely more challenging for the general public, why isn't the biosolids disposal department of the DOE considering implementation of proven alternative solutions to land application as demonstrated throughout Europe using Thermal Decomposition technology as a viable solution?

Sincerely,

Michelle Horkings-Brigham, M.E.S.
James E. Brigham, M.E., P.E., G.E.

From:	Natalie Molfino
To:	Kijowski, Emily (ECY)
Subject:	Pleeeease STOP Sewage Sludge applications in WA
Date:	Thursday, January 23, 2020 3:00:19 PM

NO type of permit can properly manage the spreading of sewage sludge on farmland because the practice is patently unsafe. The spreading of sewage sludge of Washington farmland must not be permitted at all.

Please, please read this informative and easy article about sewage sludge: https://www.beyondpesticides.org/assets/media/documents/infoservices/pesticidesandyou/documents/Biosolids.pdf

As an organic homesteader and homeschooler, I would never want sewage sludge applied near where we live, work, or play. I would move before exposing my children to these toxins, and I expect the highest of standards in health from Washington state!

Very concerned mom,
Natalie

From: Phyllis Farrell
To: Kijowski, Emily (ECY)
Subject: Biosolids permit comments
Date: Friday, January 24, 2020 7:29:13 PM

Per the invitation for public comment regarding the permitting process for biosolids application as to the advisability of whether a general permit or individual permits should be employed....since there are no individual permit rules, it is difficult to recommend that course of action. My experience with two biosolids application permits allow me to conclude that system is not protecting the environment or public health.
Haulers with records of violations, untested biosolids potentially harboring toxic and biological wastes, unsecured sites and examples of spreading during rainy, prohibited times leading to documented runoff into neighboring waterways....these problems make it obvious that current rules and enforcement are inadequate.

My understanding is the development of individual permits would place an undue burden on staff and create backlogs. Stricter general permits and better monitoring and enforcement at sites are recommended.

Respectfully,

Phyllis Farrell
Sent from Outlook

Matthew Schubart
P.O. Box 192
McKenna, WA 98558

January 10. 2020

RECEIVED
JAN 14 2020
Ecology SWM

Emily Kijowski
Biosolids Technical Specialist
Solid Waste Management Program
Dept. Of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

re - Notice of preliminary determination to develop new Biosolids Gerneral Permit

Notice as published in Washington State Register at -
http://lawfilesext.leg.wa.gov/law/wsr/2019/24/19-24-091.htm

Dear Emily,

Thanks for giving notice to me of the agency intention to renew, with changes, the state general permit for biosolids disposal in accordance with WAC 173-308-90005 Appendix 5—Procedures for issuing general permits. I wish to continue as an 'interested party' on your mailing list for updates on all related actions taken.

Introduction

The use of the 'general permit' as a *'primary regulatory mechanism for approving the final use or disposal of biosolids in the state'* has given the biosolids industry a 'free pass' to operate under a foregone conclusion that what they are doing will be safe and good for the public purposes. It also represents a final acceptance of what has been considered as an acceptable state legislative policy for the final disposal of biosolids in the state. The question that ecology ought to be asking itself is,

> *Are the criteria that were used in crafting the conditions of the current general permit, still valid, lawful, applicable, or even relevant to current circumstances regarding the disposal of biosolids?*

In this comment letter, I want to call attention to various factors of evolution in the biosolids disposal topic that make the aforementioned question an imperative for ecology. Your published

notice requesting public comments gives no indication that ecology understands these factors. Instead, the status quo basis of applying the existing basic general permit theory is being rolled out here with very little change other than some 'streamlining'.

One foundational premise that is being assumed by ecology, is that the most economical, safe, and beneficial way of disposing of biosolids is by land spreading as an agricultural fertilizer product. Such a premise was only one of a number of options that the legislature offered up as choices for biosolids disposal. This, however, must not continue to be used as a final assumed premise.

The other options of legislative policy don't ever seem to get responsibly reviewed and considered. This is the opportunity for that to be done correctly. This will be further discussed and developed in this letter.

Point-for-point comment

In paragraph 3 of the notice, there is mention made of a new approach that emphasizes efficiency that will allow for *'expedited issuance of permits for facilities with minimal permit needs'*. As I have seen it, this is the root cause for serious lack of necessary project review for the purposes of protecting the public from hazardous conditions simply for the sake of a 'rubber-stamp' approach to giving the appearance of following generally predetermined guideline review standards.

Nowhere in this notice is there any indication of how those different types of facilities would be separated out making it very difficult to coherently comment on that process.

Unfortunately, the purposes of this program always appear to favor streamlining and reduction of review because of the most lenient and past interpretation of state legislative policy. This has led to unsafe, hazardous, and irresponsible environmental conditions.

As if to prove this point, the idea that *'all applicable facilities are subject to regulation under the same set of rules, and similar management practices apply to all facilities engaged in similar activities under the rules'* is precisely the premise that sets up the conditions for improperly predicated administrative review. The trend is always taken to over generalization. How can such a premise take into account any of the myriad of local conditions that relate to a specific application, probably in all cases. You at ecology are okay with that, but it is the very approach that virtually guarantees mis-management and violation of truly healthy disposal conditions. This has been long proven out historically.

Giving only one example, the 2018/2019 Fire Mountain application review was a good example of a grossly incomplete review. The final summary of that review was described in the DNS as following all the requirements of the state laws and regulations for biosolids review so, as you

put it in your current notice under review here, *'to assure that conditions in the biosolids general permit protect human health and the environment.'* That was proven to be far from the truth, and that DNS had to be withdrawn after receiving a rightful beat-down by an indignant local population, local governments, the Nisqually Tribe, and astounded environmental groups. The reason that such a review condition can play out to such an outcome is that the normal process of ecology review is much too vague and generalized and doesn't involve adequate consideration of what the local circumstances are. In so doing, it substantially undermines any valid local government review or recommendations about environmental circumstances. As a result this has created a special class of industry that is immune to the health and safety requirements of review. The fact is, ecology is not itself qualified to perform a proper review of local conditions. Could that really be construed as the legislative intent of laws and regulations governing the disposal of biosolids? Not by my reading. It has become a built-in obfuscation of the protections necessary to administer the protection of the health and safety of the public. That form of obfuscation must not be allowed to happen.

Change #1 of the rules governing the general permit writing must be a substantial change to how ecology must interface with local population, government, citizen groups, etc. To that end, I suggest considering that section 1.6 of the general permit be altered such that ecology **must** make a **mandatory** agreement of how a local government must act in implementing and reviewing under Chapter 173-308 WAC in concert with ecology. Doing this will greatly increase the benefits of review intended under WAC 173-308-030 (6) - Relationship to other laws, regulations, and ordinances.

Change #2 that should be considered has to do with required modes of public notice under section 2.5 of the existing general permit. The requirements listed are quite standard but do not reflect the level of notice that should be afforded to people in the vicinity of these proposals. My observation has been that the land owners / occupiers in the area of the proposed project don't generally know what is about to be done in their area. The idea of notice is to notify the likely-to-be-affected people. In order to accomplish that more openly, the proponents should be additionally compelled to give mailed notice to land owners and residents within a minimum of 1 mile of the boundary of land proposed to be used. This is not unreasonable, and is actually sensible on account of the expected possible effects such an operation might have on the surrounding community. Giving minimum notice requirements is like a cruel joke, with a punch line one gets to laugh at for possibly many years.

Other considerations: Has ecology used Chapter 173-333 WAC PERSISTENT BIOACCUMULATIVE TOXINS (biosolids are specifically not included in the list of exclusions under WAC 173-333-130 which cites RCW 15.54 that specifies RCW 15.54.270 Definitions.,; see (36)) in their criteria for inclusion under the general permitting?

Show that the new statewide general permit will take all the considerations necessary as described in RCW 90.48.280 Sewage drainage basins—Comprehensive plans for sewage drainage basins ; and thence in consistency - Chapter 372-68 WAC WATER

POLLUTION CONTROL AND ABATEMENT PLANS FOR SEWAGE DRAINAGE BASINS WAC 372-68-060 at WAC 372-68-060 Outline of minimum plan requirements.

It has been shown that individual chemicals within biosolids recombine and produce other toxins and chemicals that have not been accounted for in the original makeup of the product. There is no accounting for this in the general permit with regard to testing. The requirement is only for testing a very small amount of what may actually be in the product.

Discussion

Over all, what I have seen characteristically done regarding permitting of proposals for disposal of biosolids, septage sludge, solid waste, etc., is for the DOE to work with favoritism towards applicants for disposal. It appears the call of agency duty is to see the application through at the expense of what the local residents want and are able to cope with. I understand that you feel that you are doing a necessary job of working to execute a legislative mandate to 'get rid of this stuff' by calling it names that are less offensive and putting on a good show of following the rules. I won't go on and on describing a past that you and everyone else is already familiar with. Much of what has gone by over the years with this little game has hinged around the ability of the collective powers-that-be to make such an incomprehensible legal labyrinth that noone could penetrate such that everyone is left scratching their head wondering how an agency given the task of protecting the environment and health conditions could be obviously poisoning their public against their will. On top of that, all you have to do is point to what your legislative mandate is in spreading stinky black poisonous goo around the countryside. I have seen how this baffles the public, government officials, and lawyers.

