

**Metro Organics Research Project**  
**Final Report of Findings**  
**October 29, 2009**

**Introduction**

Metro contracted with Tabor Consulting Group to conduct research to determine the potential for existing local yard debris processors and nursery operations on low-value farm land to accept organic waste (all food waste including meats and dairy and non-recyclable paper) for composting. The goal was to assess the level of interest in accepting the material, explore logistical issues including capacity and capital costs, determine the regulatory process involving land use and zoning, identify other barriers that exist, and discuss the type of assistance needed from regional and local government. A total of twenty-one in-person and telephone interviews were conducted with representatives from state and local government, existing yard debris processors, nursery stock producers, and related trade associations.

**Key Findings**

**Regulators**

The local land use review process required to obtain a conditional use permit was identified as the biggest barrier to siting a new composting facility or making improvements to an existing facility. It was suggested that local governments could help overcome this barrier by designating specific zoning districts where waste-related uses such as composting are considered a permitted use and allowed by right, thereby eliminated the need to obtain a conditional use permit.

Local land use regulations guide the process. State law requires each city and county to adopt a comprehensive plan and the local zoning and land-division ordinances needed to put the plan into effect. The local comprehensive plans must be consistent with the Statewide Planning Goals. The local government plan is the controlling document for land use in the area covered by that plan.

State administrative rules that apply are contained in OAR 660-033-0120 and 0130. The intent is to preserve high value farmland and to minimize the amount of land with good soil that is covered by non-farm operations such as composting while recognizing that this is a legitimate use of the land. The State rules do not address the type of feedstock or where the feedstock comes from. The rules favor composting operations sited on land not defined as high-value farmland.

The land use rules in all jurisdictions, except for the cities of Portland and Fairview, consider composting facilities a conditional use and are allowed only in specific zoning districts. The process to obtain a conditional use permit is lengthy and involves a land use review. Site improvements at a location with an existing conditional use permit also

trigger this process. Depending on what the property owner is seeking, the land use review could take anywhere from 3 to 6 months.

The cities of Portland and Fairview consider a composting facility as a permitted use on land that has been zoned for industrial use. The use is permitted outright, and does not require land use review. The City of Portland also requires that all the conditions contained in the City's planning and zoning code, Title 33, Planning and Zoning, Chapter 33.140.100 are met.

Clackamas County is the only county with a zoning and development ordinance that clearly defines the type of feedstock that can be accepted at a compost facility. Meat and dairy are not included in this definition. The ordinance, known as Chapter 834, must be amended to allow meat and dairy to be delivered to a composting facility without the facility being subject to zoning and development ordinance requirements for a transfer station or landfill. In all other areas, the type of feedstock is not defined. However, the facility must comply with all regulations including those concerning odor and vector.

## Yard Debris Facility Operators

The major issues for yard debris facility operators are:

- Uncertainty surrounding interpretation and requirements of new DEQ rules
- Cost to make improvements
- Land use review process

The new DEQ rules do not provide clear guidelines regarding compliance issues, and it is unclear how the criteria will be interpreted. The uncertainty about requirements for compost water quality and storm water discharge has had an impact on the interest/ability of existing operations to add mixed organics. There is also a feeling of uncertainty about how new “performance” based rules will be enforced and if they will be fair (specific to agriculture vs. commercial composting operation).

Composting is a low profit margin business. Labor costs are high and compost is a lower value product. The question is how to balance the extra expense involved in the capital improvements required to take mixed organics with the limited revenue generated by the sale of the finished product. This is further exacerbated by the current economy, which makes it difficult to get bank loans and has caused concern that local governments will not raise tipping fees to fund the capital expenditures necessary to process mixed organics.

The land use review process is seen as onerous and expensive by many compost facility operators. It requires a great deal of staff time and skill to deal with city and county staff, elected officials, and the public. Small companies do not always have the expertise to successfully get through this process. It would be helpful if Metro and local government lent their weight to the permitting effort and acted as an advocate to get through the permitting process. Suggestions for assistance from Metro include:

- Hire a public relations firm to assist one or two yard debris facility operators navigate the land use review process and help persuade the public that accepting mixed organics is a positive thing that benefits the community and the environment.
- Develop information for yard debris facility operators to help them get through the land use review process.
- Provide financial assistance.
- Provide support in meetings related to the permit process.

From the local government perspective, Metro could assist in the land use process by making this a priority within its own land use department. The importance of the issue could be conveyed to local government land use planners and assistance could be provided where appropriate.

Recology (formerly Norcal and current owner of Nature’s Needs and Compost Oregon) is the only existing yard debris facility operator contacted that seemed to be moving forward with accepting mixed organics. Most other operators are concerned about the

impact the new DEQ rules will have on their current operations and are not interested in making changes until more is known about the process and results.

### Nursery Stock Producers

There may be interest among nursery stock producers to compost urban organics for use as a growth medium. The major concerns involve the safety of the finished compost in terms of plant health and the cost of composting versus the benefit the product could provide.

There has been discussion within the industry about conducting a pilot project to determine the viability of composting. Monrovia Nursery was mentioned as a potential participant in a pilot project. A partnership between multiple government agencies and the nursery industry would be helpful to plan this type of program along with grant funding to support implementation and evaluation.

