CITY OF SUMNER
PUBLIC WORKS DEPARTMENT

TO: **Paul Rogerson, Community Development Director**

FROM: **Greg Kongslie, WWTF Superintendent**

DATE: **September 22, 2010**

RE: **General Permit for Biosolids Management**

Attached with this permit please find Department of Ecology's letter dated 8-20-10. Please refer to the highlighted area regarding SEPA requirements.

Please review and determine if the prior SEPA submitted in 2005 satisfies our current biosolids program as defined or whether a new SEPA included in this packet needs to be processed. If prior SEPA is satisfactory, I need a letter stating the current DNS application is still applicable or if a new SEPA needs to be completed.

If you have any questions, you can reach me at (253) 299-5761.

CITY OF SUMNER
RECEIVED
SEP 22 2010
COMMUNITY DEVELOPMENT

PLN2005-00047

1104 Maple Street, Suite 260, Sumner WA 98390-1423 • 253-299-5700 • Fax: 253-299-5539 • www.ci.sumner.wa.us

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

August 20, 2010

Dear Biosolids Manager:

The Department of Ecology has issued a new *General Permit for Biosolids Management* (permit). The permit went into effect on August 20, 2010. The permit and several associated documents are available at: http://www.ecy.wa.gov/programs/swfa/biosolids/forms.html or by requesting from Ecology. Associated documents currently available on the webpage or by requesting include the basic permit application form, a sample Spill Prevention and Response Plan, and a Public Notice boilerplate.

All permittees must apply for coverage under the new permit. A complete permit application package must be received by November 18, 2010. This letter describes the basic requirements for applying for coverage. This letter also describes a minor modification of the permit.

Documents to Submit

You must submit a complete permit application package (see **Subsection 3.4** of the permit). A complete package includes the basic permit application form and several supporting documents. **You must submit the basic permit application form**, but you are not required to resubmit any previously submitted supporting document if both of the following apply:

- You reviewed the previously submitted document, determined it is complete and accurate, provided the date you originally submitted the document, and maintain a copy of the document.
- Your regional biosolids coordinator has not requested that you resubmit the document.

State Environmental Policy Act Requirements (SEPA)

The act of applying for coverage under the permit triggers a requirement for review under SEPA (**see Subsection 3.2** of the permit). This means that the SEPA Lead Official must determine if existing documents are sufficient for the purposes of applying for coverage under the permit or if additional documentation is needed. **Your permit application package must include some form of written documentation showing that SEPA obligations have been satisfied.**

Public Notice

You may have to conduct Public Notice when you apply for coverage under the permit (**see Subsection 3.5** of the permit). **Public Notice is required if you land apply nonexceptional quality biosolids (including septage).** If you properly conducted Public Notice under a previous permit and you will not land apply nonexceptional quality biosolids within the next 5 years, you do not have to conduct Public Notice. The following bullet briefly describes the requirements when Public Notice is necessary.

- Public Notice must be published in a newspaper of general circulation in each county covered by a General Land Application Plan you have submitted and each county where you land apply nonexceptional quality biosolids. You do not need to publish Public Notice in any county where your biosolids are land applied by a permitted Beneficial Use Facility (BUF), as the BUF will conduct the Public Notice.

Minor Modification of Subsection 3.5.3

A minor modification to the permit is necessary. This modification concerns the Public Notice requirements. **Bullet #1 in Subsection 3.5.3 is hereby modified to read:**

- Issue one notice in a newspaper of general circulation in each county covered by a General Land Application Plan you have submitted and each county where you land apply nonexceptional quality biosolids unless this has been done by a beneficial use facility that will be land applying your biosolids. The minimum required content of the notice can be found in Appendix 1.

The following bullet shows the language that is being struck from the original language by this modification.

- Issue one notice in a newspaper of general circulation in ~~each county where you prepare biosolids,~~ each county covered by a General Land Application Plan you have submitted~~,~~ and each county where you land apply nonexceptional quality biosolids unless this has been done by a beneficial use facility that will be land applying your biosolids. The minimum required content of the notice can be found in Appendix 1.

Any person may appeal this modification pursuant to Chapter 43.21B.310 RCW. Appeals of this modification must be made within 30 days from the issuance of this letter.

Contact your regional biosolids coordinator if you have any questions about your permit and requirements. Contact me if you have any questions about the modification described above. Contact information is in the table below.

