General Permit for Biosolids Management

Current permit holders who have submitted a Notice of Intent and properly applied for coverage under this permit are provisionally approved to manage biosolids in accordance with this permit. Ecology may impose additional or more stringent requirements when issuing final coverage under this permit.

General Permit Issuance Date: ##, 2015

General Permit Effective Date: ##, 2015

General Permit Expiration Date: ##, 2020

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1. Overview of the General Permit for Biosolids Management

1.1 Introduction

The biosolids program in the State of Washington is based on Chapter 173-308 WAC, Biosolids Management. The state program, including this General Permit for Biosolids Management (permit), is intended to comply with all applicable federal rules adopted pursuant to the federal Clean Water Act as it existed on February 4, 1987, and Chapter 90.48 RCW, Water Pollution Control. Authority for administering a state biosolids management program is granted to Ecology in Chapter 70.95J RCW, Municipal Sewage Sludge-Biosolids.

The State program regulates biosolids (including septage) applied to the land for beneficial uses, biosolids being stored, sewage sludge disposed in a municipal solids waste landfill and biosolids transferred from one facility to another.

Although the state program does not regulate surface disposal or incineration, the transfer of biosolids from a wastewater treatment plant to an incineration facility or surface disposal site is an activity covered under this permit.

1.2 Use of the terms "Sewage Sludge", "Biosolids", and "Septage"

Sewage sludge is the solids, semisolids, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids are produced by treating sewage sludge to meet certain quality standards that allow it to be beneficially used. Septage is a class of biosolids that comes from septic tanks and similar systems receiving domestic wastes.

In this permit:
Sections 8, 9, and 10 apply only to biosolids or "septage managed as biosolids originating from sewage sludge".

Section 6 applies only to sewage sludge being disposed in a municipal waste landfill.
Section 11 applies only to septage being applied to the land.
All other section apply to biosolids, septage and sewage sludge unless the context requires otherwise.

1.3 Geographical Area Covered

This permit applies to facilities and biosolids management activities that occur on lands under the jurisdiction of the State of Washington.

Any treatment works located outside of the jurisdiction of the State and exporting biosolids into the State must do so in accordance with WAC 173-308-130.

1.4 Persons Required to Apply for Coverage under this Permit

Unless you are obtaining an individual permit in accordance with WAC 173-308-310, you must apply for coverage under this permit if you own or operate any of the following facilities:

- Facilities designated by Ecology as a treatment works treating domestic sewage in accordance with WAC 173-308-310(1)(b).
- Publicly owned treatment works.
- Privately owned treatment works treating only domestic sewage.

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- Industrial facilities that treat domestic sewage separately from the industrial waste stream and generate biosolids regulated by Chapter 173-308 WAC.
- Beneficial use facilities.
- Composting facilities that compost non-exceptional quality biosolids that do not have a permit meeting state program requirements as determined by Ecology.
- Facilities that mix non-exceptional quality biosolids with other material, including other biosolids.
- Septage Management facilities.

1.5 Activities Subject to Coverage under this Permit

Coverage under this permit is based on activities related to the use or disposal of biosolids. These activities include, but are not limited to, the following:

- Applying bulk biosolids to the land, including, but not limited to, agricultural lands, forest lands, public contact sites, and land reclamation sites.
- Applying septage to the land.
- Disposing sewage sludge in municipal solids waste landfills.
- Selling or giving away biosolids in bags or other containers.
- Storing biosolids.
- Transferring biosolids from one facility to another.
- Composting non-exceptional quality biosolids.

1.6 Local Health Jurisdiction Involvement

Ecology may delegate authority to a Local Health Jurisdiction (LHJ) to implement and assist in the administration of Chapter 173-308 WAC and this permit. Delegation is accomplished through an instrument of mutual consent (for example, a Memorandum of Agreement) that is acceptable to both Ecology and the LHJ. When applying for coverage under this permit, contact Ecology to find out the status of delegation agreements in the areas where you treat, store, transfer, or apply biosolids to the land.

1.7 Role of EPA

EPA has a responsibility for implementing a national biosolids management program. EPA Region 10 and Ecology work cooperatively on program implementation. EPA provides periodic technical assistance to the state; in return the state provides certain information on request to EPA regarding biosolids management in Washington.

All applicable facilities in the state must meet requirements set forth by both the state and the federal programs; satisfaction of the state program requirements does not necessarily satisfy federal obligations.

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2. Applying For Coverage under this Permit

2.1 When to Apply

All existing facilities required to be covered under this permit must submit a complete application within 90 days of the effective date of this permit unless you have received approval from your regional biosolids coordinator to submit your application within 180 days of the effective date in accordance with WAC 173-308-310(4)(a).

All new facilities must submit a complete application (subsection 2.4) at least 180 day in advance of engaging in biosolids management activities.

2.2 Complying With the State Environmental Policy Act

The act of applying for coverage under this permit triggers a requirement for review under the State Environmental Policy Act (SEPA) Chapter 197-11 WAC.

It may be possible to use previous SEPA documents to comply with the SEPA requirements. For this to be the case, the SEPA lead agency must be able to conclude that possible site specific environmental impacts of applying biosolids have been adequately considered in existing SEPA documents. As part of approving coverage under this permit, you must provide written documentation from the SEPA Lead Official showing that the SEPA requirements have been met.

You may be able to overlap the public notice period of SEPA with the public notice requirements of this permit. If you combine both public notice requirements, you must ensure that comments are directed to both the responsible SEPA and regulatory officials.

2.3 Submitting a Notice of Intent

The biosolids General Permit is reissued every five years. A Notice of Intent is written notification to Ecology that you intend to maintain coverage under the next permit. Failure to submit an NOI will result in loss of coverage and the need to reapply and pay an initial application fee.

Notices of Intent must be submitted on Ecology forms. You can obtain the current version of the Notice of Intent from Ecology's biosolids forms webpage at: http://www.ecy.wa.gov/programs/swfa/biosolids/forms.html , or you can obtain one from your regional biosolids coordinator.

In accordance with WAC 173-308-310(5)(a), you must submit a Notice of Intent form no less than 180 days before the expiration date of the General Permit for Biosolids Management.

You must submit copies of your Notice of Intent as follows:

- The signed original to the biosolids coordinator in the Ecology region where your facility is located.
- A copy to the biosolids coordinator at Ecology headquarters office.
- A copy to the Local Health Jurisdiction in each county where your biosolids will be treated, stored, disposed, or applied to the land.

You are encouraged to submit copies to Ecology regions and headquarters by email. Contact information for Ecology biosolids staff can be found on the biosolids contacts webpage at: http://www.ecy.wa.gov/programs/swfa/biosolids/contacts.html.

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2.4 Submitting a Permit Application

You can obtain the current version of the Application for Coverage form from Ecology's biosolids webpage at: http://www.ecy.wa.gov/programs/swfa/biosolids/forms.html, or from your regional biosolids coordinator.

To apply for coverage under this permit you must submit a Complete Application for Coverage package that includes, but is not limited to, the following:

- A vicinity map of the facility.
- A vicinity map of any associated treatment or storage facilities.
- A treatment facility schematic.
- Confirmation that the SEPA requirements have been met (see Subsection 2.2 for more details).
- Confirmation that the public notice requirements have been met if appropriate (see Subsection 2.5 for more details).
- Land application plans if appropriate (see Subsection 2.6 for more details).
- Monitoring data if appropriate.
- A biosolids sampling plan if appropriate (see Section 8 for more details).
- A contingency plan for handling biosolids.
- A temporary disposal plan (see Subsection 6.2 for more details).
- A spill prevention/response plan if appropriate (see Subsection 4.1 for more details).

You must submit copies of your final permit application as follows:

A signed original to the biosolids coordinator in the Ecology regional office where your facility is located.

A copy to any other Ecology regional office where your biosolids will be treated, stored, disposed, or applied to the land.

A copy to the biosolids coordinator at Ecology headquarters office.