Well, the times have changed. You can't do that anymore. The hoards are catching up to you. Let's go back to the question that I brought up at the beginning of this letter;

> *Are the criteria that were used in crafting the conditions of the current general permit, still valid, lawful, applicable, or even relevant to current circumstances regarding the disposal of biosolids?*

Something really significant finally happened in 2018 after decades of negligence and denial. And though your agency has publically denied the significance of it, the EPA published its findings about what is in biosolids and what it's probable effects are on human health. The effect this has on the program that you're wanting to administer with this general permit renewal is substantial. From a purely legal perspective, it means that if you permit these activities to continue as you have under past criteria / predication, you will be condoning the probable serious contamination of land and probably people, with full knowledge.

To my knowledge, the EPA has not yet quantified specific classification / definition of acceptable contaminant levels for these previously-unlisted toxins, and probably won't for several years. However it has become well known and accepted in science circles that many of these newer contaminants have serious, bio-accumulative effects on human health and the environment. They are proven to be present in biosolids in significant amounts that do cause harm and will not be acceptable. If you re-read the EPA report on this, with this in mind, you might see it in a different light. What the EPA has indicated is that 40 CFR part 503 can no longer be used as the standard of safety for the disposal of biosolids. You have serious responsibilities with the handling of this fact written directly into your mandates related to protecting the health, safety, and welfare of the public and the environment. You can no longer hide from this.

In fact, your first bullet point in your notice specifically refers to *'where additional or more stringent requirements may be necessary to ensure protection of public health and the environment.'*

The second bullet point refers to the preservation of the public's ability to comment. Obviously I have included some recommendations and comments on your normal permitting structures, but I, and many, do not condone or accept the continued fashion in which biosolids disposal is permitted and handled.

The third bullet point makes an obtuse statement that you have not identified any useful reasons to use individual permits by making it sound as if there is nothing gained by such regulation and that it just costs more to do so because it doesn't reduce costs. That is a preposterous proposition considering what your job is and what the substances are that we're talking about here. Why should we even bother to regulate and waste time and money on this topic? In fact, why don't you just say that public comment should now be discontinued because it is a burdensome regulation and doesn't save money? There's no bottom to that type of reasoning. Get off it.

It's clear to me, from all the combined bullet points, that ecology is insinuating that there should henceforth no longer be any individual permitting, and that all biosolids will be handled by administrative wrote without the usual need for extensive review and possible obstruction by members of the public that care. We should be happy about this because it will cut through all the hassles and save money. Incredible!

Let's take a tour around a few of the statutory and rule mandates that you are tasked with upholding and have not been serious about adhering to. Instead, you just see your job as one of enabling the hauling and spreading industry to proceed wherever and however they want without hindrance or consequence. I've been watching this charade go on for over 30 years around here.

Now the game is over. The legislature in Washington State left the door open for you to look to other methods of disposal. It has been decided in the courts that you can continue being protected in permitting the land spreading of biosolids as long as it is economical. But now, these types of contaminants that the EPA has shown the light on must be removed from any land

applied materials or you will have to be held responsible for contaminating the countryside with them. Obviously they cannot be removed by any economical means. **Trucking and spreading biosolids is then no longer economically feasible.** If that will no longer work, let's start up a discussion about new methods of disposal that the legislature also talked about. We better do this now and not waste any more time. You have an emergency on you hands now.

Now that the EPA has made it's position known, and we all know where this is headed, think about the following regarding statutory and rule mandates:

Distribution of biosolids will now become a violation of:

RCW 90.54.010 Purpose.;
RCW 90.54.020 General declaration of fundamentals for utilization and management of waters of the state.(refer to (3)(b);
RCW 90.54.090 State, local governments, municipal corporations to comply with chapter.;
RCW 90.54.140 Protection of groundwater aquifers if sole drinking water source.
Chapter 90.71 RCW PUGET SOUND WATER QUALITY PROTECTION , specifically (in part) of RCW 90.71.310 - Action agenda

It's not hard to see that SEPA rules governing the 'economical' use of bio-solids for fertilizer will conflict with the statutes governing pollution in state WPCA or federal CWA. Statute RCW 90.48.035 (rule making authority) give, and direct the DOE to change regulations to be consistent with anti-pollution provisions of WPCA.

Alternatives

One of ecology's tasks when considering any land-use action is to consider alternatives. Let's stop investing all the effort on administering an unacceptable liability and start a discussion about today's most appropriate alternative, super-high-temperature incineration. I and many others have been having meetings and discussions with engineers and industry proponents that specialize in funding, setting up, and running extremely efficient world class industrial incineration plants. They are virtually non-polluting and pay for themselves. Now there's a case for efficiency and saving money. More rudimentary units like this have been set up in the state previously but are nowhere near the state-of-the-art technology. The setup and operation of these plants are actually not hard to understand. They have been built in many other places around the world and have proven themselves over time. The knowledge, know-how, and engineering personnel are here and ready. You have no excuse to continue doing what you have been for so long. Your notice is an effort to perpetuate an explosive liability now that EPA has removed the contaminant veil.

I remember all the decades that went by fighting government agencies about whether smoking cigarettes was harmful to humans even though such had been thoroughly proven. Now the state

has latched onto that cause to make huge reimbursement from the tobacco companies. Now that the world finally got the message, smoking cigarettes is generally frowned upon by society as not only unhealthy, but as a detriment to society.

Monsanto / Bayer is now having their turn with the same type of harmful behavior.

Johnson & Johnson is now having their turn... The list is long. The only reason these eventualities take so long is on account of politics, corporate profits, convenience, momentum, and perhaps enough sand to stick one's head into. It's only a matter of time. You too could have your turn... But it's not necessary. All the climate is set now, to make a change. You can no longer consider the path you have been on to be acceptable from either a legal / lawful, or moral standpoint.

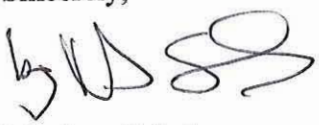
Summary

Unfortunately, the purposes of this program always appear to favor streamlining and reduction of review because the agency wants to save money and be 'more efficient'. These are very subjective concepts and don't specifically fit within the legislative mandate that you are serving in the way of protections and enforcement.

More important is to understand that the agency is blindly, habitually working to exercise authority over the most lenient and past interpretation of state legislative policy. This has led to unsafe, hazardous, and irresponsible environmental conditions. Those conditions have now been made plain and must be prevented by using a different path to resolve the enormous challenge of safely disposing of biosolids.

I know that I have ranted on here in a somewhat plebeian fashion but the facts remain whether delivered in eloquence or coarseness. This subject matter is very serious and must be given a careful and fresh thought. Be forewarned. The hoards are coming.

Sincerely,



Matthew Schubart

cc Governor Jay Inslee
Representative Brian Blake - Chair - House Rural Development, Agriculture, & Natural Resources Committee
continuedd below

Representative Joe Fitzgibbon - Chair - House Environment & Energy Committee
Laura Watson - Director WSDOE
Thurston County Commissioners
Art Starry - Director Thurston County Environmental Health Dept.
Robert Smith - Director Thurston County Planning Dept.
Kevin Hanson - Thurston County Hydro-geologist
Protect the Commons.org

Allan R Guenther
376 State Route 508
Chehalis, WA
98532

January 5, 2020

Emily Kijowski
Department of Ecology, Solid Waste Management
PO Box 47600,
OLYMPIA WA 98504-7600

DEAR EMILY:

I am writing in response to the notification I received from you in regard /Determination of a new biosolids general permit. I have had many years of bad experiences with the Newaukum Site in Lewis County.

I have met several folks about the problems at the department including Peter Lyon, Lori Davies, Kyle Dorsey, Win Hoffman and several others.

Fire Mountain Farms have several dump sites to dispose of biosolids here in Lewis County, The DOE has known for several years two of the sites lagoons have been leaking. Burnt Ridge and Newaukum. (Material mixed with Kalama Chemical Waste) Several years ago I stood at the lagoon on the Newaukum site and told Lori Davies, Kyle Dorsey and Win Hoffman that the lagoon would leak. Bob Thode who owns Fire Mountain made the statement that this lagoon is lined with and IMPERVIOUS CLAY LINER and would not leak. That liner leaked and prompted Fire Mountain to install a plastic liner. As far as I know there was no contaminated soil removed prior to installation of the plastic liner. As far as I know we are not sure if that liner is leaking because since the shutdown of the applications at Newaukum site no ground water testing has been done as

1d

per Peter Lyon (DOE) he didn't have a contract for the site. I also want to point out that since the shut down at the Newaukum site the first year I saw tanker trucks haul the excess water (rainfall) collected being trucked off the site but for the last two years have not observed any water being hauled off the site, what has happened to the 84 inches of rainfall that has filled the lagoon? Since as per Peter Lyon no water testing has been done at that site do we know? Bill Teitzel from Lewis County told me that he observed very cloudy water from the top of the lagoon indicating action in the lagoon from the biosolids within. Where has the overflow gone, this material has been applied for many years here in Lewis County.