Sincerely,

Daniel K. Thompson
State Biosolids Coordinator
Waste 2 Resources Program

Central Regional Office – Biosolids	**Central Regional Office – Septage**	**Eastern Regional Office**
Peter Severtson Regional Biosolids Coordinator Department of Ecology Waste 2 Resources Program 303 South Mission Wenatchee, WA 98801 Phone: 509-662-0508 Email: Peter.Severtson@ecy.wa.gov	Wendy Neet Regional Septage Coordinator Department of Ecology Waste 2 Resources Program 15 West Yakima Avenue, Suite 200 Yakima, WA 98902-3452 Phone: 509-454-7872 Email: Wendy.Neet@ecy.wa.gov	Martyn Quinn Regional Biosolids Coordinator Department of Ecology Waste 2 Resources Program N 4601 Monroe, Ste 100 Spokane, WA 99205-1295 Phone: 509-329-3505 Email: Martyn.Quinn@ecy.wa.gov
Northwest Regional Office	**Southwest Regional Office**	**Headquarters Office**
Marietta Sharp Regional Biosolids Coordinator Department of Ecology Waste 2 Resources Program 3190 160th Avenue SE Bellevue, WA 98008-5452 Phone: 425-649-7258 Email: Marietta.Sharp@ecy.wa.gov	Kyle Dorsey Regional Biosolids Coordinator Department of Ecology Waste 2 Resources Program PO Box 47775 Olympia, WA 98504-7775 Phone: 360-407-6393 Email: Kyle.Dorsey@ecy.wa.gov	Daniel Thompson State Biosolids Coordinator Department of Ecology Waste 2 Resources Program PO Box 47600 Olympia, WA 98504-7600 Phone: 360-407-6108 Email: Daniel.Thompson@ecy.wa.gov

Application for Coverage Under the General Permit for Biosolids Management

DEPARTMENT OF ECOLOGY State of Washington

Section A: Basic Facility Information

1) Facility name **City of Sumner Wastewater Treatment Plant** Facility owner **City of Sumner**

2) Physical address **13114 63rd Street East, Sumner, Washington 98390** Mailing address **City of Sumner City Hall, 1104 Maple Street, Sumner, Washington 98390**

3) Primary contact: Name **Greg Kongslie** Title **Superintendent WWTF** Phone **253.299.5761** Email **gregk@ci.sumner.wa.us**

4) Responsible official: Name **William L. Pugh P.E.** Title **Public Works Director, City of Sumner** Phone **253.299.5701** Email **billp@ci.sumner.wa.us**

5) Facility type – check all that apply

☒ Major Wastewater Treatment Plant (design flow of >1 mgd or serving a population of >10,000); wet weather design flow **4.59** *million gallons per day*

☐ Minor Wastewater Treatment Plant (design flow of <1 mgd and serving a population of <10,000); wet weather design flow _____ *million gallons per day*

☐ Class I Facility (have a pretreatment program or designated as Class I)

☐ Composting Facility (receive biosolids or sewage sludge from others for composting)

☐ Septage Management Facility (land apply or prepare septage for land application)

☐ Beneficial Use Facility (receive biosolids from others for land application)

☐ Other – describe _____

6) Ownership – check all that apply

☐ Federal	☐ State	☒ Local (county, city, town, village)	☐ Private
☐ Other – explain _____			

7) If your facility or any associated management or application site is located on tribal land, explain **no**

8) Other permits – check all that apply

☒ National Pollutant Discharge Elimination System (NPDES); permit number **WA0023353**	☐ State Waste Discharge; permit number _____	☒ Stormwater Discharge
☐ Ocean Dumping	☐ Underground Injection Control Program	☐ Hazardous Waste Management Program
☐ Prevention of Significant Deterioration Program	☐ Nonattainment Program	☐ Dredge or Fill
☐ National Emission Standards for Hazardous Pollutants Preconstruction	☐ Other – describe _____	

If you need this publication in another format, please call the Waste 2 Resources Program at (360) 407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Application for Coverage Under the General Permit for Biosolids Management

DEPARTMENT OF ECOLOGY State of Washington

Section B: Biosolids Quality

1) Pollutant concentrations – list any pollutants exceeding the Table 1 or Table 3 values and describe how these are being addressed by your facility and at any land application sites (see WAC 173-308-160) **none**

2) Pathogen reduction method – check all that apply (see WAC 173-308-170 or WAC 173-308-270[3])

☒ Class A—Alternative 1 (*time/temperature*)	☐ Class A—Alternative 2 (*pH/time/temperature/% solids*)
☒ Class A—Alternative 3 (*process to further reduce pathogens [PFRP]*) ☐ Composting ☒ Heat drying ☐ Heat treatment ☐ Thermophilic aerobic digestion ☐ Beta ray irradiation ☐ Gamma ray irradiation ☐ Pasteurization	
☐ Class A—Alternative 4 (*PFRP equivalent*)	☐ Class B—Alternative 1 (*7 samples*)
☒ Class B—Alternative 2 (*process to significantly reduce pathogens [PSRP]*) ☐ Aerobic digestion ☐ Air drying ☒ Anaerobic digestion ☐ Composting ☐ Liming	
☐ Class B—Alternative 3 (*PSRP equivalent*)	☐ Septage injection
☐ Septage incorporation	☐ Septage pH stabilization
☐ Does not meet pathogen reduction requirements – explain	

3) Vector attraction reduction method – check all that apply (see WAC 173-308-180 or WAC 173-308-270[3])

☒ Alternative 1 (*38% volatile solids reduction*) ☐ Alternative 1a (*bench test-anaerobic*) ☐ Alternative 1b (*bench test-aerobic*)	
☐ Alternative 2 (*specific oxygen uptake rate*)	☐ Alternative 3 (*aerobic process*)
☐ Alternative 4 (*pH stabilization*)	☒ Alternative 5 (*≥75% solids*)
☒ Alternative 6 (*≥90% solids*)	☐ Alternative 7 (*injection*)
☐ Alternative 8 (*incorporation*)	☐ Septage injection
☐ Septage incorporation	☐ Septage pH stabilization
☐ Does not meet vector attraction reduction requirements – explain _____	

