

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING A SOLID WASTE	)	ORDINANCE NO. 10-1248
FACILITY FRANCHISE APPLICATION SUBMITTED BY	)	
COLUMBIA BIOGAS, LLC TO OPERATE AN ANAEROBIC	)	Introduced by Michael Jordan,
DIGESTION AND ENERGY RECOVERY FACILITY AND	)	Chief Operating Officer, with the
AUTHORIZING THE CHIEF OPERATING OFFICER TO	)	concurrence of Carlotta Collette,
ISSUE A FRANCHISE	)	Council President

WHEREAS, Metro Code Section 5.01.045(b) stipulates that a Metro Solid Waste Facility Franchise shall be required for the person owning or controlling a facility that operates a facility that processes putrescible waste other than yard debris, including energy recovery facilities; and,

WHEREAS, on October 1, 2010, Columbia Biogas, LLC submitted a Solid Waste Facility Franchise Application pursuant to Metro Code Section 5.01.060 to operate an anaerobic digestion and energy recovery facility that will process putrescible waste other than yard debris for the production of biogas; and,

WHEREAS, Metro Code Section 5.01.070 stipulates that the Chief Operating Officer shall make an investigation concerning the application and shall formulate recommendations, including a recommendation of whether the application should be granted or denied; and,

WHEREAS, the Chief Operating Officer has reviewed and investigated the application filed by Columbia Biogas, LLC, and has formulated recommendations regarding the factors set forth in Metro Code Section 5.01.070; and,

WHEREAS, the Chief Operating Officer recommends that the franchise be granted together with specific conditions as provided in Exhibit A to this Ordinance entitled "Solid Waste Facility Franchise;" and

WHEREAS, the Metro Council has received the Chief Operating Officers recommendations and has considered the factors set forth in Metro Code Section 5.10.070; and

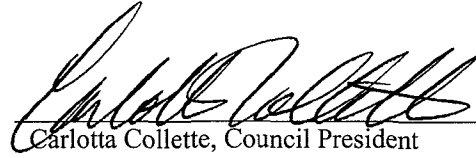
WHEREAS, the Metro Council finds that the proposed franchise meets the criteria contained in Metro Code Section 5.01.070 and that the terms, conditions, and limitations contained in Exhibit A to this Ordinance are appropriate; now therefore,

THE METRO COUNCIL ORDAINS AS FOLLOWS:

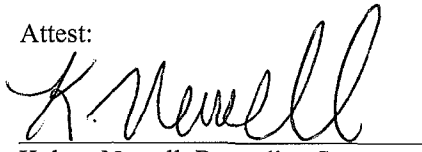
1. The Solid Waste Facility Franchise Application of Columbia Biogas, LLC is approved, subject to the terms, conditions, and limitations contained in Exhibit A to this Ordinance entitled, "Solid Waste Facility Franchise."

2. The Chief Operating Officer is authorized to issue to Columbia Biogas, LLC, a Solid Waste Facility Franchise substantially similar to the one attached as Exhibit A.

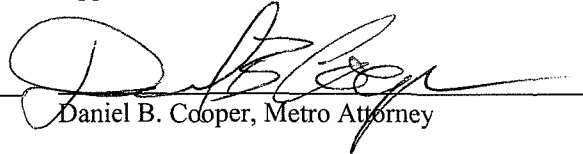
ADOPTED by the Metro Council this 9 day of DECEMBER 2010.

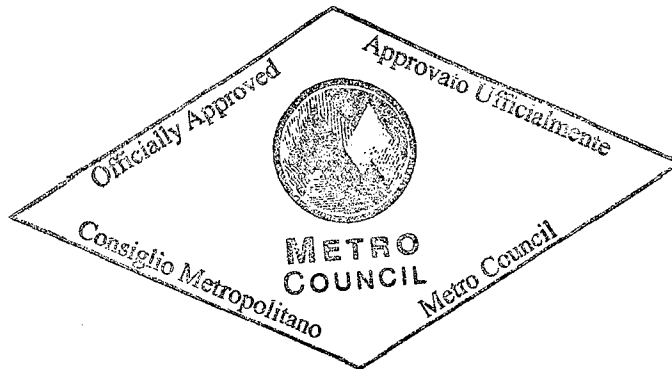
  
Carlotta Collette, Council President

Attest:

  
Kelsey Newell, Recording Secretary

Approved as to Form:

  
Daniel B. Cooper, Metro Attorney



600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736  
TEL 503-797-1835 | FAX 503-813-7544



**METRO**

## SOLID WASTE FACILITY FRANCHISE

### No. F-131-10

FRANCHISEE:	FACILITY NAME AND LOCATION:
Columbia Biogas, LLC 721 NW 9 <sup>th</sup> Avenue, Suite 195 Portland, Oregon 97209 Tel. (503) 914-4630 Email: John@columbiabiogas.com	Columbia Biogas 6849 NE Columbia Blvd Portland, Oregon Tel. (503) 914-4630 Email: John@columbiabiogas.com
OPERATOR:	PROPERTY OWNER:
Columbia Biogas, LLC 721 NW 9 <sup>th</sup> Avenue, Suite 195 Portland, Oregon 97209 Tel. (503) 914-4630  Veolia Water North America-West 2323 W. Mill Plain Blvd Vancouver, Washington 98660 Tel. (360) 735-0708	Oregon Fresh Farms Real Estate, LLC 15201 SE Rivercrest Drive Vancouver, Washington 98683 Tel. (503) 703-6737

Metro grants this franchise to the Franchisee named above. The Franchisee is authorized to operate and maintain a solid waste facility and to accept the solid wastes and perform the activities authorized by and subject to the conditions stated in this Franchise.

**ISSUED BY METRO:**

**FRANCHISEE'S  
ACKNOWLEDGEMENT OF RECEIPT:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature of Franchisee

\_\_\_\_\_  
Print name and title

\_\_\_\_\_  
Print name and title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date



## TABLE OF CONTENTS

SECTION	TITLE	PAGE
1.0	Issuance	1
2.0	Conditions and Disclaimers	2
3.0	Completion of Facility Construction	3
4.0	Authorizations	4
5.0	Limitations and Prohibitions	6
6.0	Operating Conditions	7
7.0	Operating Plan	13
8.0	Fees and Rate Setting	15
9.0	Record Keeping and Reporting	15
10.0	Insurance Requirements	18
11.0	Enforcement	19
12.0	Amendment, Modification, Suspension, and Revocation	19
13.0	General Obligations	20



1.0	ISSUANCE	
1.1	<b>Franchisee</b>	Columbia Biogas, LLC 721 NW 9 <sup>th</sup> Avenue, Suite 195 Portland, Oregon 97209 Tel. (503) 914-4630 Email: John@columbiabiogas.com
1.2	<b>Contact</b>	John McKinney Tel. (503) 914-4630 Email: John@columbiabiogas.com
1.3	<b>Franchise number</b>	When referring to this franchise, please cite: Metro Solid Waste Facility Franchise No. F-131-10.
1.4	<b>Term</b>	The term commences on December 31, 2010, and shall terminate on December 31, 2015, unless amended, modified, suspended, or revoked under the provisions of Section 12.0 of this franchise, or terminated under the provisions of Section 3.4 of this franchise.
1.5	<b>Renewal</b>	The Franchisee may apply for a franchise renewal as provided in Metro Code Section 5.01.087.
1.6	<b>Facility name and mailing address</b>	Columbia Biogas 721 NW 9 <sup>th</sup> Avenue, Suite 195 Portland, Oregon 97209
1.7	<b>Managing member</b>	Verde Renewables, LLC PO Box 189 San Anselmo, CA 94960
1.8	<b>Operator</b>	Columbia Biogas, LLC 721 NW 9 <sup>th</sup> Avenue, Suite 195 Portland, Oregon 97209 Tel. (503) 914-4630 Email: John@columbiabiogas.com  Veolia Water North America-West 2323 W. Mill Plain Blvd Vancouver, Washington 98660 Tel. (360) 735-0708 Fax. (360) 735-5983  At the Franchisee's request, the COO may amend this section to delete an operator, add an operator, or both. The COO may not unreasonably refuse the Franchisee's request to amend this section. The Franchisee remains solely responsible for compliance with this franchise



<b>1.8</b>	<b>Facility premises description</b>	Tax Lot Identification No. 1N2E-00500, City of Portland, Multnomah County, State of Oregon
<b>1.9</b>	<b>Property owner</b>	Oregon Fresh Farms Real Estate, LLC 15201 SE Rivercrest Drive Vancouver, Washington 98683 Tel. (503) 703-6737
<b>1.10</b>	<b>Permission to operate</b>	Franchisee warrants that it has obtained the property owner's consent to operate the facility as specified in this franchise.

<b>2.0</b>	<b>CONDITIONS AND DISCLAIMERS</b>	
<b>2.1</b>	<b>Guarantees</b>	This franchise shall not vest any right or privilege in the Franchisee to receive specific quantities of solid waste at the direction of Metro during the term of the franchise.
<b>2.2</b>	<b>Non-exclusive franchise</b>	This franchise shall not in any way limit Metro from granting other solid waste franchises within Metro's boundaries.
<b>2.3</b>	<b>Property rights</b>	This franchise does not convey any property rights in either real or personal property.
<b>2.4</b>	<b>Amendment and modification</b>	Except as provided in Section 12.0 of this franchise, no amendment or modification shall be effective unless approved by the Metro Council.
<b>2.5</b>	<b>No recourse</b>	The Franchisee shall have no recourse whatsoever against Metro or its officials, agents or employees for any loss, costs, expense or damage arising out of any provision or requirement of this franchise or because of the enforcement of the franchise or in the event Metro determines that the franchise or any part thereof is invalid.
<b>2.6</b>	<b>Indemnification</b>	The Franchisee shall indemnify Metro, the Council, the Chief Operating Officer (the "COO"), and any of their employees or agents and save them harmless from any and all loss, damage, claim, expense including attorney's fees, or liability related to or arising out of the granting of this franchise or the Franchisee's performance of or failure to perform any of its obligations under the Franchise or Metro Code Chapter 5.01, including without limitation patent infringement and any claims or disputes involving subcontractors.



<b>2.7</b>	<b>Binding nature</b>	This franchise is binding on the Franchisee. The Franchisee is liable for all acts and omissions of the Franchisee's contractors and agents.
<b>2.8</b>	<b>Waivers</b>	To be effective, a waiver of any terms or conditions of this franchise must conform with Section 12.0 and be in writing and signed by the COO.
<b>2.9</b>	<b>Effect of waiver</b>	Waiver of a term or condition of this franchise shall not waive nor prejudice Metro's right otherwise to require subsequent performance of the same term or condition or any other term or condition.
<b>2.10</b>	<b>Choice of law</b>	The franchise shall be construed, applied, and enforced in accordance with the laws of the State of Oregon.
<b>2.11</b>	<b>Enforceability</b>	If a court of competent jurisdiction determines that any provision of this franchise is invalid, illegal or unenforceable in any respect, the validity of the remaining provisions contained in this franchise shall not be affected.
<b>2.12</b>	<b>Franchise not a waiver</b>	This franchise does not relieve any owner, operator, or the Franchisee from the obligation to obtain all required permits, franchises, or other clearances and to comply with all orders, laws, regulations, reports or other requirements of other regulatory agencies.
<b>2.13</b>	<b>Franchise not limiting</b>	This franchise does not limit the power of a federal, state, or local agency to enforce any provision of law relating to the facility.
<b>2.14</b>	<b>Definitions</b>	Unless otherwise specified, all other terms are as defined in Metro Code Chapter 5.01.

<b>3.0</b>	<b>COMPLETION OF FACILITY CONSTRUCTION</b>	
<b>3.0</b>	<b>Acceptance of solid waste: Director's certification of the completion of facility construction</b>	Franchisee may not accept any solid waste at the facility unless the Finance and Regulatory Services Director (the "Director") has certified, in writing, that facility construction is complete according to plans submitted by Franchisee and approved by the DEQ and Metro. Such certification shall be based upon the Franchisee's compliance with the provisions of this Section 3.0 of this Franchise, including the Director's inspection of the facility and the documents submitted to the Director by the Franchisee.
<b>3.1</b>	<b>Facility design</b>	The facility must be designed and constructed in accordance with the plans submitted to Metro and the DEQ. The



		Franchisee shall submit any amendments or alterations to such plans for written approval by the Director.
3.2	<b>“As constructed” documents</b>	Within 30 days of the substantial completion of construction of the facility, the Franchisee shall submit to the Director “as constructed” facility plans which note any changes from the original DEQ and Metro approved plans.
3.3	<b>Construction inspection</b>	When construction is complete or nearly complete, the Franchisee shall notify the Director so that an inspection can be made before the facility accepts any solid waste and the facility is placed into operation. The inspection shall occur after the Franchisee has provided Metro with the documents described in subsections 3.2 of this Franchise. Franchisee may commence operation within 30 days of receipt of the documents described in subsection 3.2, unless Metro finds that the construction is not complete or that the facility has been constructed in a way that is materially inconsistent with the plans approved by Metro.
3.4	<b>Early termination of franchise for failure to perform</b>	This franchise shall terminate on December 31, 2013 if the Franchisee fails to construct the facility in accordance with the provisions of this Section 3.0, and ensure that it is operational by December 31, 2013.

4.0	<b>AUTHORIZATIONS</b>	
4.1	<b>Purpose</b>	This section of the franchise describes the wastes that the Franchisee is authorized to accept at the facility and the waste-related activities the Franchisee is authorized to perform at the facility.
4.2	<b>General conditions on solid waste</b>	The Franchisee is authorized to accept at the facility only the solid wastes described in Section 4.0 of this franchise. The Franchisee is prohibited from knowingly receiving any solid waste not authorized in this section.
4.3	<b>General conditions on activities</b>	The Franchisee is authorized to perform at the facility only those waste-related activities that are described in Section 4.0 of this franchise.
4.4	<b>Acceptance and management of source-separated food waste</b>	1. The Franchisee is authorized to accept source-separated food waste from commercial and industrial sources for on-site processing and anaerobic digestion. Examples of source-separated food waste that are authorized to be accepted by the Franchisee include: <div style="text-align: center;">a) <u>Liquid fraction</u>: primarily grease trap waste</div>





		<p>from food establishments, and liquid waste from food and beverage processors (contains little or no packaging or contaminants).</p> <p>b) <u>Clean fraction</u>: primarily source-separated food waste from food and beverage processors including bakeries, breweries and food distributors (this material has little or no packaging).</p> <p>c) <u>Mixed fraction</u>: source-separated mixed food waste from grocery stores, restaurants, food distributors and food processors (may include food-spoiled paper, biodegradable food-service ware, wax coated cardboard and packaging such as plastic, glass and metal).</p> <p>d) <u>Containerized fraction</u>: source-separated food waste, liquid or solid, delivered palletized or in large totes primarily from food processors, grocery stores, restaurants and food distributors (may include packaging such as plastic, glass, metal and paper).</p> <p>2. The Franchisee shall receive, manage, process, store, reload and transfer all source-separated food waste in accordance with the facility building design plans, odor control plans and operating plans submitted and approved by Metro as part of the franchise application (e.g., enclosed facility operations, in-vessel containers and negative air collection system routed to biofilters).</p>
4.5	<b>Management of processing residual and byproducts</b>	<p>The Franchisee shall store, reload, and transfer all putrescible and non-putrescible waste processing residual and byproducts inside a roofed, enclosed building, or other in-vessel systems in accordance with the facility design plans and operating plan submitted and approved by the COO as part of the franchise application.</p>
4.6	<b>Byproducts from anaerobic digestion process for agricultural use</b>	<p>The Franchisee may provide its liquid, semi-solid or solid digester byproducts from the anaerobic digestion process to horticultural, agricultural, landscape and nursery operations for use as a fertilizer or agricultural amendment at agronomic application rates or to distributors that resell the byproducts for such uses subject to the following conditions:</p> <p>a) <b>Registration.</b> The Franchisee must register with and obtain a license from the Oregon Department of Agriculture Fertilizer Program as a manufacturer or distributor of fertilizers and agricultural amendments. The Franchisee shall provide Metro</p>



		<p>copies of analytical results for its digester byproducts that are required for registration purposes by the Oregon Department of Agriculture. Copies of such registration applications shall be made available to Metro upon request.</p> <p>b) Customer information. The Franchisee shall maintain at the facility records of contact information for each operation, place or distributor to which it provides digester byproducts including name, contact person, telephone number, address, and the physical location of the farm, place or facility where digester byproducts will be received and/or stored for distribution.</p> <p>c) Production and sales information. The Franchisee shall maintain at the facility records of:</p> <ol style="list-style-type: none"><li>I. Monthly quantities of digester byproducts produced by type (liquid, semi-solid or solid);</li><li>II. Monthly quantities of digester byproducts delivered to customers by type; and</li><li>III. Quantity of each type of byproduct in inventory at the facility at the end of each month.</li></ol> <p>d) The Franchisee shall retain the records required by subsection (b) and (c) for one year and shall make such records available for inspection, auditing and copying by Metro at the facility, subject to Section 13.4 of this franchise.</p>
--	--	--

5.0 LIMITATIONS AND PROHIBITIONS		
5.1	<b>Purpose</b>	This section of the franchise describes limitations and prohibitions on the wastes handled at the facility and activities performed at the facility.
5.2	<b>Prohibited waste</b>	The Franchisee shall not knowingly receive, process, reload, or dispose of any solid waste not authorized by this franchise. The Franchisee shall not knowingly accept or retain any material amounts of the following types of waste: putrescible waste not authorized in Section 4.0 including yard debris, non-putrescible waste, materials contaminated with or containing friable asbestos; lead acid



		batteries; liquid waste not authorized in Section 4.0; vehicles; infectious, biological or pathological waste; radioactive waste; hazardous waste; or any waste prohibited by the DEQ or the City of Portland.
5.3	<b>Prohibition on mixing</b>	The Franchisee shall not mix or commingle any source-separated recyclable materials, or source-separated food waste, brought to the facility with any solid wastes destined for disposal.
5.4	<b>No disposal of recyclable materials</b>	The Franchisee shall not transfer source-separated recyclable materials to a disposal site, including without limitation landfills and incineration facilities.
5.5	<b>Limits not exclusive</b>	This franchise shall not be construed to limit, restrict, curtail, or abrogate any limitation or prohibition contained elsewhere in this franchise document, in Metro Code, or in any federal, state, regional or local government law, rule, regulation, ordinance, order or permit.
5.6	<b>Tonnage authorization</b>	This franchise does not limit the amount of source-separated food waste that the Franchisee may accept.