Nursery stock producers and confined animal feeding operators may not provide stable, long-term processing options for urban organics. Composting is not their core businesses so they are more likely to end the practice due to economic changes or internal business decisions.

Wym Matthews, Oregon Department of Agriculture provided one potential contact through a public information request. Rock Ridge Farm/Dairy in Aurora, Oregon has some type of operation to compost mixed organics. For more information contact Charlie Eggert, 503-805-7805.

## **Interview Summaries**

### **Yard Debris Facility Operators**

**Paul Yamamoto, Vice President**

**Phil Graham, General Manager Composting Group**

Recology (formerly Norcal and current owner of Nature's Needs and Compost Oregon)  
707-693-2103

1. Do you have the capacity to expand or accept mixed organics? If so, how many tons a year?

Yes. They accept approximately 20,000 tons per year at Nature's Needs, and roughly the same at Compost Oregon. The franchise and permit cap at Nature's Needs is 50,000, so they have the capacity to take in 30,000 more tons per year.

2. Are you interested in doing it?

Yes, at both sites.

3. What is the capital investment needed to process mixed organics in compliance with the provisions of DEQ's proposed compost facility rules?

It is difficult to say because it is not clear what will be required. The rules are performance based and do not clearly state compliance expectations. They do not fully understand what will be required to manage the water run-off. They do plan to install a low-permeable/impermeable surface, roof over the operation, and improve storm water retention. Other changes are to be determined. The estimated capital investment is \$2 million.

4. What could Metro and the city/county in which you are located do to help your facility begin processing mixed organics?

In order to take urban organic waste, they must make capital improvements including paving more of the area and building an enclosure or roof over the operation. This will trigger the need for an updated conditional use permit. An updated conditional use permit is necessary to update their land use compatibility statement and obtain a DEQ permit. They do not see an issue with the conditional use permit, but the land use compatibility statement may be more difficult. They are concerned about perceived odor problems.

They could use support from Metro and local government getting through this process to obtain an updated land use compatibility statement. They need a show of support at public meetings and through phone calls from the solid waste and recycling staff at both agencies explaining why this is needed and the benefit of the operation.

5. What is your view of current and future markets for compost?

They are excited about the market potential. In northern California they have had a lot of success marketing the material for agricultural use. They want to pursue the same markets in Oregon and have already had some success with local vineyards.

The products currently produced by Nature's Needs are certified organic. They will continue this with any new products.

6. Other

The tightening of groundwater monitoring requirements could be a potential obstacle.

**Kathleen McFarlane**

McFarlane's Bark

503-659-4240

1. Do they have the capacity to expand or accept mixed organics? If so, how many tons per year?

No. They do not have the space to expand the operation to accept mixed organics...

2. Are they interested in doing it?

No. They looked into it 8 to 10 years ago. After visiting a facility near Tacoma, Washington they decided they did not have the space and it would be too expensive to make the necessary improvements to compost mixed organics.

3. If not, why not?

Following are the barriers identified with taking mixed organics as a feedstock:

- Financial
- Liability and risk
- Potential for negative reaction from neighboring property owners
- Land use review process

**Financial:** Composting is a low profit margin business. Labor costs are high and compost is a lower value product. They would need financial backing from other operations or an outside company to make the investment to expand their operation to take mixed organics. In addition, banks are reluctant to loan money right now and tax credits wouldn't pay for the improvements.

**Liability and risk:** Taking meat and dairy increases the risk to employees and worker liability due to vectors, potential pathogens, and other risks.

Potential for negative reaction from neighboring property owners: Many neighbors are large corporations. They have had problems in the past and don't want to have problems again. Vectors are a concern.

Land use review process: They do not have the staff time to work through the land use process. This is a time consuming process involving a lot of paperwork, meetings with the County and public involvement.

4. What is their view of the current and future market for compost?

Markets are very good right now.

**Will Gehr**

Clackamas Compost  
503-557-1028

1. Do they have the capacity to expand or accept mixed organics? If so, how many tons per year?

Yes. They may be able to accept another 20,000 tons per year.

2. Are they interested in doing it?

They are interested in taking mixed organics but face a number of barriers including:

- Cost to make improvements
- Uncertainty surrounding interpretation of new DEQ rules
- Lack of property ownership
- Local zoning and development ordinance does not allow meat and dairy

3. What is the estimated capital investment needed to process mixed organics in compliance with the provisions of DEQ's proposed compost facility rules?

The new DEQ rules do not provide clear guidelines regarding compliance issues, and it is unclear how the criteria will be interpreted. Performance based rules may be better than a prescriptive path in the long run, but right now it is a source of concern because there is no point of reference to predict how the rules will be applied in any given situation. As a result, everyone assumes the worst case and is not interested in making changes until more is known about the process and results.

After talking to staff at DEQ, several assumptions have been made about the estimated capital investment to comply with the requirements for the existing operation with an eye towards adding mixed organics. The facility is located near the river so it is assumed they will be subject to constructed water control features under the "site specific" proposed DEQ rules. The estimated capital investment for the worst case scenario is \$2 million which includes a covered building. The best case scenario is a liner and bioswale

for \$400,000. The general estimate is \$1 million in capital investment and staff time to meet the pending regulations for the current operation and go through the permitting process.

