



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 24, 2017

RE: Additional conditions and final coverage issuance to Bio Recycling Corporation (Bio Recycling) Biosolids North Ranch General Permit Coverage

Dear Interested Party:

On February 2, 2017, Bio Recycling posted public notice in the Mason County Journal notifying the community of the opportunity to provide comment on the Draft Letter of Final Coverage Conditions Ecology was proposing to finalize related to their coverage under the General Permit for Biosolids Management. Additionally, the notice provided details for a meeting and hearing to provide information about the biosolids permitting process, Bio Recycling operation, answer questions, and receive oral comments related to the Draft Final Coverage Letter. The meeting and hearing was held on March 9, 2017 at 6 pm at the Mason County PUD 3 auditorium in Shelton, Washington.

This letter is to notify you that on October 24, 2017, final coverage conditions will become effective for Bio Recycling Corporation's coverage under the General Biosolids Permit. The response to comments and a copy of the enclosed letter containing the additional conditions can also be viewed on Ecology's website at:

<http://www.ecy.wa.gov/programs/swfa/biosolids/commentPeriodNorthRanch.html>.

Sincerely,

Peter Y. Lyon
Regional Section Manager
Waste 2 Resources Program

Enclosure

cc: Debbie Riley, Mason County Environmental Health
Kyle Dorsey, Department of Ecology



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

October 24, 2017

Mr. Roger Hickey
Bio Recycling Corporation
North Ranch Location
P.O. Box 982
Centralia, WA 98531

NOTICE OF FINAL COVERAGE UNDER THE GENERAL PERMIT

Permit Number: BT9901
General Permit Effective Date: September 4, 2015
Final Coverage Date: October 30, 2017
Coverage Expiration Date: September 4, 2020 (or a later date if your facility remains in compliance with the *General Permit for Biosolids Management, Chapter 173-308 WAC*, and all approved plans, and your facility has not been directed by the department to reapply for coverage under this permit or apply for coverage under a new permit)

Dear Mr. Hickey:

This letter is to notify you that Bio Recycling Corporation's North Ranch (Bio Recycling) location has been granted Final Coverage under the *General Permit for Biosolids Management (GP)*. You are required to comply with all applicable requirements of the *General Permit for Biosolids Management, Chapter 173-308 WAC*, and all approved plans.

The following requirements must be complied with as a condition of this approval:

- 1) Bio Recycling must maintain an interested parties list, and ensure that those on the list are provided public notice in all instances required by WAC 173-308-310 (13) (g) and (h), including when Bio Recycling proposes a significant change in biosolids management practices (as defined by WAC 173-308-080 Definitions).
- 2) Bio Recycling must notify Ecology within 24 hours after learning of any occurrence that is out of compliance with a requirement of Chapter 173-308 WAC, the General Permit for Biosolids Management or any other requirement applicable to Bio Recycling's permit coverage. Additionally, a written explanation must be submitted to Ecology within five days (per section 3.9.2 of the General Permit for Biosolids Management).

- 3) Bio Recycling must conduct activities regulated under the biosolids rule, RCW 173-308 WAC and the GP per the plans listed below:
 - a) Site Specific Land Application Plan (SSLAP) dated January 13, 2017.
 - b) General Land Application Plan (GLAP) dated November 18, 2015.
 - c) Bio Recycling must conduct biosolids sampling per the Biosolids Sampling and Analysis Plan submitted January 1, 2017.
 - d) Bio Recycling must conduct soil sampling per the Soil Sampling and Analysis Plan submitted January 1, 2017.
 - i) Bio Recycling must comply with the following additional soil sampling and analysis conditions:
 - (1) Ecology must be notified at least 72 hours in advance of any soil sampling event.
 - (2) Bio Recycling must submit copies of analytical lab results to Ecology within 14 days of the receipt of results from the analytical laboratory.
 - (3) Bio Recycling must sample the soil to at least 24 inches in 12-inch increments (0-12" and 12-24"). Each application unit (field) must have at least 25 sampling points, and the 25 samples must be composited to produce five individual subsamples (replicates) for each of the two depths. Samples from both the depths must be measured and reported separately as average concentrations with standard errors, coefficient of variation along with QA/QC data.
 - (4) Ecology may require spring sampling be conducted when in restrictive status. At a minimum, 7 grab samples per field must be collected from 0-12" depth.
- 4) Bio Recycling must submit, as a part of each Annual Report, a report summarizing the previous year's soil results and identifying any long term trends. The report must include average soil nitrate-nitrogen concentrations presented in a graph format and table with average concentrations and standard errors.
- 5) Bio Recycling must submit surface and groundwater data into Ecology's Environmental Information Management System (EIM) (per WAC 173-308-190 (6)).
- 6) Design and location of wells and high water table monitoring excavations must be approved by Ecology (per WAC 173-308-190 (6)).
- 7) Bio Recycling must add the following locations to the current surface water sampling locations (per WAC 173-308-190 (6)):
 - SW-4: Latitude 47° 18' 6.5226", Longitude -123° 7' 0.7458", and
 - SW-5: Latitude 47° 18' 6.5592", Longitude -123° 7' 20.0496"
- 8) Bio Recycling must determine biosolids land application timing and rates using the attached Biosolids Application Management Matrix (BAMM) unless otherwise approved by Ecology.