6.0	<b>OPERATING CONDITIONS</b>	
6.1	<b>Purpose and general performance goals</b>	<p>This section of the franchise describes criteria and standards for the operation of the facility. The Franchisee shall operate in a manner that meets the following general performance goals:</p> <ul style="list-style-type: none"><li>a) Environment. The Franchisee shall design and operate the facility to preclude the creation of undue threats to the environment including, but not limited to, stormwater or groundwater contamination, air pollution, and improper acceptance and management of hazardous waste, asbestos and other prohibited wastes.</li><li>b) Health and safety. The Franchisee shall design and operate the facility to preclude the creation of conditions that may degrade public health and safety including, but not limited to, fires, vectors, pathogens and airborne debris.</li><li>c) Nuisances. The Franchisee shall design and operate the facility to preclude the creation of off-site nuisance conditions including, but not limited to, litter, dust, odors, and noise.</li></ul>



<b>6.2</b>	<b>Qualified operator</b>	<ol style="list-style-type: none"><li>1. The Franchisee shall, during all hours of operation, provide an operating staff employed by the facility or under contract with the facility, as specified in Section 1.7 of this franchise, that is qualified and competent to carry out the functions required by this franchise and to otherwise ensure compliance with Metro Code Chapter 5.01.</li><li>2. Facility personnel, as relevant to their job duties and responsibilities, shall be familiar with the relevant provisions of this franchise and the relevant procedures contained within the facility's operating plan.</li><li>3. A qualified operator must be an employee of the facility, or under contract as specified in Section 1.7 of this franchise, with training and authority to reject prohibited waste that is discovered during load checks and to properly manage prohibited waste that is unknowingly received.</li></ol>
<b>6.3</b>	<b>Fire prevention</b>	The Franchisee shall provide fire prevention, protection, and control measures, including but not limited to, adequate water supply for fire suppression, and the isolation of potential heat sources and/or flammables from processing and storage areas.
<b>6.4</b>	<b>Adequate vehicle accommodation</b>	<p>The Franchisee shall:</p> <ol style="list-style-type: none"><li>a) Provide access roads of sufficient capacity to adequately accommodate all on-site vehicular traffic. Access roads shall be maintained to allow the orderly egress and ingress of vehicular traffic when the facility is in operation, including during inclement weather.</li><li>b) Take reasonable steps to notify and remind persons delivering solid waste to the facility that vehicles shall not park or queue on public streets or roads except under emergency conditions or as provided by local traffic ordinances.</li><li>c) Post signs to inform customers not to queue on public roadways.</li><li>d) Provide adequate off-street parking and queuing for vehicles, including adequate space for on-site tarping and untarping of loads.</li></ol>
<b>6.5</b>	<b>Managing prohibited wastes</b>	<ol style="list-style-type: none"><li>1. The Franchisee shall reject prohibited waste upon discovery and shall properly manage and dispose of prohibited waste when unknowingly received.</li><li>2. The Franchisee shall implement a load-checking</li></ol>



		<p>program to prevent the acceptance of waste that is prohibited by the franchise. This program must include at a minimum:</p> <ul style="list-style-type: none"><li>a) Load screening. As each load is tipped, a qualified operator shall visibly inspect the load to prevent the acceptance of waste that is prohibited by the franchise, in accordance with the operating plan approved by the COO.</li><li>b) Containment area. A secured or isolated containment area for the storage of prohibited wastes that are unknowingly received. Containment areas shall be covered and enclosed to prevent leaking and contamination.</li><li>c) Record maintenance. Records of the training of personnel in the recognition, proper handling, and disposition of prohibited waste shall be maintained in the operating record and be available for review by Metro.</li></ul> <p>3. Upon discovery, the Franchisee shall remove all prohibited or unauthorized wastes or manage the waste in accordance with DEQ requirements and procedures established in the operating plan. All such wastes the Franchisee unknowingly receives shall be removed from the site and transported to an appropriate destination within 90 days of receipt, unless required to be removed earlier by the DEQ or local government.</p>
<b>6.6</b>	<b>Storage and stockpiles</b>	<p>The Franchisee shall:</p> <ul style="list-style-type: none"><li>a) Manage, contain, and remove at sufficient frequency stored materials and solid wastes to avoid creating nuisance conditions, vector or bird attraction or harborage, or safety hazards;</li><li>b) Maintain all storage areas in an enclosed, roofed building, in an orderly manner and keep the areas free of litter;</li><li>c) Position stockpiles within footprints and within the storage volume limits identified on the facility site plan or operating plan; and</li><li>d) Not stockpile non-putrescible recovered materials, source-separated materials or byproducts for longer than 10 days.</li></ul>
<b>6.7</b>	<b>Dust, airborne debris and litter</b>	<p>The Franchisee shall operate the facility in a manner that minimizes and mitigates the generation of dust, airborne debris and litter, and shall prevent its migration beyond</p>



		<p>property boundaries. The Franchisee shall:</p> <ul style="list-style-type: none"><li>a) Take reasonable steps, including signage, to notify and remind persons delivering solid waste to the facility that all loads must be suitably secured to prevent any material from blowing off the load during transit;</li><li>b) Maintain and operate all vehicles and devices transferring or transporting solid waste from the facility to prevent leaking, spilling or blowing of solid waste on-site or while in transit;</li><li>c) Maintain and operate all access roads and receiving, processing, storage, and reload areas in such a manner as to minimize dust and debris generated on-site and prevent such dust and debris from blowing or settling off-site;</li><li>d) Keep all areas within the site and all vehicle access roads within ¼ mile of the site free of litter and debris generated directly as a result of the facility's operation;</li><li>e) Maintain on-site facility access roads to prevent or control dust and to prevent or control the tracking of mud off-site; and</li><li>f) Provide access to the facility for the purpose of uncovered load enforcement. During all times that solid waste or recyclable materials are being accepted, authorized representatives of Metro, including law enforcement personnel on contract to Metro, shall be permitted access to the premises of the facility for the purpose of making contact with individuals they have observed transporting uncovered loads of solid waste or recyclable materials on a public road right-of-way in violation of Section 5.09.040 of the Metro Code.</li></ul>
<b>6.8</b>	<b>Odor</b>	<ul style="list-style-type: none"><li>1. The Franchisee shall at all times operate the facility in a manner that prevents the generation of malodors that are detectable off-site. Detectable off-site malodors will be evaluated based on, but not limited to, the following properties: intensity, character, frequency, and duration.</li><li>2. The Franchisee shall establish and follow procedures in the operating plan for minimizing malodor at the facility and preventing off-site malodors.</li></ul>
<b>6.9</b>	<b>Vectors (e.g. birds, rodents, insects)</b>	<ul style="list-style-type: none"><li>1. The Franchisee shall operate the facility in a manner that is not conducive to the harborage of rodents, birds, insects, or other vectors capable of transmitting, directly</li></ul>



		<p>or indirectly, infectious diseases to humans or from one person or animal to another.</p> <p>2. If vectors are present or detected at the facility, the Franchisee shall implement vector control measures.</p>
<b>6.10</b>	<b>Noise</b>	<p>The Franchisee shall operate the facility in a manner that prevents the creation of noise sufficient to cause adverse off-site impacts and to the extent necessary to meet applicable regulatory standards and land-use regulations.</p>
<b>6.11</b>	<b>Water contaminated by solid waste and solid waste leachate</b>	<p>The Franchisee shall operate the facility consistent with an approved City of Portland or DEQ stormwater management plan or equivalent.</p>
<b>6.12</b>	<b>Access control</b>	<p>1. The Franchisee shall control access to the facility as necessary to prevent unauthorized entry and dumping.</p> <p>2. The Franchisee shall maintain a gate or other suitable barrier at potential vehicular access points to prevent unauthorized access to the site when an attendant is not on duty.</p>
<b>6.13</b>	<b>Signage</b>	<p>The Franchisee shall post signs at all public entrances to the facility, and in conformity with local government signage regulations. These signs shall be easily and readily visible, and legible from off-site during all hours and shall contain at least the following information:</p> <ul style="list-style-type: none"><li>a) Name of the facility;</li><li>b) Address of the facility;</li><li>c) Emergency telephone number for the facility;</li><li>d) Operating hours during which the facility is open for the receipt of authorized waste;</li><li>e) Fees and charges;</li><li>f) Metro's name and telephone number (503) 234-3000 (Metro's Recycling Information Hotline);</li><li>g) A list of authorized and prohibited wastes;</li><li>h) Vehicle / traffic flow information or diagram;</li><li>i) Covered load requirements; and</li><li>j) Directions not to queue on public roadways.</li></ul>
<b>6.14</b>	<b>Nuisance complaints</b>	<p>1. The Franchisee shall respond to all nuisance complaints in timely manner (including, but not limited to, blowing debris, fugitive dust or odors, noise, traffic, and vectors), and shall keep a record of such complaints and any</p>



		<p>action taken to respond to the complaints, including actions to remedy the conditions that caused the complaint.</p> <p>2. If the facility receives a complaint, the Franchisee shall:</p> <ul style="list-style-type: none"><li>a) Attempt to respond to that complaint within one business day, or sooner as circumstances may require; and</li><li>b) Log all such complaints as provided by the operating plan. Each log entry shall be retained for one year and shall be available for inspection by Metro. Each log entry shall include:<ul style="list-style-type: none"><li>i. The nature of the complaint;</li><li>ii. The date the complaint was received;</li><li>iii. The name, address and telephone number of the person or persons making the complaint; and</li><li>iv. Any actions taken by the operator in response to the complaint (whether successful or unsuccessful).</li></ul></li><li>c) The Franchisee shall make records of such information available to Metro upon request. The Franchisee shall retain each complaint record for a period not less than one year.</li></ul>
<b>6.15</b>	<b>Access to franchise document</b>	<p>The Franchisee shall maintain a copy of this franchise on the facility's premises, and in a location where facility personnel and Metro representatives have ready access to it.</p>
<b>6.16</b>	<b>Good neighbor plan and agreement</b>	<ul style="list-style-type: none"><li>1. The Franchisee shall develop, implement and maintain a good neighbor plan with the surrounding community that may be impacted by the facility construction and operations.</li><li>2. As part of the good neighbor plan, the Franchisee shall make good faith efforts to establish a written agreement between the Franchisee and the Cully Association of Neighbors. The agreement shall, at a minimum, describe how the Franchisee will hear and respond to neighborhood concerns, and include a process for dispute resolution.</li><li>3. The Franchisee shall submit a copy of the good neighbor plan to Metro three months prior to commencing construction, and shall provide Metro an updated plan within 15 days of any revision to the plan.</li></ul>





		<p>4. The franchisee shall provide a written report to Metro on the status of the good neighbor plan and its implementation, including, but not limited to, community concerns and actions taken by the Franchisee. The reports shall be submitted to Metro on January 30 each year and include updates on the facility activities with respect to the good neighbor plan during the previous year.</p> <p>5. A copy of the good neighbor plan shall be kept on the facility's premises, and in a location where facility personnel and Metro representatives have ready access to it.</p> <p>6. The good neighbor plan shall not limit, or in any way restrict, Metro's ability to enforce the provisions of this franchise.</p>
--	--	---

7.0 OPERATING PLAN		
7.1	<b>Purpose</b>	This section lists the requirements associated with preparing and implementing a facility operating plan, and lists the procedures that must be included in the required facility operating plan.
7.2	<b>Plan compliance</b>	The Franchisee must operate the facility in accordance with an operating plan approved in writing by the COO. The operating plan must include sufficient detail to demonstrate that the facility will be operated in compliance with this franchise and the conditions listed in Section 7.0. The Franchisee must submit a complete, updated operating plan to Metro within 60 days of completing process stabilization and performance testing. The Franchisee may amend or revise the operating plan from time to time, subject to written approval by the COO.
7.3	<b>Plan maintenance</b>	The Franchisee must revise the operating plan as necessary to keep it current with facility conditions, procedures, and requirements. The Franchisee must submit amendments and revisions of the operating plan to the COO for written approval prior to implementation.
7.4	<b>Access to operating plan</b>	The Franchisee shall maintain a copy of the operating plan on the facility premises and in a location where facility personnel and Metro representatives have ready access to it.



<b>7.5</b>	<b>Procedures for inspecting loads</b>	The operating plan shall establish: <ul style="list-style-type: none"><li>a) Procedures for inspecting incoming loads for the presence of prohibited or unauthorized wastes;</li><li>b) Procedures for identifying incoming and outgoing loads for waste classifications; and</li><li>c) A set of objective criteria for accepting and rejecting loads.</li></ul>
<b>7.6</b>	<b>Procedures for processing and storage of loads</b>	The operating plan shall establish procedures for: <ul style="list-style-type: none"><li>a) Processing authorized solid wastes;</li><li>b) Reloading and transfer of authorized solid wastes;</li><li>c) Managing stockpiles consistent with Section 6.6 to ensure that they remain within the authorized footprints and volumes identified on the facility site plan or operating plan;</li><li>d) Storing authorized solid wastes; and</li><li>e) Minimizing storage times and avoiding delay in processing of authorized solid wastes.</li></ul>
<b>7.7</b>	<b>Procedures for managing prohibited wastes</b>	The operating plan shall establish procedures for managing, reloading, and transferring to appropriate facilities or disposal sites each of the prohibited or unauthorized wastes if they are discovered at the facility. In addition, the operating plan shall establish procedures and methods for notifying generators not to place hazardous wastes or other prohibited wastes in drop boxes or other collection containers destined for the facility.
<b>7.8</b>	<b>Procedures for odor prevention</b>	The operating plan shall establish procedures for complying with Section 6.8 of this franchise regarding odor prevention and control. The plan must include a management plan that will be used to monitor and manage odors of any derivation including malodorous loads delivered to the facility including leaking trucks and containers arriving on-site.
<b>7.9</b>	<b>Procedures for dust prevention</b>	The operating plan shall establish procedures for complying with Section 6.7 of this franchise regarding dust control. The plan must include a management plan that will be used to monitor and manage dust of any derivation.
<b>7.10</b>	<b>Procedures for emergencies</b>	The operating plan shall establish procedures to be followed in case of fire or other emergency.



<b>7.11</b>	<b>Procedures for nuisance complaints</b>	The plan must include procedures for receiving, recording and responding to nuisance complaints consistent with Section 6.14 of this franchise.
<b>7.12</b>	<b>Closure protocol</b>	The Franchisee shall establish protocol for closure and restoration of the site in the event of a long-term cessation of operations as provided in Metro Code Section 5.01.060(c)(3) and as required by the DEQ.
<b>7.13</b>	<b>Financial assurance</b>	The Franchisee shall maintain financial assurance for the cost of the facility's closure and maintain such financial assurance in a form approved by the DEQ for the term of this franchise.

<b>8.0</b>	<b>FEES AND RATE SETTING</b>	
<b>8.1</b>	<b>Purpose</b>	This section of the franchise specifies fees payable by the Franchisee, and describes rate regulation by Metro.
<b>8.2</b>	<b>Annual fee</b>	The Franchisee shall pay an annual franchise fee, as established in Metro Code Chapter 5.01. Metro reserves the right to change the franchise fee at any time by action of the Metro Council.
<b>8.3</b>	<b>Rates not regulated</b>	The tipping fees and other rates charged at the facility are exempt from rate regulation by Metro.
<b>8.4</b>	<b>Metro fee and tax imposed on disposal</b>	The Franchisee is liable for payment of the Metro Regional System Fee, as provided in Metro Code Title V, and the Metro Excise Tax, as provided in Metro Code Title VII, on all solid wastes disposed.
<b>8.5</b>	<b>Community enhancement fee (host fee)</b>	The Franchisee is liable for payment of a community enhancement fee as provided by ORS 459.284 and Metro Code Chapter 5.06.