The Fire Mountain Sites, Hannaford, Burnt Ridge and Newaukum, contain material that was not approved by the Department of Ecology resulting in the shutdown of those sites for that material to be dumped. (I am sure you recognize I use the word dumped rather than applied in my opinion they are just that)

I understand there an agreement has been made with EPA, and DOE to transport nearly 20 thousand cubic yards out of the county to a landfill when a delisting of the Kalama Chemical mixed material is completed. Lewis County officials have been notified of this intention.

Since the Department of Ecology is asking for comments on a Statewide general permit for Biosolids I would like to point out that this state has several eco regions and they are different. A general Statewide permit might be OK but the department should take into consideration the climate of the regions that they would like to permit.

Areas that have rainfall of over 35 inches and water near the surface applications should be limited unless the

material can be tilled into the ground the same day as applied. The problems we are having here in Lewis County is the material has to be stored until the groundwater is 12 inches below the surface. Since a good share of the application sites are in wet areas that means the material must be stored in bunkers or lagoons until it can be applied. Lori Davies, Kyle Dorsey, Peter Lyon, (Win Hoffman retired) and others from the DOE have stated there is very little smell to the class B material when it comes to the Fire Mountain Farms bunkers or lagoons. I would say if this material could be applied when it comes in then it would be less offensive to the neighbors. The problem is that it sits and goes aerobic and when applied is very offensive. If the DOE would go around to the areas that applications are made and talk to folks living those areas you would hear the complaints.

As pointed out in reference to the eco areas of the state I believe you could till in the material as it arrives in a region that only gets a few inches of rain per year and ground water is very deep.

In regard to monitoring of applications statewide I believe the individual counties should have better control and better knowledge of what material is coming to their respective counties. The DOE should fund a person from each county to have a better handle on what is being dumped in their counties. AGRONOMIC RATES OF APPLICATIONS NEED TO BE MORE CLOSELY MONITORED

In the case of the Newaukum Site and the Hanford site heavy applications are applied in September and October of the year ask yourself is that material been uptaken by the time the fall rains come, NO I CONTEND much goes right to the Chehalis River basin. Art Blum who lived on the

West side of the Newaukum site told me the ditch ran black during the first heavy rains of the year. When the field had heavy applications. (all the fir trees on the west side of Newaukum Site died and all my cedar trees next to the lagoon on my place are dead) TMDL I don't believe is measured during a period of 2 inches of rain per day. By the time spring rolls around the solid material is gone for sure.

As stated by the DOE public health and the environment is very important, in the case of no testing being done at the Fire Mountain Farms Newaukum, Hanaford Burnt Ridge is a problem and my understanding that lagoons have leaked and High Nitrates were present this cannot happen with a new permit.

I believe biosolids could be properly managed under a general permit if the eco regions of the state are considered and with more monitoring from the individual counties, in the past I believe DOE has good folks attempting to monitor the disposal of material HOWEVER you must have enough people and have systems in place to hold contractors accountable for their actions. In the case of Lewis County it is my opinion that DOE could use some help. As an example I remember Win Hoffman coming down to Newaukum to inspect application of material the ground was black with material when she was inspecting, the next day after she left more material was being applied, she was only one person for many sites.

I am interested in the applications of biosolids to be done in a responsible way and without the input of the counties in

implementing the procedures besides monitoring the health standards it is lacking. As Dennis Haddler former Lewis County Commissioner said : I believe in property rights as long as it doesn't affect my neighbor after he vomited in the ditch while observing biosolids applications at the Newaukum site:

Thank you for the opportunity to comment sincerely

ALLAN Robert Guenther

Bob Guenther

Bob Guenther

I have talke with Peter Lyon This morning he inducates Ecology is Not required to test sites.

I Believe that a new policy should require testing ground water at all sites by Ecology.

Thank you

Bob Guenther

From: Diane Riley
To: Kijowski, Emily (ECY)
Subject: sewage sludge on farmland
Date: Thursday, January 23, 2020 11:08:25 PM

Ms. Kijowski,

I do not believe any type of permit can properly manage the spreading of sewage sludge on farmland because the practice is patently unsafe. The spreading of sewage sludge of Washington farmland must not be permitted at all.

Thank you,

Diane Riley
39 Green Hill Rd
Bellingham WA 98229
(360) 483-8180

From:	Chrys Ostrander
To:	Kijowski, Emily (ECY)
Subject:	Comment to the Washington State Dept. of Ecology re statewide general permit for regulation of biosolids
Date:	Thursday, January 23, 2020 1:21:08 PM

Hello,

Herein is my comment to the Washington State Dept. of Ecology regarding the question: "Is a statewide general permit appropriate for the regulation of biosolids under state rules?"

As the Sierra Club points out in its comment sent to Ecology on Jan. 10, "...because no individual permit language exists, nor do individual permits, we cannot make a comparison between the two types of permits. There is nothing to compare and no way to satisfactorily answer your questions. It is a Catch-22. For the public to adequately comment, it needs to see the individual permit regulations."

The question cannot be answered without more information from Ecology. You should re-frame your approach.

Barring that, I would advocate for individual permits in hopes that individual sewage sludge permits could allow for more public involvement in and scrutiny of each new permit application submitted by a sludge hauling and spreading operation. This might cost the Department more, but you are forgetting to factor in the public health and ecological costs to Washington residents of the continued toxic pollution of our farm soils, food stuffs and waterways because of this dangerously misguided practice.

Let me be clear: **NO type of permit can properly manage the spreading of sewage sludge on farmland because the practice is patently unsafe-- The spreading of sewage sludge of Washington farmland must not be permitted at all.**
In support of my position I refer you to the 2018 audit report from the US EPA's Office of Inspector General which stated

"The EPA's controls over the land application of sewage sludge (biosolids) were incomplete or had weaknesses and may not fully protect human health and the environment. The EPA consistently monitored biosolids for nine regulated pollutants. However, it lacked the data or risk assessment tools needed to make a determination on the safety of 352 pollutants found in biosolids."

The OIG made thirteen recommendations, including requiring labeling of biosolids products to include information regarding the presence of up to 352 unregulated pollutants in sludge and statements of risks about biosolids.

"…the EPA identified 352 pollutants in biosolids. The EPA does not have complete risk assessment information on these pollutants; therefore the agency cannot say, whether the pollutants are safe or unsafe when found in biosolids … [including] sixty-one designated as acutely hazardous, hazardous or priority pollutants in other [Federal] programs."

"…Existing biosolids data and studies do not fully examine the pollutants found in biosolids, especially unregulated pollutants. Until such research and data exist, the EPA cannot determine if any regulations should be issued. In over 20 years, no new pollutants have been regulated."

In addition, in October of last year, Elizabeth Resek, Biosolids Lead, Health and Ecological Criteria Division, Office of Science and Technology, EPA/Office of Water wrote in response to a farmer's inquiry: "Right now, the EPA cannot say that the pollutants found in biosolids will not cause harmful effects to you, your crops or your livestock. We will know more when we assess these chemicals - something we are actively working on. You're asking

important questions. Your decision to use (or not use) biosolids will have to be based on how comfortable you are with not knowing what harm the pollutants in the biosolids might cause."

By the way, the OIG report points out that the EPA is NOT actively working on those chemical assessments.

The State of Washington must see the writing on the wall and end the spreading of sewage sludge on forest and farmland. The State must now work proactively to research and implement alternative methods of sewage sludge disposal such a microwave-assisted thermal decomposition incorporating resource-recovery and energy extraction.

Every truckload of sludge deposited by land-application is pollution and filth and has no place being spread where we grow our food or dumped willy-nilly all over our precious landscape. Stop it now.

Chrys Ostrander
Caretaker @ Heartsong
Editor/Publisher Inland FoodWise Online
Newsletters and Action Alerts for the Inland Northwest Foodshed

No Sewage Sludge on Agricultural Lands!
http://www.protectmillcanyon.org/
Activists wanted: https://tinyurl.com/join-no-sludge-on-aglands

7034-C Hwy 291
Tumtum, WA 99034
Voice message and Text: (914) 246-0309
Skype: chrys.ostrander
farmrchrys@gmail.com
On Wordpress
On Facebook
Affordable web design (More...)

From: Craig Baker
To: Kijowski, Emily (ECY)
Subject: biosolids comments
Date: Friday, January 17, 2020 2:22:39 PM

As long as the new permitting process does not impose a risk that standards for these facilities, or the permitting of them, is not dminished, I see no problem with the new process. I feel allowing the Dept of Ecology to be more efficient will allow them to address concerns in other areas, and facilities with more complex cases, better.

Craig Baker
2319 W Walton Ave
Spokane, WA 99205

From: Clay Anderson
To: Kijowski, Emily (ECY)
Subject: Permits
Date: Tuesday, December 24, 2019 4:02:12 PM

Thank you for your email, I believe that the general permits are working well. You folks do an amazing job of managing the permits
And responding when there are questions. I will be a supporter of the DOE on their preferred choice. As always thank you for what you do to keep all of safe.