4) Briefly describe how your facility meets the requirement for the removal of manufactured inerts (see WAC 173-308-205) **All influent wastewater flows thru two 6 mgd rated 1/4" perforated plate fine screens. Screenings are washed compacted and landfilled.**

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Application for Coverage Under the General Permit for Biosolids Management

DEPARTMENT OF ECOLOGY State of Washington

Section C: Biosolids Generated and Managed During the Past Year

1) Generated **316** *dry tons*
2) Sent to a facility for further treatment **0***dry tons*; list facility names with subtotals **n/a**
3) Received from a facility for further treatment **0***dry tons*; list facility names with subtotals **n/a**
4) Sent to a landfill for disposal **0***dry tons*; list landfill names with subtotals **n/a**
5) Sent to an incinerator **0***dry tons*; list incinerator names with subtotals **n/a**
6) Stored for less than 2 years **0***dry tons*
7) Stored or accumulated for more than 2 years (this includes lagoon facilities) **0***dry tons*
8) Sent to a Beneficial Use Facility (BUF) **0***dry tons*; list BUF names with subtotals **n/a**
9) Received by a BUF (only BUFs should complete this) **0***dry tons* ; list facility names with subtotals **n/a**
10) Land applied or sold/given away (do not include amounts sent to a BUF) **316***dry tons*
11) If you want to maintain the option of sending your biosolids for management to any permitted BUF you must either list the BUFs to which biosolids may be provided or specify the criteria by which BUFs may be selected in the future or check the box below. **Ecology strongly recommends you check the box below**.

    ☒ We maintain the option to send our biosolids to any facility permitted by Ecology to accept it, including any BUFs.

Section D: Additional Comments

Please include any additional comments that you think are important (for example, expectations for major changes in biosolids generation, quality, or management over the next 5 years) **We are planning for construction of a permanent dry storage facility for class A biosolids. This storage will have enough capacity for at a minimum to hold winter storage of biosolids when demand for the product is at it's lowest.**

If you need this publication in another format, please call the Waste 2 Resources Program at (360) 407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Application for Coverage Under the General Permit for Biosolids Management

DEPARTMENT OF ECOLOGY State of Washington

Section E: Attachments

In addition to this application form, a complete application includes, but is not limited to, the following attachments (see Subsection 3.4 of the permit).

1) **Vicinity Map.** A Vicinity Map is required for all facilities and any associated treatment or storage facilities. The map must extend at least 1 mile around the perimeter of the facility and any associated treatment or storage facilities. The map must also show the location and means of access. Check and complete as appropriate.

   ☐ A Vicinity Map is being submitted with this application.

   ☒ A Vicinity Map was previously submitted on **8-31-05**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

2) **Facility Schematic.** A Facility Schematic is required for all facilities. The Facility Schematic must show how you process and/or manage biosolids. Check and complete as appropriate.

   ☐ A Facility Schematic is being submitted with this application.

   ☒ A Facility Schematic was previously submitted on **8-31-05**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

3) **Spill Prevention and Response Plan.** A Spill Prevention and Response Plan is required if you or your agent transport your biosolids (see Subsection 5.1 of the permit). Check and complete as appropriate.

   ☐ A Spill Prevention and Response Plan has been submitted with this application.

   ☒ A Spill Prevention and Response Plan was previously submitted on **8-31-05**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

4) **Biosolids Sampling and Analysis Plan.** A Biosolids Sampling and Analysis Plan is required when you sample your biosolids. Check and complete as appropriate.

   ☒ A Biosolids Sampling and Analysis Plan is being submitted with this application.

   ☐ A Biosolids Sampling and Analysis Plan was previously submitted on **n/a**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

5) **Analytical Data.** If you sample your biosolids, land application site soil, or land application site water you must submit Analytical Data from the past 2 years. Check and complete as appropriate.

   ☐ Analytical Data from the past 2 years have been submitted with this application.

   ☒ Analytical Data from the past 2 years were previously submitted on **2-15-10**. (Note: Data submitted with your annual biosolids reports are considered to be "previously submitted".)

6) **Temporary Disposal Plan.** A Temporary Disposal Plan is required if you dispose biosolids in a landfill on a temporary basis (see WAC 173-308-300(8)). Check and complete as appropriate.

   ☒ A Temporary Disposal Plan is being submitted with this application.

   ☐ A Temporary Disposal Plan was previously submitted on **n/a**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

If you need this publication in another format, please call the Waste 2 Resources Program at (360) 407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Application for Coverage Under the General Permit for Biosolids Management

DEPARTMENT OF ECOLOGY State of Washington

7) **Contingency Plan for Exceptional Quality (EQ) Biosolids.** A Contingency Plan is required if you create EQ biosolids. The Contingency Plan must describe your plans for handling biosolids in the event that your process fails to produce EQ biosolids. Check and complete as appropriate.

   ☒ A Contingency Plan is being submitted with this application.

   ☐ A Contingency Plan was previously submitted on **n/a**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

8) **Site Specific Land Application Plan (SSLAP).** A SSLAP is required for every site where nonexceptional quality biosolids are applied (see Subsection 3.6.1 of the permit). If your biosolids are land applied by a permitted BUF, you do not need to submit a SSLAP. Check and complete as appropriate.