<b>9.0</b>	<b>RECORD KEEPING AND REPORTING</b>	
<b>9.1</b>	<b>Purpose</b>	This section of the franchise describes record keeping and reporting requirements. The Franchisee shall effectively monitor facility operation and maintain accurate records of the information described in this section.
<b>9.2</b>	<b>Reporting requirements</b>	1. For all solid waste and other feedstock materials the Franchisee is authorized to receive under Section 4.0 of this franchise, the Franchisee shall keep and maintain



		<p>accurate records of the amount of such materials the Franchisee receives, recovers, recycles, reloads, and disposes.</p> <p>2. The Franchisee shall keep and maintain complete and accurate records of the following for all transactions:</p> <ul style="list-style-type: none"><li>a) Ticket Number (should be the same as the ticket number on the weight slips);</li><li>b) Customer account numbers identifying incoming customers and outgoing destinations;</li><li>c) Description whether the load was incoming to the facility or outgoing from the facility;</li><li>d) Material Category: Code designating the following types of material (more detail is acceptable): (1) incoming source-separated food waste; (2) outgoing recyclable materials by type, including agricultural use byproducts by type (liquid, semi-solid, or solid); (3) outgoing non-putrescible waste; (4) outgoing putrescible waste;</li><li>e) Origin: Code designating the following origin of material: (1) from inside Metro boundaries; (2) from within Multnomah, Clackamas and Washington Counties but outside Metro boundaries; and (3) from another location outside Metro boundaries:<ul style="list-style-type: none"><li>i. Any load containing any amount of waste from within the Metro region shall be reported as if the entire load was generated from inside the Metro region.</li><li>ii. If the Franchisee elects to report all loads delivered to the facility as being generated from inside the Metro region, then the Franchisee is not required to designate the origin of loads as described above in Subsections (e)(2) and (e)(3).</li></ul></li><li>f) Date the load was received at, transferred within, or transmitted from the facility;</li><li>g) Time the load was received at, transferred within, or transmitted from the facility;</li><li>h) Indicate whether Franchisee accepted or rejected the load;</li><li>i) Net weight of the load; and</li><li>j) The fee charged to the generator of the load.</li></ul>
--	--	--



<b>9.3</b>	<b>Record transmittals</b>	Franchisee shall transmit to Metro records required under Section 9.0 and the corresponding summary report derived from such records no later than fifteen days following the end of each month in a format prescribed by Metro.
<b>9.4</b>	<b>Account number listing</b>	Within five business days of Metro's request, Franchisee shall provide Metro with a listing that cross-references the account numbers used in the transaction database with the company's name and address.
<b>9.5</b>	<b>Transactions based on scale weights</b>	Except for minimum fee transactions for small, lightweight loads, the Franchisee shall record each inbound and outbound transaction electronically based on actual and accurate scale weights using the Franchisee's on-site scales.
<b>9.6</b>	<b>DEQ submittals</b>	The Franchisee shall provide Metro with copies of all correspondence, exhibits, or documents submitted to the DEQ relating to the terms or conditions of the DEQ permits or this franchise within two business days of providing such information to DEQ.
<b>9.7</b>	<b>Copies of enforcement actions provided to Metro</b>	The Franchisee shall ensure Metro receives copies of any notice of violation or noncompliance, citation, or any other similar enforcement actions issued to the Franchisee by any federal, state, or local government other than Metro, and related to the operation of the facility.
<b>9.8</b>	<b>Unusual occurrences</b>	<ol style="list-style-type: none"><li>1. The Franchisee shall keep and maintain accurate records of any unusual occurrences (such as fires, leaks or explosions, and any other significant disruption) encountered during operation, and methods used to resolve problems arising from these events, including details of all incidents that required implementing emergency procedures.</li><li>2. If a breakdown of the Franchisee's equipment occurs that will substantially impact the ability of the facility to remain in compliance, or create off-site impacts, the Franchisee shall notify Metro within 24 hours of the discovery of the breakdown.</li><li>3. The Franchisee shall report any facility fires, accidents, emergencies, and other significant incidents to Metro within 24 hours of the discovery of their occurrence.</li></ol>
<b>9.9</b>	<b>Changes in ownership</b>	<ol style="list-style-type: none"><li>1. Any change in control of Franchisee or the transfer of a controlling interest of Franchisee shall require prior written notice to Metro. "Transfer of a controlling interest of Franchisee" includes without limitation the</li></ol>



		<p>transfer of 50% or more of the ownership of Franchisee to or from a single entity. Metro may modify this franchise under Section 12.3 to require the new ownership of Franchisee to assume all the rights and obligations of this franchise.</p> <p>2. The Franchisee may not lease, assign, mortgage, sell, or otherwise transfer control of the franchise unless the Franchisee follows the requirements of Metro Code Section 5.01.090.</p>
--	--	---

<b>10.0 INSURANCE REQUIREMENTS</b>		
<b>10.1</b>	<b>Purpose</b>	This section describes the types of insurance that the Franchisee shall purchase and maintain at the Franchisee's expense, covering the Franchisee, its employees, and agents.
<b>10.2</b>	<b>General liability</b>	The Franchisee shall carry broad form comprehensive general liability insurance covering bodily injury and property damage, with automatic coverage for premises, operations, and product liability. The policy shall be endorsed with contractual liability coverage.
<b>10.3</b>	<b>Automobile</b>	The Franchisee shall carry automobile bodily injury and property damage liability insurance.
<b>10.4</b>	<b>Coverage</b>	Insurance coverage shall be a minimum of \$500,000 per occurrence. If coverage is written with an annual aggregate limit, the aggregate limit shall not be less than \$1,000,000.
<b>10.5</b>	<b>Additional insureds</b>	Metro, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSUREDS.
<b>10.6</b>	<b>Worker's Compensation Insurance</b>	The Franchisee, its subcontractors, if any, and all employers working under this franchise, is subject employers under the Oregon Workers' Compensation Law shall comply with ORS 656.017, which requires them to provide Workers' Compensation coverage for all their subject workers. The Franchisee shall provide Metro with certification of Workers' Compensation insurance including employer's liability. If the Franchisee has no employees and will perform the work without the assistance of others, a certificate to that effect may be attached in lieu of the certificate showing current Workers' Compensation.



<b>10.7</b>	<b>Notification</b>	The Franchisee shall give at least 30 days written notice to the COO of any lapse or proposed cancellation of insurance coverage.
-------------	---------------------	---

<b>11.0</b>	<b>ENFORCEMENT</b>	
<b>11.1</b>	<b>Generally</b>	Enforcement of this franchise shall be as specified in Metro Code Chapter 5.01.
<b>11.2</b>	<b>Authority vested in Metro</b>	The power and right to regulate, in the public interest, the exercise of the privileges granted by this franchise shall at all times be vested in Metro. Metro reserves the right to establish or amend rules, regulations or standards regarding matters within Metro's authority, and to enforce all such requirements against Franchisee.
<b>11.3</b>	<b>No enforcement limitations</b>	This franchise shall not be construed to limit, restrict, curtail, or abrogate any enforcement provision contained in Metro Code or administrative procedures adopted pursuant to Metro Code Chapter 5.01, nor shall this franchise be construed or interpreted so as to limit or preclude Metro from adopting ordinances that regulate the health, safety, or welfare of any person or persons within the District, notwithstanding any incidental impact that such ordinances may have upon the terms of this franchise or the Franchisee's operation of the facility.
<b>11.4</b>	<b>Penalties</b>	Each violation of a franchise condition shall be punishable by penalties as established in Metro Code Chapter 5.01. Each day a violation continues constitutes a separate violation.

<b>12.0</b>	<b>AMENDMENT, MODIFICATION, SUSPENSION, AND REVOCATION</b>	
<b>12.1</b>	<b>Amendment by agreement</b>	At any time during the term of the franchise, either the COO or the Franchisee may propose amendments to this franchise. If either the COO or the Franchisee proposes amendments to this franchise, both parties shall make good faith efforts to arrive at consensus on the intent and implementing language of said amendments.
<b>12.2</b>	<b>Amendment by Metro Council action</b>	Except as provided in Section 12.3, the provisions of this franchise shall remain in effect unless the Metro Council: a) Amends the Metro Code, amends the Regional



		<p>Solid Waste Management Plan, or implements other legislation of broad applicability that affects the class of facilities of which this Franchisee is a member; and</p> <p>b) Adopts an ordinance amending this franchise to implement the policy, code or process specified by said ordinance.</p> <p>If, in the course of considering an ordinance amending this franchise as provided in (b) above, the Franchisee provides evidence that the amendment will result in significant capital cost to the Franchisee, the Metro Council will include capital cost and the ability of the Franchisee to achieve a reasonable rate of return on any additional investment required as factors when considering whether to adopt the ordinance.</p>
<b>12.3</b>	<b>Modification, suspension or revocation by Metro for cause</b>	<p>The COO may, at any time before the expiration date, modify, suspend, or revoke this franchise in whole or in part, in accordance with Metro Code Chapter 5.01, for reasons including but not limited to:</p> <ul style="list-style-type: none"><li>a) Violation of the terms or conditions of this franchise, Metro Code, or any applicable statute, rule, or standard;</li><li>b) Changes in local, regional, state, or federal laws or regulations that should be specifically incorporated into this franchise;</li><li>c) Failure to disclose fully all relevant facts;</li><li>d) A significant release into the environment from the facility;</li><li>e) Generation of malodors detectable off-site;</li><li>f) Significant change in the character of solid waste received or in the operation of the facility;</li><li>g) Any change in ownership or control;</li><li>h) A request from the local government stemming from impacts resulting from facility operations; and</li><li>i) Compliance history of the Franchisee.</li></ul>

<b>13.0</b>	<b>GENERAL OBLIGATIONS</b>	
<b>13.1</b>	<b>Compliance with law</b>	<p>The Franchisee shall fully comply with all applicable local, regional, state and federal laws, rules, regulations, ordinances, orders and permits pertaining in any manner to this franchise, including all applicable Metro Code provisions and administrative procedures adopted</p>





		<p>pursuant to Chapter 5.01 whether or not those provisions have been specifically mentioned or cited herein. All conditions imposed on the operation of the facility by federal, state, regional or local governments or agencies having jurisdiction over the facility shall be deemed part of this franchise as if specifically set forth herein. Such conditions and permits include those cited within or attached as exhibits to the franchise document, as well as any existing at the time of the issuance of the franchise but not cited or attached, and permits or conditions issued or modified during the term of the franchise.</p>
<b>13.2</b>	<b>Deliver waste to appropriate destinations</b>	<p>The Franchisee shall ensure that solid waste transferred from the facility goes to the appropriate destinations under Metro Code Chapters 5.01 and 5.05, and under applicable local, state and federal laws, rules, regulations, ordinances, orders and permits.</p>
<b>13.3</b>	<b>Right of inspection and audit</b>	<p>Authorized representatives of Metro may take photographs, collect samples of materials, and perform such inspection or audit as the COO deems appropriate, and shall be permitted access to the premises of the facility at all reasonable times during business hours with or without notice or at such other times upon giving reasonable advance notice (not less than 24 hours). Metro inspection reports, including site photographs, are public records subject to disclosure under Oregon Public Records Law subject to Section 13.4. Subject to the confidentiality provisions in Section 13.4 of this franchise, Metro's right to inspect shall include the right to review all information from which all required reports are derived including all books, maps, plans, income tax returns, financial statements, contracts, and other similar written materials of Franchisee that are directly related to the operation of the facility.</p>
<b>13.4</b>	<b>Confidential information</b>	<p>The Franchisee may identify as confidential any reports, books, records, maps, plans, income tax returns, financial statements, contracts and other similar written materials of the Franchisee or photographs taken by Metro that are directly related to the operation of the facility and that are submitted to or reviewed by Metro. The Franchisee shall prominently mark any information that it claims confidential with the mark "CONFIDENTIAL" prior to submittal to or review by Metro. Metro shall treat as confidential any information so marked and will make a good faith effort not to disclose such information unless Metro's refusal to disclose such information would be contrary to applicable Oregon law, including, without limitation, ORS Chapter</p>

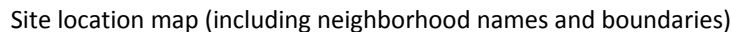


		<p>192. Within five (5) days of Metro's receipt of a request for disclosure of information identified by Franchisee as confidential, Metro shall provide Franchisee written notice of the request. The Franchisee shall have three (3) days within which time to respond in writing to the request before Metro determines, at its sole discretion, whether to disclose any requested information. The Franchisee shall pay any costs incurred by Metro as a result of Metro's efforts to remove or redact any such confidential information from documents that Metro produces in response to a public records request. This Section 13.0 shall not limit the use of any information submitted to or reviewed by Metro for regulatory purposes or in any enforcement proceeding. In addition, Metro may share any confidential information with representatives of other governmental agencies provided that, consistent with Oregon law, such representatives agree to continue to treat such information as confidential and make good faith efforts not to disclose such information</p>
<b>13.5</b>	<b>Compliance by agents</b>	<p>The Franchisee shall be responsible for ensuring that its agents and contractors operate in compliance with this franchise.</p>

IN CONSIDERATION OF ORDINANCE NO. 10-1248, FOR THE PURPOSE OF APPROVING A SOLID WASTE FACILITY FRANCHISE APPLICATION SUBMITTED BY COLUMBIA BIOGAS, LLC TO OPERATE AN ANAEROBIC DIGESTION AND ENERGY RECOVERY FACILITY AND AUTHORIZING THE CHIEF OPERATING OFFICER TO ISSUE A FRANCHISE

Prepared by: Bill Metzler 503-797-1666  
Roy Brower 503-797-1657

On October 1, 2010, in accordance with Metro Code Section 5.01.060, Columbia Biogas, LLC (CBG) submitted an application for a solid waste facility franchise to establish an anaerobic digestion and energy recovery facility that will process food waste into biogas for energy production at 6849 NE Columbia Boulevard, in Portland, Oregon (Metro Council District 5). Anaerobic digestion is a controlled and enclosed biological process that breaks down organic matter in the absence of oxygen, and can produce biogas for energy generation.



Staff Report to Ordinance No. 10-1248  
Page 1 of 33

overlay zone (IG2 “h”). The facility design, land use and site development is regulated by the City of Portland Planning and Zoning Code.

The owner of the facility is Columbia Biogas, LLC, whose managing member is Verde Renewables, LLC. The property is owned by Oregon Fresh Farms, with a lease agreement between CBG and Oregon Fresh Farms Real Estate, LLC. The lease agreement is for 25 years with options to renew. Currently, CBG proposes to initially contract with Veolia Water North America-West, LLC to perform long-term operations and maintenance.

According to the applicant, the facility proposes to accept a total of 194,000 tons per year of both solid and liquid food wastes from commercial and industrial sources (90,000 tons per year of solid food waste and 104,000 tons per year of liquid food waste). Of the 90,000 tons per year of solid food waste, 45,000 tons will come from commercial sources (e.g. grocery stores and restaurants), 45,000 tons will come from industrial sources (e.g. food packaging plants). Staff has assumed that all 45,000 tons of the commercial food waste and about 10 percent of the 45,000 tons of industrial food waste is currently being disposed in a landfill – for a total of 49,500 tons total per year that is being landfilled (see the Budget Impact section for further information). The balance of the industrial food waste is either generated outside the Metro region or is used in other applications (e.g. animal feed) and not currently disposed in a landfill. The 104,000 tons of liquid food waste (e.g. grease trap waste and liquid waste from food and beverage processors) is assumed to be disposed in the sewer system currently and not part of the solid waste system.

The primary product will be methane-rich gas (“biogas”). The applicant plans to generate about five megawatts of electricity continuously; equivalent to meeting the power needs of around 4,000 to 5,000 homes. As a byproduct, the facility will produce fertilizer products to be used in a variety of agricultural operations. Once operating, the facility will employ about ten people.

The proposed facility will process food waste via an anaerobic digestion system. Food waste is “putrescible” waste as defined in Metro Code Section 5.01.010(gg): *“Putrescible means rapidly decomposable by microorganisms, which may give rise to foul smelling, offensive products during such decomposition which is capable of attracting or providing food for birds and potential disease vectors such as rodents and flies.”* The facility does not propose to accept yard debris or yard debris mixed with food waste due to its low methane production value.

Anaerobic digestion of the putrescible waste is “processing” as defined in Metro Code Section 5.01.010(dd): *“Processing means a method or system of altering the form, condition or content of Wastes, including but not limited to composting, vermiprocessing and other controlled methods of biological decomposition; classifying; separating; shredding; milling; pulverizing; or hydropulping; but excluding incineration or mechanical volume reduction techniques such as baling and compaction.”*

The proposed facility is considered an energy recovery facility as defined by Metro Code Section 5.01.010(o): *“Energy recovery means a type of Resource Recovery that is limited to methods in which all or a part of Solid Waste materials are processed to use the heat content, or other forms of energy, of or from the material.”* However, the facility will not incinerate waste. Rather, the proposed facility will digest food wastes (a controlled method of biological decomposition) to produce biogas fuel (from methane), which the facility will use in internal combustion engines to drive electric generators that are connected to the grid.

### Solid waste policy context

The decision to franchise CBG, or any other similar facility under Metro's current revenue system, once again raises the tradeoff between Metro's waste reduction policies and the financial sustainability of the agency. Solid waste reduction has guided Metro's policy for many years. The Council goal to reduce solid waste and divert it from land disposal will impact collection of system fees, excise taxes, disposal fees, and Metro's costs for disposal, transfer and transport. This is discussed in the Budget Impact section.

Developing the region's food waste collection and processing infrastructure is also one of the key strategies called out by Metro's Solid Waste System Roadmap for leading the region toward a more sustainable future over the next decade. As a new franchised solid waste facility, CBG would contribute to this goal by expanding the region's ability to divert food waste from landfills and instead process it for productive use.

### Metro regulatory oversight of CBG and other solid waste facilities in the region

Metro is responsible for managing the regional solid waste system to ensure that it is maintained in a sustainable, economically healthy, and environmentally sound manner. In that regard, Metro is responsible for authorizing, monitoring and regulating the operations of private solid waste facilities like CBG, and to ensure that such facilities meet applicable regulatory, operational, environmental, contractual, and financial requirements.

Metro's regulatory oversight of the solid waste system consists primarily of monitoring private solid waste operations and enforcing compliance with the Metro Code, administrative procedures, performance standards, Metro-granted authorizations (i.e. licenses and franchises), and flow control instruments (i.e. non-system licenses and designated facility agreements). Metro's regulatory program would conduct periodic facility inspections of CBG. Metro inspectors ensure that the region's solid waste facilities comply with the Code and other applicable franchise standards.

Metro inspectors document their field observations, compliance findings, and other pertinent site information. In the event that violations are discovered during an inspection, the circumstances related to the discovery of the violation, nature of the violation, and any other pertinent information are documented in the Inspection Report in order to support an enforcement action if necessary. Metro may initiate enforcement actions in response to violations of the Code or Metro-granted authorizations including assessment of penalties as appropriate. In cases where violations of local, state, or federal laws are identified, the Metro staff coordinates with the appropriate regulatory agency for further investigation and follow-up.

### Applicable permits

The applicant anticipates the following permits will need to be obtained for construction or operation of the facility:

- City of Portland Building and Plumbing Permits
- City of Portland Public Works Permits
- City of Portland Industrial Discharge Permits
- DEQ Air Contaminant Discharge Permit
- DEQ National Pollutant Discharge Elimination System (NPDES) – Stormwater-1200

- DEQ NPDES-Stormwater-1200COLS
- DEQ Solid Waste Treatment Permit
- Metro Solid Waste Facility Franchise

## THE PROPOSED FACILITY SYSTEMS

The following information describes details about the CBG anaerobic digestion facility systems, and is based on the franchise application submitted to Metro. The proposed site layout for the CBG facility is included as **Attachment 1** and a proposed isometric view facility is included as **Attachment 2**. An electronic copy of the CBG solid waste facility franchise application submitted to Metro is available ([www.oregonmetro.gov/biogas](http://www.oregonmetro.gov/biogas)).