The land where the facility is sited is owned by another party. As a result, it may not make sense to make the investment. They are working on buying the site, but are not confident it will happen.

The question is how to balance the extra expense involved in taking mixed organics with the limited revenue generate by the sale of compost.

4. What could Metro and the city/county in which they are located do to help their facility begin processing mixed organics?

Chapter 834 of the Clackamas County Zoning and Development Ordinance contains the rules related to composting and yard debris processing facilities. The definition of green feedstocks that are allowable does not include meats and dairy. Clackamas County needs to amend Chapter 834 to allow meats and dairy to be delivered to composters, without being subject to the Clackamas County zoning and development ordinance requirements for transfer stations or landfills.

In order to make significant changes on the property they must get another conditional use permit and go through the land use review process. This process is onerous and expensive. It requires a great deal of staff time and skill in dealing with the County staff, elected officials, and the public. Small companies do not have the expertise to successfully get through this process.

In general, it would be helpful if Metro and the County lent their weight to the permitting effort and acted as an advocate to get through the permitting process. Metro could hire a public relations firm to assist one or two processors navigate the land use review process and help persuade the public that accepting mixed organics is a positive thing that benefits the community and the environment. Metro could also develop information that would help processors in this area. Financial assistance could be provided, as well as support in meetings related to the permit process. Metro could also provide incentive payments to processors to help them make the changes necessary to take mixed organics.

Studies have shown that smaller scale facilities and decentralized systems are more successful. It is also a more sustainable model to keep the material in the area where it is generated. Government needs to recognize this and set up systems to facilitate this model. An example would be for Clackamas County to rewrite Chapter 834 to include meat and dairy. The composting method should also be standardized.



5. What is their view of the current and future market for compost?

Markets are strengthening even in a down economy. There is indication that farmers are interested in the material and there will be a growing agricultural demand. However, the bulk price for compost is low and it would be very helpful if this could double.

**Jill Jacobson**

Sunderland Recycling Facility (Portland Leaf)  
Portland Office of Transportation's Bureau of Maintenance  
503-823-1146

1. Do they have the capacity to expand or accept mixed organics? If so, how many tons per year?

No. They are at capacity with the leaves they compost. They do not have the space to take in another feedstock.

2. Are they interested in doing it? If so:

Not really. They have been approached by the City of Portland Bureau of Planning and Sustainability, but it has not been seriously considered.

3. If not, why not?

- Lack of space
- Not zoned to accept waste, so would have to go through a land use review process
- Potential issues with the neighbors

4. What is their view of the current and future market for compost?

They are able to market all the material they produce.

**Jeff Grimm**

Grimm's Fuel  
503-636-3623

1. Do they have the capacity to expand or accept mixed organics? If so, how many tons per year?

It is likely that they currently have enough space to accept mixed organics. They are also negotiating with neighboring landowners to acquire additional property.

2. Are they interested in doing it?

They have no immediate plans to take mixed organics.

3. If not, why not?

Barriers include:

- Uncertainty about DEQ rule changes in terms of existing operation
- Land use review process
- Cost

They have talked about taking mixed organics, but a lot depends on the pending rule changes. At this point, they are unclear about what the new regulations will require in terms of their existing operation.

The land use review process would be a problem. The facility is within Tualatin city limits. The access roads are in the County right-of-way. They are also bordered by property under the jurisdiction of the Oregon Department of Transportation. During a recent improvement process they worked with City and County land use officials, which proved to be very difficult and parties ultimately ended up in court. They did not have as many problems with the City land use officials. They are reluctant to make any improvements that would cause them any additional involvement with land use officials.

During the land use review and permitting process, it would have been helpful to have support from Metro and other agencies involved with the solid waste, recycling, and composting. This could include a letter of encouragement.

Adding meat and cheese to existing feedstock is likely to require changes to current operations. Odors and vectors are an issue. If they acquired additional property they could set up an ag-bag system. However, it is difficult to get money right now for any type of capital investment.

4. What is their view of the current and future market for compost?

Markets are good right now. There is a steady supply of feedstock and the price for finished products is good.

NOTE: Grimm's Fuel is within the city of Tualatin. Kathy Kaatz at the City of Tualatin was contacted. She referred the inquiry to Doug Rux the Community Development Director, 503-691-3018 who was unavailable during the time frame of this project.

**Bud Dow**

Northwest Environmental  
503-357-6090

1. Do they have the capacity to expand or accept mixed organics? If so, how many tons per year?

Not interested in taking mixed organics.

2. Are they interested in doing it?

No.

3. If not, why not?

He is not interested in taking mixed organics because of the DEQ rule changes. He thinks they will be treated like a landfill and is worried about fines. He is also concerned about keeping his existing operation under the new rules.

4. What is their view of the current and future market for compost?

Markets are good.

