

# Notice of Public Hearing – November 18, 2010

## DEQ permits for the proposed Columbia Biogas facility in NE Portland

DEQ invites comments on a proposed anaerobic digestion facility that will turn food waste into electricity and other usable byproducts.

The purpose of this notice is to invite you to provide comments related to the specific conditions within the proposed air and solid waste permits. You may make oral comments at the public hearing. You may also comment in writing.

### Notice issued

Friday, October 15, 2010

### Comments due

Written comments are due by 5 p.m. on Monday November 29, 2010.

### Hearing details

November 18, 2010

Information session begins at 6:30 p.m. with formal hearing to follow.

Metro  
Council Chambers  
600 NE Grand Avenue  
Portland, OR 97232

Trimet bus #6 stops near Metro and the MAX blue, red, and green lines stop at Martin Luther King Blvd.

### What is proposed?

The Oregon Department of Environmental Quality is proposing to issue air and solid waste permits for an anaerobic digestion facility. Anaerobic digestion is a controlled and enclosed biological process that breaks down organic matter in the absence of oxygen.

The applicant plans to accept and anaerobically digest commercial and industrial liquid and solid food waste to produce biogas. The biogas will be combusted to generate electricity. Other byproducts include heat and liquid and solid residues which can be used as fertilizer and soil amendments.

These are new permits for the proposed facility

### Who is the applicant?

Columbia Biogas LLC  
721 NW 9<sup>th</sup> Avenue, Suite 195  
Portland, OR 97209

### Where is the facility located?

6849 NE Columbia Boulevard  
Portland, OR 97218

### Who might have an interest?

People who work, live, and recreate in the area.

### DEQ's Role

DEQ is responsible for protecting and enhancing Oregon's water and air quality, for cleaning up spills and releases of hazardous materials, and for managing the proper disposal of hazardous and solid wastes. One way DEQ does this is by requiring permits for certain activities. DEQ issues permits to regulate the type and amount of air emissions and regulate the management and disposal of wastes at a regulated facility.

### Where can I send my comments?

Columbia Biogas Permit Comments  
Holly Pence  
DEQ Northwest Region  
2020 SW 4<sup>th</sup> Ave., Suite 400  
Portland, OR 97201  
Phone: (503) 229-5353 or Toll Free: (800) 452-4011  
Fax: (503) 229-6945  
E-mail: [Pence.Holly@deq.state.or.us](mailto:Pence.Holly@deq.state.or.us)

### Where can I get technical information?

See contact information in the bar at the far right on this page.

### Where can I get background information or review documents?

Information about this project is viewable online by clicking the following links:

[Air Quality Draft Permit](#)  
[Air Quality Permit Report](#)  
[Solid Waste Draft Permit](#)  
[Solid Waste Permit Evaluation Report](#)

You can review hard copies of the draft permits and related documents at Gregory Heights Library located at 7921 NE Sandy Blvd and at the DEQ Northwest Region office in Portland. For a review appointment, please contact Holly Pence at (503) 229-5353 or e-mail [Pence.Holly@deq.state.or.us](mailto:Pence.Holly@deq.state.or.us).



State of Oregon  
Department of  
Environmental  
Quality

Northwest Region  
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### To review documents or send comments, contact:

Holly Pence  
Phone: (503) 229-5353  
Fax: (503) 229-6945  
[Pence.Holly@deq.state.or.us](mailto:Pence.Holly@deq.state.or.us)

### For Solid Waste technical information, contact:

Stephanie Rawson  
Phone: (503) 229-5562  
[Rawson.Stephanie@deq.state.or.us](mailto:Rawson.Stephanie@deq.state.or.us)

### For Air Quality technical information, contact:

Kathy Amidon  
Phone: (503) 667-8414  
Ext. 55010  
[Amidon.Kathy@deq.state.or.us](mailto:Amidon.Kathy@deq.state.or.us)

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Please include your full name, e-mail address and mailing address so that we can purge your information from our print mailing list, thus saving trees and taxpayer dollars.

### **Permit expiration**

Upon issuance, the air permit will be effective for five years and expire on **July 1, 2015** and the solid waste permit will be effective for seven years and expire on **December 1, 2017**.

Oregon law requires facilities with a Simple Air Contaminant Discharge Permit to renew that permit every five years and facilities with a Solid Waste Disposal Permit must renew that permit the end of the permit period. The facility will be inspected periodically to determine compliance with DEQ permits.

### **What will Columbia Biogas do that affects air quality?**

The facility will be using anaerobic digesters to turn food waste into biogas which will be combusted in generators to produce electricity. The proposed facility includes four generators each rated 1,426 Kilowatts, equipped with catalyst controls; anaerobic digester tanks exhausted to biofilters for odor control; and one flare as a back-up control device.

The permit includes operation and maintenance requirements intended to minimize odors and increase efficiency of the control devices.

The facility will release (Particulate Matter (PM), Carbon Monoxide (CO), Nitrogen Oxide (NOx), Sulfur Dioxide (SO<sub>2</sub>), Volatile Organic Compounds (VOC), and trace amounts of Hazardous Air Pollutants to the air.