A copy to the Local Health Jurisdiction in each county where your biosolids will be treated, stored, disposed, or applied to the land.

Submit any copies to Ecology regions and headquarters by email. You are also encouraged to submit any copies to LHJs by email if the LHJ allows electronic submittal.

Contact information for Ecology biosolids staff can be found on the biosolids contacts webpage at: http://www.ecy.wa.gov/programs/swfa/biosolids/contacts.html.

2.5 Public Notice Requirements When Applying for Coverage

When you apply for coverage under this permit, you must conduct public notice in accordance with this subsection. Follow the steps within the category that applies to your facility.

Note*: If you are a wastewater treatment plant that sends all of your biosolids to a Beneficial Use Facility, you do* ***not*** *land apply biosolids.*

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2.5.1 Wastewater Treatment Plants that DO NOT land apply biosolids

If your facility met the public notice requirements under the previous general permit (and you have documentation to show this) and you do not land apply biosolids, you are **not** required to conduct additional public notice.

If you are a new facility or for some reason had a lapse in coverage under the General Permit of August 20, 2010 and do not land apply biosolids, you must conduct public notice in the following manner:

- Issue one notice in a newspaper of general circulation in the county where you are located. The minimum required content of the notice can be found in Appendix 1.
- Submit your official interest parties list to the biosolids coordinator at Ecology headquarters office AND any other Ecology regional office where your biosolids will be treated, stored, disposed, or applied to the land.
- Send notification to all persons on your approved interested parties list, plus Ecology headquarters and regional office(s), at the same time or before notice is run in the newspaper.
- Provide a 30-day public comment period following the publication of a newspaper notice.

2.5.2 Wastewater Treatment Plants that Land Apply Biosolids

If you land apply biosolids you must conduct public notice in the following manner:

- Issue one notice in a newspaper of general circulation in the county where you are located, in each county where you land apply biosolids, and all additional counties that may be covered by a General Land Application Plan you have submitted. The minimum required content of the notice can be found in Appendix 1.
- If proposing a new land application site or to expand an existing site, post notices at the new site(s) or expanded area of the existing site.
- Submit your official interest parties list to the biosolids coordinator at Ecology headquarters office AND any other Ecology regional office where your biosolids will be treated, stored, disposed, or applied to the land.
- Send notification to all persons on your approved interested parties list, plus Ecology headquarters and regional office(s), at the same time or before notice is run in the newspaper.
- Provide a 30-day public comment period following the newspaper posting.

2.5.3 Beneficial Use Facilities

All Beneficial use facilities must conduct public notice when applying for coverage initially **and** when reapplying for coverage when a new general permit is issued. Public notice must be conducted in the following manner:

- Issue one notice in a newspaper of general circulation in the county where you are located, in each county where you land apply biosolids, and all additional counties that may be covered by a General Land Application Plan you have submitted. The minimum required content of the notice can be found in Appendix 1.
- If proposing a new land application site or to expand an existing site, post notices at the new site(s) or expanded area of the existing site.
- Submit your official interest parties list to the biosolids coordinator at Ecology headquarters office AND any other Ecology regional office where your biosolids will be treated, stored, disposed, or applied to the land.

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- Send notification to all persons on your approved interested parties list, plus Ecology headquarters and regional office(s), at the same time or before notice is run in the newspaper.
- Provide a 30-day public comment period following the newspaper posting.

2.6 Land Application Plans

2.6.1 Site Specific Land Application Plans

You must submit a Site Specific Land Application Plan (SSLAP) for every site where non-exceptional biosolids are applied to the land. The minimum required content of a SSLAP can be found in Appendix 3.

2.6.2 General Land Application Plans

You must submit a General Land Application Plan (GLAP) if you intend to develop other land application sites during the life of your permit coverage. The minimum required content of a GLAP can be found in Appendix 2.

2.6.3 Exemption for Biosolids Going to Permitted Beneficial Use Facilities

When your biosolids are sent to a permitted beneficial use facility, you do not have to prepare land application plans if the conditions in WAC 173-308-310(8)(g) have been met.

2.6.4 Exemption for Exceptional Quality Biosolids

You are not required to submit land application plans for the management of exceptional quality biosolids unless Ecology requires a plan in accordance with WAC 173-308-310(8)(a)(ii-iii).

2.7 Ecology Review of Submitted Plans

All plans submitted in the permit application process will be reviewed by Ecology prior to the issuance of Final Coverage. During that review process, Ecology may determine that changes and/or additions are necessary to effectively meet the plans' intended purpose.

Ecology will rely on several reference documents when reviewing plans. https://fortress.wa.gov/ecy/publications/publications/9380.pdf.

In addition, Ecology has prepared some sample plans that are available on its biosolids forms webpage at: http://www.ecy.wa.gov/programs/swfa/biosolids/forms.html. You can use these plans as guidance.

3. Requirements Applicable to all Permittees

3.1 Duty to Comply

You must comply with all conditions of this permit, all applicable requirements of Chapter 173-308 WAC, all applicable requirements of 40 CFR Part 503, and all applicable requirements of any other state, federal, or local laws, rules, or ordinances.

You must also comply with any provisions in your permit application, including those in any plans, unless those provisions are modified through the permit review and final coverage issuance process.

You must also comply with any additional or more stringent requirements developed as a condition of final coverage under this permit.

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Ecology may modify, revoke and reissue, or terminate coverage under this permit for cause. Permit conditions remain in effect even if you file a request to modify, revoke and reissue, or terminate coverage under this permit or notify Ecology of planned changes or anticipated noncompliance.

Ecology may modify or revoke and reissue your coverage under this permit in accordance with WAC 173-308-310(23).

Ecology may terminate your coverage under this permit in accordance with WAC 173-308-310(24).

3.2 Continuing Coverage and Duty to Reapply

If you wish to continue an activity regulated by this permit after its expiration date, you must submit a Notice of Intent at least 180 days in advance of its expiration date and subsequently apply for coverage under a new permit in accordance with WAC 173-308-310(3)-(5). If you fail to submit a timely and sufficient Notice of Intent, your coverage under this permit will cease on its expiration date.

3.3 Need to Halt or Reduce Activity Not a Defense

Other permit compliance requirements, due to enforcement actions, shall not be a defense for non-compliance with this permit.

3.4 Duty to Mitigate

You must take all reasonable steps to minimize or prevent biosolids use or disposal that may adversely affect human health or the environment. This includes, but is not limited to, the proper operation and maintenance of equipment, adequate laboratory controls and appropriate quality assurance procedures.

3.5 Duty to Provide Information to Ecology

You must furnish any information requested by Ecology to determine compliance with this permit, or to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage. Any and all records required to be kept by Chapter 173-308 WAC must be furnished to Ecology upon request.

3.6 Inspection and Entry

You must allow Ecology, or an authorized representative of Ecology, upon the presentation of credentials and other documents as may be required by law, to:

- Enter the premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.
- Have access to and copy, during reasonable times, any records that must be kept under the conditions of this permit.
- Inspect during reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
- Sample or monitor during reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by state law, Chapter 70.95J RCW, and the Clean Water Act, any substances, parameters, or practices at any location.

3.7 Monitoring and Records

You must monitor and report monitoring results as specified in Section 8 of this permit and in accordance with your NPDES permit or State Waste Discharge Permit, if applicable.

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You must retain all records and data used to complete the application for this permit for a period of at least 5 years from the date of the application or longer as required by other applicable laws or regulations.

3.8 Signatory Requirements

All applications, notices of intent, reports, or information submitted to Ecology must be signed and certified in accordance with WAC 173-308-310(10).

3.9 Reporting of Changes, Noncompliance, Compliance Schedules, and Other Information

3.9.1 Planned Changes

You must notify your regional biosolids coordinator and any participating delegated LHJ of significant changes in your biosolids management practices or planned physical alterations or additions to your facility.