From: JUDY O\"NEAL
To: Kijowski, Emily (ECY)
Subject: General Permits
Date: Thursday, December 26, 2019 7:46:47 AM

I do not wish a General Permit allowing biosolids! There would be too much of a chance of a lot of permits allowing
these toxins to be put on locations everywhere without the knowledge of the public.

Individual permits should be posted and the public should be made aware of these requests.

I think this is an attempt to push the agenda of biosolids on the public and it is shameful.

Judy O'Neal

From: Walter White
To: Kijowski, Emily (ECY)
Subject: Biosolids General Permit Renewal
Date: Friday, December 27, 2019 5:50:23 PM

Hello Ms. Kijowski:

I have concerns about a general permit for Biosolids. I am opposed to this.

I prefer that each site be managed under individual permits. We had a violator of their Biosolids permit in my area of Thurston County that the Dept of Ecology didn't catch for many years. We also had a recent application that was withdrawn in Yelm, WA. That application had no requirements regarding the transportation plan for the massive influx of trucks into the already overloaded 2-lane roads in/out of our area. This application also was within ¼ mile of a protected Salmon river.

Thank you for seeking public comment on a general permit. I am completely opposed.

Thank you
Walter White

22444 PARKCREST LN SE
YELM WA 98597

From: Venita Graham
To: Kijowski, Emily (ECY)
Subject: re: biosolids permits
Date: Friday, December 27, 2019 6:23:40 PM

THIS EMAIL ORIGINATED FROM OUTSIDE THE WASHINGTON STATE EMAIL SYSTEM - Take caution not to open attachments or links unless you know the sender AND were expecting the attachment or the link

Hi Emily,
I saw the posting about considering making permits for biosolids applications general instead of individual. I strongly oppose tat, seeing what we in Yelm just went through with the farm that wanted to get paid to handle Seattles wastes in our backyard! An individual permit will require more information and transparency to the public. Please don't let this subject be made less important by lumping the permits together! Thank you, Venita Ozols-Graham 21934 183rd Ave SE, Yelm, Wa 98597

From: Carol Beckham
To: Kijowski, Emily (ECY)
Subject: New Biosolids Permitting Process
Date: Sunday, December 29, 2019 6:51:38 PM

THIS EMAIL ORIGINATED FROM OUTSIDE THE WASHINGTON STATE EMAIL SYSTEM - Take caution not to open attachments or links unless you know the sender AND were expecting the attachment or the link

We live in the Yelm - Clearwood area and feel very strongly that any permit applications re bio solids should remain as individual permits not an umbrella one.

Sincerely,
Ron and Carol Beckham
17316 West View Ln SE
Yelm WA 98586-8959
Sent from my iPhone

From:	DORIS@cellarius.org
To:	Kijowski, Emily (ECY)
Cc:	Dorsey, Kyle (ECY)
Subject:	General Permits for biosolids
Date:	Wednesday, January 1, 2020 12:39:02 PM
Attachments:	biosolids-faq.pdf

Dear Emily,

I have studied the Notice of Preliminary Determination to Develop New Biosolids General Permit" and see that I can ask you questions and send a comment.

My question is –

> Are or will sewage treatment plants in Washington state be required to test biosolids for per-and poly-fluoroalkyl substances (PFAS). This family of about 4000 synthetic, persistent, bioaccumulative, and toxic chemicals has been linked to adverse effects on human health, wildlife and ecosystems?

This is an emerging issue that could affect dischargers to sewage plants because many kinds of facilities are known to use, release or dispose of PFAS. Facilities that may use, process or release PFAS chemicals include: waste and sewage management; aerospace; automotive; aviation; building and construction; cable and wiring; cookware; electronics; energy; food processing; inks; paints; polishes; stain and water repellant coatings for paper, packaging, textiles, footwear, furniture and carpeting; and firefighting products.

According to the report "Nationwide occurrence of PFASs in U.S. biosolids" https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3776589/:

> "Ten out of thirteen PFASs analyzed were consistently detected in all composite biosolids samples except for PFBA, PFHpA, and PFBS (Table 2). The most abundant PFAS in biosolids was PFOS, detected at a concentration of 403 ± 127 ng/g dw, followed by PFOA (34 ± 22 ng/g dw). The remaining eleven PFASs ranged between 2 and 26 ng/g (Table 2) and the mean total concentration of PFASs (SPFAS) detected in the five composite samples was 539 ± 224 ng/g dw. The levels detected in U.S. biosolids are more than an order of magnitude higher than levels detected in sewage sludge samples collected from Spain and Germany."

The Interstate Technical Regulatory Council 2017 Factsheet "History and Use of Per- and Polyfluoroalkyl Substances (PFAS)" reported that "PFAS (measured as PFCAs and PFSAs) have been found in domestic sewage sludge (Higgins et al. 2005).

USEPA states that more than half of the sludge produced in the United States is applied to

agricultural land as biosolids, therefore biosolids application can be a source of PFAS to the environment (USEPA 2017n). The most abundant PFAS found in biosolids (PFOS and PFOA) are the same as in WWTP effluent; however, biosolids may also contain other long chain PFAS (Hamid and Li 2016). Application of biosolids as a soil amendment can result in a transfer of PFAS to soil (Sepulvado et al. 2011). These PFAS can then be available for uptake by plants and soil organisms. There are indications that PFAAs can enter the food chain through the use of biosolids-amended soil (Lindstrom et al. 2011; Blaine et al. 2013; Blaine et al. 2014; Navarro et al. 2017).

My comment is:

> Because it is known that some facilities in Washington state use and may release PFAS compounds to sewage plants , the Washington state Biosolids Program should address PFAS contamination in its General Permit requirements. Specifically the review required in the SEPA component of the permit application should ask for information about potential problems posed by PFAS.

I would like to be added to your list of interested parties. Thank you for your work on this important issue.

Doris Cellarius

From:	al hultengren
To:	Kijowski, Emily (ECY)
Subject:	New Biosolids General Permit
Date:	Monday, January 6, 2020 1:51:34 PM

Dear Emily Kijowski,
Thanks for informing me about the development of a new Biosolids General Permit. I'm going to trust you and your co-workers to be using good judgement on this. My experience back 40 years ago at Pack Forest, near Eatonville, made me aware of the potential hazards of biosolids. Much progress has been made in reducing the amount of hazardous components in the biosolids of 2019/2020.
As long as the new permitting policy assures that there will be adequate inspection and monitoring of the permitee to abide by all environmental health and safety standards, I won't have any objections.
Having monitored Geoduck harvesting,and the logging of DNR timberlands in the past for DNR, I know that human nature (avarice and ambition) can often get the best of people.
Sincerely, Al Hultengren

PS If by any chance you know Dave Grant (a refugee, from DNR, now working for your agency), say hello to him for me.He can tell you about the Geoduck harvesting.

From: Maile Lono-Batura
To: Kijowski, Emily (ECY)
Subject: General Permit Comment Letter
Date: Thursday, January 23, 2020 3:20:09 PM
Attachments: image001.png
2020-01-21-NWBiosolids-WADOEGenPermit.pdf

Hello Emily,

Thank you for this opportunity to provide comment on the General Permit. Please find the attached comment letter being submitted on behalf of Northwest Biosolids.

Feel free to contact me if you have any questions.

NORTHWEST BIOSOLIDS
Unearthing Sustainable Solutions

Maile Lono-Batura
Executive Director
o. (206) 477-5565 c. (206) 471-0460
www.nwbiosolids.org Seattle, WA

NORTHWEST BIOSOLIDS
Unearthing Sustainable Solutions

201 S. Jackson St., KSC-NR-0512
Seattle, Washington, USA 98104-3855
Phone: 206-477-5565 Fax: 206-263-3485
nwbiosolids.org

January 21, 2020

Emily Kijowski
Washington State Department of Ecology
Solid Waste Management
P.O. Box 47600
Olympia, WA 98504-7600

For the past 30 years, Northwest Biosolids has worked to advance wastewater management and environmental sustainability through the beneficial use of biosolids in the Pacific Northwest.

Northwest Biosolids believes that Ecology's General Permit for Biosolids has been an effective tool in regulating biosolids activities throughout the state. The general permit has been used to implement similar management requirements at similar facilities and has allowed the state to make efficient use of limited resources.

When facilities propose to apply biosolids to the land that do not meet the most stringent standards of the state rule, the basic requirements of the general permit are augmented by a requirement to incorporate a general and/or site-specific land application plan. Additional or more stringent requirements may then be established in the plans on a case-by-case basis for individual sites if the basic requirements of the general permit are not adequate. In this way the general permit is not only efficient but protective of the environment and human health as well.

Northwest Biosolids continues to support Washington State Department of Ecology's (Ecology) 173-308 WAC state-wide general permit as it creates a level playing field for all wastewater treatment facilities. The general permit framework also allows Ecology the efficacy of carrying out the robust program it has upheld for over 30 years. 47% of our regional membership has been operating under Ecology's Biosolids management program since its inception, and many of our members actively worked for the passage of RCW 70.95j, which was the legislation upon which the current biosolids program was based.