   ☐ A SSLAP is being submitted with this application.

   ☐ A SSLAP was previously submitted on **n/a**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

   ☐ Our biosolids are land applied by a BUF permitted to accept our biosolids.

9) **General Land Application Plan (GLAP).** A GLAP is required if you want to maintain the option of proposing new sites for applying nonexceptional quality biosolids during the term of this permit (see Subsection 3.6.2 of the permit). If your biosolids are land applied by a permitted BUF, you do not need to submit a GLAP. Check and complete as appropriate.

   ☒ A GLAP is being submitted with this application.

   ☐ A GLAP was previously submitted on **n/a**. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

   ☐ Our biosolids are land applied by a BUF permitted to accept our biosolids.

10) **State Environmental Policy Act (SEPA).** The act of applying for coverage under this permit triggers a requirement for review under SEPA (see Subsection 3.2 of the permit). This does not necessarily mean that a new SEPA threshold determination will be required, but any decisions regarding what is needed in order to comply with SEPA must be made by the SEPA Lead Official. Check and complete as appropriate.

    ☒ A SEPA determination or a notice from a SEPA Lead Official showing that the SEPA requirements have been met is being submitted with this application.

11) **Public Notice.** Depending on your operation you may be required to conduct Public Notice as part of submitting this application (see Subsection 3.5 of the permit). Check and complete as appropriate.

    ☐ A copy of our Public Notice or an Affidavit of Publication is being submitted with this application.

    ☒ Public Notice is not required for our facility at this time because we met the Public Notice requirements under a previous permit, submitted a copy of our Public Notice or an Affidavit of Publication on **8-31-05**, and will not apply nonexceptional quality biosolids during the term of this permit. I reviewed the previous submittal, confirm it is complete and accurate, and maintain a copy of the document.

If you need this publication in another format, please call the Waste 2 Resources Program at (360) 407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Application for Coverage Under the General Permit for Biosolids Management

DEPARTMENT OF ECOLOGY State of Washington

Section F: Certification Statement

This certification statement must be signed by the **Responsible Official** listed in Section A (see WAC 173-308-310(10)(b)).

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature _____ Title **Public Works Director, City of Sumner** Date 9/21/10

Section G: Submitting Your Application

Submit your application as described below. Contact information for Ecology staff is in the table below and at: http://www.ecy.wa.gov/programs/swfa/biosolids/contacts.html.

- ☒ **Hardcopy** of complete, final application to the biosolids coordinator in the Ecology regional office where your facility is located (drafts may submitted electronically).
- ☒ Copy to the biosolids coordinator at any other Ecology regional office where your biosolids will be treated, stored, disposed, or applied to the land. **Please submit electronically.**
- ☒ Copy to the biosolids coordinator at Ecology's headquarters office. **Please submit electronically.**
- ☒ Copy to the local health jurisdiction (LHJ) in each county where your biosolids will be treated, stored, disposed, or applied to the land unless the LHJ has stated in writing that they do not wish to receive copies.

Central Regional Office – Biosolids	Central Regional Office – Septage	Eastern Regional Office
Peter Severtson Regional Biosolids Coordinator Department of Ecology Waste 2 Resources Program 303 South Mission Wenatchee, WA 98801 Phone: 509-662-0508 Email: Peter.Severtson@ecy.wa.gov	Wendy Neet Regional Septage Coordinator Department of Ecology Waste 2 Resources Program 15 West Yakima Ave, Suite 200 Yakima, WA 98902-3452 Phone: 509-454-7872 Email: Wendy.Neet@ecy.wa.gov	Martyn Quinn Regional Biosolids Coordinator Department of Ecology Waste 2 Resources Program N 4601 Monroe, Ste 100 Spokane, WA 99205-1295 Phone: 509-329-3505 Email: Martyn.Quinn@ecy.wa.gov
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Biosolids Sampling and Analysis Plan

City of Sumner Wastewater Treatment Facility
13114 - 63rd Street east
Sumner, Washington 98390
8/31/2010

Biosolids are sampled and analyzed to determine compliance to Ecology standards for beneficial reuse. The sampling and analysis is broken into two components the anaerobic digestion that produces the class "B" digestion and the heat dryer that produces the EQ class "A" biosolids.

Anaerobic digester sampling and analysis (weekly)

In-plant sample and analysis anaerobic digester (Grab samples);

Conventionals

- PH primary and secondary digester (SM 4500 H)
- Temperature (SM 2550)
- Total Solids (SM 2540 G)
- Volatile Solids (SM 2540 E)
- Alkalinity (SM 2320 B)

Heat treated dried biosolids sampling and analysis (weekly)

In-plant sample and analysis class "A" biosolids (batches 4-6 composited)

Microbiological

- Fecal Coliform (SM 9221 E 2)

Conventionals

- Total Solids (SM 2540 G)

Commercial laboratories analysis (quarterly) 10 batch samples composited

Microbiological

- Fecal Coliform Method (SM 9221 C E)

Conventionals

- PH (SW-846 9045)
- Total Solids (SM 2540 G)
- Total Volatile Solids (SM 2540-G)