3.9.2 Noncompliance

You must report to your regional biosolids coordinator any noncompliance which may endanger human health or the environment within 24 hours of learning of the situation. Unless waived by Ecology, you must also submit a written explanation of the noncompliance within 5 days. The written explanation must include the following:

- A description of the noncompliance and its cause.
- The period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue.
- Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- Submit report no later than 14 calendar days following the incident.

3.9.3 Other Information

If you become aware that you failed to submit any relevant facts or you submitted incorrect information in a permit application or a report, you must promptly submit such facts or information to your regional biosolids coordinator.

3.10 Transferring Permits

Coverage under this permit is not transferable to any person except as provided in WAC 173-308-310(22).

3.11 Penalties

If you violate this permit, you are subject to a penalty of up to $5,000 per day per violation. In the case of a continuing violation, each day of violation is a separate violation. An act of commission or omission that procures, aids, or abets in the violation is considered a violation under this subsection.

If you willfully violate any of the provisions of this permit, you are guilty of a gross misdemeanor. Willful violation of this permit or orders issued pursuant to Chapter 70.95J RCW is a gross misdemeanor punishable by a fine of up to $10,000 per day per violation and costs of prosecution, or by imprisonment for up to 1 year, or both.

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3.12 Obtaining and Providing Information

If you prepare biosolids, you must provide information needed to comply with this permit to any person who receives your biosolids.

If you apply bulk biosolids to the land, you must:

- Obtain information needed to comply with the requirements of this permit.
- Obtain written approval of the landowner prior to applying any Class B quality biosolids to the land for the first time.
- Provide information to the landowner or leaseholder needed to comply with this permit.

3.13 Final Coverage: Additional or More Stringent Requirements

On a case-by-case basis, Ecology may impose requirements that are in addition to or more stringent than the requirements in this permit. All such requirements will be provided in writing along with Ecology's notice of final coverage under this permit.

All additional or more stringent requirements become a part of the permit and are fully enforceable. Additional or more stringent requirements may be appealed as described in Subsection 3.18.

3.14 Compliance Schedules

A schedule may be established leading to compliance with requirements of this permit and Chapter 173-308 WAC. A compliance schedule may not extend deadlines established under the Clean Water Act or Chapter 70.95J RCW. Compliance schedules must be established in accordance with the requirements of WAC 173-308-310(16).

3.15 Annual Report

You must submit an annual report to Ecology by March 1 of each year. All requested information that is required under Chapter 173-308 WAC or this permit must be submitted. The current annual report form?? is at: http://www.ecy.wa.gov/biblio/ecy070125.html.

Any required reporting to the EPA must be submitted by February 19 of each year.

3.16 Permit Fees

You must pay an annual biosolids permit fee to Ecology. Fees are determined and issued in accordance with WAC 173-308-320.

3.17 Record Keeping Requirements

You must keep records and certification statements in accordance with WAC 173-308-290.

3.18 Appeals

Any person may appeal this permit as provided by applicable law including, but not limited to, Chapter 43.21B RCW and Chapter 34.05 RCW. Appeals of this permit must be made within 30 days of the issuance date listed on the cover page.

Any person aggrieved by an Ecology decision made in accordance with this permit may appeal that decision as provided by applicable law including, but not limited to, Chapter 43.21B RCW and Chapter 34.05 RCW.

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4. Requirements for Transporting Biosolids

If you transport biosolids, you must ensure that the transportation vehicle is properly cleaned prior to use of the vehicle for the transportation of food crops, feed crops, or fiber crops.

4.1 Spill Prevention/Response Plan

A spill prevention/response plan from a facility with coverage under this permit must be in place for all biosolids transfers. The plan may be from either the sending or receiving facility, whichever has responsibility for the transfer.

You must submit a spill prevention/response plan to Ecology that describes how you will attempt to prevent and respond to any spills. The spill prevention/response plans must include the following:

- The main route traveled and any possible alternate routes
- Spill prevention measures
- Equipment needed to respond appropriately to a spill that will be carried on the vehicle transporting biosolids
- Spill response measures should a spill occur
- Contact information for Ecology, Jurisdictional Health Department(s) and Washington Department of Transportation.

Note: *The transportation of biosolids is otherwise subject to regulation by the Washington State Utilities and Transportation Commission under Title 81 RCW.*

5. Requirements for Storing Biosolids

Storage of biosolids must be conducted in a manner that is not likely to result in harm to human health and/or the environment and with approval from the regional coordinator.

5.1 Exemptions

- If you store biosolids in a manner that will not result in harm to human health and/or the environment, your storage is exempt from the provisions of Subsections 5.2 and 5.3 if either of the following applies:
- You are storing in accordance with a current local, state, or federal water pollution control permit or other environmental permit.
- You utilize temporary, small scale storage for no more than 30 days in a tank holding no more than 10,000 gallons with a total on-site maximum volume of no more than 20,000 gallons.

5.2 Surface Impoundments (Lagoons)

If you store your biosolids in a surface impoundment that was constructed and used for that purpose prior to July 1, 2007, the surface impoundment must meet the requirements for the design, construction, and operation of surface impoundments in Chapter 173-304 WAC or a higher standard.

If you store your biosolids in a surface impoundment that was constructed or upgraded since July 1, 2007, or you are proposing to use a surface impoundment for biosolids storage for the first time, the surface impoundment must meet the requirements for the design, construction, and operation of surface impoundments in Chapter 173-350 WAC or a higher standard.

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5.3 Tanks

If you store biosolids in a tank, the following must be reviewed by a licensed Professional Engineer and approved by Ecology:

- All tanks must be structurally sound.
- All tanks must be sited in a stable location.
- No tanks may be sited in an area where the seasonal ground water may come into contact with the tank unless otherwise approved by Ecology.
- If tanks are above ground, secondary containment may be required as part of the approval process.
- If tanks are below ground, leak detection tests may be required as part of the approval process.

6. Requirements for Disposal of Sewage Sludge in a Municipal Solid Waste Landfill

6.1 Disposal on an Emergency Basis

If you want to dispose of biosolids or sewage sludge on an emergency basis you must do the following:

- Obtain written approval from Ecology that disposal is an acceptable option.
- Obtain a written determination from the LHJ where the biosolids or sewage sludge is proposed for disposal

The LHJ must notify Ecology in writing of its findings and the basis for its determination. In its written notification, the LHJ must include the following:

- The date on which disposal is approved to begin.
- Any conditions of approval.
- The date after which disposal is prohibited.

6.2 Disposal on a Temporary Basis

If you want to dispose of biosolids or sewage sludge on a temporary basis you must do the following:

- Obtain written approval from Ecology that disposal is an acceptable option.
- Obtain written approval for disposal from the LHJ where the biosolids or sewage sludge is proposed for disposal.
- Provide a copy of the LHJ approval to Ecology.
- Submit a plan for approval to Ecology. The plan must include the following information:
    - The conditions that make disposal necessary.
    - The steps that will be taken to correct the conditions that make disposal necessary so that disposal will not become a long-term management option.
    - Submit a timetable for implementing the steps to be taken to correct the conditions that make disposal necessary.
    - Provide Ecology with written approval for disposal from the local health jurisdiction and the receiving health jurisdiction.

6.3 Disposal on a Long-term Basis

Disposal of biosolids or sewage sludge on a long-term basis requires:

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- Authorization in a valid NPDES or state waste discharge permit issued under chapter 90.48 RCW or a permit issued under this chapter
- You must submit, for Ecology approval, an evaluation of the various management options that demonstrates to the satisfaction of Ecology that options for beneficial use are economically infeasible.

Written approval for disposal from the local health jurisdiction in the receiving jurisdiction must be submitted to Ecology

7. Requirements for Transferring Biosolids

Coverage under this permit includes authorization for transferring biosolids from one facility to another for treatment or management if the following conditions are met:

- Nothing in the permit for either the sending or the receiving facility prohibits the transfer of biosolids.
- Both the sending and the receiving facility exchange adequate information needed to comply with this permit and Chapter 173-308 WAC. This may include, but is not limited to, information on biosolids quality and the permit status of each facility.
- Approval from Ecology

8. Requirements for Analyzing Biosolids and Monitoring Processes

This section contains the minimum requirements for biosolids analysis and process monitoring that are applicable when you prepare biosolids for land application or sale/give away.