Northwest Biosolids membership includes 152 members that include wastewater utilities (70%), private companies (22%) and supporting organizations (8%) from Alaska, California, Idaho, Montana, Ohio, Oregon, Washington, Alberta and British Columbia. Membership includes small wastewater treatment plants that produce 10 dry tons of biosolids annually to large agencies that generate 30,000 dry tons annually,

recycling nearly 91% of the biosolids produced in our region. Together, our membership has leveraged our collective to fund biosolids research end use options and ensure quality biosolids programs across the region.

Thank you again for this opportunity to comment.

Sincerely,

Maile Lono-Batura
Executive Director, Northwest Biosolids

cc: Dan Thompson, City of Tacoma, WA – Regulations Development Chair
Christian Evans, SYLVIS Environmental, BC – Regulations Development Co-chair
Deidre Bartlett, EPCOR, AB – Regulations Development Co-chair
Steve Thompson, Clean Water Services, OR – Regulations Development Co-chair
Tania Gheseger, Metro Vancouver, BC – President

From:	E S PACKARD
To:	Kijowski, Emily (ECY)
Cc:	darlenes@olympus.net; mvanclevesc@gmail.com
Subject:	Sierra Club comments on biosolids permitting
Date:	Friday, January 10, 2020 12:01:52 PM
Attachments:	Ecology Biosolids Permitting 1-10-20.docx

Emily,

Attached are Sierra Club Washington State Chapter's comments on your biosolids question of whether to permit applicants under general or individual permits. **Please confirm receipt of our comments.**

Sincerely,

Elaine Packard

Chair, Water and Salmon Committee, Washington State Chapter Sierra Club

SIERRA CLUB
WASHINGTON STATE

10 January 2020

Emily Kijowski
Biosolids Technical Specialist
Solid Waste Management
Washington State Department of Ecology
Olympia WA 98504
Emily Kijowski <ekij461@ecy.wa.gov>

RE: Biosolids Permit: General vs Individual

Thank you for the notification of your request for public input on whether to continue with permitting under the umbrella general permit or switch to individual permits. Sierra Club understands that the response is centered around that question. And we understand Ecology prefers to continue using the general permit, in part due to the number (375) of permit applicants, the work load to switch to individual permits, and the timeliness of finalizing and distributing permits.

We understand that if we believe biosolids cannot be properly managed under a general permit, we are to explain how an individual permit would result in better protections for public health and the environment, or be more efficient, less burdensome or less costly.

However, because no individual permit language exists, nor do individual permits, we cannot make a comparison between the two types of permits. There is nothing to compare and no way to satisfactorily answer your questions. It is a Catch-22. For the public to adequately comment, it needs to see the individual permit regulations. For staff to develop individual permit regulations, staff might see this as a waste of time if it does not intend to switch to individual permits.

The general v. individual permit brings to mind shellfish aquaculture USACE permitting. The main USACE office was approving general permits. These were challenged in Washington State. A federal judge ruled the general permits were not protective of Washington State's natural resources and ruled they are illegal. (A further decision is pending on whether the previous general permits will be vacated.) The briefs and the judge's decision spelled out the inadequacies of the permits in holding the shellfish farmers to high standards. Indeed, the industry admitted to its lax regulations. From here forward, shellfish applicants will have to apply for individual permits. This will allow for more public oversight and understanding of the specifics of all new site applications. Is this a good analogy? In this case individual site regulations exist.

Sewage applicants will want to retain the general permit process. But to answer your question responsibly, respondents need to see individual permit regulations created. Until then, we cannot determine whether which permit is appropriate.

But if a choice is needed, it would seem that after 15 years of general permitting, it is timely for staff to take a fresh look at each of the applicant's activities under an individual permit.

Respectfully,

Elaine Packard
Chair, Water and Salmon Committee
Washington State Chapter Sierra Club
180 Nickerson Street, Suite 202
Seattle, WA 98109

From:	Emily McCartan
To:	Kijowski, Emily (ECY)
Cc:	David Troutt; Phyllis Farrell
Subject:	Nisqually River Council comment letter on WSR 19-24-091
Date:	Thursday, January 23, 2020 9:53:30 AM
Attachments:	NRC Bisolids General Permit Letter 1.22.20.pdf

Dear Ms. Kijowski,

Please find attached the Nisqually River Council's comments on WSR 19-24-091, Notice of Preliminary Determination to Develop New Biosolids General Permit. We appreciate the opportunity to provide input and would like to remain informed on future stages of this process. If you don't have us included already, please add myself and the NRC Chair and Vice Chair to the list of interested parties for updates as the Department moves forward:

Emily McCartan (NRC staff): emily@nisquallyriver.org
David Troutt (NRC Chair): troutt.david@nisqually-nsn.gov
Phyllis Farrell (NRC Vice Chair): phyllisfarrell681@hotmail.com

Thank you!

Best,
Emily

Emily McCartan *(she/hers)*
Nisqually River Council Program Coordinator
Nisqually River Foundation
(360) 438-8715
emily@nisquallyriver.org
nisquallyriver.org
Follow us on Facebook and Twitter

Nisqually River Council

620 Old Pacific Highway SE • Olympia WA 98513 • (360) 438-8715

Emily Kijowski
Department of Ecology
Solid Waste Management
P.O. Box 47600
Olympia, WA 98504-7600

January 22, 2020

Dear Ms. Kijowski,

Thank you for the opportunity to comment on WSR 19-24-091: Notice of Preliminary Determination to Develop New Biosolids General Permit. We understand the scope of this Determination to be whether the Department of Ecology will proceed with a new statewide general permit for biosolids management, or pursue the development of an alternative procedure for individual permitting. Based on the history of biosolids use in the Nisqually Watershed and current research on chemicals of concern and their impacts on our waters and ecosystems, the Nisqually River Council (NRC) believes that individual permitting would provide the best adaptive strategies for protecting natural resources and human health.

The NRC's mission is to create sustainability in the Nisqually Watershed for current and future generations by developing a common culture of environmental, social and economic stewardship. Our watershed contains critical habitat for Chinook salmon and steelhead, both listed as threatened under the Endangered Species Act; supplies water for the communities of Olympia, Lacey, Yelm, Roy, and Eatonville; and supports a diverse rural economy based on agriculture, timber, and recreation. Water quality is a central priority for the NRC in safeguarding the long-term sustainability of all of these interests, and we greatly appreciate the Department's many years of supportive participation in the Council's work.

The NRC has several concerns with the current general permitting process, calling for further evaluation prior to renewal. In particular, the general permit lacks the flexibility to appropriately manage biosolids applications for highly variable site-specific conditions, and to account for rapidly changing scientific knowledge about chemicals of concern and best practices for monitoring and controlling them. The Nisqually Watershed, like all watersheds in Washington, has a unique set of local circumstances, including diverse hydrogeologic conditions and protected species habitat, which can significantly affect the environmental impacts of biosolids. It has been difficult to pursue higher standards for screening and monitoring biosolids in areas of greater sensitivity when those actions are not universally required

under the general permit. We hope instead to see individual permitting or a more flexible general permit that allows greater control over the appropriate level of testing and monitoring when warranted for a specific site.

Likewise, the five-year renewal schedule for the general permit does not keep pace with developing science around water quality and chemicals of concern in biosolids. Current research in the Nisqually Watershed and elsewhere shows high levels of flame retardants and pharmaceuticals occurring in our waters. Threatened Nisqually steelhead contain the highest levels of PBDEs in Puget Sound. Many of these chemicals of concern are not tested for or regulated under current biosolids management practices. As our understanding of the sources and effects of these substances on human and wildlife health improves, the NRC believes individual permits can provide better and more timely ability to safeguard public and environmental health than a long-term statewide general permit.

The NRC understands and appreciates the Department's mandate to limit regulatory burdens and implement the most efficient strategies for permitting and oversight. However, "efficiencies" in permitting that lead to an increased likelihood of contamination, health and ecological impacts, and remediation needs are not, ultimately, the most efficient or effective way to protect public health, protected species, and public confidence in the process. We appreciate the opportunity to provide our feedback at this stage and hope to stay engaged in a productive and transparent discussion with you as this process moves forward.

Sincerely,

David A. Troutt
Chair

From:	Kirsten McDade
To:	Kijowski, Emily (ECY)
Subject:	Biosolids General Permit Comment
Date:	Friday, January 24, 2020 10:54:58 AM
Attachments:	Biosolids General Permit Comment letter Jan 2020.docx

Emily,

Please find our organization's comment to the GP for Biosolids attached below.

One of the questions that came up as we were discussing the idea of a general permit was whether or not a WWTP could regulate their biosolids more strictly than the permit requirements? Do you know if this is possible? Are there municipalities that are already doing this?

Thanks,
Kirsten

Kirsten A. McDade
(she/her/hers)
Pollution Prevention Specialist
RE Sources for Sustainable Communities
Bellingham, WA 98225
kirstenm@re-sources.org
Mobile: (360) 220-0556
re-sources.org | Facebook | E-News

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RESOURCES FOR SUSTAINABLE COMMUNITIES
PROTECT. ACTIVATE. INNOVATE. THRIVE.