Minerals

- Potassium (SW-846-6010B)

Nutrients

- Ammonia (SM 4500NH3B&E)
- Available Ammonia (Plumb 1981)
- Total Nitrogen TKN (SM 4500N C)
- Nitrate + Nitrite (SM4500NO3 F)
- Organic Nitrogen (EPA Calc)

Total Metals

- Silver (SW-846 3050 B)
- Arsenic (SW-846 6010 B)
- Beryllium (SW-846-6010B)
- Cadmium (SW-846 6010B)
- Chromium (SW-846 6010B)
- Copper (SW-846 6010B)
- Molybdenum (SW-846 6010B)
- Nickel (SW-846 6010B)
- Phosphorus (SW-846 6010B)
- Lead (SW-846 6010B)
- Lead (SW-846 74210
- Antimony (SW-846 6010B)
- Selenium (SW-846 7740)
- Thallium (SW-846 7841
- Zinc (SW-846 6010B)
- Mercury (SW-846 7471B)

Prepared by: Greg Kongslie
Superintendent WWTF
City of Sumner

Temporary Disposal Plan

Landfill of Biosolids

City of Sumner Wastewater Treatment Facility
13114 - 63rd Street East
Sumner, Washington 98390
8/31/2010

Sumner produces a Class B biosolids from anaerobic digestion. In addition, Sumner also has a dryer that uses heat to produce Class A biosolids. In an event that all known options except landfill of biosolids are eliminated than this plan would take effect.

Landfill of Biosolids Plan

- Contacts with landfills willing to take biosolids.
- Provide a list to Ecology of disposal locations.
- Authorization will be requested from the Department of Ecology stating the reasons landfill is a viable option for biosolids disposal.
- A timeline stating amount of biosolids applied to landfill as well as expected timelines that landfill would be used.
- Tacoma Pierce County Health Department will also be contacted as well as the Health Department for the county where the landfill is located.
- Written confirmation from Health Departments authorizing disposal of biosolids to landfill.
- Written route plan would be developed for drivers to the landfill.
- Weight and trip records will be maintained for reporting.
- Notification to Ecology when landfill of biosolids began and stopped.
- Disposal of sewage sludge in solid waste landfill will adhere to the requirements of WAC 173-308-300 and WAC 173-351.

To date no contact has been made with a local landfill operation to determine if the biosolids would be incorporated locally or outside of Pierce County. It is assumed that there are willing landfills to receive biosolids with regulatory approval.

Prepared by: Greg Kongslie
Superintendent WWTF
City of Sumner

WAC 173-308-300

Disposal of sewage sludge in municipal solid waste landfill units and use of biosolids in municipal solid waste landfill operations.

(1) When biosolids are placed in a municipal solid waste landfill unit they are considered solid waste (sewage sludge).

(2) Any landfill accepting sewage sludge for disposal must be in compliance with the requirements of chapter 173-351 WAC and 40 CFR Part 258.

(3) Sewage sludge that is disposed in a municipal solid waste landfill must meet the liquids in landfills restrictions of chapter 173-351 WAC.

(4) Sewage sludge that is disposed in a municipal solid waste landfill must not be hazardous waste as defined in chapter 173-303 WAC or 40 CFR Part 261.

(5) **Daily cover.** The use of sewage sludge as daily cover or as an amendment to daily cover is not a beneficial use and is considered disposal.

(6) **Intermediate or final cover.** The use of biosolids as a component of landfill intermediate or final cover is considered a beneficial use if the following conditions are met:

(a) The use is consistent with an approved landfill plan of operations or closure/post-closure plan.

(b) The biosolids are used for the purposes of establishing a vegetative cover.

(c) If the biosolids are nonexceptional quality, the department has approved a site specific land application plan that meets the requirements of WAC 173-308-310(8). For the purposes of this subsection, a site specific land application plan may recognize an approved plan of operations or closure/post-closure plan that addresses the substantive requirements of WAC 173-308-310(8).

(7) **Disposal on an emergency basis.**

(a) Facilities wishing to dispose of sewage sludge in a municipal solid waste landfill on an emergency basis must meet the conditions of this subsection and those in chapter 173-351 WAC.

(b) The person proposing to dispose of sewage sludge must obtain a written determination from the local health jurisdiction where the sewage sludge is proposed for disposal that a potentially unhealthful circumstance exists under present conditions of management or would result from land application, and that other management options are unavailable or would pose a threat to human health or the environment.

Last Update: 10/26/93

Chapter 173-351 WAC
Criteria for municipal solid waste landfills

Complete Chapter

WAC Sections

173-351-010 Purpose, applicability and effective dates.
173-351-100 Definitions.
173-351-120 Consideration of other local, state, and federal laws.
173-351-130 Location restrictions.
173-351-140 Other location restrictions.
173-351-200 Operating criteria.
173-351-210 Plan of operation.
173-351-220 Additional operating criteria.
173-351-300 Design criteria.
173-351-400 Ground water monitoring systems and corrective action.
173-351-405 Performance standards for ground water monitoring system designs.
173-351-410 Ground water sampling and analysis requirements.
173-351-415 Ground water reporting.
173-351-420 Statistical methods for ground water monitoring.
173-351-430 Detection monitoring program.
173-351-440 Assessment monitoring program.
173-351-450 Alternate ground water monitoring programs.
173-351-460 Role of jurisdictional health department in corrective action.
173-351-465 Role of department of ecology in corrective action.
173-351-480 Ground water modeling.