NOTE: Northwest Environmental is within the city of Cornelius. Jerry Green with Washington County referred inquiries to Mark Crowell, City of Cornelius Operations Manager, 503-357-3011 x373 who was unavailable during the time frame of this project.

**Andy Hutchinson**

Allwood Recyclers

503-667-5497

1. Do they have the capacity to expand or accept mixed organics? If so, how many tons per year?

He does have the capacity, but is not interested in taking mixed organics.

2. Are they interested in doing it?

No.

3. If not, why not?

He has looked into taking mixed organics and visited a facility in Washington ten years ago. He feels it is too expensive and is not sure it would be successful.

4. What is their view of the current and future market for compost?

Markets are good. More homeowners are purchasing material, but fewer contractors are buying material in bulk. This may be due to the downturn in the economy and decrease in construction.

**Matt Stern**

Western Oregon Waste, Greenlands  
503-474-4848

1. General Comments

The new DEQ rules do not provide clear guidelines regarding compliance issues, especially surrounding water quality requirements. Facilities are concerned that existing operations may not comply and are reluctant to make the investment to take mixed organics before the screening process has been completed. The last thing a facility wants to do is add a new feedstock and be out of compliance.

There is concern that compliance with the new DEQ rules may result in facility closures or consolidation. Will there be enough of a return on investment to comply with new rules to make it worth staying in business?

The general feeling is that the capital investment to comply with new rules for existing operations will depend on the magnitude of the water quality treatment system needed. Facilities may have to spend significant amounts of money to contain water. At this point, cost estimates are in the range of \$1 million.

The current economy has added a new wrinkle because local jurisdictions are not as likely to raise the rates to cover the cost of capital improvements to comply with the DEQ rule changes for existing operations let alone the cost associated with adding mixed organics.

The general view of the markets is very strong. The demand for compost currently outstrips the supply.

**Local Government**

**Jerry Green**

Washington County, Solid Waste Facility Regulation  
503-846-3663

All the following information is specific to Nature's Needs (Great Northwest Recycling of Oregon, Inc., a subsidiary of Recology)

1. Would local land use rules allow for composting of mixed organics at this facility?

Yes. They have a current conditional use permit to operate the composting facility in an AF-20 agricultural zone on non-prime land. The permit allows them to accept food waste as a feedstock in the composting process. They currently take in some food waste from Safeway. The particular feedstock is not an issue from the zoning perspective.

2. If so, what is the process that the facility would need to undertake to get local approval, including specific steps and expected timeline?

Site improvements are needed to accept more organic waste including meat and dairy. More of the area must be paved and an enclosure constructed in order to provide surface and groundwater protection and control odor and vectors. These site improvements will trigger the requirement for a new conditional use permit. This new conditional use permit would then be reflected in the issuance of an updated land use compatibility statement from the County, which is required by DEQ in order to get a DEQ composting permit.

An updated conditional use permit is considered a Type III land use action. Following is a generalized summary of steps, which take 3 months:

1. Pre-application conference with staff (unless waived by the applicant)
2. Neighborhood Meeting (if applicable)
3. Application submitted
4. Staff reviews application for acceptance
5. Notice to applicant of acceptance of application
6. Staff schedules public hearing before the Hearings Officer
7. Applicant posts property (Rural applicants only)
8. Staff mails Public Notice to surrounding property owners (500 ft. urban, 1000 ft. rural) and Citizen Participation Organizations at least 20 days prior to the hearing
9. Staff report prepared (available 7 days before hearing)
10. Public hearing before the Hearings Officer or the Planning Commission (for plan amendments)
11. Decision by Hearings Officer
12. Staff mails Notice of Decision to applicant, CPO, and those who testified
13. 21 day appeal period (to Land Use Board of Appeals), 14 day appeal period for plan amendment (appeals to the Board of County Commissioners)

It is expected that the conditional use permit will be approved with conditions that include compliance with:

- Rules and regulations of DEQ compost permit
- Metro designated facility permit
- Washington County franchise agreement

The City of North Plains has concerns about traffic and odor. These concerns may come up at the public hearing. Great Northwest Recycling of Oregon, Inc., has entered into an agreement with the City of North Plains to provide a financial contribution to the city in order to maintain the section of road that is inside City limits to address the concern about traffic. The franchise agreement, DEQ permit and Metro permit all deal with odor control.

Storm water management is not an issue from an engineering perspective. It is an issue of capital investment. The County is trying to get some stimulus money to help Great Northwest Recycling of Oregon, Inc., with the capital investment required.

The process of obtaining the land use compatibility statement from the County is not seen as a barrier.

3. What additional hurdles are there?

The perception of odor will be an issue, but the County feels that will be covered under Washington County franchise requirements and DEQ and Metro permit requirements.

Capacity is not an issue. The current franchise and permit cap are set at 50,000 tons annually for all material. Currently they take in half that amount.