2309 Meridian Street
Bellingham, WA 98225
(360) 733-8307 • re-sources.org

To: Emily Kijowski
Department of Ecology, Solid Waste Management
P.O. Box 47600
Olympia, WA 98504-7600
Transmitted Via Email to: emily.kijowski@ecy.wa.gov

January 24, 2020

RE: Comment on the Preliminary Determination to Develop New Biosolids General Permit

Dear Emily Kijowski,

Thank you for taking the time to consider our comments on the preliminary determination to develop a new biosolids general permit.

RE Sources for Sustainable Communities is a local organization in northwest Washington, founded in 1982. RE Sources works to build sustainable communities and protect the health of northwest Washington's people and ecosystems through the application of science, educatio n, advocacy, and action. Our North Sound Baykeeper program is dedicated to protecting and enhancing the marine and nearshore habitats of northern Puget Sound and the Georgia Strait. Our chief focus is on preventing pollution from entering the North Sound a nd Strait, while helping our local citizenry better understand the complex connections between prosperity, society, environmental health, and individual wellbeing. Our North Sound Baykeeper is the 43rd member of the Waterkeeper Alliance, with over 300 orga nizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has over 20,000 members in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

We support general permits as appropr iate to regulate the final use or disposal of biosolids in Washington state. We also support:

CLEAN ENERGY WAY BEYOND DIRTY FUELS. CLEAN WATER WITHOUT IT THERE'S NOTHING. THE RESTORE SPEND A LITTLE. SAVE A TON. SUSTAINABLE SCHOOLS IT ALL STARTS HERE. LOW CARBON LIVING IT BEGINS WITH US.

- Reorganizing the permit to create efficiencies, so long as these efficiencies don't overlook pollution problems and free up Washington State Department of Ecology (Ecology) staff and resources to ensure that the permit is properly regulated and human and environmental health is protected;
- Ecology maintaining "the right to condition approval of coverage under the general permit in any case where additional or more stringent requirements may be necessary to ensure protection of public health and the environment";
- Preserving public opportunity for hearings and/or to comment on the draft general permit and when new requests to apply biosolids are proposed;
- Maintaining the right for Ecology to require an individual permit when the practices of an applicant may not reasonably be covered under the general permit, so long as human health and the environment are still protected;
- Allocating additional funds to be used to continue researching the safety of using biosolids on land especially those used to grow crops for human consumption.

Locally, our City of Bellingham is considering biosolids as an option for our waste water treatment plant and many citizens have raised concerns over the safety associated with biosolids as we know our wastewater treatment systems are unable to treat many pollutants, including byproducts from pharmaceuticals, personal care products, and industrial waste. Generally, we encourage Ecology to ensure that biosolids are regulated above the existing weak Environmental Protection Agency standards. Thanks so much for your time and consideration.

Sincerely,

Eleanor Hines
North Sound Bay Keeper, Lead Scientist

Kirsten McDade
Pollution Prevention Specialist

RE Sources for Sustainable Communities

From:	Aimee Simpson
To:	Kijowski, Emily (ECY)
Cc:	Brenna Davis; Rebecca Robinson
Subject:	Comments on Biosolids General Permit
Date:	Friday, January 24, 2020 6:46:27 PM
Attachments:	WA Dept of Ecology Biosolids Permits_2020.01.24.pdf

Dear Ms. Kijowski:

Please find the attached comments concerning the biosolids general permit evaluation.

Thank you,

Aimee M. Simpson, J.D.
Director of Advocacy & Product Sustainability
PCC Community Markets
3131 Elliott Ave., Suite #500,
Seattle, WA 98121
(206) 717-6548
aimee.simpson@pccmarkets.com

January 24, 2020

Emily Kijowski
Washington Department of Ecology
Solid Waste Management
P.O. Box 4760, Olympia, WA 98504-7600
emily.kijowski@ecy.wa.gov

Re: Biosolids General Permit

Dear Ms. Kijowski:

PCC Community Markets, a locally-owned community food market, appreciates the department's request for input on the issue of whether a statewide general permit is appropriate for biosolids regulation. We respectfully submit that it is not.

As the nation's largest co-op grocery retailer with 13 stores and more than $288 million in revenue, PCC Community Markets has dedicated our triple bottom line business to providing local, organic and sustainable food to Washington state residents. Our shoppers care about the environment and how their food is grown, raised, and harvested. Our shoppers also care about what can be done to reduce the harmful impacts of our food system.

Application of biosolids to agricultural lands, unfortunately, presents significant risks to both aquatic and land-based ecosystems through introduction of potential toxins and potential pathogens. Overall, we do not believe that biosolids application to agricultural lands should continue or be permitted—especially with the increasingly fragile state of our local environment and species, such as Chinook salmon.

However, should the department continue its permitting program for biosolids, we believe that it should be under a program offering more individualized assessments of whether the application of biosolids can occur without negative impacts to the many at-risk ecosystems and species. We also believe that a move to individual permits would ensure greater accountability and transparency should these risks not be properly assessed or violations of the permit occur.

Again, we thank you for the opportunity to comment.

Sincerely,

Aimee Simpson
Director of Advocacy & Product Sustainability

From:	Wyatt Golding
To:	Dorsey, Kyle (ECY); Kijowski, Emily (ECY)
Cc:	Ed Kenney
Subject:	Comment Letter from Preserve the Commons
Date:	Friday, January 24, 2020 4:13:13 PM
Attachments:	Biosolids General Permit Comment 1.24.2020.pdf

Mr. Dorsey and Ms. Kijowski,

Please find attached a comment letter regarding biosolids application submitted on behalf of Preserve the Commons. Please confirm receipt.

Thank you and have a great weekend,

Wyatt Golding

Attorney for Preserve the Commons

Wyatt Golding

Attorney
Ziontz Chestnut
2101 Fourth Ave, Suite 1230
Seattle, WA 98121
Office: 206-448-1230
Direct: 206-448-7142
Email: wgolding@ziontzchestnut.com

January 24, 2020

From:

Preserve the Commons

To:

Kyle Dorsey
Emily Kijowski
Department of Ecology, Solid Waste Management,
P.O. Box 47600, Olympia, WA 98504-7600
kdor461@ecy.wa.gov
emily.kijowski@ecy.wa.gov

Sent via email only

Preserve the Commons' Comment Letter Regarding Proposed Use of a General Permit or Individual Permits for Biosolids Application

Mr. Dorsey and Ms. Kijowski,

Please accept these comments submitted on behalf of Preserve the Commons, a volunteer non-profit organization dedicated to protecting public resources from contamination associated with biosolids application in Washington State. Local residents formed Preserve the Commons following a proposed application by Fire Mountain Farms on land located near Yelm, Washington and the Nisqually River. The application has since been rescinded. Through studying and commenting on that project, consulting with attorneys and experts in the field, and researching prior enforcement actions against biosolids applicators (including Fire Mountain Farms) we learned a great deal about the risks of biosolids ground application. Based on that research, we strongly believe that a general permit is inadequate to regulate biosolids application, and urge the Department of Ecology to require individual permits with comprehensive State Environmental Policy Act (SEPA) analysis.

An individual permitting regime is most appropriate because environmental conditions, resources, and affected public vary greatly from site to site across the large and ecologically diverse State of Washington. The amount and manner of precipitation, permeability of soils, content of biosolids, nature of surrounding aquatic resources, and groundwater connection and flow can be significantly different not just from site to site but within a given site. The efficacy of regulatory measures to protect public resources from biosolids application is therefore highly variable. For example, at the proposed application site in Yelm, studies indicated that for certain areas of the site there is extreme soil permeability which results in deep groundwater contamination, outside the scope of what the general permit considered. Concerns were heightened because of the local community's use of groundwater for drinking water, the high degree of interchange between

groundwater and surrounding surface waters, potential impacts to threatened and endangered species, and impacts to Treaty fishing rights of the Nisqually Tribe.

Individual permitting is also necessary because of the rapidly developing scientific understanding of the contaminants present and biosolids and their impacts. As detailed in Preserve the Commons' comments on the proposed Yelm application, microplastics and nanoplastics, contaminants of emerging concern, a variety of biological pathogens, and "forever chemicals" polyfluoroalkyl substances all present significant environmental risk. These issues are gaining increasing study and attention at the national, state, and local level. In addition, rapidly declining salmon populations and imperiled resident orca populations have created the need for increased rigor in evaluating and preventing cumulative effects of water pollution. A general permit would likely extend for at least five years, which would render it outdated or require repeated updated analysis. We are also concerned that general permit coverage appears to be regularly extended with limited additional review. This practice seems to be leading to the soil and/or groundwater contamination of established biosolids sites over time. In our neighboring Mason and Lewis counties there are at least five sites showing such contamination, and those sites cover hundreds of acres. In contrast, site specific permitting would more likely result in analysis based on best available science, and require timely resubmittal and analysis to prevent long-term contamination.