You must submit a biosolids sampling plan that addresses how you intend to meet the requirements in this section. As part of the approval process, Ecology may require biosolids analysis and/or process monitoring beyond the minimum requirements in this section.

8.1 Representative Sampling

Samples collected for analysis and monitoring locations must be representative of the biosolids or the treatment process used to prepare the biosolids.

8.2 Frequency of Biosolids Analysis

At a minimum, you must analyze your biosolids at the frequency listed in Table 1. Ecology may require additional sampling and analysis. The frequency of biosolids analysis is based on the dry weight tonnage of biosolids applied to the land or prepared for sale/give away per 365-day period. For facilities that compost or mix Class B quality biosolids with other materials, the frequency of analysis is based on the dry weight tonnage of the total amount of material, not just the biosolids.

Table 1 applies to the pollutants in WAC 173-308-160, the pathogen density requirements in WAC 173-308-170, the vector attraction reduction standards in WAC 173-308-180, and the nitrogen concentrations and percent solids needed to support agronomic rate determinations. It does not apply to process monitoring, which is described in Subsection 8.3.

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Table 1 Minimum Frequency of Biosolids Analysis (adapted from WAC 173-308-150)

Metric tons per Year	Frequency*
<1 - 290 (<1 - 320 U.S. tons)	once per year (1X per year)
290 - 1,500 (320 - 1,653 U.S. tons)	once per quarter (4X per year)
1,500 - 15,000 (1,653 - 16,535 U.S. tons)	once per 60 days (6X per year)
>15,000 (>16,535 U.S. tons)	once per month (12X per year)
* = after 2 years of analyzing at this frequency, analysis for the pollutant concentrations may be reduced, but it must not be less than once per year	

8.3 Frequency of Process Monitoring

Monitoring of the processes used to prepare biosolids that are land applied or sold/given away must be conducted at a frequency that will ensure that the process meets the applicable requirements. This applies to the pathogen reduction processes in WAC 173-308-170 and the vector attraction reduction processes in WAC 173-308-180. As an example, Table 2 provides the minimum expectations for monitoring temperatures for a specific composting process.

Table 2 Minimum Process Monitoring Requirements for Meeting the Pathogen and Vector Attraction Reduction Requirements by the Static Aerated Pile Composting Method

Process	Required Process Monitoring*
Pathogen reduction via WAC 173-308-170(3)(b)(i)(A)	Monitor pile temperatures for at least 3 continuous days
Vector attraction reduction via WAC 173-308-180(3)	Monitor pile temperatures for at least an additional 11 continuous days (a total of 14 days)
** = applies to each composting pile*	

8.4 Point of Compliance

The point of compliance for a sample is the date on which the sample is taken, not the date on which results are subsequently reported.

You may distribute biosolids based on the most recent analytical results. However, if subsequent results show that you distributed biosolids that failed to meet the appropriate standards, you will be in violation of this permit.

8.5 Requirement for Analysis by an Accredited Laboratory

An accredited laboratory is a laboratory accredited under Chapter 173-50 WAC, Accreditation of Environmental Laboratories, for a specific analyte using a specific analytical method.

All required biosolids analyses must be performed by a laboratory that is accredited by Ecology for the respective method used if an accreditation protocol for the method exists. Accreditation must be under the "Solids and Chemical Materials" matrix, unless otherwise approved

8.6 Analytical Methods

Unless another method is approved by Ecology, the methods in Table 3 must be used for biosolids analysis. In addition, the basic preservation and maximum holding times listed in Table 3 must be met.

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Table 3 Analysis Methods, Preservation and Holding Times (adapted from WAC 173-308-140)

Parameter	Methods	Basic Preservation	Maximum Holding Time
Arsenic	SW-846 6010 SW-846 6020 SW-846 7010 SW-846 7061	Cool to ~4° C	6 months
Cadmium	SW-846 6010 SW-846 6020 SW-846 7000 SW-846 7010	Cool to ~4° C	6 months
Chromium VI	SW-846 7195 SW-846 7196 SW-846 7197 SW-846 7198	Cool to ~4° C	28 days
Copper	SW-846 6010 SW-846 6020 SW-846 7000 SW-846 7010	Cool to ~4° C	6 months
Lead	SW-846 6010 SW-846 6020 SW-846 7000 SW-846 7010	Cool to ~4° C	6 months
Mercury	SW-846 7470 SW-846 7471	Cool to ~4° C	28 days
Molybdenum	SW-846 6010 SW-846 6020 SW-846 7000 SW-846 7010	Cool to ~4° C	6 months
Nickel	SW-846 6010 SW-846 6020 SW-846 7000 SW-846 7010	Cool to ~4° C	6 months
Selenium	SW-846 6010 SW-846 6020 SW-846 7010 SW-846 7741	Cool to ~4° C	6 months
Zinc	SW-846 6010 SW-846 6020 SW-846 7000 SW-846 7010	Cool to ~4° C	6 months
Total Kjeldahl Nitrogen (TKN)	SM 4500, N_{org} B SM 4500, N_{org} C ASTM D3590-89 ASTM D3590-02	Cool to ~4° C	28 days
Nitrate-nitrogen	EPA 353.2 SM 4500-NO_3 E, F, or H	Cool to ~4° C	28 days
Ammonia-nitrogen	SM 4500-NH_3 B + C, D, E, or G	Cool to ~4° C	28 days
Organic Nitrogen	Calculated: TKN minus NH_3-N	Not applicable	Not applicable
Total Phosphorus	EPA 365.1 EPA 365.3 SM 4500-P B + E or F	Cool to ~4° C	28 days
PCBs	EPA 1668	Cool to ~4° C	1 year

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Parameter	Methods	Basic Preservation	Maximum Holding Time
	SW-846 8082		
Dioxins and Furans	EPA 1613 SW-846 8280 SW-846 8290	Freeze at -10° C	1 year
Semi-volatile Organic Compounds	SW-846 8270	Cool to ~4° C	14 days
Volatile Organic Compounds	SW-846 8260	Cool to ~4° C Freeze at -7° C or preserve with methanol	48 hours 14 days
Total Solids, Fixed Solids, or Volatile Solids	SM 2540 G	Cool to ~4° C	7 days
Volatile Solids Reduction	EPA/625/R-92/013 (Appendix C)	Not applicable	Not applicable
Additional Volatile Solids Reduction for Anaerobically Digested Solids	EPA/625/R-92/013 (Appendix D.1)	Hold at temperature of digester Maintain anaerobic conditions	6 hours
Additional Volatile Solids Reduction for Aerobically Digested Solids	EPA/625/R-92/013 (Appendix D.3)	Cool to 20° C Maintain aerated conditions	As soon as possible
Specific Oxygen Update Rate (SOUR)	EPA/625/R-92/013 (Appendix D.2) SM 2710 B	Hold at temperature of digester (10-30° C) Maintain aerobic conditions	As soon as possible
pH	SW-846 9040 (if <80% solids) SW-846 9045 (if >80% solids)	Not applicable	15 minutes
Fecal Coliform	EPA 1680 EPA 1681 EPA/625/R-92/013 (Appendix F) SM 9221 C and E SM 9222 D	Cool to ~4° C	Analysis within 8 hours from time of collection. Extended to 24 hours if using EPA 1680 or EPA 1681 for Class A compost or Class B from a digester SM 9222 D is not recommended and may only be used for Class B
Salmonella bacteria	EPA 1682 SM 9260 D EPA/625/R-92/013 (Appendix G)	Cool to ~4° C	6 hours
Helminth Ova	EPA/625/R-92/013 (Appendix I)	Cool to ~4° C	1 month
Enteric Viruses	ASTM D4994-89 EPA/625/R-92/013 (Appendix H)	Cool to ~4° C Freeze at -18° C	<24 hours 2 weeks

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8.7 Records of Analytical and Monitoring Information

Records of analytical and monitoring information must include all of the following:

- The date, place, and time of sampling or measurement.
- The individuals who performed the sampling or measurement.
- The date analysis was performed.
- The individual who performed the analysis.
- The analytical technique or method used.
- The results of the analysis or measurement, including Quality Assurance and Quality Control (QA/QC) results.