**Babe O’Sullivan**

City of Portland, Bureau of Planning and Sustainability  
503-823-9582

And

**Melinda Rosenfeld and Jean Hester**

City of Portland, Bureau of Development Services  
Development Services Center  
503-823-6046

1. Would local land use rules allow for composting of mixed organics?

Yes, a composting facility is considered a waste-related use and is allowed on available land that has been zoned for industrial use. A conditional use permit and land use review are not required if all of the conditions contained in Title 33, Planning and Zoning Chapter 33.140.100 are met as follows:

- i. The use has be approved by Metro under their authority as prescribed in ORS 268.317;
- ii. Metro’s approval of the use includes a mitigation plan. The requirements of the mitigation plan must be approved by the City Council through an intergovernmental agreement with Metro, adopted prior to Metro’s approval of the use; and
- iii. The location of the use must be in conformance with Metro’s Regional Solid Waste Management Plan.

2. What is the process that the facility would need to undertake to get local approval, including specific steps and expected timeline?

- Select a site on land that has been zoned for industrial use.
- Identify any overlay zones: Once a site has been identified, the first step is to determine if there are any environmental or greenway overlays. The overlay zones are intended to protect and conserve important natural resource values and functions throughout Portland's watersheds. If there is a greenway overlay or if the project involves building in the environmental zone there must be an environmental review. An environmental review is an 8-10 week public notice process
- Comply with all conditions specified in Title 33, Chapter 33 under waste-related limitations: There is no precedent for conforming to the rules in the zoning code listed above. It has not been implemented to date. The biggest question is the development and approval of the mitigation plan. It is unclear what would be included in the plan or how long the approval process might take.
- Comply with requirements of City Bureaus and other regulatory agencies: Melinda Rosenfeld provided the following list of contact names and a brief description of what aspect of the project they would review. She also emailed the group with a general summary of the project included below.

*"Metro is looking at developing a regional composting facility. It would involve installation of concrete pads upon which organic materials would be placed and covered with Gore-Tex jackets. There would also be a building (either new or renovated) to house materials with very limited staff and associated parking. Materials would be trucked in, either by contracted haulers or by a separate truck fleet. The trucks may or may not be parked on site when not in use, depending on what the hauling arrangement is. The overall site will be approx 15-20 acres in size. Some of the potential sites are brownfields. Some are within Portland city limits and others are in unincorporated Multnomah County."*

**Permitting Services** Melinda Rosenfeld 503-823-6046

[melinda.rosenfeld@ci.portland.or.us](mailto:melinda.rosenfeld@ci.portland.or.us)

Process questions, submittal requirements, fee estimates, general info

**Planning & Zoning** Jean Hester 503-823-7783 [jean.hester@ci.portland.or.us](mailto:jean.hester@ci.portland.or.us)

Zoning Code - site zoning, setbacks, landscaping, parking, bike parking, etc

**Life Safety** Connie Jones 503-823-3958 [connie.jones@ci.portland.or.us](mailto:connie.jones@ci.portland.or.us)

Building Code - occupancy, egress, seismic upgrade reqmts, accessibility reqmts, etc

**Fire Marshal** Rich Butcher 503-823-3802 [rbutcher@fire.ci.portland.or.us](mailto:rbutcher@fire.ci.portland.or.us)

Site access, fire sprinklers

**Source Control** Sebrina Nelson-Deal 503-823-5843

[sebrinand@bes.ci.portland.or.us](mailto:sebrinand@bes.ci.portland.or.us) or Greg East 503-823-7577  
[grege@bes.ci.portland.or.us](mailto:grege@bes.ci.portland.or.us)

Waste containment, truck washing, brownfields development, UICs, dewatering

**Environmental Services** Joe Blanco 503-823-2059 [joeb@bes.ci.portland.or.us](mailto:joeb@bes.ci.portland.or.us)

On-site stormwater disposal reqmts, sanitary/storm sewer connections, Sanitary & Storm System Development Charges

**Subsurface** Mike Ebeling 503-823-7247 [mike.ebeling@ci.portland.or.us](mailto:mike.ebeling@ci.portland.or.us)

On-site stormwater disposal design/feasibility, soil infiltration

**Commercial Plumbing** Marv Morlan 503-823-7317

[marv.morlan@ci.portland.or.us](mailto:marv.morlan@ci.portland.or.us)

Plumbing Code

**Site Development** George Helm 503-823-7201 [george.helm@ci.portland.or.us](mailto:george.helm@ci.portland.or.us)

Geotechnical & soils questions, flood plain development

**Transportation** Tom Biornstad 503-823-6890 [tom.biornstad@pdxtrans.org](mailto:tom.biornstad@pdxtrans.org)

ROW work (driveways & sidewalks), ROW dedications, Transportation System Development Charges (SDCs)

**Water Bureau** Mari Moore 503-823-7364 [mmoore@water.ci.portland.or.us](mailto:mmoore@water.ci.portland.or.us)

Water line upsize & related SDC fees

**Parks SDC** Steve Pearson 503-823-5443 [steve.pearson@ci.portland.or.us](mailto:steve.pearson@ci.portland.or.us)

Parks SDC fees

It is difficult to predict the timeline for the review process because it depends on the site, the scope of work, and completeness of the plans and drawings that are submitted to the City. A rough estimate of the timeline is six to eight weeks assuming the site does not require an environmental review. In which case, an addition eight to ten weeks would be required to complete the process.