### Overview

CBG proposes to construct a biogas production facility utilizing solid and liquid source-separated food waste from grocery stores, restaurants, and industrial food and beverage processors. CBG will support the efforts of local governments to increase diversion of commercial organic waste from landfills due to the advanced preprocessing equipment which will enable the processing of food waste with packaging which composting operations typically do not accept. In addition, the facility will process difficult to manage materials such as liquid organic waste which is commonly carried by municipal sewer lines to wastewater treatment plants. The facility does not propose to accept yard debris or yard debris mixed with food waste as these feedstocks do not produce sufficient amounts of biogas.

The primary facility components will include a receiving and processing building, biofilters for odor control, processing equipment and tanks, byproduct processing equipment, biogas conditioning and holding tanks, power-generation equipment (internal combustion engines) and a gas flare.

According to the applicant, the primary product of the proposed facility will be biogas (a methane-rich gas), which is a commercial fuel with a high heat content. The facility will directly use the biogas to generate about five megawatts of electricity; equivalent to the power needs of around 4,000 to 5,000 homes. As a secondary byproduct, the facility will produce a fiber product that can be used as a fertilizer for agricultural applications at agronomic rates. This fiber is expected to have positive soil building qualities similar to peat moss. In addition, the facility will produce water as well as a concentrate containing micronutrients to be stored in a nutrient storage tank and sold as a liquid fertilizer for agricultural use.

Food waste will be delivered to the facility in different types of vehicles, depending on the type of food waste (i.e. liquid, solid or semi-solid) and generator (e.g. commercial or industrial). The facility is expected to accept food waste in containerized and leak proof vehicles such as packer trucks, compacted dropboxes, large transfer trailers, and tanker trucks. Access to the facility will be provided via NE Columbia Boulevard, which is designed to handle truck traffic, as it has a center turn lane for trucks and is currently identified as a transportation corridor (traffic and transportation issues are part of the land use designation and approval process by the City of Portland).

Once operational, the proposed facility expects to receive 50 loads of food waste per day with deliveries averaging about five trucks per hour. In addition, about eight trucks per day will haul byproduct material off-site. The facility will be open to receive waste from Monday through

Saturday from 6 a.m. to 4 p.m. On Sunday the facility will not be open to accept waste. The facility will not be open to the public. CBG will pre-screen deliveries and control the traffic throughput.

#### Facility design and technology

According to the applicant, the final design of the facility will be performed by a team comprised of local firms and leading international and national process technology experts. The team possesses experience in engineering food waste anaerobic digestion facilities; expertise in transfer stations and solid waste processing facility design; and the design of odor management systems for solid waste, composting and wastewater facilities. The team also has experience in the design and operation of wastewater treatment facilities.

Load checking, receiving and tipping will occur in an enclosed receiving building located at the southern end of the site nearest to Columbia Boulevard. Processing will begin in the enclosed receiving building and continue in the process tankage area. Food-related packaging residuals and recyclable materials generated from the processing of the feedstock will be stored inside the receiving building in storage bins provided by permitted solid waste haulers and transported to authorized disposal sites or recycling facilities. Commodities and byproducts will be sold and transported directly to end-users.

The applicant proposes to process all waste in an enclosed building and in tanks to prevent nuisance malodors from being generated or detected off-site. Biofilters will be used to treat air from the processing areas that will be under negative air pressure to minimize the risk of generating off-site malodors. The floor of the tipping and processing areas will be impervious concrete. No feedstocks or residuals will be stored outside the building or tanks.

#### Facility capacity and feedstocks

As previously stated in this report, the applicant proposes to accept a total of 194,000 tons per year of both solid and liquid food wastes from commercial and industrial sources (90,000 tons per year of solid food waste and 104,000 tons per year of liquid food waste). The applicant anticipates that the facility will receive on average 300 tons of food waste per day, six days a week, with a maximum capacity of up to 500 tons per day. Of the 90,000 tons per year of solid food waste, 45,000 tons per year will come from commercial sources (e.g. grocery stores); 45,000 tons per year from industrial sources (e.g. food packaging plants) and 104,000 tons per year will be liquid food waste. It is assumed that the commercial food waste is currently being disposed of in landfills. The actual ratio of commercial and industrial food waste accepted at the facility will likely ebb and flow as feedstock supplies are established by CBG.

#### Waste receiving

The applicant has indicated that all food waste will be delivered to the facility in enclosed trucks to minimize odors. The enclosed receiving building includes multiple bays that will be maintained under negative air pressure (air suction) to prevent escape of odors when the doors are open. All trucks will back up into a receiving bay and the overhead door will enclose the truck in the unloading area. Following offloading, departing trucks will exit the building and drive through a tire wash to prevent tracking food waste off-site.

The facility does not intend to accept any yard debris, yard debris mixed with food waste, nonfood waste (with the exception of food product packaging), hazardous waste or prohibited waste.

Feedstock will be visually inspected during receiving and handling to ensure that suppliers have complied with the feedstock criteria and that loads do not contain nonfood waste or unacceptable material. The applicant further states that any loads determined to be unacceptable will be reloaded into the hauler's truck for appropriate disposal and will remain the hauler's responsibility to properly manage or dispose of the waste. Prohibited waste found in deliveries will be removed by the hauler, immediately, at the hauler's expense in accordance with the operating plan. Non-recyclable residual waste from the processing will be disposed at a local solid waste transfer station.

#### Waste handling

Solid food waste will be dumped inside the enclosed receiving building either directly to a hopper or on the tip floor, depending on the characteristics of the material. Waste off-loaded onto the tip floor will be loaded into a hopper. Conveyors will move waste dumped in a hopper to the processing equipment at the end of the hopper. All air in this area will be captured and sent to the odor treatment system (biofilter).

The liquid food wastes will be pumped through pipes to processing equipment and to a heated storage tank. The enclosed liquid waste processing area will have separate ventilation with all air being captured and sent to the odor treatment system (biofilter).

#### Waste processing

The processing area located in the enclosed receiving building will be provided with continuous ventilation and odor control. This area will have equipment lines for size reduction and de-packaging food waste. The processing area is isolated from the receiving area to minimize odor concentrations and ventilated to the odor treatment system. Residual waste from processing will consist of food-related packaging such as non-recoverable plastics, cardboard and glass. Metal and aluminum will be removed for recycling. An additional process will remove heavy solids such as sand and ground glass.

#### Waste digestion

The facility will use a two-stage "wet digestion" process, which operates in sealed tanks on a continuous-loop basis. After processing, all food waste will be pumped through enclosed pipes to sealed tanks for further treatment via hydrolysis and fermentation. The detention time in the hydrolysis tank will vary from one to three days at temperatures between 110 degrees and 130 degrees Fahrenheit. After the hydrolysis phase, the liquid substrate is pumped to one of three fermentation tanks. In the fermentation tanks, the waste is anaerobically digested by bacteria that produce a methane-rich gas. The methane gas is then piped to gas conditioning and storage equipment. Gas produced in the tanks will be captured and sent as fuel to the electric power generator engines. Each tank will have an emergency pressure relief valve that will protect the tank from over pressurization. According to the applicant, this sealed system approach is effective in controlling odors from the biogas generation components located outside the receiving building, and is similar to designs used at wastewater treatment facilities.



### Digestate treatment

The byproduct (“digestate”) produced from the anaerobic digestion process will be pumped through enclosed pipes to the digestate treatment building which will be ventilated and air sent to the odor treatment system with biofilters. The material will be dewatered in the building using a high solids centrifuge which will produce solids commonly known as digested fiber. The digested fiber will be conveyed to a hopper in the building where it will be loaded into trucks for hauling to markets. The liquid separated from the solids by the dewatering process will be further processed by ultra filtration and reverse osmosis. Buffer and storage tanks will be used to store liquid between process and these tanks will be vented so that any air will pass through the odor treatment system.

### Odor control and treatment

According to the applicant, the facility will include a state-of-the-art odor control system which is being designed by a leading U.S. expert in odor control systems for compost, wastewater, and solid waste facilities. All food waste delivered to the facility will be received and processed within the enclosed receiving building which will be ventilated to industry standard biofilters using biological odor treatment. The odor control system will consist of in-line ventilators which draw air from multiple collection points through ductwork to exterior mounted biofilters.

Biofilters will be used to capture and remove odors from the collected air. According to the applicant, biofilters are a proven odorous air treatment technology and were selected in lieu of chemical systems, as they will effectively remove a large spectrum of odorous compounds without the addition of chemicals. The applicant may use biofilters developed and manufactured by Bay Products and Biorem that have been successfully used for odor control at modern wastewater treatment facilities in Oregon and Southern Washington. Biofilters using compost media and soil media (Bohn Biofilters) have also been effectively used at local facilities for reducing odors.

The applicant further describes biofilters as a biological treatment method that utilizes a medium that works together with naturally occurring bacteria to remove and oxidize odorous compounds present in the air-stream. A moisture layer is maintained on the medium by a combination of humidification of the air going to the biofilter and a surface irrigation system. As the air passes through the medium, odorous compounds are adsorbed into the moisture layer. Microorganisms oxidize the compounds and the byproducts are water and carbon dioxide. Sufficient residence time in the media must be provided to allow the compounds to be properly adsorbed into the moisture layer on the medium.

### Pathogen reduction

All byproducts will be processed to meet the federal and state requirements for land application as a soil amendment or fertilizer product. The applicant will adhere to the applicable requirements of the U.S. Environmental Protection Agency’s (USEPA) “Process to Further Reduce Pathogens.” The franchise application contains detailed information on pathogen reduction and testing methods to be followed by the facility.

### Biogas utilization

The biogas that is produced in the fermentation tanks will be piped to gas conditioning equipment, which will remove moisture as well as hydrogen sulfide and other sulfur compounds. According to the applicant, hydrogen sulfide in the gas can be harmful to the power generating engines and

catalyst in the air pollution control devices. CBG is proposing to install a biogas conditioning system that will reduce hydrogen sulfide concentrations in the biogas from about 3,000 parts per million (ppm) down to a maximum of 25 ppm in the biogas supplied to the power generating engines. The conditioned biogas will be stored in a low-pressure membrane dome and will provide an even gas flow to the engine generators when the gas production in the fermenters is variable.

The current design has the biogas combusted in four internal combustion engine generator sets. Each engine generator will be designed to combust about one-fourth of the biogas generated and in total will be rated to produce about five megawatts of electricity. The engines will be operated continuously (i.e. 24-hours a day, seven days per week), except during maintenance down times.

The applicant proposes to connect to the PacifiCorp Killingsworth substation grid via the existing power distribution line at the subject property. The plant's local production of power will support frequency and voltage on the PacifiCorp distribution system and provide reliable electricity to the surrounding community. According to the applicant, a flare will be constructed primarily as a safety feature and its use will be limited to when biogas cannot be combusted in the generator engines during maintenance or emergency. The flare also serves as a safety device in the event of an upset condition and is being sized by CBG to combust all of the biogas if needed in an emergency situation.

#### Digested fiber and liquid fertilizer (byproducts)

The digested fiber produced as a byproduct of the fermentation process will contain useful nutrients within the fibrous solids. These byproducts are expected to be sold and used by local nurseries, landscaping applications, nearby composting facilities, or farms as fertilizer or soil amendment upon receipt of any required DEQ or Oregon Department of Agriculture approvals. Distribution and use of these byproducts will be monitored by Metro (see Special Conditions Included in the Franchise)

The applicant further states that the water or concentrate produced will contain high concentrations of ammonia, phosphorus, and other micronutrients. This water will be stored in a nutrient storage tank and is proposed to be sold as a liquid fertilizer upon registration with the Oregon Department of Agriculture as an approved fertilizer product. According to the applicant, clean treated process water may be pumped to the City of Portland sanitary sewer system.

#### Contract operator

CBG proposes to initially contract with Veolia Water North America – West, LLC (Veolia) to perform long-term operations and maintenance (O&M) of the facility. Veolia is a national and international firm that operates and manages more than 400 water and wastewater facilities under long-term O&M agreements with some 265 municipal clients and agencies, as well as industrial and commercial clients. Locally, Veolia has 30 years of experience in the Pacific Northwest, with approximately 70 full-time employees in the Portland Metro region and surrounding area. CBG may change contractors upon modification of its Metro franchise.

#### Emergency contingencies

The applicant indicates the facility is being designed to minimize any potential for process upset caused by unexpected situations. The facility will be designed and constructed to meet all local fire safety requirements. The application states that the facility will be highly reliable because of

duplicate and oversized processing lines, as well as a generous tip floor that will allow for handling of feedstock in the event of rush periods or repair and maintenance. The facility design includes two identical lines dedicated for processing the containerized and mixed food waste fractions. In the event that one of the two parallel lines is down for repair or maintenance, a second shift will be scheduled on the remaining line to allow for the processing of any of the waste received daily. In the event of a power failure or other unforeseen event, feedstock material will be temporarily redirected to an authorized solid waste transfer station or an authorized processing facility. A backup power source may be implemented for operating odor-control equipment, if conditions warrant. According to the applicant, the potential explosive hazard of the facility is considered to be minor due to the low volumes of stored biogas and the low pressure maintained in the system.

### Technology overview

The applicant states that most biogas equipment has been standardized and is proven to be reliable at thousands of facilities throughout Europe. Germany is the leading country in Europe, with over 4,000 units in operation. In the United States, anaerobic digestion is a common technology used at municipal wastewater treatment facilities and the processing of manure at farms. The applicant has indicated that as of 2009, 125 anaerobic digesters were in operation in the United States, none of which, however, accepts the specific feedstock types targeted by CBG.

A local example of a modern wastewater treatment facility that uses anaerobic digestion, biofilters and biogas production is the Durham Advanced Wastewater Treatment Facility, located in Tigard near Cook Park and Tigard High School. The facility serves residents of Washington County, Beaverton, Durham, King City, Sherwood, Tigard, and Tualatin and small portions of southwest Portland and Lake Oswego. The plant cleans an average of 22 million gallons of wastewater per day and generates enough power from the methane gas to provide 25 percent of the facility's electricity needs.

Near Corvallis, Oregon, the Stahlbush Island Farm owns and operates an anaerobic biogas power generation plant using agricultural residue as feedstocks. The farm has about 4,500 acres of cropland, a food processing plant, and a biogas plant. The facility began operations in 2009 and turns vegetative waste from food processing into methane-rich biogas. The gas fuels a generator that can produce about 1.6 megawatts of electricity. The Stahlbush biogas facility represents a recently completed facility, although the plant uses a different style of fermentation tanks than proposed by CBG.

The CBG facility application states that it will utilize a proprietary two-stage "wet-digestion" design called Enbaferm, which was developed by Enbasys, an Austrian process engineering firm. According to the applicant, Enbasys designed one of the largest and most successful food waste anaerobic digestion facilities in Europe.

The configuration of the proposed CBG facility is unique in the United States because it combines an enclosed front-end receiving and processing facility with the anaerobic digestion components to create a complete closed-loop system for processing food waste into biogas for on-site energy production.

In addition, according to the applicant, the following European anaerobic digestion plants (top six in throughput capacity) are representative of the proposed facility:

<b>Facility Location</b>	<b>Tons per Year</b>
1. Barcelona, Spain	240,000
2. Padua, Italy	120,000
3. Werlte, Germany	110,000
4. Prince Edward Island, Canada	100,000
5. Hannover, Germany	100,000
6. Nemscak, Slovenia	87,000

The applicant states that all equipment to be installed at the facility is industry standard, with proven reliability throughout the biogas and wastewater industry. In addition, Enbasys, as process engineer and technology supplier, will guarantee minimum performance levels in the design contract. According to the applicant, a general contractor has been selected who is recognized for its experience in building several of the larger waste water treatment facilities in the Pacific Northwest. The construction of the facility is expected to last nine to 12 months in duration and planned to begin in mid-2011.

#### Potential environmental risks

The facility has applied for a Standard Air Contaminant Discharge Permit (ACDP) from the DEQ (Permit No. 26-9820-ST-01). According to the DEQ permit review report the facility will not be a major source of hazardous air pollutants and therefore only a Standard ACDP will be required to construct and operate the facility.

According to the applicant and the DEQ draft permit and review report, operation of the anaerobic digestion facility will generate emissions of criteria pollutants that must not exceed established limits. Criteria pollutants consist of particulate matter less than 10 microns, particulate matter less than 2.5 microns, nitrogen oxides, carbon monoxide, volatile organic compounds, sulfur dioxide and lead. Air emission sources at the facility include engine generators, the flare, and tanks storing organic liquids and gases. The combustion of biogas in the engine generators and the flare will produce the majority of the air emissions at the facility.

The applicant further states that the engines proposed for use in the facility are 4-stroke lean burn gas engines that are designed specifically to burn gaseous fuels. In addition to being able to combust biogas very efficiently, each engine will be equipped with additional pollution control devices to control emissions of carbon monoxide, volatile organic compounds, organic hazardous air pollutants, and nitrogen oxides.

### **PUBLIC ENGAGEMENT**

#### Applicant initiated process

A public engagement process was initiated by the applicant to include meetings with the neighborhood associations and key business and special interest groups to foster communication and promote transparency. The applicant has met with several groups including the Cully Association of Neighbors, Concordia Neighborhood Association, Central Northeast Neighbors, the Columbia Corridor Association, the Columbia Slough Watershed Council, and other groups involved with the urban parks, trails and greenspace issues.

The applicant has stated that one-on-one meetings have and will continue to be held with key representatives from each group to identify concerns and stakeholders. The applicant has made presentations to appropriate sub-committees or the full membership of interested groups to explain the project in detail and provide an opportunity for the public to ask questions and provide feedback. The applicant has indicated that initial meetings with neighborhood leaders have been supportive.