9. Requirements for Biosolids Applied to Agricultural Land, Forest Land, Public Contact Sites, or Land Reclamation Sites

9.1 Removing Manufactured Inerts

The biosolids must meet the requirements for removal of manufactured inerts in WAC 173-308-205. Minimally, the following conditions must be met:

- The biosolids must contain <1% by volume recognizable manufactured inerts.
- Material must be screened through a bar screen with a maximum 3/8 inch aperture or an Ecology-approved equivalent process is required. Screening (or an approved equivalent process) may occur at any time in the wastewater treatment or biosolids manufacturing process, but it must occur before grinding or similar processes.

9.2 Soil Testing

All new land application sites must test for the pollutants listed in WAC 173-308-160 Table 3 to determine background levels.

Soil nutrient levels must be tested prior to each land application event. Background nutrient levels will be used to calculate the agronomic rate in accordance with WAC 173-308-190, except as allowed for certain land reclamation sites or research projects approved in accordance with WAC 173-308-190(3) and WAC 173-308-192, respectively.

9.3 Agronomic Rate

The biosolids must be applied at an agronomic rate in accordance with WAC 173-308-190, except as allowed for certain land reclamation sites or research projects approved in accordance with WAC 173-308-190(3) and WAC 173-308-192, respectively.

The person who prepares the biosolids is responsible for providing information necessary to determine an agronomic rate to the person who receives the biosolids.

9.4 Pollutants

The biosolids must not exceed the ceiling concentration limits in WAC 173-308-160 Table 1. In addition, the biosolids must either not exceed the pollutant concentration limits in WAC 173-308-160 Table 3 or be applied at a rate that will not exceed the cumulative pollutant loading rates in WAC 173-308-160 Table 2.

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If the biosolids are subject to the cumulative pollutant loading rates in WAC 173-308-160 Table 2, the person who proposes to apply the biosolids must obtain approval from Ecology in accordance with the process prescribed in WAC 173-308-160(2) prior to application. Table 4 provides a summary of WAC 173-308-160 Tables 1, 2, and 3.

Table 4 Allowable Biosolids Pollutants and Loading Rates (adapted from WAC 173-308-160)

Pollutant	WAC 173-308-160 Table 1 Ceiling Limits	WAC 173-308-160 Table 2 Cumulative Loading Rates	WAC 173-308-160 Table 3 Pollutant Limits
Arsenic	75 mg/kg	41 kg/ha	41 mg/kg
Cadmium	85 mg/kg	39 kg/ha	39 mg/kg
Copper	4300 mg/kg	1500 kg/ha	1500 mg/kg
Lead	840 mg/kg	300 kg/ha	300 mg/kg
Mercury	57 mg/kg	17 kg/ha	17 mg/kg
Molybdenum	75 mg/kg	Not applicable	Not applicable
Nickel	420 mg/kg	420 kg/ha	420 mg/kg
Selenium	100 mg/kg	100 kg/ha	100 mg/kg
Zinc	7500 mg/kg	2800 kg/ha	2800 kg

9.5 Pathogens

The biosolids must meet one of the Class A processes in WAC 173-308-170(1)-(4) or one of the Class B processes in WAC 173-308-170(5)-(7).

9.6 Vector Attraction Reduction

The biosolids must meet either one of the vector attraction reduction process in WAC 173-308-180 or be managed to reduce vector attraction in the field as described in WAC 173-308-210(4)(a) and (b).

9.7 Site Management and Public Access Restrictions for Class B Biosolids

The site management and public access restrictions in this subsection apply to biosolids that are Class B for pathogens when they are applied to the land.

9.7.1 Crop Harvest Waiting Periods

The time between the last application of Class B biosolids and crop harvesting must adhere to the waiting periods in Table 5.

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Table 5 Crop Harvesting Restrictions for Class B Biosolids

Crop Type	Examples	Does the harvested part of plant contact biosolids?	Length of time the biosolids remain on soil surface	Waiting period until harvest is allowed
Above ground food crops	Cherries, wheat	No	Not applicable	30 days
Above ground food crops	Lettuce, cucumbers	Yes	Not applicable	14 months
Root food crops	Onions, potatoes	Yes	≥4 months	20 months
Root food crops	Onions, potatoes	Yes	<4 months	38 months
Feed crops	Range land, pasture	Not applicable	Not applicable	30 days
Fiber crops	Trees, cotton	Not applicable	Not applicable	30 days
Turf	Lawn grass	Not applicable	Not applicable	1 year*
** = unless a different waiting period is approved by Ecology*				

9.7.2 Public Access Restrictions

Public access must be restricted following the application of Class B biosolids. Minimally, sites must be posted during the entire time site access is restricted in accordance with the requirements in Table 6. Exceptions to these requirements must have approval by Ecology.

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Table 6 Site Posting Requirements for Class B Biosolids

Where	Notice Content*	How Long
All significant points of access to the site Every ½ mile (805 meters) around the perimeter of the site	The name and address or phone number of the generator and, if different, the person who applies the biosolids The names, addresses, and phone numbers of the regulatory and permitting authorities The material that is being applied Notice that access is restricted and, if desired, the date after which access is no longer restricted If applicable, a notice on limitations regarding the harvesting of edible plants from the site	Sites with a "high" potential for public exposure: 1 year Sites with a "low" potential for public exposure: 30 days
** = unless the use of "No Trespassing" signs has been approved by Ecology for this purpose*		

9.7.3 Additional Site Management Restrictions

Table 7 contains additional site management restrictions that must be met when Class B biosolids are land applied.

Table 7 Additional Site Management Restrictions for Class B Biosolids

Feature	Restriction
Surface waters	No application within 100 feet*
Wells	No application within 100 feet (30.5 meters)*
Wetlands	No application allowed**
Waters of the state	No application allowed**
Flooded, frozen, or snow-covered sites	No application allowed**
** = unless a different buffer is approved or required by Ecology* *** = unless approved by Ecology; applies to any Class B quality biosolids*	

10. Requirements for Biosolids Sold/Given Away in Bags or Other Containers

Any biosolids sold or given away must meet the pollution concentration limits in Table 3 of WAC 173-308-160, one of the Class A pathogen reduction requirements in WAC 173-308-170 and one of the vector attraction reduction requirements in WAC 173-308-180.

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10.1 Labeling Requirements

The biosolids must have a label or accompanying information sheet. The label or information sheet must contain the following information:

- The name, address, and phone number of the person who prepared the biosolids.
- A statement or information indicating that the product complies with applicable regulations for biosolids or that the product has been prepared to meet standards that make it safe for its intended use when used in accordance with the directions provided by the manufacturer.
- A statement or information that encourages proper use of the product and protection of public health and the environment. This may include information on product storage, hygiene, and protection of surface or ground water resources.
- Agronomic rates for typical applications or guidance on how to determine the agronomic rate of application.
- A statement or information indicating that the product contains or is derived from biosolids.
- Unless registered as a fertilizer by the Washington State Department of Agriculture, a disclaimer stating that the product is not a commercial fertilizer and that all nutrient claims are estimates or averages and not guaranteed.

11. Requirements for Septage Applied to the Land

This section contains the requirements for the land application of septage. It does not apply to "septage managed as biosolids originating from sewage sludge".

11.1 Removing Manufactured Inerts

The septage must meet the requirements for removal of manufactured inerts in WAC 173-308-205. Minimally, the following conditions must be met.