There is some coordination between the City and unincorporated Multnomah County in this process. The City has an intergovernmental agreement with Multnomah County to enforce the requirements of the Stormwater Management Manual (SWMM) in unincorporated areas related to Source Control (specifically Chapter 4). As a result, Source Control is involved in the review process. The City also provides building review services for projects in unincorporated areas of the County. This is limited to review of the structure itself and compliance with the building code including occupancy, egress, seismic upgrade requirements, accessibility, etc. Other City agencies that coordinate with the County include the Fire Marshal, Subsurface, and Commercial Plumbing.

### 3. What additional hurdles are there?

The biggest hurdle would probably be compliance with Source Control including Stormwater Source Control. The Stormwater Source Control Section's programs control pollutants in stormwater runoff at their source, and protect the storm sewer system from non-stormwater discharges. The section works with facilities to implement best management practices that reduce stormwater pollution. The Environmental Services Source Control Division works with commercial and industrial customers to control pollution at its source by minimizing pollutants used in manufacturing, encouraging



businesses to reuse potential pollutants, and treating pollutants before they are released to the environment.

Source Control coordinates with DEQ in regard to permit requirements. Which ever agency has the stricter rules apply. In general, the City rules have applied but if the new DEQ compost facility rules are stricter then those rules will take precedent.

**Don Kienholz**

Multnomah County Land Use and Transportation Program

[don.d.kienholz@co.multnomah.or.us](mailto:don.d.kienholz@co.multnomah.or.us)

1. Would local land use rules allow for composting of mixed organics?

Yes.

2. What is the process that the facility would need to undertake to get local approval, including specific steps and expected timeline?

Depending on what the property owner was seeking it would be reviewed as a Type II administrative review (roughly 4 months) or a Type III Conditional Use review (roughly 6 months). It is likely that a compost facility would require a Type III Conditional Use review.

The County has some hand out materials that describe the Type II land use process, but hasn't yet finalized the Type III process hand out. The Type II process hand out is not yet available online. The Type III process is similar to what is described in the interview with Jerry Green with Washington County.

Much of the time it takes to review depends on the completeness of the application and if the property and all structures were lawfully established. Local service providers must also certify they are able to provide services such as fire protection and sanitary review.

The County does some coordinated work with the City of Portland but it centers on building permits for the west side of the county and sanitation permits. Multnomah County does not have a building department and contracts with Portland for all trade permits on the west side and the City of Gresham for building permits on the east side of the County.

**Rick Winterhalter**

Clackamas County Solid Waste

503-742-4466

1. Would local land use rules allow for composting of mixed organics at this facility?

No. Chapter 834 of the Clackamas County Zoning and Development Ordinance contains the rules related to composting and yard debris processing facilities. The definition of green feedstocks that are allowable does not include meats and dairy. So any new facility

or existing facility with a conditional land-use permit is not allowed to take mixed organics.

The exception may be Clackamas Compost which has a non-conforming land use permit. This means that the facility, as currently operated, does not have to comply with Chapter 843. However, site modifications would require an alteration to the existing non-conforming use permit. This would subject the facility to the administrative action review process as defined in Sections 1200 and 1300 of the Clackamas County Zoning and Development Ordinance. It is unclear whether or not the result of this process would be a requirement to comply with Chapter 834. If it does, then the facility could not take meat and dairy. The administrative action review process is described below.

2. What is the process that a facility would need to undertake to get local approval, including specific steps and expected timeline?

Chapter 834 must be amended to allow meats and dairy to be delivered to composters, without being subject to the Clackamas County zoning and development ordinance requirements for transfer stations or landfills. The process to change the 834 involves work by internal staff to draft the changes, input and support of the land use planners, and approval by the Clackamas County Board of Commissioners. The County is currently reviewing the zoning and development ordinance to identify codified barriers to achieving the County's commitment to Sustainability practices.

If Chapter 834 is amended, and the facility is sited in a permitted zoning district as described in Chapter 834, a conditional use permit must be obtained. Application for a condition use permit is subject to the administrative action review process as defined in Sections 1200 and 1300 of the Clackamas County Zoning and Development Ordinance. In brief, the administrative action review process includes the submission of an application and all necessary documents, public notice, a public hearing before a Hearing Officer, and review and final decision by a Hearing Officers. The process can take 3 to 5 months.

3. What additional hurdles are there?

The process of obtaining a conditional use permit is time consuming and expensive. To avoid this process the County needs to define a zoning district where the use is allowed similar to the City of Portland.

McFarlane's Bark is unlikely to obtain approval to take mixed organics because of the facility size, location, and the lack of space for expansion.

Clackamas Compost does not own the land where the facility is currently located. The facility is also located near the river, so it may be subject to constructed water control features under the "site specific" proposed DEQ rules.

Metro could provide support on land-use issues. It would be helpful if Metro's land-use staff worked with local government land-use staff to make the process easier.

**Lindsey Nesbitt**

City of Fairview, Community Development  
503-674-6230

1. Would local land use rules allow for composting of mixed organics at this facility?

Yes. The Allwood Recyclers facility is currently zoned Agricultural Holding (AH). The AH zone is a holding zone until the property is rezoned to General Industrial (GI). She spoke with the Community Development Director and after reviewing the development code they determined that the Allwood facility is an appropriate place to handle the food waste composting. They determined the AH/GI zone is the correct zone for this type of business and also determined that the food waste composting is similar to the current uses at the Allwood facility.