CBG presented the proposed facility plans at an October 19, 2010 special meeting of the Cully/Concordia neighborhoods. The informational meeting was an opportunity for neighbors to ask questions and learn more from CBG representatives. Metro staff attended the meeting to observe the public outreach and engagement process launched by CBG. The following are staff observations about the public engagement effort:

- Approximately 100 local residents were in attendance. A 30-min. informational presentation was made by CBG and followed by an hour-long question/answer period. The discussion included questions and concerns about traffic, odors, local jobs and other potential impacts that could be related to the design and operation of the proposed facility. A total of 34 questions was heard and answered by CBG during the meeting.
- The applicant has established an advisory group to work with local residents and get their input for going forward. The first advisory committee was held on November 10, 2010. Metro has included special conditions in the proposed franchise that would require CBG to develop, implement and maintain an on-going good neighbor plan with the community.

The applicant launched an effort to engage Northeast Portland neighbors, area businesses and interest groups in discussions about the proposed facility and to address related concerns. Additional information about CBG's public engagement and community relations process is detailed in **Attachment 3** to this report.

#### Oregon DEQ public hearing

The Oregon DEQ held a public hearing for the proposed facility on Thursday, November 18, 2010 to solicit comments on the specific conditions within the proposed DEQ air and DEQ solid waste permits related to the proposed CBG facility. The public hearing was held at Metro Regional Center from 6:30 p.m. to 8:00 p.m. The following is a brief summary:

Approximately 50 people attended the public hearing about the DEQ air and solid waste permits for the proposed CBG facility. Following presentations by and a question and answer session with CBG and DEQ staff, nine people offered testimony.

Three local government representatives expressed support for the facility, including Bruce Walker (City of Portland), Stan Jones (Port of Portland) and Brian Whitecap (West Multnomah County Soil and Water Conservation District). They indicated that this type of facility is critical to building local capacity to process food waste in a sustainable way.

The testimony of four citizens, including three Cully neighborhood residents, focused on concerns related to the proposed DEQ permitting standards. There were appeals to regulators to "set the bar high" with stringent standards, and frequent and timely inspections to ensure the facility be a

success, set an example of “best practices” and protect neighbors from potential nuisances, particularly off-site odors.

The testimony of two citizens focused on concerns about air emissions, respiratory protection and occupational noise exposure. These issues are regulated by DEQ air quality and solid waste permits, as well as the Occupational Safety and Health Administration.

One individual spoke in general opposition to the proposed facility, noting that there is no proven track record for the facility or operations proposed by CBG. He raised concerns about having citizens “shoulder” potential impacts, including odors, waste stream, traffic, rodents and bacteria. He also voiced concern about the proximity of the facility and its potential to adversely affect a nearby golf course.

#### Metro Council public hearings

The Metro Council will hold a public hearing to consider the franchise application submitted to Metro by CBG. The public hearing will take place at 5 p.m. Thursday, December 9 at Metro Regional Center (600 NE Grand Ave., Portland).

### **METRO CODE PROVISIONS RELATED TO FRANCHISE APPROVAL**

#### **1. Franchise Required**

Metro Code Section 5.01.045(b)(1) stipulates that a Metro Solid Waste Franchise is required for the Person owning or controlling a facility at which the activity of processing of putrescible waste other than yard debris is performed.

The proposed facility will process putrescible waste (i.e., food wastes) other than yard debris via an anaerobic digestion system. Anaerobic digestion of the putrescible waste is “processing” as defined in Metro Code Section 5.01.010(dd): *“Processing means a method or system of altering the form, condition or content of Wastes, including but not limited to composting, vermiprocessing and other controlled methods of biological decomposition; classifying; separating; shredding; milling; pulverizing; or hydropulping; but excluding incineration or mechanical volume reduction techniques such as baling and compaction.”*

Metro Code Section 5.01.045 (b)(3) stipulates that a Metro Solid Waste Franchise is required for the Person owning or controlling a facility at which the activity of operating an energy recovery facility is performed.

The proposed facility is also considered an energy recovery facility as defined by Metro Code Section 5.01.010(o): *“Energy recovery means a type of Resource Recovery that is limited to methods in which all or a part of Solid Waste materials are processed to use the heat content, or other forms of energy, of or from the material.”* However, the facility is not designed or permitted to incinerate waste. Rather, the proposed facility will digest food wastes (a controlled method of biological decomposition) to produce biogas, which the facility will use in internal combustion engines to drive electric generators that will be connected to the grid.

## **2. Application**

Metro Code Section 5.01.055(a) stipulates that a prospective applicant for a franchise shall participate in a pre-application conference.

On May 13, 2010, the applicant participated in a pre-application conference with Metro staff.

Metro Code Section 5.01.060(a) stipulates that applications for a Franchise shall be filed on forms or in the format provided by the Chief Operating Officer ("COO").

On October 1, 2010, Columbia Biogas, LLC submitted a solid waste facility franchise application pursuant to Metro Code Section 5.01.060(a) to operate an anaerobic digestion facility that will process source-separated food waste for the production of biogas for the generation of electricity. The application was determined by the COO to be complete on October 12, 2010.

## **3. Compliance with the Criteria Contained in Metro Code Section 5.01.070**

Metro Code Section 5.01.070(c) stipulates that the COO shall formulate recommendations regarding whether the applicant is qualified, whether the proposed Franchise complies with the Regional Solid Waste Management Plan, whether the proposed Franchise meets the requirements of Section 5.01.060, and whether or not the applicant has complied or can comply with all other applicable regulatory requirements.

### **A. Metro Code Section 5.01.070(c) criteria evaluation:**

#### ***i. Applicant qualifications***

The applicant is Columbia Biogas, LLC. The application is for a new solid waste facility that anaerobically digests food waste for the production of biogas. This type of solid waste processing facility is new to the region. Additionally, the applicant is not from the traditional solid waste industry and, therefore is not well known to Metro. The following background information was provided by the applicant.

The managing member of CBG is Verde Renewables, LLC. Verde Renewables, originally Verde Power, is wholly owned and operated by John McKinney, an entrepreneur with over 17 years of experience financing and managing energy related investments in both the private equity and public markets. Mr. McKinney founded Verde Power in 2001, a green-field development firm involved in the development of utility scale wind power projects. The company was renamed Verde Renewables in 2010. Mr. McKinney has managed all aspects of project development including resource assessment, land acquisition, business development, power purchase agreements, grid interconnection, regulatory/permitting and project finance. Mr. McKinney has extensive relationships in the renewable power market. In 2005, Mr. McKinney co-founded Greenrock Capital, which partnered exclusively with a leading global investment bank. Greenrock Capital originated, structured and negotiated over \$650,000,000 in partnership and project finance transactions involving renewable power developers and projects. Mr. McKinney oversaw the firm's investment strategy, origination, structuring and monitoring activities. Columbia Biogas will have other shareholders when it is fully capitalized for this project.

Dale Richwine is the project manager for Columbia Biogas. Mr. Richwine is an environmental engineer with over 38 years experience in the planning, design, start-up, operation and management of water and wastewater treatment facilities. Mr. Richwine has a broad background in the operation and management of treatment plants, including anaerobic digestion, biosolids and recycled wastewater utilization programs.

Columbia Biogas is planning to contract with Veolia Water North America to operate the proposed facility. According to the applicant, Veolia is one of the most qualified teams in the United States with regard to the operation and management of anaerobic digestion facilities. Veolia Water has a long history in providing full-service operations and maintenance (O&M) to clients in North America dating back more than 37 years. Veolia has three current contracts in Oregon for the operation and management of municipal water and wastewater facilities which they operate with a team of 70 local staff, including water treatment plants in Canby, Gresham, Wilsonville, and three wastewater treatment plants in Vancouver, Washington.

Based on the information provided by the applicant, CBG appears sufficiently qualified to establish and operate the proposed facility.

***ii. Compliance with the Regional Solid Waste Management Plan (RSWMP)***

The 2008-2018 Regional Solid Waste Management Plan (RSWMP or Plan) adopted by the Metro Council and approved by the Oregon DEQ provides the Portland metropolitan area with program and policy direction related to:

- Reducing the amount and toxicity of waste generated and disposed,
- Ensuring the disposal system serves the region's best interests, and
- Advancing sustainable practices throughout the region.

The Plan provides a framework for how Metro, local governments and the private sector can work together to achieve the environmental benefits that accrue from waste reduction efforts, while ensuring that our region's discards are managed in a manner that protects human health and the environment. It identifies a number of policies to be used to guide regional decision-making related to the three key areas listed above. These policies provide guideposts for how the region should focus its efforts and direction for how the region should manage the network of facilities that handle recyclables and waste.

In evaluating the CBG application for consistency with the RSWMP, key policies to consider that are addressed in this section are:

- 1.0 System performance
- 2.0 Preferred practices
- 5.0 Source separation
- 7.0 New facilities

***1.0 System performance***

A number of the elements of this policy (environmentally sound, technologically feasible, and acceptable to the public) are addressed elsewhere in this report. The other key components are whether CBG contributes to a system that is both regionally balanced and cost-effective.



From the perspective of regional balance, Metro staff believes that the most effective, and likely, system for recovering the region's food waste will be one that includes a number of processors and technologies each serving portions of the region, rather than one mega-facility. Today, those facilities are effectively limited to the Allied Waste operation in Benton County and the Cedar Grove sites in the Puget Sound area, with an expectation that the Nature's Needs facility in North Plains will come fully online in late 2011. In this context, the proposed CBG facility would make a significant contribution to achieving regional balance in the food waste recovery system through its location, which would likely serve generators in the northeast and central quadrant of the region.

In terms of supporting the cost-competitiveness of the region's solid waste system, the facility's projected tip fee of \$50-\$60 per ton is within a range of other planned and operating food waste processing facilities (note that compostable solid waste is currently accepted at the Metro Central Transfer Station for \$41.70 per ton. This tip fee is linked to the contract for managing food waste and is only in effect through 2011 and never considered a long-term sustainable tip fee).

## *2.0 Preferred practices*

The region's solid waste management practices are guided by the hierarchy of reduce, reuse, recycle or compost, energy recovery, and landfilling. Given current capacity for food waste processing, staff expects that CBG will source food waste that would otherwise be disposed in one or more of the landfills that serve the region. Accordingly, CBG then contributes to the desired regional practice of directing waste up the hierarchy to both energy recovery and, if it successfully markets its solid and liquid end products, a close approximation of composting.

## *5.0 Source separation*

The RSWMP identifies source separation of recoverable materials as the region's preferred approach to removing materials from the waste stream. CBG's feedstock requirements are consistent with this preference, as it will be using source-separated solid and liquid food waste. It will accept packaged food waste, which contrasts to the practices of composting facilities that currently accept material generated in the Metro region. This is not an operational problem if CBG's de-packaging processes are effective, but will require CBG, Metro and local governments to coordinate on food waste preparation messages provided to businesses in the region.

## *7.0 New facilities*

The regional policy regarding new solid waste facilities is that they be considered if they significantly support and are consistent with the RSWMP. The Plan identifies key sectors and material streams on which the region should focus its recovery efforts based on the quantity of those materials available and the feasibility of recovering them. One of those key streams and sectors is organics generated by the commercial sector, and a priority strategy is to increase opportunities available to businesses to divert organics from the waste stream. The addition of a facility such as CBG is thus fully supportive and consistent with the RSWMP policy on new facilities.

### ***iii. Meeting the Requirements of Metro Code Section 5.01.060***

- a) Applications for a Franchise or License or for renewal of an existing Franchise or License shall be filed on forms or in the format provided by the COO.*

The applicant seeks a franchise and, in accordance with Metro Code provisions, has filed a completed application accompanied by payment of the application fee of \$500. Accordingly, staff finds that the application was properly filed.

- b) In addition to any information required on the forms or in the format provided by the COO, all applications shall include a description of the Activities proposed to be conducted and a description of Wastes sought to be accepted.*

The application included a description of the Activities proposed to be conducted and a description of Wastes sought to be accepted. The information required in Metro Code Section 5.01.060(a) and (b) was included in the franchise application and accordingly, staff finds that the application was properly filed.

- c) In addition to the information required on the forms or in the format provided by the COO, applications for a License or a Franchise shall include the following information to the COO:*

- 1) Proof that the applicant can obtain the types of insurance specified by the COO during the term of the Franchise or License;*

The application included a letter from the president of CBG affirming that prior to construction, CBG will provide Metro with proof of the types of insurance as specified by the COO. Further, the proposed franchise contains conditions requiring that the applicant will obtain and maintain the required insurance.

- 2) A duplicate copy of all applications for necessary DEQ permits and any other information required by or submitted to DEQ;*

The application included duplicate copies of all applications for necessary DEQ permits.

- 3) A duplicate copy of any Closure plan require to be submitted to DEQ, or if DEQ does not require a Closure plan, a Closure document describing Closure protocol for the Solid Waste Facility at any point in its active life;*

The DEQ requires CBG to develop a “worst-case” Final Closure Plan to be submitted within 90 days of issuance of the DEQ permit. A duplicate copy will be submitted to Metro at that time. However, in the interim, a Closure document describing closure protocol was included in the application.

- 4) A duplicate copy of any documents required to be submitted to DEQ demonstrating financial assurance for the costs of Closure, or if DEQ does not require such documents or does not intend to issue a permit to such facility, the applicant must demonstrate financial assurance or submit a proposal for providing financial assurance prior to the commencement of Metro-regulated activities for the costs of Closure of the facility. The proposal shall include an estimate of the cost to implement the Closure plan required in Section 5.01.060(c)(3). If an application is approved, the license or franchise shall require that financial assurance is in place prior to beginning any activities authorized by the license or franchise. However, regarding applications for licenses, if DEQ does not issue a permit or require such financial assurance documents, then the COO may waive this requirement if the*

*applicant provides written documentation demonstrating that the cost to implement the Closure plan required in Section 5.01.060(e)(3) will be less than \$10,000.*

The DEQ will require that CBG submit to DEQ evidence of financial assurance for the costs of Closure within 180 days of issuance of the DEQ permit. A duplicate copy of the DEQ required financial assurance documents will be submitted to Metro.

- 5) *Signed consent by the owner(s) of the property to the proposed use of the property. The consent shall disclose the property interest held by the Licensee or Franchisee, the duration of that interest and shall include a statement that the property owner(s) have read and agree to be bound by the provisions of Section 5.01.180(e) of this chapter if the License or Franchise is revoked or any License or Franchise renewal is refused;*

The application included the signed consent of the property owner on the form provided by the COO.

- 6) *Proof that the applicant has received proper land use approval; or, if land use approval has not been obtained, a written recommendation of the planning director of the local governmental unit having land use jurisdiction regarding new or existing disposal sites, or alterations, expansions, improvements or changes in the method or type of disposal at new or existing disposal sites. Such recommendation may include, but is not limited to a statement of compatibility of the site, the Solid Waste Disposal Facility located thereon and the proposed operation with the acknowledged local comprehensive plan and zoning requirements or with the Statewide Planning Goals of the Land Conservation and Development Commission; and*

The application included proof that the applicant has received proper land use approval in the form of a DEQ Land Use Compatibility Statement (LUCS) that was signed by the City of Portland on August 6, 2010. The LUCS states that the proposed activity is allowed outright in the underlying industrial zone.

- 7) *Identify any other known or anticipated permits required from any other governmental agency. If application for such other permits has been previously made, a copy of such permit application and any permit that has been granted shall be provided.*

The applicant anticipates obtaining the permits listed below in Section iv. Compliance with Other Regulatory Requirements.

The information requirements described in Metro Code Section 5.01.060(c) were included in the franchise application and accordingly, staff finds that the application was properly filed.

- d) *An application for a Franchise shall be accompanied by an analysis of the factors described in Section 5.01.070(f) of this chapter.*

As part of the franchise application, Metro Code 5.01.060(d) requires the applicant to provide an analysis of the same factors described in Metro Code Section 5.01.070(f)(1-5). In its application,

CBG provided a narrative of how the proposal responds to these five factors. A summary of the applicant's response, and the staff analysis is provided below in Section 3B of this document.

***iv. Compliance with Other Regulatory Requirements***

The applicant intends to obtain all required permits for the construction and operation of the facility. The applicant states that the following permits are anticipated:

- City of Portland Building and Plumbing Permits
- City of Portland Public Works Permits
- City of Portland Industrial Discharge Permits
- DEQ Air Contaminant Discharge Permit
- DEQ National Pollutant Discharge Elimination System (NPDES) – Stormwater-1200
- DEQ NPDES - Stormwater-1200COLS
- DEQ Solid Waste Treatment Permit

The facility will be new and does not have any prior operating or compliance record. However, the franchise application includes detailed information on the proposed facility contract operator, Veolia Water. According to the applicant, Veolia Water is an established national firm with 30 years experience in the Pacific Northwest. Veolia Water operates more than 400 water and wastewater treatment facilities under long-term operation and maintenance agreements with clients.

More locally, in Canby, Veolia was awarded a 10-year contract to manage the Canby Utility Water Treatment plant and a seven year contract to manage the Gresham wastewater treatment system (including a co-generation plant). In Wilsonville, Veolia operates and maintains the surface water treatment facility, and three wastewater treatment facilities for the City of Vancouver in Washington. The DEQ has indicated that there are no outstanding compliance issues with the facilities in Oregon that are operated by Veolia. Staff has no reason to believe that the applicant will not comply with all applicable regulatory requirements.

**B. Metro Code Section 5.01.070(f) states:**

*In determining whether to authorize the issuance of a Franchise, the Council shall consider, but not be limited by, the following factors:*

- (1) Whether the applicant has demonstrated that the proposed Solid Waste Facility and authorized Activities will be consistent with the Regional Solid Waste Management Plan;*

**Summary of applicant response**

To determine consistency with the RSWMP, the applicant must show that the proposed facility will be consistent with applicable regional policies and programs described in the RSWMP. The applicant included a detailed discussion of how the proposed facility will be consistent with the RSWMP. More importantly, the applicant submitted a statement that was signed on May 17, 2010 by Matt Korot, the Metro Resource Conservation & Recycling Program Director, and is the Solid Waste Management Authority for plan implementation. The statement indicates that the proposed facility is consistent with the RSWMP.