An individual permitting scheme would not only be more protective of public resources, it would ultimately provide a more efficient regulatory process. Issuance of a general permit, which would likely be applied hundreds of times across the State, would have significant probable adverse environmental impacts, which should lead to preparation of a detailed environmental impact statement (EIS) under SEPA. RCW 43.21C.030. Under the Department's regulations, non-project programmatic SEPA review is required because "[t]he SEPA process shall be integrated with agency activities at the **earliest possible time** to ensure that planning and decisions reflect environmental values, to avoid delays later in the process, and to seek to resolve potential problems." WAC 197-11-055(1) (emphasis added). The EIS process would be lengthy and could result in wide-reaching litigation. Then, given high site variability, the Department and applicators would also have to conduct extensive site-specific SEPA review, with a likely "mitigated determination of non-significance" or additional EIS. With a rapidly developing understanding of contaminants and their impacts, adequate site-level review is likely to require significant analysis. Given this repetitive process, consolidating review into one meaningful review at the site level via individual permits, with tailored protections and mitigation, would provide a more streamlined approach that better protects public resources than a tiered approach. Individual permits would also allow for timely approval of truly low-impact proposals that did not present public concern.

An additional benefit of individual permits is that it allows the affected public to have site-specific, meaningful input on <u>all</u> environmental impacts of biosolids application, and would provide the Department adequate discretion on how to minimize and mitigate such impacts. In contrast, in a tiered permitting structure, a general permit is issued which sets forth presumptive protections for most impacts. Then, often years from general permit issuance, an applicator would apply for permit coverage at a given site. The agency will have to justify deviation from general terms, rather than simply applying the appropriate protections for the site. The affected population will likely pay attention for the first time to biosolids regulation, but the basic permitting scheme

and environmental impact evaluation will be functionally predetermined and agency discretion will be greatly constrained. There is a significant environmental justice concern, as affected low-income rural communities (where biosolids application is likely to be targeted) are unlikely to participate in the general permit process and then will have constrained input and protections on the site level. The most appropriate and effective means of ensuring meaningful public input is to independently tailor protections to the needs of a given site, rather than starting with the presumption that certain protections are adequate.

Preserve the Commons understands that the Department's preference is to issue a general permit in part to allow for "expedited issuance of permits for facilities with minimal permit needs, freeing up ecology resources to dedicate time to facilities with more complex permit requirements." For the reasons set forth above, individual permits would be more protective and efficient. If the Department pursues a general permit, we request that the Department prepare an EIS. Any general permit should be narrowly tailored to the aspects of biosolids application that are truly shared across applications. While we anticipate submitting further comments as appropriate at later stages of commenting, we specifically request that a general permit impose far more stringent standards for screening of microplastics and nanoplastics, testing and standards for a broader variety of pollutants beyond the current list focused on heavy metals, and define when application of so-called "exceptional quality biosolids" requires review due to a conclusion "that the requirements are necessary to protect public health and the environment from any adverse effect that may occur from a pollutant in the bulk biosolids." WAC 173-308-200(2). There is a minimal difference between exceptional quality biosolids and other biosolids, and we believe that the exemption from permitting should be only rarely applied.

Thank you for your consideration.

Sincerely,

Jim Brigham
Lynn Ferguson
Michelle Horkings-Brigham
Ektara Jarecki
Ed Kenney
Susie Kyle
Amy Malik

On behalf of Preserve the Commons

From:	David Troutt
To:	Kijowski, Emily (ECY)
Cc:	Emily McCartan; Jay Manning; Frank, Willie (DOHi); James Slape Jr; Meghan Gavin; Dennis McLerran; Maia Bellon; Christopher Ellings; George Walter
Subject:	Nisqually Tribe comment letter
Date:	Friday, January 24, 2020 12:26:38 PM
Attachments:	ATT00001.txt

Emily,

Please find the comment letter from the Nisqually Indian Tribe regarding Department of Ecology's request for comments on whether a general permit is appropriate to regulate the final use or disposal of biosolids in Washington State under WSR 19-24-091, "Notice of Preliminary Determination to Develop New Biosolids General Permit." Please let me know if there are any questions. Mahalo - david

David Troutt
Natural Resources Director
Nisqually Indian Tribe

Mahalo A Aheahi ka makani me ekeki i ke kai
Thank you and fair winds and following seas

NISQUALLY INDIAN TRIBE
Department of Natural Resources
4820 She-Nah-Num Dr. SE
Olympia, Washington 98513
360.456.5221 (main)
360.438.8742 (fax)
www.nisqually-nsn.gov

Emily Kijowski
Department of Ecology, Solid Waste Management
P.O. Box 47600
Olympia, WA 98504-7600

January 16, 2020

Ms. Kijowski,

The Nisqually Indian Tribe provides the following comments to the Department of Ecology's request for comments on whether a general permit is appropriate to regulate the final use or disposal of biosolids in Washington State under WSR 19-24-091, "Notice of Preliminary Determination to Develop New Biosolids General Permit." Ecology intends to issue a statewide general permit for the management of biosolids, although it recognizes individual permits could better protect public health and the environment and could be more efficient, less burdensome, and less costly. Nisqually has seen historic, ongoing, and proposed future applications of biosolids in the Nisqually watershed. Our experience informs us that individual, site-specific permits written to the unique physical and biological conditions of a proposed site best protect the resources needing our common stewardship. Nisqually has significant concerns about the adverse impact the inadequate management of biosolids in the Nisqually Watershed will have on our treaty rights and trust resources.

Each watershed in the State is unique in multiple ways, and capturing that in a general permit, even with the ability to condition, is challenging at best and inadequate far too often. We have invested a tremendous amount of tribal, State, and Federal resources into protecting and restoring habitat in the Nisqually to benefit the ecosystem and to support multiple listed species' recovery. In many cases, these protected and restored lands and waters represent the last best hope for critical species to survive the rapidly changing climate and, in the case of Nisqually steelhead, from going extinct. The location and connection of these lands and waters, and the future work to improve baseline conditions in the Watershed, is unique to the Nisqually, and simply cannot be addressed in a general permit that applies statewide.

We have observed that a conditioned general permit offers far fewer protections than an individual permit. A general permit allows a certain level of risk to be applied to the surrounding environment; it is only after the impacts have been discovered that remediation and risk reduction occur. On the other hand, an individual permit written to address local conditions and needs greatly reduces the risk to the environment from unintended consequences before those unintended consequences occur. This precautionary approach is most protective of the environment and of the Tribe's treaty rights.

As one particular example, only individual permits can presently require that the risk factors associated with the source and content of bio-solids be clearly identified and monitored on site. If a general permit does not require certain actions, such as source identification and complete toxic screening, conditions on an application to the general permit cannot require them.

This is a critical issue for the Tribe, particularly because our ESA-listed steelhead suffer from the highest observed levels of toxic loading of polybrominated diphenyl ethers (PBDEs) in the Puget Sound region. Adding biosolids from unknown sources likely containing elevated levels of PBDEs to the Watershed would increase the risk of extinction to this incredible biological and treaty-protected resource. The Nisqually Watershed cannot withstand this risk, even though other watersheds in the State with much lower loading might be able to. Individual permits tailored to a site's unique physical and biological conditions offer the only solution for ensuring the areas of our State requiring our protection the most, such as the Nisqually Watershed, receive it.

We have observed that individual permits can offer the same ease in management as general permits if individual permits begin from a common set of best management practices (BMPs). There are likely some common application standards based on Ecology's many years of experience in this issue that can be captured in BMPs. If these BMPs serve as the basis for each individual permit, Ecology could have some uniformity in management while having the opportunity to consider each particular biosolid source in the context of the surrounding ecosystem and to protect each unique aspect of each site.

If Ecology is disinclined to utilize individual permits statewide, it should consider requiring individual permits for any facilities in the Nisqually Watershed. Under WAC 173-308-90005(1)(b), the Director has the authority to issue a general permit for facilities within appropriate geographic areas. The Nisqually Watershed is an "inappropriate geographic area" given its high loading of PBDEs and the risk the inadequate management of biosolids poses to the Watershed's ESA-listed steelhead. The Nisqually Watershed requires the protection only an individual permit can offer. If Ecology utilizes a general permit for the management of biosolids throughout most of the State, it should exempt facilities in the Nisqually Watershed from that coverage and should require those facilities to apply for individual, site-specific permits.

If Ecology is disinclined to utilize individual permits statewide, it should consider requiring individual permits for any facilities in the Nisqually Watershed. Under WAC 173-308-90005(1)(b), the Director has the authority to issue a general permit for facilities within appropriate geographic areas. The Nisqually Watershed is an "inappropriate geographic area" given its high loading of PBDEs and the risk the inadequate management of biosolids poses to the Watershed's ESA-listed steelhead. The Nisqually Watershed requires the protection only an individual permit can offer. If Ecology utilizes a general permit for the management of biosolids throughout most of the State, it should exempt facilities in the Nisqually Watershed from that coverage and should require those facilities to apply for individual, site-specific permits.

No matter how Ecology decides to proceed, we would like to be involved in the further development of this program. Please keep us informed and thank you for this opportunity to comment.