- The septage must contain <1% by volume recognizable manufactured inerts.
- Screening through a bar screen with a maximum 3/8 inch opening or an Ecology-approved equivalent process.

11.2 Soil Testing

All new land application sites must test for pollutants to determine background levels.

Soil nutrient levels must be tested prior to each land application event. Background nutrient levels will be used to calculate the agronomic rate in accordance with WAC 173-308-190.

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11.3 Application Rates

The septage must be applied at a rate not exceeding the rate determined by *Equation 1.* To determine the distance *(in feet*) over which a load of liquid septage should be spread to meet the application rate, use Equation 2.

Equation 1 – Annual Application Rate for Septage

$$AAR = N \div 0.0026$$

Where:

AAR = annual application rate in gallons per acre per 365-day period
N = amount of nitrogen in pounds per acre per 365-day period needed by the crop or vegetation grown on the land (subtract any nitrogen supplied by other sources—for example, commercial fertilizers or manures)

Equation 2 – Spreader Drive Length for Septage

$$\text{Drive length (in feet)} = \text{gallons} \div \text{spread width (in feet)} \times 43{,}560 \div AAR$$

Where:
AAR = annual application rate in gallons per acre per 365-day period determined by Equation 1

11.4 Pollutants

The septage application rate formula in Equation 1 was developed by EPA. EPA included acceptable pollutant loading from septage into the formula. Testing for pollutants in WAC 173-308-160 is not required for septage applied to land. Ecology may require additional or more stringent testing requirements developed as a condition of final coverage under this permit.

11.5 Pathogen Reduction and Vector Attraction Reduction

The requirements for pathogen and vector attraction reduction for septage are based on the percent by volume of septage from households.

11.5.1 Loads with >75% from Households

For loads of septage composed of >75% septage from households, one of the following requirements must be met.

1. The septage must be injected so that no significant amount of the septage is on the surface within 1 hour after injection, or
2. The septage must be incorporated into the soil within 6 hours after application, or
3. The septage must be stabilized by raising the pH to ≥ 12 and held at this pH for ≥ 30 minutes. The following standards apply to this pH stabilization process:

    - Samples collected or monitoring locations must be representative of the septage that will be applied.
    - A minimum of 2 tests for pH must be conducted.

- The first test must occur after lime or an alkali has been added and a pH of ≥ 12 has been attained.
- The second test must occur ≥ 30 minutes after the first test to show that a pH of ≥ 12 has been retained.
- If the pH is <12 when the second test is conducted, the process must be restarted.

11.5.2 Loads with <75% from Households

For loads of septage composed of <75% septage from households, the septage must be stabilized by raising the pH to ≥12 and held at this pH for ≥30 minutes.

The following standards apply to this pH stabilization process:

- Samples collected or monitoring locations must be representative of the septage that will be applied.
- A minimum of 2 tests for pH must be conducted.
- The first test must occur after lime or an alkali has been added and a pH of ≥12 has been attained.
- The second test must occur >30 minutes after the first test to show that a pH of ≥12 has been retained.
- If the pH is <12 when the second test is conducted, the process must be restarted.

11.6 Sites where Septage Cannot be Applied

Septage cannot be applied to a public contact site, a lawn, or a home garden. A "public contact site" is land with a high potential for public exposure, including, but not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, golf courses, and reclamation sites in a city.

11.7 Site Management and Public Access Restrictions

The site management and public access restrictions in this subsection apply when septage is applied to the land.

11.7.1 Crop Harvest Waiting Periods

The time between the last application of septage and crop harvesting must adhere to the waiting periods in Table 8.

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Table 8 Crop Harvesting Restrictions for Septage

Crop Type	Examples	Does the harvested part of plant contact septage?	Length of time the septage remains on soil surface	Waiting period until harvest is allowed
Above ground food crops	Cherries, wheat	No	Not applicable	30 days
Above ground food crops	Lettuce, cucumbers	Yes	Not applicable	14 months
Root food crops	Onions, potatoes	Yes	>4 months	20 months
Root food crops	Onions, potatoes	Yes	<4 months	38 months
Feed crops	Range land, pasture	Not applicable	Not applicable	30 days
Fiber crops	Trees, cotton	Not applicable	Not applicable	30 days

11.7.2 Public Access Restrictions

Public access must be restricted following the application of septage. Minimally, sites must be posted during the entire time site access is restricted in accordance with the requirements in Table 9.

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Table 9 Site Posting Requirements for Septage

Where	Notice Content*	How Long
• **All significant points of access to the site** • **Every ½ mile (805 meters) around the perimeter of the site**	• **The name and address or phone number of the generator and, if different, the person who applies** • **The names, addresses, and phone numbers of the regulatory and permitting authorities** • **The material that is being applied** • **Notice that access is restricted and, if desired, the date after which access is no longer restricted** • **If applicable, a notice on limitations regarding the harvesting of edible plants from the site**	**30 days**
**** = unless the use of "No Trespassing" signs has been approved by Ecology for this purpose***		

11.7.3 Additional Site Management Restrictions

Table 10 contains additional site management restrictions that must be met when septage is applied.

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Table 10 Additional Site Management Restrictions for Septage

Feature	Restriction
Surface waters	**No application within 100 feet (30.5 meters)***
Wells	**No application within 100 feet (30.5 meters)***
Wetlands	**No application allowed****
Waters of the state	**No application allowed****
Flooded, frozen, or snow-covered sites	**No application allowed****
**** = unless a different buffer is approved by Ecology*** ***** = unless approved by Ecology***	

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APPENDIX 1 - PUBLIC NOTICE CONTENT

1) Name and address of the facility and the name of the contact person for the facility.
2) Name and address of Ecology person responsible for the permit.
3) Name and address of the local health jurisdiction person responsible for the permit if the local health jurisdiction has been delegated this responsibility.
4) A description of the proposal.
   - Proposals for coverage under this permit must cite the General Permit for Biosolids Management.
   - Proposals for land application plans must contain information on the location of the proposed land application sites and, if applicable, the sources of biosolids that may be applied.
   - Proposals for general land application plans must provide information on how the public will be notified when specific sites are identified.
5) A brief statement describing the applicant's biosolids management practices.
6) A statement describing an interested person's opportunity to comment or request a public hearing or meeting on the proposal, including the last date for comments or requests and the contact person to whom comments or requests must be directed.

   The period for comments and requests must be at least 30 days following the posting. Comments and requests should be directed to the responsible Ecology contact or the responsible local health jurisdiction contact if the authority is delegated.

   The following is an example: "*Any person who wants to comment on this proposal or wants to request a public hearing or meeting must do so in writing within 30 days of this notice. Comments should be addressed to* (insert either 'the Ecology contact listed' or 'the local health jurisdiction contact listed')*.*"
7) The statement, "*If you wish to be included on an interested parties list to receive notification of activities relating to this project, please notify, in writing, the* (insert facility name) *contact listed.* (Insert facility name) *will provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list.*"
8) Any additional information considered necessary or proper.

APPENDIX 2 - GENERAL LAND APPLICATION PLAN CONTENT

1) Describes the geographical area covered by the plan, including the names of all counties and water resource inventory areas where biosolids may be applied.
2) Identifies site selection criteria.
3) Describes how sites will be managed.
4) Provides for not less than 30 days advance notice to Ecology of new or expanded land application sites, including those subject to provisional approval under WAC 173-308-310(18), to allow time for Ecology to object prior to the biosolids application.
5) Provides for advance public notice as required in WAC 173-308-310(13), and that is reasonably calculated to reach potentially interested adjacent and abutting property owners.