The following determination was made by Metro that the proposed CBG facility is consistent with the RSWMP: *“The proposed solid waste disposal site is compatible with the RSWMP and there is a need for a facility that provides an end-market for commercial-sector generated food waste that would otherwise be landfilled.”* This determination was prompted by a DEQ requirement that the applicant obtain such proof as part of the DEQ solid waste facility permit application process.

### Findings

This issue was examined above in Section 3A(ii) of this document entitled, Compliance with the Regional Solid Waste Management Plan (RSWMP). As previously discussed, staff concludes that the solid waste management activities to be granted under this franchise are in compliance and consistent with the RSWMP.

*(2) The effect that granting a Franchise to the applicant will have on the cost of solid waste disposal and recycling services for the citizens of the region;*

### Summary of applicant response

The application states that the two primary cost components of a customer’s garbage bill are collection and disposal. The tipping fees charged for disposal at CBG (\$50-\$60 per ton) will be attractive to commercial haulers and will encourage flow to the facility. The tipping fee will be lower than the fee for disposing of garbage at the transfer stations or other disposal facilities and comparable to fees charged by other food waste composting operations to encourage recycling.

Further, the application states that, unlike composting facilities located far away from population centers and urban areas due to the amount of land that is needed for the operations and to mitigate odor issues, CBG will be located close to the areas where the food waste is generated and collected. This allows waste haulers to spend the majority of their time collecting waste rather than driving to the facility. The applicant asserts that saving thirty minutes on the collection route is a \$42 savings that can theoretically be passed back to customers.

### Findings

The Code directs the Council to consider the effect of the franchise on the economic cost of disposal and recycling services in the region. Although the applicants do not explicitly state that operation of the facility will reduce these costs, their arguments appear to support that proposition. However, staff finds that while costs may be reduced for a small segment of generators – users of CBG – these savings will be more than offset by increases in the balance of the disposal system.

The applicants state that two factors will make CBG attractive to haulers: (1) its tip fee will be less than the tip fee for disposal; (2) it will be located closer to the source of food waste than alternative food waste processors, thereby allowing haulers to save time on transport from the collection route to the facility. The applicant argues that haulers who are able to realize these savings will voluntarily use the facility and the resulting savings can be passed on to the customer, thereby lowering the cost of disposal and recycling services.

This argument is reasonable from the viewpoint of the haulers and generators that use CBG. However, the Code requires the Council to consider the effect on a far larger group: “the citizens of the Metro region.” Below, staff provides an analysis of the CBG operation from this system-wide

perspective. The reader should bear in mind that this analysis is limited to *economic* costs per the Code criterion. A broader analysis based on the environmental benefits and costs might arrive at a different conclusion.

Disposal. The applicant's estimated tip fee (between 50 and 60 dollars per ton) is comparable with the cost of disposal (Metro's current cost is \$56.45 per ton) because of federal subsidies for construction and revenue anticipated from power sales. CBG would be able to charge a lower tip fee because it expects that materials delivered to CBG will be exempt from Metro's Regional System Fee and Excise Tax (currently \$27.66 combined). The generators of the waste diverted from disposal to CBG would realize an aggregate savings of approximately \$1.29 million per year on disposal (46,500 tons X \$27.66/ton; see "Budget Impact" elsewhere in this staff report for the economic assumptions).

However, the applicant's diversion of waste from disposal is not without cost consequences to the disposal system. As is shown in the Budget Impact section of this staff report, the Regional System Fee would rise by 78¢ and the Metro Excise Tax by 43¢, or \$1.21 per ton combined. This increase would be paid on all waste that continues to be disposed at both public and private facilities. Based on the 1,109,000 tons that would continue to be disposed (source: Metro's most recent tonnage forecast), all non-users of CBG combined would pay an additional \$1.34 million in disposal costs. Users of Metro transfer stations would pay even more. From the same Budget Impact section, Metro's tip fee would have to rise by \$1.97 to cover increased station operating costs, transportation and disposal. Based on the 501,000 tons that would continue to flow through the Metro transfer stations (same source as above) Metro's customers combined would pay an additional \$987,000 in disposal costs. The sum of these two impacts - \$2.33 million - clearly outweighs the \$1.29 million saved by users of CBG.

Collection. The applicant argues that, due to its location close to the urban source of food waste, haulers can save one-half hour on transport from the collection route to the facility. This translates to an additional \$390,000 to \$780,000 savings to users of CBG - not enough to overcome the system-wide increases in disposal costs. (The math: one-half hour per trip at the applicant's estimate of \$84 operating cost per hour for collection vehicles *times* 30 to 60 trips per day [applicant's estimate] *times* 310 days per year [closed Sundays and three holidays] = \$390,000 to \$780,000.)

Furthermore, the applicants do not address the fact that the economics of collection are in fact dominated by the density of pickups along the route and the amount per pickup. Staff is skeptical that a dedicated food waste route with lower density and perhaps less weight per pickup can be cost-competitive with a garbage route, unless the hauler is collecting primarily for large generators and leaving small generators in the disposal system. The density and pickup factors alone could negate the off-route savings described above.

Conclusion and limitations of this analysis. Based on the factors provided by the applicant, staff finds that the operation of CBG might provide cost savings for its users, but these savings will be more than offset by cost increases in the balance of the disposal system. Accordingly, the cost of disposal and recycling services for the citizens of the Metro region is likely to rise as a result of CBG.

However, as noted above, this analysis is based on economic costs alone. An analysis of the total environmental benefits and costs might well lead to a different conclusion. Also, this analysis is based on information provided in the CBG application, but the reader should note that these impacts would be the same for any comparable facility or waste reduction program.

*(3) Whether granting a Franchise to the applicant would be unlikely to unreasonably adversely affect the health, safety and welfare of Metro's residents;*

*(4) Whether granting a Franchise to the applicant would be unlikely to unreasonably adversely affect nearby residents, property owners or the existing character or expected future development of the surrounding neighborhood;*

#### Summary of applicant response

In addressing factors (3) and (4) together, the applicant contends that the CBG facility is designed to be constructed and operated to prevent unreasonable adverse affects on human health and the environment. The applicant states that several plans have been developed specifically to minimize adverse affects on nearby residents, property owners or the existing character or expected future development of the surrounding neighborhood. They are described in greater detail in Attachment K-Additional Factors for Council Consideration in the CBG franchise application, and include the following:

- Monitoring and Testing Program.
- Safety and Compliance Training and Inspection.
- Spill Prevention and Emergency Spill Response.
- Nuisance Control Procedures.
- Pathogen Control Procedures.
- Odor Minimization Management Plan.
- Complaint Procedures.
- Operational Contingency Plan.

#### Findings

The proposed facility is sited on industrial-zoned property bordered by NE Columbia Boulevard to the south and Columbia Slough to the north. The surrounding properties are zoned industrial and include businesses such as an auto body shop, bus yard, machine shops auto parts store, equipment and parts recycling, and the south end of the Colwood Golf Course.

To the south of the facility and across Columbia Boulevard is the Porter-Yett gravel excavation company. To the south-east is the now closed Killingsworth Fast Disposal (KFD) landfill that is owned by the City of Portland; and the methane collection and flare system are operated by Metro. The KFD landfill is also named the Thomas Cully Park (City of Portland Parks & Recreation 2008 Master Plan). The nearest residential area is located within one-half mile of the subject property, south of Columbia Boulevard, in the Cully neighborhood.

Based on the application submitted, and in addition to the above referenced plans, there are several important elements that help to safeguard human health, safety, the environment, minimize adverse affects on nearby residents, property owners or the existing character or expected future development of the surrounding neighborhood. These include, but are not limited to the following factors:

1. The applicant will obtain all required permits that are intended to provide safeguards for human health, safety, and the environment. These include: City of Portland Industrial Discharge Permits, DEQ Air Contaminant Discharge Permit, DEQ National Pollutant Discharge Elimination System (NPDES) – Stormwater-1200, DEQ NPDES - Stormwater-1200COLS, and DEQ Solid Waste Treatment Permit, and a Metro Franchise.
2. A Land Use Compatibility Statement (LUCS) was issued by the City of Portland on August 6, 2010. The LUCS states that the subject property is zoned general industrial and the use is allowed outright (no conditional use permit or hearing process required by the city).
3. The facility will accept and process only source-separated liquid and solid food wastes from commercial and industrial sources that are approved in advance by CBG. The facility will not accept mixed municipal solid waste (“garbage”). The facility will not accept yard debris or yard debris mixed with food waste from residential collection routes.
4. The operations will only be conducted inside enclosed buildings or inside tanks. Food waste will not be stored or processed outside.
5. The facility will utilize a state-of-the-art odor control system to capture air from the enclosed receiving and processing areas and collect exhaust from process equipment and tanks. The captured air will be diverted to biofilters for treatment.
6. The proposed franchise includes conditions that require the facility to operate in compliance with all applicable permits and regulations, including adherence to the design and operating plans submitted to the DEQ and Metro. The proposed franchise includes detailed conditions concerning waste acceptance and handling activities, including the requirement that the facility be operated in a manner that prevents the generation of odors that are detectable off-site.
7. Metro repeatedly inspects and monitors franchised solid waste facilities to ascertain compliance with the Metro Code and the facility franchise agreement. Metro conducts frequent inspections of new facilities to assure compliance with the franchise conditions.
8. In the event that franchise violations are discovered at the facility, Metro can initiate enforcement actions that are based on the severity and frequency of the violation(s). Upon a finding of violation of the Metro Code or the franchise, Metro typically will issue a Notice of Violation (NOV) to the Franchisee that may include monetary penalties and an opportunity for the facility to cure or abate the violation. In the event that Metro’s COO finds that there is a serious danger to the public health or safety as a result of the actions or inactions of the franchisee, the COO may immediately suspend the franchise and may take whatever steps may be necessary to abate the danger.
9. The proposed franchise includes special conditions to address specific concerns that are related to the unique nature of this facility. They are discussed below.

#### Special Conditions Included in the Franchise

In addition to standard provisions in solid waste facility franchises that address the full range of operating requirements, recordkeeping and enforcement provisions (including franchise modification suspension and revocation), staff recommend that the proposed franchise contain



the following additional special conditions. These conditions help to address some of the concerns about the unique characteristics of the proposed facility and help minimize potential adverse affects on nearby residents, property owners or the existing character or expected future development of the surrounding neighborhood.

**Completion of Facility Construction in Accordance with Approved Design and Early Franchise Termination for Non-Performance (Section 3.0 of the franchise).** The proposed franchise includes special conditions that address any potential uncertainties with the proposed design and construction of the facility. Section 3.0 of the franchise includes several provisions that stipulate that the franchisee may not accept any solid waste at the facility until Metro has certified that facility construction is complete according to plans submitted by the applicant and approved by the DEQ and Metro. In addition, Section 3.4 includes a provision that would terminate the franchise in the event that the Franchise fails to construct the facility and ensure that it is operational by December 31, 2013 (the applicant has stated that in order to retain eligibility for certain federal tax credits, the facility must be operational by this date).

**Acceptance and Management of Source-Separated Food Waste (Section 4.4 of the franchise).** The provisions in this section stipulate the types of source-separated food wastes that the franchisee may accept for processing at the facility, consistent with the application. This will ensure that only source-separated food waste will be delivered and processed at the facility- and not raw garbage. In addition, this section stipulates that the franchisee must receive, manage, process, store, reload and transfer all source-separated food waste in accordance with the facility building design plans, odor control plans and operating plans submitted and approved by Metro as part of the franchise application. These plans include an enclosed facility operation, in-vessel containers and negative air collection system routed to biofilters and several other features detailed earlier in this report.

**Byproducts for Agricultural Use (Section 4.6 of the franchise).** The purpose of this section is to ensure that the byproducts(“digester residuals”) from the anaerobic digestion process that are reloaded for agricultural uses or to distributors are managed in accordance with accepted agricultural practices at agronomic application rates and are not improperly land disposed. This section stipulates that the Franchisee obtain the required licenses from the Oregon Department of Agriculture for the byproducts. In addition, the Franchisee must maintain records of customer and production information that will be made available for Metro inspection.

**Good Neighbor Plan and Agreement (Section 6.16 of the franchise).** The provisions in this section require the franchisee to develop and implement a good neighbor plan with the surrounding community. As part of the good neighbor plan, the Franchisee must also make good faith efforts to establish a written agreement with the Cully Association of Neighbors that describes, at a minimum, how CBG will hear and respond to neighborhood concerns. The agreement should also include a process for dispute resolution with the City of Portland Office of Neighborhood Involvement. The Franchisee is required to provide a report to Metro on the plan implementation activities and progress on a regular basis. Metro will retain its legal authority to enforce the franchise conditions and Metro Code requirements independent of the good neighbor plan and agreement.

**Community Enhancement Fees or Host Fees (Section 8.5 of the franchise).** The provisions in this section requires that the Franchisee be liable for payment of a community enhancement fee as

provided by ORS 459.284 and Metro Code Chapter 5.06. The community enhancement fees will be used for the purpose of community rehabilitation, mitigation and enhancement.

The RSWMP Regional Policy 11.0 - Host Community Enhancement stipulates: *"Any community hosting a solid waste "disposal site" as defined by ORS 459.280 shall be entitled to a Metro-collected fee to be used for the purpose of community enhancement."*

Under the definition of ORS 459.280, the proposed facility qualifies as a disposal site because it will be an energy recovery facility. Therefore, the host community is entitled to a Metro-collected community enhancement fee. Metro has implemented its authority under ORS 450.284 and 459.290 by enacting Metro Code 5.06.010, which provides, in relevant part:

*(a) It is the policy of the district to apportion an enhancement fee of \$.50 per ton on solid waste delivered to each site within the district and dedicate and use the monies obtained for enhancement of the area and around the site from which the fees have been collected.*

In order to implement and administer the community enhancement fee for the CBG facility, staff will propose related amendments to Metro Code Chapter 5.06 that will establish this specific community enhancement program and its administration. Metro will work closely with the local neighborhood association, the Franchisee and the City of Portland Office of Neighborhood Involvement to establish an administrative framework for an enhancement fund.

Other solid waste disposal sites that collect host community enhancement fees that are administered through a community enhancement grant program include: Metro Central Transfer Station, Metro South Transfer Station, Forest Grove Transfer Station, and the St. Johns Landfill. Accordingly, there are four enhancement grant target areas, each with a committee composed of local residents who help promote, solicit, select and evaluate projects.

- Metro Central Enhancement Committee (North and Northwest Portland)
- North Portland Enhancement Committee (North Portland)
- Metro South Enhancement Committee (Oregon City)
- Forest Grove Enhancement Committee (Forest Grove)

Metro's grant program acknowledges that people in our neighborhoods are the best source of ideas about important investments within the community. Local residents with a vested interest in their area are given the authority to make decisions about public investments.

### Potential risk

It should be noted, however, that the granting of a franchise to the proposed facility is not without some potential for risk. Although anaerobic digestion and biogas production are currently used in agricultural and wastewater treatment applications, this type of solid waste facility will be new to the region. According to the applicant, however, European countries have extensive experience and success with anaerobic digestion of food waste and biogas energy production, as does the East Bay Municipal Utility District facility in Oakland, California.

In the event that there are failures in the facility design or operational procedures, there could be an escape of fugitive odors from the facility. Depending on the magnitude of such an event, this could result in odors that might be detectable in surrounding locations that shift with the

predominant wind direction. For example, the prevailing wind direction at the subject site is from the east during the November to March months, from south to north during the month of April, and from the north-northwest during the months of September and October.

In balancing the potential risks and safeguards associated with the proposed facility franchise, the COO concludes that: 1) granting a franchise to the applicant would be unlikely to unreasonably adversely affect the health, safety and welfare of Metro's residents; and 2) granting a franchise to the applicant would be unlikely to unreasonably adversely affect nearby residents, property owners or the existing character or expected future development of the surrounding neighborhood.

*(5) Whether the applicant has demonstrated the strong likelihood that it will comply with all the requirements and standards of this chapter, the administrative rules and performance standards adopted pursuant to Section 5.01.132 of this chapter and other applicable local, state and federal laws, rules, regulations, ordinances, orders or permits pertaining in any manner to the proposed Franchise.*

Since the applicant is new to the region, there is no operating or compliance history with Metro, the City of Portland, or the DEQ. However, the applicant has submitted applications for all required local and state permits. Further, the franchise application includes detailed information on the proposed facility contract operator, Veolia Water. Veolia Water is an established national firm with 30 years experience in the Pacific Northwest. Veolia Water operates more than 400 water and wastewater treatment facilities under long-term operation and maintenance agreements with clients. Veolia Water, being a well established and respected company, provides staff with sufficient confidence to demonstrate the strong likelihood that the operation of the proposed facility would be conducted in compliance with all requirements and standards of the Metro Code, the administrative rules and performance standards, and other applicable local, state and federal laws, rules, regulations, ordinances, orders or permits pertaining in any manner to the proposed franchise.

## **OTHER FACTORS FOR COUNCIL CONSIDERATION**

The Council must weigh several factors before determining whether to grant or deny the franchise. Staff has provided analysis of the Code requirements and the COO has made a recommendation to approve the application. The Council may consider the information put forward by staff and the applicant and decide, as the Council deems appropriate, whether to grant or deny the franchise. The following additional factor is offered for Council consideration.

### Previous solid waste sites located in the Cully neighborhood area

The proposed CBG facility will be located in an industrial area of the Cully neighborhood. The Cully neighborhood area is currently impacted by several other existing industrial uses, truck traffic on Columbia Boulevard, and noise from Portland International Airport. The neighborhood area also contains two closed landfill disposal sites and previously hosted a now defunct solid waste composting facility. Refer to **Attachment 4** for the location of each site listed below in context with Cully neighborhood and the proposed CBG facility. The following is a brief summary of each site.