Contingency Plan for Exceptional Quality (EQ) Biosolids

City of Sumner Wastewater Treatment Facility
13114 - 63rd Street East
Sumner, Washington 98390
8/31/2010

Sumner produces a Class B biosolids from anaerobic digestion. In addition, Sumner also has a dryer that uses heat to produce Class A Exceptional Quality (EQ) Biosolids. In an event that the dryer fails or that the quality does not meet exceptional standards the following plan is to be followed.

Meeting requirements for Pathogen Reduction

Fecal Coliform analyses are performed on all batches of dried biosolids. Each batch of dried biosolids is collected following discharge and this sample is stored. Once the dump truck is filled (approximately 4-6 batches) the samples collected during the filling are sent to the lab and composited prior to further testing for fecal coliform to verify the quality of the biosolids is exceptional quality.

We utilize a physical process of heat drying that evaporates water from the biosolids cake at high temperatures until the biosolids are $\geq$90 % solids by weight. This drying process heats the biosolids to the point where all fecal coliform organisms are eradicated. The MPN method that is used plots the value using three different dilution ranges. To meet exceptional quality the fecal coliform must be less than 1000 most probable number (MPN) per gram of total solids.

Failure to meet requirements for Pathogen Reduction

Failure to meet exceptional quality occurs when the fecal coliform count is greater than 1000 most probable number (MPN) per gram of total solids. Should this occur the biosolids are not suitable for public giveaway as a Class A soil amendment and will be hauled to a Beneficial Use Facility (BUF) for further treatment.

Meeting Vector Attraction Reduction

Sumner meets vector attraction reduction in several ways:

- Biosolids digestion with greater than 38% volatile solids reduction.
- Test end-product of anaerobic digestion process. Forty day anaerobic test at 30-37° C. Acceptable stabilization if less than 17% volatile solids reduction occurs during test.
- Treatment for drying. Not to include unstabilized primary wastewater solids. Total solids greater than 75% before mixing with other materials.

Failure to meet Vector Attraction Reduction

Failure to meet exceptional quality occurs when the vector attraction methods listed below cannot be met. Should this occur, the biosolids are not suitable for public giveaway

as a Class A soil amendment and will be hauled to a Beneficial Use Facility (BUF) for further treatment.

Meeting EPA Standards for Class A Exceptional Quality Biosolids

Sumner biosolids metals fall far below EPA ceiling concentrations for Exceptional Quality (EQ) Biosolids. Composites of the drying batch of the heat drying process are collected, composited, and sent to a commercial laboratory to be analyzed for heavy metal levels in the biosolids. These results are compared against the EPA ceiling limits for EQ Biosolids and must fall within EQ limits to be distributed to the public.

Failure to meet Standards of Class A Exceptional Quality Biosolids

Should levels of biosolids metals fall outside of the EQ range and this is confirmed by secondary testing to be accurate, all public distribution of biosolids would cease while investigations to determine the cause and remedy. Contaminated biosolids would be processed as determined by the Department of Ecology and other regulating agencies determined to have a stake in the final outcome and disposal. If allowed these biosolids would go to a landfill.

To date no contact has been made with a local landfill operation to determine if the biosolids would be incorporated locally or outside of Pierce County. It is assumed that there are willing landfills to receive biosolids with regulatory approval.

Prepared by: Greg Kongslie
Superintendent WWTF
City of Sumner

General Biosolids Land Application Plan
(GLAP)

City of Sumner Wastewater Treatment Facility
13114 - 63rd Street East
Sumner, Washington 98390
8/31/2010

Sumner processes biosolids thru two 400,000 gallon capacity anaerobic digesters. The primary digester is a fixed lid heated and mixed mesophillic anaerobic digester. Overflow from the primary digester is passed through a gravity overflow line to the secondary digester. The secondary digester is neither heated nor mixed and is also a mesophillic operation. The secondary digester has a floating lid that allows for a few weeks of liquid storage. All biosolids products meet Ecology's requirements for removal of manufactured inerts per section WAC 173-308-205 for screening minimum of 3/8 or less. Sumner screens its wastewater through two Frankenberger Stahl- & Maschinenberg (FSM) perforated plate fine screens. Each of these screens are rated for 6 MGD.

Option #1 Land Application of heat dried Class A biosolids

- Class B anaerobic digested biosolids are thickened by an Andritz centrifuge then heat dried through a Fenton Dryer producing a Class A product that meets time/temperature of at least 74° C for 20 minutes and vector attraction reductions of ≥90% solid.
- Dried biosolids are given away at no charge to the public thru several methods;
  1) Public access storage shed at the WWTF that can hold up to 10 yards of dried biosolids that is accessible 24 hours per day 7 days a week for local customers who pickup biosolids onsite.
  2) Also picked up on site are larger quantity pickup or trailer loads that are filled by city staff using a skid steer or backhoe tractor from either the small storage shed or from the larger taped biosolids storage pad.
  3) Larger delivery of dump truck loads to farmers or users that have a minimum of 2 acres or more of applicable land.
  4) City staff may also land apply biosolids using a dump truck equipped with a rear spreader to apply product. These sites may be public or private.
- Mixed with soil, sand, sawdust, or other raw materials to produce a blended product that creates another end user for the biosolids.
- Sold or given biosolids to a commercial soil handler who directly sells, or blends with soil, sand, or sawdust, or other products to make a blended product for sale.
- Plans to build a permanent dry storage facility to meet winter storage needs.