- a) Additionally, Bio Recycling must manage all land application to fields with current coverage under the restrictive status for two years from the effective date of this letter.
- 9) Agronomic application rate proposals for each field must be submitted at least 14 days in advance of anticipated application.
- 10) Bio Recycling will either use monthly Crop Irrigation Requirement (CIR) values provided in Appendix B of the Washington Irrigation Guide or calculate a CIR using a ten year rolling average precipitation rate to determine appropriate application rates.
- 11) No additional organic or inorganic nitrogen fertilizers may be applied to the site unless approved by Ecology.
- 12) Within 30 days of the effective date of this notice, Bio Recycling must submit to Ecology a plan for bringing the facility into full compliance with the BMM criteria on or before September 30, 2018. This plan must include schedules for all tasks that the plan identifies.
- 13) If Bio Recycling's plan for bringing the facility into full compliance with the BMM criteria includes the construction of onsite storage, a construction proposal must be submitted which meets the requirements for design, construction, and operation of surface impoundments specified in Chapter 173-350-330 WAC and 173-308-280 WAC (per section 5.2 of General Permit for Biosolids Management). Any surface impoundment or tank system proposal which Bio Recycling may submit to Ecology must meet the following requirements:
 - a) The proposal must provide schedules for the design and construction phases, which include progress meetings with Ecology.
 - b) Construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:
 - i) An engineering report that:
 - (1) Presents the design basis and calculations for the engineered features of the surface impoundment or tank system, and storm water management features,
 - (2) Presents any emission control features as required by the permitting air authority where applicable,
 - (3) Demonstrates that the proposed design will meet the performance standards of WAC 173-350
 - ii) Scale drawings of the facility including the location and size of storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
 - iii) Design specifications for the engineered features of the facility including any surface impoundment or tank systems, run-on/runoff controls, storm water management features, and aeration and emission management features as required by a permitting air authority

- c) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure that facility is constructed in accordance with the approved design.
- d) Construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan.
- e) Operation of a newly constructed storage facility must not commence until Ecology has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

Any significant changes (as defined in WAC 173-308-080 Definitions) will require notification of interested parties, posting the site for public notice, and a 30 day comment period (per WAC 173-308-310 (13)). Non-significant changes or amendments to the plans or final coverage may be required or approved by Ecology as necessary.

Where there is a conflict between one of the foregoing requirements of approval and any provision of WAC 173-308, the Biosolids General Permit, or an approved Site Specific Land Application Plan, the more stringent requirement will prevail.

YOUR RIGHT TO APPEAL

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608

Mr. Roger Hickey
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Street Addresses	Mailing Addresses
Pollution Control Hearings Board 1111 Israel Rd SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this permit to:

Kelsey Dunne
Southwest Regional Biosolids Coordinator
360-407-6055
Kelsey.Dunne@ecy.wa.gov

MORE INFORMATION

- **Pollution Control Hearings Board**
www.eho.wa.gov/Boards_PCHB.aspx
- **Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice and Procedure**
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW, Administrative Procedure Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>
- **Chapter 70.95J. RCW - Municipal Sewage Sludge – Biosolids**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=70.95J>
- **Chapter 173-308 WAC - Biosolids Management**
<http://www.ecy.wa.gov/biblio/wac173308.html>

Sincerely,


Peter Y. Lyon
Regional Section Manager
Waste 2 Resources Program

Enclosure

By certified mail [91 7199 9991 7037 7521 4749]

cc: Debbie Riley, Mason County Environmental Health
Kyle Dorsey, Department of Ecology

Biosolids Application Management Matrix

Operational Status:	Restrictive Status	Normal Status
<p>Fall Soil Nitrate Results₁</p> <ul style="list-style-type: none"> • Sum of Nitrate- N in 0"-12" and 12"- 24" sampling depths. • Field specific biosolids application rates. 	<ul style="list-style-type: none"> • Max Application Window: April 1 – September 30 • Irrigation₂ and agronomic rate approach to determine application rates. • Application rate must be approved by Ecology. • Spring soil sampling be required, timing based on T-sum 200₃. 	<ul style="list-style-type: none"> • Max Application Window: March 1 – October 15 • No application until T-sum 200 is met₃ • No application until Manure Spreading Advisory (MSA) = Low Risk₄ • Agronomic rate approach to determine application rates. • Application rate must be approved by Ecology.
Soil Nitrate Concentration		
<p>Target Range (≤20 ppm)</p>	<ul style="list-style-type: none"> • After two consecutive seasons, may transition to <u>Normal Status</u> (Column 2). • No increase in application rate or decrease in nutrient removal without Ecology consultation. 	<ul style="list-style-type: none"> • No increase in application rate or decrease in nutrient removal without Ecology consultation.
<p>Above Target (>20 ppm - ≤40 ppm)</p>	<ul style="list-style-type: none"> • Reduce application rate by 25%. • Report proposed actions to reduce residual nitrates. 	<ul style="list-style-type: none"> • Reduce application rate by 25%. • Report proposed actions to reduce residual nitrates.
<p>Excessively Above Target (>40 ppm)</p>	<ul style="list-style-type: none"> • <u>Stop application</u> until fall soil nitrate reaches Target Range. • Explanatory report submitted by professional consultant which includes recommended changes to application and farming practices. 	<ul style="list-style-type: none"> • Transition to <u>Restrictive Status</u> (Column 1). • Explanatory report submitted by professional consultant which includes recommended changes to application and farming practices.
<p>1: Must occur per Oregon State University publication EM 8832 Post-Harvest Soil Nitrate Testing for Manured Cropping Systems West of the Cascades. 2: Bio Recycling will either use monthly Crop Irrigation Requirement (CIR) values provided in Appendix B of the Washington Irrigation Guide or calculate a CIR using a ten year rolling average precipitation rate to determine appropriate application rates. 3: As defined by Oregon State University, http://forages.oregonstate.edu/fi/topics/pasturesandgrazing/fertilizationandliming/tsum200. 4: Found at http://www.wadairyplan.org/home.</p>		