**Riedel Municipal Solid Waste Compost Facility.** The now defunct Riedel Municipal Solid Waste (MSW) Composting Facility was located at 5437 NE Columbia Boulevard. The facility was conceived and developed over a long period of time to serve as one element of Metro's

integrated solid waste management system. The Riedel composting facility was closed in 1992 after less than a year of operating. The facility was ordered to stop accepting wastes by the DEQ due to persistent odor complaints from nearby residents and businesses. Due to financial problems, the Riedel facility was purchased by Credit Suisse, the bank which had provided financial backing for the project. The facility never reopened, and Metro's service agreement with Riedel was terminated. References to the facility were removed from the Regional Solid Waste Management Plan in 1994 (Ordinance No. 94-1915A).

The proposed CBG facility design and processing operations are significantly different from the Riedel MSW facility. The following is a summary of the key differences.

- Feedstocks
  - Riedel accepted loads of unprocessed raw garbage (MSW) from household and businesses. The waste was not pre-sorted or source-separated and contained putrescible waste with non-compostable material and contaminants.
  - CBG will accept only source-separated food waste from commercial and industrial sources. No household or commercial garbage will be accepted at the facility.
- Building
  - Riedel did not operate in an enclosed facility. The composting process occurred in an open-sided roofed structure.
  - CBG operations will be conducted in a completely enclosed roofed building and in enclosed tanks – no open air operations or outdoor storage will occur.
- Odor controls
  - Riedel did not use a reliable odor control system. Odors were generated in the receiving/tipping area, bag breaking area, MSW conveyors, and during the handling of MSW. Odors were also generated at the aerated composting beds. Odorous air was eventually released to the ambient air through open sides of the buildings, creating significant malodors in local neighborhoods.
  - CBG will use a state-of-the-art negative air capture and biofiltration system to remove odors. The odorous air collection system will consist of dedicated systems with ducts drawing air from receiving and processing areas within the building as well as tanks and the digestate treatment building. The air will be collected and treated in biofilters.
- Processing
  - Riedel was a MSW processing and composting facility that used an open air sorting area, conveyors and a "Dano drum" to breakdown the garbage and remove non-compostable contaminants. The composting process relied on air, temperature, and moisture to drive the biological process.
  - The proposed CBG facility is not a composting operation. CBG will use enclosed areas to sort and process the food waste. An anaerobic digestion system that is enclosed in tanks will produce biogas for energy production.

End  
products

- Riedel did not ultimately produce a marketable compost product due to excessive contamination levels associated with MSW and poor compost process controls.
- CBG will to generate electricity as its primary product. Secondary products will be sold and used in nursery and agricultural applications.

**Killingsworth Fast Disposal (KFD) landfill.** The old KFD landfill comprises approximately 25 acres in the Cully neighborhood in northeast Portland at NE 75<sup>th</sup> avenue and NE Killingsworth, southeast of the proposed CBG site. The site started as a sand and gravel mine. Once the rock was depleted, the site became a special waste landfill that accepted construction, industrial and non-putrescible waste. The landfill ceased operations in 1991. The DEQ designated KFD as an Orphan Cleanup Project in July 1999, and used funds from the Solid Waste Orphan Site Account to design and install a new methane gas control system, and implement upgrades to the landfill cover, site drainage, and site security. Additional gas extraction wells were also installed by the DEQ. Since then it has been maintained and monitored by DEQ, Metro, Portland Parks and Portland Bureau of Environmental Services. The site continues to produce methane, which is collected on-site and burned in a small facility next to the site's main entry off of NE Killingsworth. Portland Parks and Recreation acquired the site in 2002 with the intention of developing it as Thomas Cully Park, and Metro began maintaining and monitoring it under contract with the City. A master plan for the park was developed by Portland Parks & Recreation in 2008. (Excerpts from Metro Report – **Our Landfill Legacy**, March 2004, and **Thomas Cully Park Master Plan**, Portland Parks & Recreation-December 2008)

**Waybo Pit.** The Waybo Pit is located at 7800 NE Killingsworth Street. The site accepted and landfilled construction and demolition waste and operated from 1965 through 1971. The records are unclear about the exact size and operational period of this site. The site was originally permitted by Multnomah County Planning Commission under a land use permit in December 1964. The site was closed, and the DEQ never issued a landfill permit due to unfavorable natural conditions that precluded use of the site for landfilling. (Excerpts from Metro Report – **Our Landfill Legacy**, March 2004)

## **ANALYSIS / INFORMATION**

### **1. Known Opposition**

At this time, there is no known opposition to the proposed facility. However, it can be expected that there may be some individuals concerned with aspects of the proposed facility.

### **2. Legal Antecedents**

Metro Code Chapters 5.01 and 5.06, the Regional Solid Waste Management Plan, and ORS 459.284 and 459.290.

### **3. Anticipated Effects**

Adoption of Ordinance No. 10-1248 would authorize the COO to issue a Solid Waste Facility Franchise to CBG for a term of five years.

#### 4. Budget Impacts

The franchise as proposed would affect three Metro funds: the Solid Waste Fund, the General Fund and the Rehabilitation & Enhancement Fund. The effects on each are described in turn.

The analysis is based on Metro's current solid waste revenue system. The impacts are based on information provided in the CBG application, but the reader should note that these impacts would be the same for any comparable facility or waste reduction program.

##### **Assumptions for the Analysis**

According to the application, CBG will use various feedstocks totaling 194,000 tons per year from several different sources. The budget analysis requires information on *which* of these feedstocks will be diverted from Metro's solid waste revenue system, *how much* will be diverted, *when* it will be diverted, and *from where*.

Which feedstocks. This analysis is based staff's assumption that all of the commercially-generated feedstock identified in the application and 10 percent of the industrially-generated feedstock are currently disposed as mixed putrescible waste and incur full Metro fees and taxes. Approval of this franchise would exempt these tons from Metro fees and taxes. The balance of the industrial feedstock is either generated outside the region or is used in other applications and not currently disposed. None of the semi-solid and liquid waste is assumed to be currently handled in the solid waste disposal system.

How much. This analysis is based on a net diversion of 46,500 tons per year from the solid waste revenue system. This figure is comprised of the direct diversion of 49,500 tons that is currently disposed as mixed putrescible waste, less 3,000 tons of residual that CBG will return to the disposal system per year.

The derivation of these figures is shown in the table below. The direct diversion of 49,500 tons consists of all 45,000 tons of the commercially-generated feedstock identified in the application and 10 percent of the 45,000 tons of industrially-generated feedstock. The total is starred [\*] in the table below.

The 3,000 tons of residual is estimated from information provided in the CBG franchise application. According to the application [page 5], 20 percent of the incoming commercial feedstock and 2.2 percent of the industrial feedstock will be incompatible with the digestion technology. All told, this accounts for 10,000 tons of process rejects per year. The rejects consist mainly of packing and transportation materials – wood pallets, cardboard cartons, glass and metal containers, and plastics. According to the CBG Operations Plan, these rejects will be set aside for recycling or disposal [pages 5-2 and 7-1].

Staff assumed that all 1,000 tons per year of the industrial process rejects will ultimately be disposed. Staff further assumed that 2,000 tons of the commercial process rejects will be disposed and the balance (7,000 tons) recycled. The disposal rate from the commercial feedstock (2,000 tons is 4.4 percent of 45,000 tons per year) is double the applicant's industrial reject rate and consistent with Metro's experience with source-separated food waste contamination at Metro Central.

Feedstock by Generator, Process Rejects and Disposal  
(tons per year)

Feedstock by Generator Type	Inbound Feedstock	Process Rejects		Disposition of Rejects	
		Percent	Tons	Recycled	Disposed
Commercial	45,000	20%	9,000	7,000	2,000
Industrial (in-system)†	4,500	2.2%	100	0	100
Subtotal, in SW system*	49,500	---	9,100	7,000	2,100
Industrial (out-of-system)†	40,500	2.2%	900	0	900
Industrial (liquids)	104,000	0%	0	0	0
Subtotal, out of SW system	144,500	---	900	0	900
<b>Grand Total</b>	<b>194,000</b>	<b>---</b>	<b>10,000</b>	<b>7,000</b>	<b>3,000</b>

These figures are based on the application, page 5; and staff's assumptions set forth in the text.

\* This material is currently disposed as putrescible waste (see "Which Feedstocks" above).

† The 10/90 in-system/out-of-system split is explained in "Which Feedstocks" above.

**When.** This analysis is based on the assumption that the facility begins accepting waste on April 1, 2012. For simplicity of exposition, the results are shown for a ramp-up to the full targeted throughput within three months. Metro would experience the same budgetary impacts if ramp-up is in fact slower, but they would be realized over a longer time period.

**From where.** Two scenarios bracket the budgetary effects. The highest impact occurs if all of the solid waste feedstock is diverted from putrescible waste currently delivered to Metro Central. The lowest impact *on Metro* occurs if all of the feedstock is diverted from private facilities. Accordingly, the results of both scenarios are presented in this section. It is important to keep in mind that there are also economic effects on private facilities under both scenarios; however they are not analyzed as part of this *budgetary impact* assessment.

### **The Solid Waste Fund**

**Low impact scenario: no diversion from Metro transfer stations.** Under this scenario the operation of CBG would increase only one expenditure from the solid waste fund: the price that Metro pays to Waste Management for disposal at Columbia Ridge Landfill under its contractual declining block rate. Diversion of 46,500 tons would reduce the dollar amount of the disposal budget but at a higher cost per ton. The Metro tip fee would have to rise by 54 cents to recover this cost. To put this number in context, the current tip fee is \$85.85.

On the revenue side, the exemption of 46,500 tons from the Regional System Fee translates to a potential revenue loss of approximately \$790,000. Historically in similar circumstances Metro has raised the system fee to cover the effect of tonnage lost to the recovery exemption. In this case, that impact would be an increase of 78 cents per ton. This 78 cents would be charged on all solid waste that continues to be disposed, including the waste delivered to Metro transfer stations and privately-owned landfills. To put this number in context, the current Regional System Fee is \$16.72.

In summary, the total effect would likely be a rate increase rather than a budget impact. Under the low impact scenario, the increase would amount to \$1.32 (\$0.54 + \$0.78) on the Metro tip fee and 78 cents per ton at private facilities.

High impact scenario: all diversion from Metro Central. Under this scenario, the operation of CBG would increase the operations cost of Metro Central and reduce transaction fee revenue, *in addition to* the effects on the system fee described for the low impact scenario. Although the budgeted costs for station operations, transport and disposal would drop, the rate per ton would rise and require an increase of \$1.97 to the Metro tip fee to recover the costs. The loss of transactions would reduce transaction fee revenue and require an increase of 33 cents to the automated scale transaction fee.

As was the case for the low scenario, the total effect would likely be a rate increase rather than a budget impact. The increase would be the \$0.78 for the system fee described under the low impact scenario, plus \$1.97 for station operation for a total of \$2.75 increase to the Metro tip fee. In addition, the automated transaction fee would rise by \$0.33.

To put these figures in context, if CBG were to become operational now, the current Metro tip fee of \$85.85 would rise \$2.75 to \$88.60.

## The General Fund

The impact on the General Fund is the same for both scenarios, and is entirely on the revenue side. As with the Regional System Fee, approval of this franchise would remove 46,500 tons from the revenue base. However, unlike the Regional System Fee, the excise tax rate is driven entirely by previous-calendar year tonnage. Therefore, it takes over two years for the reduction of the tonnage base to work its way into the rate calculation. Until that happens, approval of this franchise would reduce General Fund revenue by about \$130,000 during the last quarter of FY 2011-12, \$513,000 in the first full year of operation and \$173,000 in the second full year of operation. By the third year the rate will have increased by \$0.43 per ton to absorb the revenue impact. The details are show in the table below.

Rate and Revenue Effects on the General Fund

Fiscal Year	Excise Tax Rates ( <i>per ton</i> )			Annual Tax Revenue ( <i>\$millions</i> )		
	Base Case	With CBG	Difference	Base Case	With CBG	Difference
2011-12	\$11.10	\$11.10	-	\$12.870	\$12.740	(\$130,000)*
2012-13	11.03	11.03	-	13.020	12.507	(513,000)
2013-14	10.87	11.21	32¢	13.060	12.887	(173,000)
2014-15	10.87	11.33	43¢	13.290	13.290	-

\* Reflects three months of operation in FY 2011-12.

## The Rehabilitation & Enhancement Fund

Revenue for the Rehabilitation and Enhancement of host communities derives from a state-authorized and Metro-implemented surcharge on all wastes accepted at the facility for a fee. This analysis is based on the current “host fee” set by Metro at 50 cents per ton and the total CBG feedstock, estimated by the applicant at 194,000 tons per year. The latter figure is comprised of 90,000 tons of solid waste plus 104,000 tons of liquids and semi-solids per year



by weight. The effects in this section will change if the host fee changes or the wastes that are subject to the host fee change in the future.

Under both the low and high impact scenarios, the Cully neighborhood (where CBG is located) would receive host fee revenue of \$83,000 per year net of \$14,000 in Metro administrative costs (based on 0.15 FTE and \$500 in materials per year). Under the low impact scenario, all of this would be new money to the R&E Fund, being derived from tonnage now delivered to facilities and applications that do not impose a host fee. Under the high impact scenario, \$23,250 would be diverted from the Metro Central R&E Account (46,500 tons diverted from Central at 50¢ per ton). That is, under the high scenario about 75 percent of the Cully host fee revenue would be new money and the balance diverted from the Metro Central Enhancement District. Details are shown in the table below.

#### Budget Impact on the Rehabilitation & Enhancement Fund

By Account	Diversion Scenario	
	Low Impact (No tons from Metro)	High Impact (All tons from Central)
<b>Cully Account (CBG)</b>		
New revenue	\$ 97,000	\$ 97,000
New costs	14,000	14,000
Net ( <i>\$ distribution available</i> )	83,000	83,000
<b>Metro Central Account</b>		
Revenue change	0	(23,250)
Cost change	0	0
Net ( <i>change in \$ distribution</i> )	0	(23,250)
<b>Net impact on R&amp;E Fund</b>	<b>\$ 83,000</b>	<b>\$ 59,750</b>

#### Summary

Analysis is provided for two scenarios: a low-impact budget scenario in which none of the waste is diverted from Metro transfer stations; and a high-impact scenario in which all of the waste is diverted from Metro Central. These scenarios bracket the budget impacts. Again, the reader should note that these impacts would be the same for any comparable facility or waste reduction program.

- **Solid Waste Fund.** The diversion of tonnage from disposal to recovery would reduce the dollar amount that Metro budgets for disposal operations, but the per-ton cost would rise on the waste that continues to be disposed. Historically, Metro has covered such changes by raising solid waste rates. Under the low impact scenario the Metro tip fee would rise by \$1.32, excluding excise tax changes. Under the high impact scenario the increase would be \$2.75, also excluding tax effects.
- **General Fund.** Approval of this franchise will not affect General Fund costs, but the excise tax rate will have to rise 43¢ to recover the revenue lost to the diversion of tonnage. It will take three years for the rate to adjust fully under the current rate mechanism in Metro Code. There will be a \$816,000 loss of revenue to the General Fund during the three-year adjustment period.

- Rehabilitation & Enhancement Fund. The Rehabilitation & Enhancement Fund could receive as much as \$83,000 in new revenue per year, net of administrative costs. These dollars would be available for grants to qualified Cully neighborhood (where CBG is located) applicants. Under the low impact scenario, all of this is new money. Under the high impact scenario approximately \$23,000 of this is shifted from funds currently going to the Metro Central Enhancement Community.

## **RECOMMENDED ACTION**

### Chief Operating Officer Recommendation

The Metro Code requires the COO to formulate recommendations to the Metro Council “regarding whether the applicant is qualified, whether the proposed Franchise complies with the Regional Solid Waste Management Plan, whether the proposed Franchise meets the requirements of [Metro Code] section 5.01.060, and whether or not the applicant has complied or can comply with all other regulatory requirements.”

In addition, the Metro Code requires the Council to consider five criteria when deciding whether to grant or deny an application for a franchise, but the Code explicitly provides that the Council need not be limited by only those five criteria. The previous analysis in this report has addressed all of the issues that the COO is required to analyze, as well as all five of the criteria the Council is required to consider.

The COO finds:

- The applicant is qualified to operate the proposed facility.
- The proposed franchise complies with the Regional Solid Waste Management Plan.
- The proposed franchise meets the applicable requirements of Metro Code section 5.01.060.
- The applicant has complied or can comply with all other regulatory requirements.

Generally, the type of facility represented by CBG will help the Metro region meet several goals established by the Council. Diversion of food waste from landfills lessens our dependence on disposal capacity by reducing the amount of waste disposed. Local processing capacity helps minimize truck delivery miles by reducing long trips to landfills to dispose of solid waste. Directing food waste into better and higher uses such as energy production, composting and agriculture, represents a more sustainable use of resources. Energy production from processing food waste is also consistent with the state’s and region’s economic development emphasis on green jobs and green energy.

Moreover, developing the region’s food waste collection and processing infrastructure is one of the key strategies called out by Metro’s Solid Waste System Roadmap for leading the region toward more sustainable future over the next decade. As a new franchised solid waste facility, CBG would contribute to this goal by expanding the region’s ability to divert food waste from landfills and instead process it for productive use.

This applicant has produced a very high quality application, instituted a very inclusive public outreach effort with local neighborhood groups, business groups and other potentially interested parties. CBG has been very responsive to requests for information and answering questions. It has demonstrated a willingness to meet all necessary regulatory requirements and special conditions imposed by Metro in a responsive way.

This facility is unique in the United States because of its enclosed configuration as a processing facility (anaerobic digestion), and biogas energy recovery facility devoted to food and organic waste. There are inherent risks (e.g. business, financial, and neighborhood impacts) associated with such a venture. However, the applicant appears to be adequately capitalized, has assembled a highly competent team of national and international experts, and has demonstrated a willingness to engage and listen to the public and regulators during the process.

Therefore, based on Metro's investigation and balancing of various factors covered in this staff report, the COO recommends approval of Ordinance No. 10-1248.