Option #2 Land Application of Liquid "B" biosolids

- Class B anaerobic digested biosolids may be taken from either the primary or secondary digester to be land applied if prior authorization and permits from Ecology and Tacoma Pierce County Health Department is approved.

- SEPA processing is required to verify the land site is acceptable for biosolids as well as determining the soil conditions and other sensitive issues that must be addressed through the permitting process. New sites will require SEPA and Public Notification.
- Sumner has a number of prior sites that were SEPA evaluated and approved in past years that may still be viable in the future.
- Application of biosolids is through a 3500 gallon tank truck that has a rear discharge spreader that allows adjustment to the angle of deflection in the spreading operation. Applications are made by experienced staff who apply to the land at agronomic loading rates with predetermined setbacks and application limits from all sensitive issues identified in the land application plan.

Option #3 Land Application of De-Watered "B" biosolids

- Class B anaerobic digested biosolids may be taken from either the primary or secondary digester to be land applied if prior authorization and permits from Ecology and Tacoma Pierce County Health Department is approved.
- SEPA processing is required to verify the land site is acceptable for biosolids as well as determining the soil conditions and other sensitive issues that must be addressed through the permitting process. New sites will require SEPA and Public Notification.
- Sumner has a number of prior sites that were SEPA evaluated and approved in past years that may still be viable in the future.
- Transported to BUF for disposal, composting, or further treatment.

Prepared by: Greg Kongslie
Superintendent WWTF
City of Sumner

Bonney Good SUMNER GROW

What Is It?

A humus that is derived from biosolids produced from wastewater treatment. Biosolids are an alternative to chemicals to restore soil health and provide much needed slow release (non-burning) nitrogen to lawns, shrubs, trees and gardens.

Why Use It?

Rather than pay money for chemical fertilizers, this humus is

- Safe to use in all gardens even those with pets and children
- Seed-free
- 60% organic with 4% slow release nitrogen
- Enriches the "soil web" to build new soil
- Loosens hard soil
- Increases fertilizer uptake and utilization
- Develops greater root systems
- Yields healthier and stronger plants
- Increases the water holding capacity of the soil
- Stores moisture as surrounding soil loses water
- Free!

How Do I Get It?

Sumner Bonney Lake Wastewater Treatment Facility
13114 - 63rd Street E, Sumner WA 98390
253-299-5760

A Free Bucket Full

Visit the shed in front of the Wastewater Treatment Facility anytime. (Bring your own buckets--a shovel will be available.)

A Free Truck Load

If you'd like to fill your pick-up, call us for an appointment.

A Free Dump-Truck Load!

We can deliver a full 10-yard bulk load for your yard, commercial landscaping or farm within the Sumner/Bonney Lake area! Call to make arrangements. Please note: we can only provide this option if we have enough material available. Also, a little goes a long way, and many gardeners are surprised at just how much 10 's really is. We only recommend this option if you have five acres or more to cover.

RECOMMENDED USES

The material is soil-like in appearance. Keep material dry until ready for use.

Consider mixing your own potting soil and adding about 8-10% Bonney Good Sumner Grow to the mix. This gives your plants a slow-release nitrogen feed with valuable trace elements over a period of time, getting new transplants off to a healthier start.

Established Lawns
Use as a top dressing at about 25 pounds per 1,000 square feet.

New Lawns & Sod Applications
Use a little less--about 20 lbs per 1,000 square feet.

Shrubs
Use about 1 cup for small bushes, two for medium sized, three for large.

Potted Plants
Use a handful for each medium sized plant.

To Restore Old, Worked Out Gardens
Work about 10-20 pounds per 100 square feet into the top 6 inches of soil. This replaces chemical fertilizers.

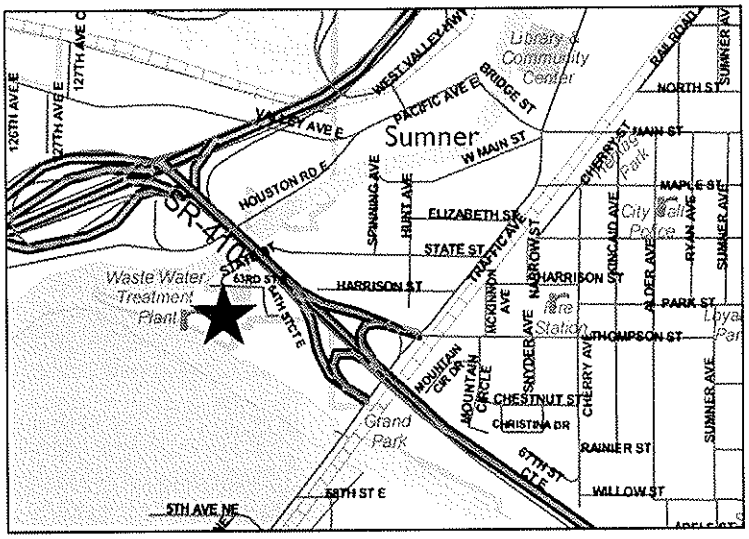
Trees
Use 2 pounds per inch of diameter spread evenly to the drip line (the tree's shade at noon).