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APPENDIX 3 - SITE SPECIFIC LAND APPLICATION PLAN CONTENT

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:
- The date(s) when the biosolids were applied (if known). The amount of biosolids applied (if known).
- The concentrations of the pollutants in the biosolids (if known).
- 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 (for example, 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 Ecology.
4) Method(s) of application.
5) Seasonal and daily timing of biosolids applications.
6) Provisions for conducting any soils, surface waters, or ground water sampling and any available data collected from the site within the last 2 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 off-site 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 [8 inches to the mile] for detailed information with an overview map at 1:63,360 [1 inch to the mile]).
Minimally, maps must provide the following information:

- A legend.
- The location and means of access.
- 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.
- The number of acres in the site or in any distinct application unit within a site.
- Location and extent of any wetlands on the site.
- A topographic relief of the application site and surrounding area.
- Adjacent properties and uses, and their zoning classification.
- Any seasonal surface water bodies located on the site.
- Any perennial surface water bodies located on or within 1/4 mile (402 meters) of the site.
- The location of any wells located on or within 1/4 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.
- Buffer zones to features such as surface waters, wells, property boundaries, and roadways and the width of the buffer zones.
- The presence and extent of any threatened or endangered species or related critical habitat.
- 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.
- The location and size of any areas that will be used to store biosolids.

10) If the seasonal ground water is 3 feet (0.91 meters) or less below the surface, a management plan describing how you will protect ground water. For example, you may propose to limit applications to the time of year when ground water has receded to more than 3 feet (0.91 meters) below the surface.

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11) A description of how access to the site will be restricted (for example, 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 Ecology that is needed to evaluate the appropriateness of the site for biosolids application.

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GLOSSARY OF TERMS

The following definitions cover many of the terms used in this permit.

"Accredited laboratory" is a laboratory accredited under Chapter 173-50 WAC for a specific analyte using a specific analytical method.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Aerobic digestion" is the biochemical decomposition of organic matter in biosolids into carbon dioxide and water by microorganisms in the presence of air. Aerobic digestion does not include composting.

"Agricultural land" is land on which a food crop, feed crop, or fiber crop is grown. This includes range land and land used as pasture.

"Agronomic rate" is the biosolids application rate that provides the amount of nitrogen necessary for the optimum growth of targeted vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under Chapter 90.48 RCW and related rules including Chapters 173-200 WAC and Chapter 173-201A WAC.

"Anaerobic digestion" is the biochemical decomposition of organic matter in biosolids into methane gas and carbon dioxide by microorganisms in the absence of air. Anaerobic digestion does not include composting.

"Apply biosolids or biosolids applied to the land" means the land application of biosolids for the purpose of beneficial use.

"Beneficial use facility" means a receiving-only facility consisting of a site or sites where biosolids from other treatment works treating domestic sewage are applied to the land for beneficial use, which has been permitted as a treatment works treating domestic sewage in accordance with WAC 173-308-310, and that has been designated as a beneficial use facility through the permitting process.

"Beneficial use of biosolids" means the application of biosolids to the land for the purposes of improving soil characteristics including tilth, fertility, and stability to enhance the growth of vegetation consistent with protecting human health and the environment.

"Biosolids sold/given away in a bag or other container" means biosolids sold/given away to the general public in a bag or other container holding less than 1 metric ton (1.1 U.S. tons).

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process that can be beneficially recycled and meets all applicable requirements under this permit. Biosolids includes a material derived from biosolids, and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under this permit. For the purposes of this permit, semisolid products include biosolids or products derived from biosolids ranging in character from mostly liquid to fully dried solids.

"Bulk biosolids" means biosolids that are not sold/given away in a bag or other container for application to the land.

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“Ceiling concentration” means the maximum concentration of a pollutant in any biosolids sample, beyond which level the biosolids would be classified as sewage sludge not suitable for application to the land. Ceiling concentrations are established in Table 1 of WAC 173-308-160.

“Class I biosolids management facility” is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a state that has elected to assume local program responsibilities under 40 CFR 403.10(e)), and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I biosolids management facility by the EPA Regional Administrator, or in the case of approved state programs, the Regional Administrator in conjunction with the state director, because of the potential for its biosolids use or disposal practice to affect public health and the environment adversely.

“Clean Water Act” or “CWA” means the Clean Water Act or Federal Clean Water Act (FCWA) (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

“Complete application” includes but, is not limited, to the following: a completed Application for Coverage, a vicinity map of the facility, a vicinity map of any associated treatment or storage facilities, a treatment facility schematic, confirmation that the SEPA requirements have been met, confirmation that public notice requirements have been met, land application plans if required, monitoring data if required, a biosolids sampling plan if required, a contingency plan for exceptional quality biosolids if required, a temporary disposal plan if required, a spill prevention/ response plan if required, and a signature by an appropriate official.

“Composting” means the biological degradation of organic materials under controlled conditions designed to promote aerobic decomposition. This does not include the treatment of sewage sludge in a digester at a wastewater treatment plant.

“Cumulative pollutant loading rate” is the maximum amount of a pollutant that can be applied to an area of land from biosolids that exceed the pollutant concentration limits established in Table 3 of WAC 173-308-160.

“Density of microorganisms” is the number of microorganisms per unit mass of total solids (dry weight) in the biosolids.

“Department” means the Washington state department of ecology and, within the scope of its delegation, a local health jurisdiction that has been delegated authority under WAC 173-308-050.

“Director” means the director of the department of ecology or his or her authorized representative.

“Disposal on a long-term basis” means to adopt disposal as a preferred method of management for at least 5 years, or for an indefinite period of time with no expectation for pursuing other management alternatives.

“Disposal on a temporary basis” means a period of more than 1 but less than 5 years. Generally, situations requiring the temporary use of disposal facilities will normally occur as a result of deficiencies in the wastewater or biosolids treatment process, or economic, administrative, or contractual constraints which cannot be resolved in less than 1 year.

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“Disposal on an emergency basis” means a period up to but not exceeding 1 year. Generally, emergency situations requiring the use of disposal facilities will normally occur as a result of inclement weather conditions at a beneficial use site, contractual or technical difficulties in the treatment, transportation, or application of the biosolids, or as a result of short term economic or administrative barriers, any and all of which are expected to be resolved within a period of 1 year.

“Domestic sewage” is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

“Dry weight basis” means calculated on the basis of having been dried at 105C (221°F) until reaching a constant mass (in other words, essentially 100% solids content).

“EPA” means the United States Environmental Protection Agency.

“Exceptional quality biosolids” means biosolids that meet the pollutant concentration limits in Table 3 of WAC 173-308-160, and at least one of the Class A pathogen reduction requirements in WAC 173-308-170, and at least one of the vector attraction reduction requirements in WAC 173-308-180.

“Facility” means a treatment works treating domestic sewage as defined in this permit, unless the context of the permit requires otherwise. For the purposes of this permit a facility is considered to be new if it has not been previously approved for the treatment, storage, use, or disposal of biosolids or sewage sludge.

“Feed crops” are crops produced primarily for consumption by animals.

“Fiber crops” are crops such as flax and cotton including, but not limited to, those whose parts or by-products may be consumed by humans or used in the production or preparation of food for human consumption.

“Food crops” are crops consumed by humans. These include, but are not limited to, fruits, vegetables, grains, and tobacco.

“Forest” is an area of land that is managed for the production of timber or other forest products, or for benefits such as recreation and watershed protection, and that is or will be dominated by trees under the current system of management. For the purposes of this permit, other areas of land that are not regulated as agricultural land, public contact sites, land reclamation sites, or lawns or home gardens are considered forest land.

“General permit” means a permit issued by Ecology in accordance with the procedures established in this permit, to be effective in a designated geographical area, that authorizes the application of biosolids to the land or the disposal of sewage sludge in a municipal solid waste landfill, under which multiple treatment works treating domestic sewage may apply for coverage.

“Geometric mean” means the antilogarithm of the arithmetic average of the logarithms of the sample values, or the nth root of the product of n sample values.

“Ground water” means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

“Health jurisdiction” or “local health jurisdiction” means city, county, city-county, or district public health jurisdiction as defined in Chapter 70.05 RCW, Chapter 70.08 RCW, and Chapter 70.46 RCW.