Sincerely,

David A. Troutt, Natural Resources Director
Nisqually Indian Tribe

Pierce County
Planning & Public Works

Dennis Hanberg—Director
dennis.hanberg@piercecountywa.gov

9850 64th Street West
University Place, Washington 98467-1078
piercecountywa.gov/ppw

RECEIVED
JAN 02 2020
Ecology SWM

December 30, 2019
U-115649

Emily Kijowski,
Department of Ecology, Solid Waste Management
PO Box 47600
Olympia, WA 98504-7600

Subject: **Notice of Preliminary Determination to Develop New Biosolids General Permit**
Support of General Permit for Biosolids Management

Dear Ms. Kijowski,

The Pierce County Planning and Public Works -Sewer Division has been a Biosolids General Permit holder since the inception of the program in 2010.

We believe that a general permit is the appropriate tool to regulate the beneficial use or disposal of biosolids in Washington State. The requirements that are defined within the general permit protect public health and the environment in an efficient and cost-effective manner.

We would like to express our continued support of the use of a general permit for biosolids management in Washington State and look forward to being an active stakeholder in the development of a new statewide general permit for biosolids management in 2020.

Sincerely,

Jane Vandenberg

Jane Vandenberg, PE
Wastewater Utility Manager

JV:kj
Cors/U-115649

ec: Katherine Brooks, Pierce County Planning and Public Works Sewer Division
Patrick Kongslie, Pierce County Planning and Public Works Sewer Division

Appendix B. (Late Comments Received)

We received the following comments after the close of the comment period. Accordingly, we could not address them in the body of our response to comments. We include them here to recognize the viewpoints and efforts of the individuals who did take time to comment

From:	csword
To:	Kijowski, Emily (ECY)
Subject:	Biosolids
Date:	Saturday, January 25, 2020 11:39:40 AM

Dear Ms Kijowski,

Recently I became aware of the discussion on biosolids. My town began offering treated biosolids for gardeners a while back. Many of my friends tried it out. So that inspired me to do some research. I know people pour all kinds of stuff into the sewage stream: leftover paint (I did that years ago.), solvents, any kind of leftover liquids they don't want to pour into their own yards.

My conclusion about all this was a firm. No. I don't want biosolids in soil where edibles are grown. I know Something needs to be done with biosolids, but getting people to pass toxins through their body ? That's not a solution. I won't go on because you've probably heard it all.

My vote: no biosolids on farmland.

Thank you,
Carol Sword
A lover of clean Washington produce.

From:	Larsen, April
To:	Kijowski, Emily (ECY)
Subject:	City of Tacoma Letter of Support
Date:	Tuesday, January 28, 2020 10:59:03 AM
Attachments:	ESBO-CTPB1-MPC4504-C_Scan_to_Desktop_01-28-2020_10-47-26.pdf

April Larsen
Office Administrator
Business Operations
Environmental Services
alarsen@cityoftacoma.org
Phone: 253.404.6965

Healthy Neighborhoods + Thriving Puget Sound = A Better Tacoma

City of Tacoma
Environmental Services Department

January 23, 2020

Emily Kijowski,
Department of Ecology, Solid Waste Management
P.O. Box 47600
Olympia, WA 98504-7600
emily.kijowski@ecy.wa.gov

Dear Ms. Kijoski,

The City of Tacoma Environmental Services TAGRO program produces approximately 5,000 dry tons of Class A Biosolids each year. TAGRO produces several biosolids derived soil amendments and sells or donates all of its production for a variety of agricultural, forestry, and home garden uses. We distribute biosolids products in virtually every county in Western Washington. We have been operating under Ecology's General Permit for Biosolids Management since its inception.

Ecology's General Permit for Biosolids has been an effective tool in regulating biosolids activities throughout the state. The General Permit has been used to implement similar management requirements at similar facilities, and has allowed the state to make efficient use of limited resources. The City of Tacoma believes a General Permit is appropriate because all applicable facilities are subject to regulation under the same set of rules, and similar management practices apply to all facilities engaged in similar activities under the rules. When facilities propose to apply biosolids to the land that do not meet the most stringent standards of the state rule, the basic requirements of the General Permit are augmented by a requirement to incorporate a general and/or site specific land application plan. Additional or more stringent requirements may then be established in the plans on a case-by-case basis for individual sites if the basic requirements of the General Permit are not adequate. In this way the General Permit is not only efficient, but protective of the environment and human health as well.

Tacoma supports the concept in the new General Permit that creates three sections that will group facilities by similar operations. This new approach will allow for expedited issuance of permits for facilities with minimal permit needs, freeing up Ecology resources to dedicate time to facilities with more complex permit requirements.

If you have any questions or would like to further discuss Tacoma's biosolids experience please call me at 253 502-2191.

Respectfully,

Daniel C. Thompson Ph D
Business Operations Division Manager
Environmental Services

From:	Brad Beach
To:	Kijowski, Emily (ECY)
Cc:	Annette Bullchild
Subject:	WSR 19-24-091: Notice of Preliminary Determination to Develop New Biosolids General Permit
Date:	Thursday, January 30, 2020 8:01:06 AM
Attachments:	NIT Response.pdf

Good Morning Ms. Kijowski,

Please see attached letter for the Nisqually Indian Tribe's Tribal Historic Preservation Office (THPO) comments on the above referenced project.

Thank you,
Brad Beach
Nisqually Tribe
THPO Department
c: 360-528-0680
p: 360-456-5221 x 1277
beach.brad@nisqually-nsn.gov

Nisqually Indian Tribe
4820 She-Nah-Num Dr. S.E.
Olympia, WA 98513
(360) 456-5221

January 30, 2020

Emily Kijowski
Department of Ecology
Solid Waste Management
P.O. Box 47600
Olympia, WA 98504

Dear Ms. Kijowski,

The Nisqually Indian Tribe thanks you for the opportunity to comment on:

Re: WSR 19-24-091: Notice of Preliminary Determination to Develop New Biosolids General Permit

The Nisqually Indian Tribe's Tribal Historic Preservation Office (THPO) is concerned that the biosolids general permitting process lacks the flexibility required to manage site-specific conditions regarding both cultural and natural resources. We would prefer to see an individual permitting process that would allow a much more in depth review of the project and its potential impacts within the Nisqually Indian Tribe's ceded lands.

Sincerely,

Brad Beach
THPO Department
360-528-0680
360-456-5221 ext 1277
beach.brad@nisqually-nsn.gov

Annette "Nettsie" Bullchild
THPO Department
360-456-5221 ext 1106
bullchild.annette@nisqually-nsn.gov

Jeremy "Badoldman" Perkuhn
THPO Department
360-456-5221 ext 1274
badoldman.jp@nisqually-nsn.gov

Appendix C. (Notice of Preliminary Determination to Develop New Biosolids General Permit)

WSR 19-24-091
DEPARTMENT OF ECOLOGY
[Filed December 3, 2019, 2:39 p.m.]

Notice of Preliminary Determination to Develop New Biosolids General Permit

The department of ecology requests comments on whether a general permit is appropriate to regulate the final use or disposal of biosolids in Washington state.

The department of ecology (ecology) intends to develop and issue a new *statewide general permit for biosolids management*. The current biosolids general permit expires on September 4, 2020. It will continue to be in effect and enforceable beyond this date for facilities that properly notify the department of their intent to seek coverage under the new permit. The new biosolids general permit will apply to public and private entities that treat, store, transfer, apply, or dispose of biosolids in the state. This permit is the primary regulatory mechanism for approving the final use or disposal of biosolids in the state.

In addition to revising requirements in the general permit, ecology plans to reorganize the permit to support a more efficient permitting process. The new general permit will be divided into three sections that will group facilities by similar operations. This new approach will allow for expedited issuance of permits for facilities with minimal permit needs, freeing up ecology resources to dedicate time to facilities with more complex permit requirements.

Ecology will use the standards for biosolids management in chapter 173-308 WAC and accepted best management practices to assure that conditions in the biosolids general permit protect human health and the environment.

Ecology issued general permits for biosolids management in 1997, 2005, 2010, and 2015. The department continues to believe a general permit is appropriate because all applicable facilities are subject to regulation under the same set of rules, and similar management practices apply to all facilities engaged in similar activities under the rules. Ecology does not believe individual permits are necessary for the following reasons:

Ecology retains the right to condition approval of coverage under the general permit in any case where additional or more stringent requirements may be necessary to ensure protection of public health and the environment.

The general permit process preserves public opportunity for hearings and/or to comment on both the draft general permit, and on individual requests for approval of coverage for facilities that propose to apply biosolids to the land or distribute them to the public.

Ecology has not identified any reduction in regulatory burden or costs that might be conferred by issuing individual permits.

Ecology has identified significant efficiencies in the general permit process and with the envisioned structure and approach to issuing the new general permit. Achieving those efficiencies is a key goal for the program.

Finally, ecology retains the right to require an individual permit when the practices of an applicant may not be reasonably addressed within the construct of the general permit.

If you believe biosolids cannot be properly managed under a general permit, please explain your concern and how an individual permit would result in better protections for public health and the environment, or be more efficient, less burdensome, or less costly.

Please send your response, comments, questions, or requests to Emily Kijowski, Department of Ecology, Solid Waste Management, P.O. Box 47600, Olympia, WA 98504-7600, emily.kijowski@ecy.wa.gov.

Comments must be received at the department of ecology or postmarked no later than January 10, 2020.