Proper use of Bonney Good Sumner Grow will give the best desired plant growth as well as protecting public health and the environment.

Bonney Good Sumner Grow exceeds the EPA's Exceptional Quality Standards as well as all Class A Pathogen & Vector attraction requirements.

Directions:

From Traffic Avenue in downtown Sumner, turn onto State State. Follow State Street, which ends at the facility.



Approximate Nutrient Levels 4.3 -- 2.7 -- 0.15

This product is not a commercial fertilizer. Nutrient concentrations are estimates based on prior analyses but are not guaranteed concentrations.

Total Nitrogen (N)	4.3%
Phosphorus (P)	2.7%
Potassium (K)	0.15%

	Heavy Metal Concentration in Bonney Good Sumner Grow (2006 averages) ppm	EPA Standards for Class A Exceptional Quality Biosolids ppm
Arsenic	2.9	41
Cadmium	6.5	39
Mercury	1.98	17
Molybdenum	3.8	75
Nickel	0.25	420
Lead	20	300
Selenium	1.6	100
Zinc	733	2800
Chromium	16	1200
Copper	793	1500
	Average Fecal Coliform (MPN)	Requirement Fecal Coliform (MPN)
	4.8	<1000

This product has not been tested for pharmaceutical residue.

SUMNER

BONNEY Lake

City of Sumner
Biosolids Distribution

Date	Total Solids	Fecal Coli	Load Weight	Dry Weight	ID #	Location
01/08/09	92	<2	14000	12880	090106	Larry from South Prairie
01/12/09	94	<2	12780	12013	090114	Public (plant)
01/16/09	95	<2	15640	14858	090127	Public (plant)
01/26/09	95	<2	16800	15960	090140	Public (plant)
02/09/09	96	<2	16800	16128	090219	Public (plant)
02/13/09	95	<2	17660	16777	090231	Ron Gatto
02/25/09	95	<2	17600	16720	090239	Public (plant)
03/05/09	95	<2	17400	16530	090312	Public (plant)
03/12/09	96	<2	14600	14016	090319	Public (plant)
03/23/09	95	<2	18220	17309	090334	Toms Dirt (next to Larry)
03/30/09	95	<2	14000	13300	090350	Public (plant)
04/09/09	94	<2	18180	17089	090421	Doran Docken
04/15/09	94	<2	14000	13160	090431	Public (plant)
04/23/09	94	<2	15820	14871	090447	Public (plant)
04/30/09	93	<2	15080	14024	090458	Public (plant)
05/14/09	94	<2	14000	13160	090537	Public (plant)
05/26/09	93	<2	14000	13020	090552	Public (plant)
06/01/09	92	<2	15020	13818	090601	Public (plant)
06/10/09	92	<2	15500	14260	090616	Public (plant)
0[illegible]/09	92	<2	14840	13653	090623	Public (plant)
06/25/09	91	<2	15500	14105	090640	Public (plant)
07/01/09	91	<2	14940	13595	090703	Public (plant)
07/08/09	91	<2	15640	14232	090713	Public (plant)
07/16/09	91	<2	14540	13231	090728	Public (plant)
07/23/09	92	<2	14000	12880	090736	Public (plant)
07/30/09	89	<2	14760	13136	090743	Public (plant)
08/06/09	91	<2	15460	14069	090812	Public (plant)
08/13/09	90	<2	14440	12996	090824	Public (plant)
08/20/09	90	<2	15360	13824	090831	Public (plant)
08/28/09	91	<2	14100	12831	090838	Public (plant)
09/09/09	91	<2	14000	12740	090915	MikeShinn3yd / Public(plant)
09/14/09	91	<2	14240	12958	090920	Gerrick (Bonney Lake)
09/21/09	90	<2	14000	12600	090927	Dave Keef ?
09/25/09	88	<2	13740	12091	090932	Public (plant)
10/05/09	89	<2	14000	12460	091004	Monika3yd / Public(plant)
10/13/09	87	<2	11700	10179	091017	Public (plant)
10/21/09	90	<2	13120	11808	091024	Larry from South Prairie
10/26/09	89	<2	13380	11908	091030	Larry from South Prairie
11/03/09	90	<2	14000	12600	091103	Public (plant)
11/12/09	89	<2	16800	14952	091125	Public (plant)
11/23/09	91	<2	14000	12740	091134	Public (plant)
11/30/09	89	<2	14440	12852	091139	Ron(Clay)
1[illegible]/09	91	<2	13360	12158	091207	Public (plant)
12/14/09	92	<2	16560	15235	091223	Public (plant)
12/16/09	92	<2	13340	12273	091228	Public (plant)
12/29/09	91	<2	16300	14833	091236	Public (plant)
Total			343.8	316.4	tons	