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“Individual permit” means a permit issued by Ecology to a single treatment works treating domestic sewage in accordance with WAC 173-308-310, which authorizes the management of biosolids or sewage sludge.

“Industrial septage” or “commercial septage” is the contents from septic tanks or similar systems that receive wastewater generated in a commercial or industrial process. This definition includes, but is not limited to, grease trap wastes generated at restaurants and similar food service facilities.

“Industrial wastewater” or “commercial wastewater” is wastewater generated in a commercial or industrial process.

“Incineration” means the firing of sewage sludge as a means of disposal.

“Land application” is the application of biosolids to the land surface by means such as spreading or spraying, the injection of biosolids below the land surface, or the incorporation of biosolids into the soil, for the purpose of beneficial use.

“Land with a high potential for public exposure” is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (for example, a construction site located in a city).

“Land with a low potential for public exposure” is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (for example, a strip mine located in a rural area).

“Local health jurisdiction” see definition of health jurisdiction.

“Manufactured inerts” means wastes such as plastic, metals, ceramics and other manufactured items that remain relatively unchanged during wastewater or biosolids treatment processes.

“Monthly average” is the arithmetic mean of all measurements taken during the month.

“Municipal sewage sludge” means sewage sludge generated from a publicly owned treatment works. For the purposes of this permit, sewage sludge generated from the treatment of only domestic sewage in a privately owned or industrial treatment facility is considered municipal sewage sludge.

“Municipality” means a city, town, borough, county, parish, district, association, or other public body (including an inter-municipal agency of two or more of the foregoing entities) created by or under state law, or a designated and approved management agency under Section 208 of the Clean Water Act, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in Section 201(e) of the Clean Water Act, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of biosolids.

“Nonexceptional quality biosolids” means biosolids that do not meet the criteria of “exceptional quality biosolids” as defined in this section.

“Other container” is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of 1 metric ton (1.1 U.S. tons) or less.

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“Owner” means any person with ownership interest in a site or facility, or who exercises control over a site or facility, but does not include a person who, without participating in management of the site or facility, holds indicia of ownership primarily to protect the person's security interest.

“Pasture” is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

“Pathogenic organisms” are disease causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

“Permit” means an authorization, license, or equivalent control document issued by the director to implement the requirements of this permit. Unless the context requires differently, the use of the term in this permit refers to individual permits, general permits, and coverage under general permits.

“Person who prepares biosolids” is either the person who generates biosolids during the treatment of domestic sewage in a treatment works or the person who derives a material from biosolids.

“Person” is an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

“pH” means the logarithm of the reciprocal of the hydrogen ion concentration.

“Place sewage sludge” or “sewage sludge placed” means to dispose of sewage sludge.

“Pollutant limit” is a numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (for example, milligrams per kilogram of total solids), the amount of a pollutant that can be applied to a unit area of land (for example, kilograms per hectare), the volume of a material that can be applied to a unit area of land (for example, gallons per acre), or the number of pathogens or indicator organisms per unit of biosolids. Pollutant limits are established in Tables 1 - 3 of WAC 173-308-160, in WAC 173-308-170, and in WAC 173-308-270.

“Pollutant” is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

“Public contact site” is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

“Publicly owned treatment works” means a treatment works treating domestic sewage that is owned by a municipality, the state of Washington, or the federal government.

“Range land” is generally open, uncultivated land dominated by herbaceous or shrubby vegetation that may be used for grazing or browsing, either by wildlife or livestock.

“Receiving-only facility” means a treatment works treating domestic sewage that only receives sewage sludge or biosolids from other sources for further treatment and/or application to the land, and which does not generate any biosolids from the treatment of domestic sewage.

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“Reclamation site” is drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, strip mines and construction sites.

“Regional administrator" means the Regional Administrator of Region 10 of the Environmental Protection Agency or his/her authorized representative.

“Residential equivalent value” means the number of residential equivalents determined for a facility under Chapter 173-224 WAC or a value similarly obtained under WAC 173-308-320.

“Restrict public access” means to minimize access of nonessential personnel to land where biosolids are applied, through the use of natural or artificial barriers, signs, remoteness, or other means.

“Saturated zone” means the zone below the water table in which all interstices are filled with water.

“Septage managed as biosolids originating from sewage sludge” means septage managed as if it had originated from a sewage treatment process at a wastewater treatment facility including, but not limited to, meeting the sampling requirements in WAC 173-308-140, the monitoring requirements in WAC 173-308-150, the pollutant limits in WAC 173-308-160, the pathogen reduction requirements in WAC 173-308-170, and the vector attraction reduction requirements in this permit.

“Septage management facility” means a person who applies septage to the land or one that treats septage for application to the land.

“Septage” or “domestic septage” is liquid or solid material removed from septic tanks, cess pools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks, or similar systems that receive only domestic sewage. Septage may also include commercial or industrial septage mixed with domestic septage if approved in accordance with WAC 173-308-020(3)(g).

“Sewage sludge” is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

“Significant change in biosolids management practices” means, but is not limited to, the following: a change in the quality of biosolids that are applied to the land, either from class A to class B for pathogens, or from Table 3 to Table 1 of WAC 173-308-160 for pollutant limits; the addition of a new area to which biosolids will be applied which was not previously disclosed during a required public notice process; for class B biosolids only, a change from nonfood crops to food crops, a change from crops where the harvestable portions do not contact the biosolids/soil mixture to crops where the harvestable portions contact the biosolids/soil mixture, or a change in site classification from land with a low potential for public exposure to land with a high potential for public exposure; or any change or deletion of a requirement established in an approved land application plan or established as a condition of coverage under a permit that would result in a decrease in buffer size, site monitoring, or facility reporting requirements, which was not otherwise provided for in the permit or plan approval process.

“Site” means all areas of land, including buffer areas, which are identified in the scope of an approved Site Specific Land Application Plan. A site is considered to be new or expanded when biosolids are

applied to an area not approved in a Site Specific Land Application Plan or that was not previously disclosed during a required public notice process.

“Specific oxygen uptake rate (SOUR)” is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the biosolids.

“State” means the state of Washington.

“Store or storage of biosolids” is the placing of biosolids on land or in surface impoundments or other containment devices in which the biosolids remain for 2 years or less, except where a greater time period has been approved by Ecology. This does not include the placing of biosolids on land or in surface impoundments or other containment devices for treatment or disposal.

“Stover” is the non-grain, above-ground part of a grain crop, often corn or sorghum.

“Surface Disposal” is the placing of active sewage sludge into an area of land that contains one or more sewage sludge units.

“Surface impoundment” means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

“Surface waters of the state” means surface waters of the state as defined in WAC 173-201A-020.

“Tank” means a stationary device designed to contain an accumulation of liquid or semisolid materials and which is constructed primarily of nonearthen materials to provide structural support.

“Temporary, small-scale storage” is the storage of biosolids for no more than 30 days in a tank holding no more than 10,000 gallons with a total on-site maximum volume of no more than 20,000 gallons.

“Total solids” are the materials in biosolids that remain as residue when the biosolids are dried at 103 to 105C (217.4 to 221°F).

“Treat or treatment of biosolids” is the preparation of biosolids for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

“Treatment works treating domestic sewage” means a publicly owned treatment works or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage or sewage sludge, including land dedicated for the disposal of sewage sludge. Treatment works treating domestic sewage also includes beneficial use facilities and septage management facilities as defined in this section, and a person, site, or facility designated as a treatment works treating domestic sewage in accordance with WAC 173-308-310(1)(b). This definition does not include septic tanks or similar devices or temporary, small-scale storage as defined in this section.

“Treatment works” is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

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“Unstabilized solids” are organic materials in biosolids that have not been treated in either an aerobic or anaerobic treatment process.

“Vector attraction” is the primarily odorous characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

“Volatile solids” is the amount of the total solids in biosolids that are lost when the biosolids are combusted at 550C (1,022°F) in the presence of excess air.

“Waters of the state” means waters of the state as defined in RCW 90.48.020.

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