2. If so, what is the process that the facility would need to undertake to get local approval, including specific steps and expected timeline?

In order to site the food waste at this facility, land use permits, or zone changes are not required since the existing facility is already facilitating a similar use. The Allwood site does have 2 issues, there is a mapped riparian resource, the creek, and the site is also identified as a culturally sensitive site. Prior to utilizing this site for food waste composting, we would need to review a site plan showing the footprint of the food waste operation. The footprint must be a minimum of 50 feet away from the creek and we will want to ensure the footprint is not expanded, without reviewing the site for cultural sensitivity. If the footprint is expanded and more land area is disturbed, we will have to review the site to make sure it has been properly surveyed for artifacts. The applicable code section addressing these two issues is FMC 19.100 Significant Environmental Concern Overlay (<http://www.codepublishing.com/OR/fairview.html> ).

A food waste composting facility is considered a permitted use in the City of Fairview in the General Industrial (GI) zone. The use is permitted outright, and would not require land use review. However, buildings require Design Review, so if new buildings are to be constructed, a land use application would be required. Also if the site has riparian resources, additional land use review may be required. The Planning Department should be consulted at the beginning of the site selection process to identify these issues. The Public Works department would also be involved because the majority of the City is located in a Wellfield Protection Area, which requires additional measures and precautions for handling stormwater run off.

3. What additional hurdles are there?

There is concern about potential hazards to humans with food waste composting. They would like to learn more about potential health hazards/problems and what is typically done as prevention measures.

## **Nursery/Agriculture**

### **Wym Matthews**

Oregon Department of Agriculture  
503-986-4792

1. Is there interest in composting “urban” organics?

There is interest in composting urban organics, but it creates new challenges including:

- Vector and odor control
- Prevention of surface and groundwater contamination

It is likely that confined animal feeding operations (CAFO) will be the most interested in adding this feedstock. It is unclear how many agricultural operations will be interested.

There are currently seven or eight CAFOs in or near the Metro with “approved” composting operations that may have the ability to accept this feedstock and see the benefit of the addition revenue this may bring. However, this may not be a stable, long-term processing option. Most CAFOs compost to manage their own waste and it is not part of their core business. Two operations have recently cancelled their composting plans/permits with the Department of Ag stating business reasons.

2. What is the estimated capital investment needed to process mixed organics in compliance with the provisions of DEQ’s proposed compost facility rules?

It is difficult to predict the capital investment, but it will likely include construction of covered areas for composting to prevent discharge and facilitate year-around operations.

The Department of Agriculture is most concerned about surface and groundwater contamination and other sources of pollution. The addition of mixed organics will likely increase the water content of the composting operation and cause more discharge. The result may be a higher risk of surface and groundwater contamination. To contain discharge, facilities may construct covered areas for composting. In addition, contractual agreements to accept urban organics will require year around operations. Covered areas for composting will minimize discharge in the rainy months.

3. What could Metro and the city/county in which they are located do to help their facility begin processing mixed organics?

It will be important to see how the regulatory process flows once the rules have been approved. Assistance may be needed to facilitate getting people into the process.

4. Would all the finished compost be used on-site? If not, what are their anticipated markets?

CAFO composting operations are likely to include animal mortalities. Finished compost from these operations cannot be applied to food crops and is more likely to be used on-site.

**Jim Johnson**

Oregon Department of Agriculture  
503-986-4706

1. General Comments

As long as composting is related to a farm use, it does not require a land use permit. Under the proposed DEQ rules it may require a permit from DEQ.

In general the ODA does not care what feedstocks are used in the composting process or where they come from. Their concern is whether or not it is a farm use. The local governments make the determination on whether composting is a stand alone operation and subject to local land use regulations or a farm use.

Metro could contact the Oregon Farm Bureau or the Oregon Dairymen's Association to provide information about the proposed rule changes and potential opportunities.

**Jennifer Donnelly**

Oregon DLCD, Metro/Portland Representative  
971-673-0963

1. What land use rules would apply to an operation that composts mixed organics?

The local land use ordinances/rules would apply. Her department would not get involved unless a rule change was requested or no rule existed to address the issue. Details on the uses allowed in farm zones are found in ORS Chapter 215 and in Oregon Administrative Rules, Chapter 660, Division 33.

Oregon has set statewide goals that are achieved through local comprehensive planning. State law requires each city and county to adopt a comprehensive plan and the zoning and land-division ordinances needed to put the plan into effect. The local comprehensive plans must be consistent with the Statewide Planning Goals. Plans are reviewed for such consistency by the state's Land Conservation and Development Commission (LCDC). When LCDC officially approves a local government's plan, the plan is said to be 'acknowledged.' It then becomes the controlling document for land use in the area covered by that plan.

The goal that would apply in this situation is Goal 3: Agricultural Lands. Goal 3 defines “agricultural lands.” It then requires counties to inventory such lands and to “preserve and maintain” them through farm zoning.