#### **LIST OF ATTACHMENTS TO STAFF REPORT**

Attachment 1 - Proposed Site Layout Plan

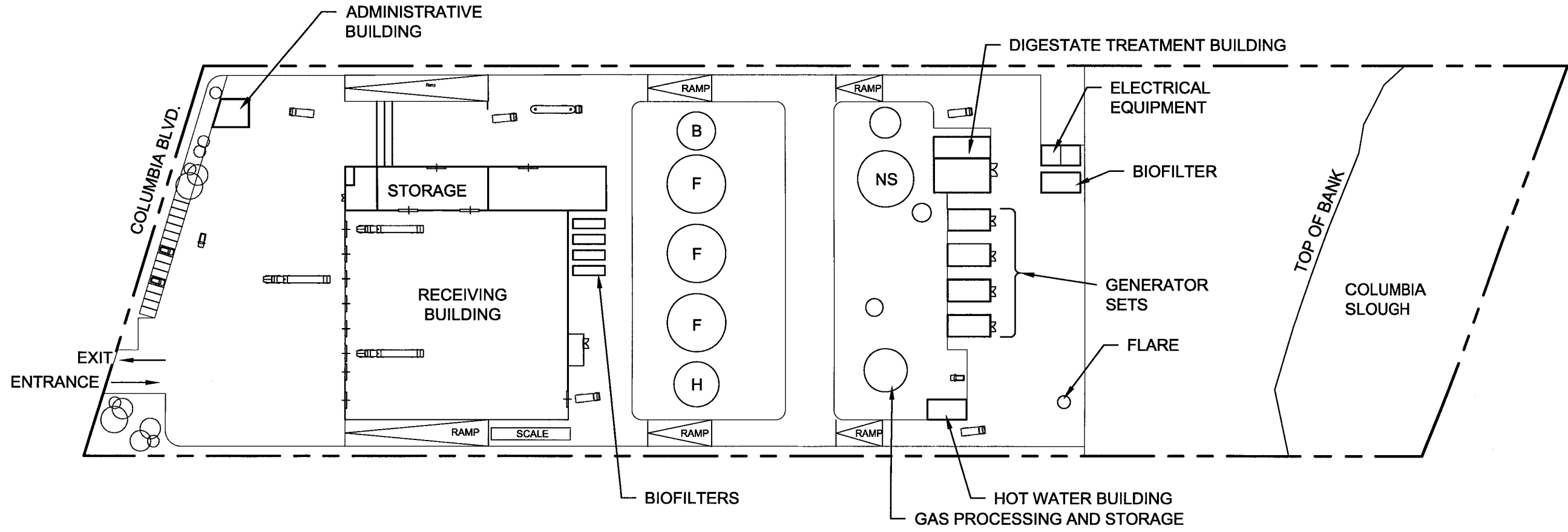
Attachment 2 – Proposed Facility Isometric View

Attachment 3 – Columbia Biogas Community Relations Summary

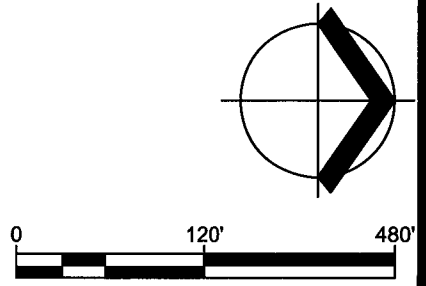
Attachment 4 – Previous Solid Waste Sites in Cully Area

BM:bjl

S:\REM\metzlerb\Columbia BIOGAS\Staff Report\STAFF REPORT.docx



NOTES:  
B = BUFFER TANK  
F = FERMENTER TANK  
H = HYDROLYSIS TANK  
NS= NUTRIENT STORAGE



SITE LAYOUT

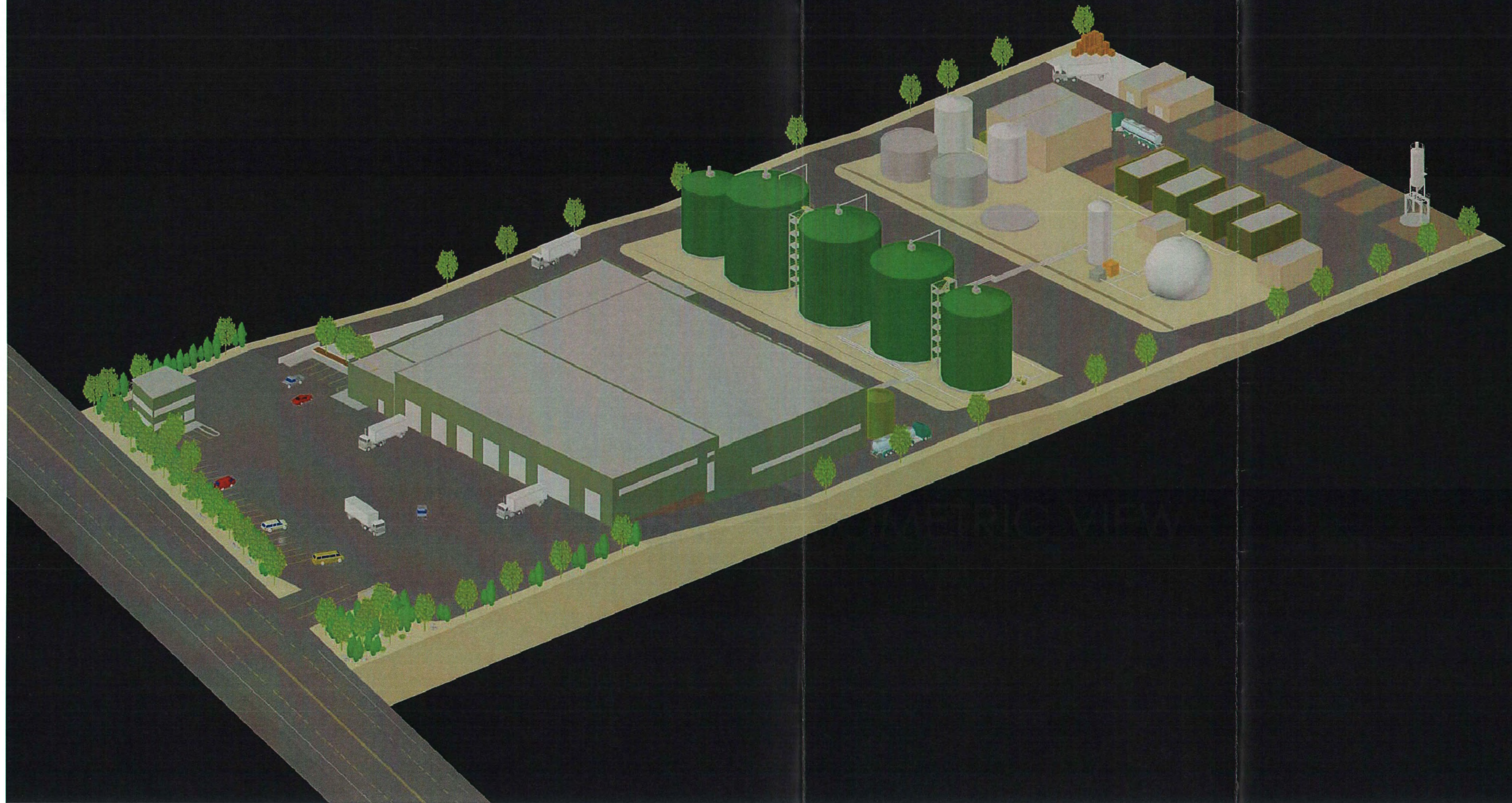
COLUMBIA BIOGAS  
PORTLAND, OREGON

FIGURE  
2-1





MAUL  
FOSTER  
ALONGI



# PROPOSED FACILITY - SOUTHEAST ISOMETRIC VIEW

COLUMBIA BIOGAS

SOURCE: ENBASYS BIOTECH ENERGY, GMBH

FIGURE 2-2

September 3, 2010



**Columbia Biogas  
Public Engagement Process Report  
November 15, 2010**

The purpose of this report is to respond to Metro's request for information about the public engagement process thus far in connection with the submittal of the Columbia Biogas franchise application.

**Community Relations**

An active community relations effort has been in progress for several months. The goal is to engage in two-way communications with the public to foster understanding of the project, understand areas of interest and concern, and increase citizen input into design and operation decisions. Specific community relations activities include:

- General meetings with key individuals and community organizations in the area of the facility site
- Special focus meetings to concentrate on specific areas of interest and concern
- Presentations and tours to answer questions about the project for special interest groups and neighborhood associations
- Informational website
- Neighborhood Advisory Committee to provide a forum for ongoing communication and developing a good neighbor plan

General Meetings

- Columbia Corridor Association  
Corky Collier, Executive Director
- Cully Association of Neighbors  
Rich Gunderson, Parks and Open Spaces Committee  
Bob Grainger, Treasurer Cully Board  
Erwin Bergman, Livability/Airport Committee  
Nick Bouwes, Member
- Concordia Neighborhood Association  
Anne Rothert, Chair Concordia Board
- Central Northeast Neighbors  
Alison Stoll, Executive Director
- Columbia Slough Watershed Council  
Jan Van Dyke, Executive Director
- Native American Youth and Family Center  
Rey Espana, Director of Employment, Housing and Community Development
- Verde  
Alan Hipolito, Executive Director
- Hacienda Community Development Corporation  
Nathan Teske, Community Economic Development Direct

- Portland Sustainability Institute  
Steve Gutmann, Finance Innovation Director
- Recycling Advocates  
Jonny Leuthold, Co-President
- Association of Oregon Recyclers  
Rick Winterhalter, Chair

### Special Focus Meetings

#### *Focus Area: Noise and Odor*

- Erwin Bergman and Nick Bouwes, Cully Association of Neighbors; Enbasys  
Neighborhood residents met with Enbasys, the process engineering firm designing the facility to discuss design features to control noise and odor.

#### *Focus Area: Jobs*

- Rey Espana, Native American Youth and Family Center; Nathan Teske, Hacienda Community Development Corporation, Work Systems, John Gardner and staff  
Met to discuss opportunities to extend jobs to minorities, women, and local residents.

#### *Focus Area: Jobs*

- Rey Espana, Native American Youth and Family Center; Alan Hipolito, Verde; Owen Boe, Veolia; Jeff Wall, Slayden Construction  
Met with Slayden Construction, the proposed general contractor for the project and Veolia, the proposed facility operator to discuss employment needs and identify opportunities to extend jobs to minorities, women and local residents.

### Presentations

- Cully Association of Neighbors (CAN) Board Meeting, October 5<sup>th</sup>, 2010  
Two hour meeting to present information about the project to the Board of the Cully Association of Neighbors and answer questions. Veolia, the proposed contracted operator of the facility, was also present to answer questions.  
*Promotion:* Attendees invited by Kathy Fuerstenau, Chair of CAN.  
*Attendance:* Kathy Fuerstenau, Chair; Dustin Michelletti, Vice Chair, Bob Grainger, Treasurer; Evans Martin, Outreach Coordinator; Laura Young, Member at Large; Michael Crupper, Member at Large.  
*Opportunities for Comment:* Question and answer period.
- Cully Association of Neighbors (CAN) General Membership Meeting, October 12<sup>th</sup>, 2010  
Guest speaker on agenda of regularly scheduled general membership meeting. Twenty minute presentation including a question and answer period.  
*Promotion:* CAN website.  
*Attendance:* 35 to 45 residents of the Cully neighborhood including CAN Board members.  
*Opportunities for Comment:* Question and answer period.
- Cully and Concordia Neighborhoods Meeting, October 19<sup>th</sup>, 2010  
Special meeting for the neighborhoods organized, promoted and facilitated by the Columbia Biogas project team. Two hour meeting to present information about the project to the public including a question and answer period. Presentations given by John McKinney, owner of Columbia Biogas and technical experts on the project team focused on design and mitigation

efforts for areas of concern including odor, noise, and traffic. Also present were the project manager, Dale Richwine and Owen Boe, Veolia, the proposed contracted operator of the facility.

*Promotion:* Over 9,000 postcards mailed to every resident and business of the Cully and Concordia neighborhoods. Notice of the meeting was also posted on Cully, Concordia and Sumner neighborhood association websites and blogs.

*Attendance:* Approximately 100 people including Metro and DEQ staff.

*Opportunities for Comment:* Question and answer period. Comment cards were also available for people to write down questions or comments for follow-up by Columbia Biogas team members.

- Columbia Slough Watershed Council General Meeting, October 25<sup>th</sup>, 2010  
Guest speaker on agenda of regularly scheduled general meeting. Thirty minute presentation including a question and answer period.

*Promotion:* Columbia Slough Watershed Council website.

*Attendance:* 20 to 25 members of the Board of Directors and visitors.

*Opportunities for Comment:* Question and answer period.

- Tour of Site for Proposed Columbia Biogas Facility, November 4<sup>th</sup>, 2010  
Conducted a tour of 6849 N.E. Columbia Blvd., the location of the proposed facility. Explained the lay out of the facility on the site and answered questions.  
*Promotion:* Chair of Cully Association of Neighbors and Executive Director of Columbia Slough Watershed Council informed membership of tour.  
*Attendance:* 10 people including Cully residents, members of the Columbia Slough Watershed Council and a representative of Verde.  
*Opportunity for Comment:* Open discussion during the tour with questions and answers.

- Tour of Durham Advanced Waste Water Treatment Facility, December 6<sup>th</sup>, 2010  
Planned tour of facility with odor control technology similar to that planned for Columbia Biogas.  
*Promotion:* Announced at Neighborhood Advisory Committee meeting. Chair of Cully Association of Neighbors to inform general membership.  
*Attendance:* To Be Determined.  
*Opportunity for Comment:* Plan for open discussion during the tour with questions and answers.

#### Website

The purpose of the website is to provide information about the project and allow for public comment. The website address is [www.columbiabiogas.com](http://www.columbiabiogas.com). It contains information about the facility, the products produced, services provided, the project team, and provides answers to frequently asked questions. It also provides a means for the public to ask questions or post comments. Queries submitted via the website are answered in a timely manner.

#### Neighborhood Advisory Committee

Formed a Neighborhood Advisory Committee to foster ongoing communication between the neighborhood and Columbia Biogas. The first task of the Committee will be to develop a Good Neighbor Plan. The Committee will meet on a regular basis and serve as a forum to discuss areas of interest and concern. The first meeting of the Committee was held on Wednesday, November 10<sup>th</sup> and a total of eleven people were in attendance as well as several members of the Columbia Biogas team. Attendees represented the following organizations: Cully Association of Neighbors, Concordia Neighborhood Association, Central Northeast Neighbors, Columbia



Slough Watershed Council, Verde, Hacienda Community Development Corporation, Native American Youth and Family Center, and the City of Portland Bureau of Environmental Services. The next meeting is scheduled for Monday, November 29<sup>th</sup>.

### **Governmental Relations**

A series of meetings have been held with elected officials and local government staff to provide information about the project, discuss how the facility will integrate into the solid waste management system and other regulatory and environmental programs, and identify areas of interest and concern.

Special effort was made to meet with local government solid waste staff as well as Metro solid waste staff. The purpose of these meetings was to discuss how the facility would integrate into the existing regulatory system in different jurisdictions and understand the status of planning efforts for food waste collection and recovery. The goal is to develop understanding in order to work in partnership with regional and local governments throughout the metropolitan area.

### Elected Officials

- Oregon State Representative  
Tina Kotek
- Oregon State Senator  
Chip Shields
- Oregon State Representative  
Jules Bailey
- Mayor of the City of Portland  
Sam Adams
- Metro Councilors  
David Bragdon (former Council President)  
Rex Burkholder  
Kathryn Harrington  
Rod Park  
Carlotta Collette  
Robert Liberty  
Carl Hosticka

### Regional Government Staff – Solid Waste

- Metro, Resource Conservation and Recycling  
Matt Korot, Resource Conservation and Recycling Program Director  
Jennifer Erickson, Senior Planner
- Metro, Solid Waste Compliance and Cleanup  
Roy Brower, Regulatory Affairs Manager  
Bill Metzler, Senior Planner  
Warren Johnson, Compliance Supervisor

### Local Government Staff - Solid Waste

- City of Portland, Bureau of Planning and Sustainability  
Bruce Walker, Solid Waste and Recycling Program Manager and other staff
- City of Gresham, Department of Environmental Services  
Dan Blue, Recycling and Solid Waste Program Manager and other staff
- City of Beaverton, Recycling and Garbage  
Scott Keller, Program Manager and other staff
- Clackamas County, Office of Sustainability

- Rick Winterhalter, Senior Sustainability Analyst and other staff
- Washington County, Solid Waste and Recycling  
Theresa Koppang, Solid Waste Supervisor
- City of Vancouver, Washington, Public Works Solid Waste Services  
Rich McConaghy, Environmental Resource Manager and other staff
- Clark County, Washington, Department of Public Works  
Anita Largent, Solid Waste Manager and other staff

#### Local Government Staff - Other Agencies

- City of Portland, Bureau of Planning and Sustainability  
Debbie Bischoff, Senior Planner
- City of Portland, Bureau of Environmental Services  
Nancy Hendrickson, Columbia Slough Watershed Manager  
Susan Barthel, Program Coordinator
- Multnomah County Drainage District No. 1  
Dave Hendricks, Deputy Director

#### Other Governmental Agencies

- Port of Portland  
Stan Jones, Aviation Environmental Compliance Manager and other staff

#### **Public Relations**

To date, public relations efforts have included responding to interview requests from media sources.

#### Media

- Sustainable Business Oregon, October 21, 2010  
<http://www.sustainablebusinessoregon.com/articles/2010/10/columbia-biogas-plans-waste-to-power-pla.html>
- Daily Oregon Business Magazine email, October 21, 2010  
<http://www.oregonbusiness.com/high-five/10-high-five/4296-biogas-facility-planned-in-portland>
- Daily Journal of Commerce, October 21, 2010  
<http://djcoregon.com/news/2010/10/21/north-portland-facility-would-turn-food-into-power/>
- Oregonian, October 30, 2010  
[http://www.oregonlive.com/portland/index.ssf/2010/10/food-compost\\_plant\\_in\\_northeas.html](http://www.oregonlive.com/portland/index.ssf/2010/10/food-compost_plant_in_northeas.html)
- The Hollywood Star News, *Cully waste processor claims low impact*, November 2010