### **What will Columbia Biogas do that affects land quality?**

The solid waste permit would allow the applicant to accept commercial and industrial food waste and includes conditions on waste disposal and management. If not conducted properly, the acceptance and management of food waste can create odors and problems with rodents or insects.

The facility operations will be conducted inside buildings and tanks. Waste receiving and pretreatment areas are also indoors and will be emptied and cleaned at the end of each operating day. DEQ permits require the facility to use odor control measures to minimize odor impacts. The solid waste permit also requires the facility to manage waste to prevent the attraction and sustenance of vectors such as rodents.

### **What are the known health effects or environmental impacts of the wastes that Columbia Biogas will handle?**

Health risks should be low as the liquid and solid food waste will be source separated and should

have little or no chemical contaminants. Meat waste may potentially contain pathogens such as E. coli or Salmonella. The digestion process should destroy most pathogens. The facility will sample the byproducts to determine if pathogens were destroyed.

DEQ has determined that the facility plans describe methods that are adequately protective of human health and the environment.

### **What legal requirements apply?**

Oregon Revised Statutes (ORS) 468A.040 and Oregon Administrative Rules (OAR) Chapter 340 Division 216 and 218 give DEQ the authority to issue air discharge permits. OAR Chapter 340 Divisions 200 through 268 contains all pertinent rules that govern the air quality program.

ORS 459 and OAR Chapter 340 Divisions 93 through 97 give DEQ the authority to issue solid waste disposal permits.

### **How does DEQ determine what requirements go in the permits?**

Various federal and state regulations apply to a facility depending on the type of industry, the type and amount of air pollutants emitted and wastes disposed or handled, and the location of the facility. All applicable regulations must be contained in the permit, including the appropriate recordkeeping, monitoring, and reporting requirements to ensure compliance with these rules.

### **Meeting air quality standards**

Air quality in Portland meets the National Ambient Air Quality Standards established by the US Environmental Protection Agency to protect public health. DEQ has determined that the air emissions from Columbia Biogas will not result in a violation of those standards. DEQ is responsible for establishing permit emissions limits that ensure air quality standards are not violated.

### **What pollutants are considered in determining permitted air discharges?**

EPA and DEQ use six key pollutants as indicators of air quality. These are known as "criteria pollutants" and are compounds that, if inhaled, may lead to health effects that generally aggravate cardiovascular and respiratory disease. If the amount of criteria pollutants emitted is greater than a regulated minimum, then emission limits are established.

Hazardous air pollutants are compounds that, if inhaled, may pose a threat of adverse human health or environmental effects, including, for example, acute or chronic toxicity, cancer, birth defects, or reproductive dysfunction. The mere presence of these pollutants in the air does not necessarily mean that a health risk exists. EPA has established a list of 187 compounds that are classified and regulated as hazardous air pollutants. If the amount of hazardous air pollutants released is greater than a regulated minimum level, then additional requirements may also apply.

**How are the permitted air emissions measured?**

Air pollutant emissions are calculated using established emission factors.

**Air emissions and permit limits**

Table 1 below presents the maximum allowable emissions for the facility. Typically, a facility’s actual emissions are less than the maximum limits established in a permit. However, actual emissions can increase up to the permitted limit.

This facility does not have the potential to be a major source of hazardous air pollutants. In addition, EPA has determined that these types of sources do not warrant regulation for hazardous air pollutants. Total hazardous air pollutants from the source are estimated to be 2.1 tons per year.

**What other DEQ permits are required?**

In addition to the air discharge permit and the solid waste disposal permit, Columbia Biogas has applied for a water quality discharge permit for construction activities.

City of Portland stormwater and pretreatment permits may also be required.

**What similar activities take place in the vicinity of the facility?**

The nearby area contains an asphalt plant, a printer, facilities that manufacture and paint metal products, and an engine test cell that produce air pollutant emissions.

**What other information about this company is related to this permit?**

The company owns no other facilities in this area.

**What happens after the hearing?**

After the comment period closes, DEQ will consider and provide responses to comments received. DEQ may modify provisions in the proposed permits, but the permit writers can only modify conditions of the permits in accordance with the rules and statutes under the authority of DEQ. Participation in the rulemaking or the legislative process is the only way to change the rules or statutes. Ultimately, if a facility meets all legal requirements, DEQ will issue the facility’s solid waste permit and air quality permit.

**Accessibility information**

DEQ is committed to accommodating people with disabilities at our hearings. Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format. To make these arrangements, contact DEQ Communications & Outreach at (503) 229-5696 or toll free in Oregon at (800) 452-4011; fax to 503-229-6762; or e-mail to [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us). TTY users, please call 711 for assistance.

<b>Air Criteria Pollutant</b>	<b>Proposed Limit</b>	<b>Estimated Actuals</b> <i>(tons/year)</i>
Small Particulate Matter (PM <sub>10</sub> )	14	2
Fine Particulate Matter (PM <sub>2.5</sub> )	9	2
Nitrogen Oxides (NO <sub>x</sub> )	39	10
Sulfur Dioxide (SO <sub>2</sub> )	39	2
Carbon Monoxide (CO)	99	25
Volatile Organic Compounds (VOC)	39	15