**Katherine Daniels**

Oregon DLCD  
503-373-0050 x329

1. What land use rules would apply to an operation that composts mixed organics?

The Department of Land Conservation and Development is only concerned about the use of the land and the protection of farmland for agricultural use. They want to minimize the amount of land with good soils that is covered by non-farm operations such as composting while recognizing that this is a legitimate use of the land. They are not concerned about the type of feedstock or where the feedstock comes from.

The land use rules that apply are contained in Oregon Administrative Rules, Division 33 Agricultural Land. Specifically rule 660-033-0120 and 660-003-0130. Rule 0120 specifies uses allowed on agricultural land, which includes composting facilities on farms or for which a permit has been granted by the DEQ. Rule 0130 – 29(a) and (b) specify what type of operation is allowed on high-value farmland and land not defined as high-value farmland.

Composting operations and facilities allowed on high-value farmland are limited to those that are exempt from a permit from DEQ, only require approval of an Agricultural Compost Management Plan by ODA, or require a permit from DEQ where the compost is applied primarily on the subject farm or used to manage and dispose of by-products generated on the subject farm. Excess compost may be sold to neighboring farm operations in the local area. In other words, it is only allowed if it is part of the general operation of the farm.

Composting operations and facilities allowed on land not defined as high-value farmland are limited to those described above as well as operations that require a permit from DEQ. Onsite sales are limited to bulk loads of at least one unit (7.5 yards) in size and transported in one vehicle.

**Jeff Stone**

Government Relations, Oregon Association of Nurseries  
503-682-5089

1. Are nursery stock producers on low-value agricultural land interested in composting “urban” organics?

Nursery stock producers may be interested. The level of interest is dependent on the safety of the finished compost in terms of plant health and the cost of composting versus the benefit the product could provide. It is likely that the finished compost would be used

as a growth medium by the producers. Safety and regulatory issues are a key concern. The nursery industry is regulated at the state and federal level to assure plant health standards. Producers would need to be sure that the finished compost was safe for nursery stock and would not create plant disease. The cost to produce the material including the value of the land needed for processing, labor costs, and equipment would need to be less than a comparable growth medium currently in use.

There has been discussion within the industry about conducting a pilot project to determine if composting might be a viable option. Monrovia Nursery was mentioned as a company that might be interested in participating in a pilot project. Nursery stock producers are generally interested in having as much control of their supply chain as possible. The ability to produce a necessary feedstock such as compost on-site rather than purchasing it from an outside vendor is seen as a benefit.

2. What is the estimated capital investment needed to process mixed organics in compliance with the provisions of DEQ's proposed composting facility rules?

The discussion within the industry has not gone as far as to identify specific composting processes or estimate the necessary capital investment. A pilot project would be useful in determining this information as well addressing concerns regarding plant disease.

3. What could Metro and the city/county in which they are located do to help their facility begin processing mixed organics?

A partnership between multiple government agencies and the nursery industry would be helpful to plan this type of program along with grant funding to support implementation and evaluation. Local governments could help mitigate potential land use issues including problems with smell or other concerns.

4. Would all the finished compost be used on-site? If not, what are their anticipated markets?

It is likely that the material would be used on site as a growth media, but it could also be sold to the public.

## **Compost Facility Representatives**

### **Kristan Mitchell**

Oregon Refuse and Recycling Association (ORRA)  
503-588-1837

1. What issues would impact the ability of an existing processor/commercial composter to accept urban organic waste?

Uncertainty about the enforcement of the new “performance” based rules, particularly management of storm water. Operators are not sure how they will be required to manage the water discharge related to the composting operation and the related financial impact of compliance. Adding food waste may change the nature of the water discharge and place them in a higher environmental risk category that requires a composting permit.

2. Is there interest in taking the material? If not, why not?

There is interest in taking the material, but uncertainty about how the new rules will be enforced and if they will be fair.

3. What is your view of the current and future market for compost?

Some ORRA members are moving towards getting organic certification because they view it as a way to add value to their product. Most members currently report a strong market for the product.

4. Other

## **Other Representatives**

### **Charlie Landman**

DEQ  
503-229-6461

1. Where there any major issues or concerns from the commercial refuse and recycling industry, composting operators, agriculture industry, or government representatives during the rule making process?

No major issues or concerns. The agricultural representatives are comfortable with the rules. However, they may be surprised that they will be dealing with DEQ rather than the Department of Agriculture.



2. What do you see as the major barriers to including mixed organic waste as a feedstock in the composting process?

The rules are performance based. They do not care what type of feedstock is included as long as the operation does not pollute surface or ground water, achieves pathogen reduction and there are no odor or vector problems.

Land use issues may come into play when expanding an existing operation or siting a new one. The operations are likely to be on low value farm land with conditional use permits. It may be difficult for existing processors to include mixed organic waste because they will need a more sophisticated system that will require additional capital.

3. What is your view of the current and future market for compost?

The ideal market for compost that includes mixed organic waste should be the farms themselves. On a farm a closed-loop process would be the most efficient where they recycle the water run-off from the operation onto food crops.