



# Walla Walla County Community Development Department

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Date: December 14, 2020  
Date Prepared: December 11, 2020  
To: Walla Walla County Planning Commission  
From: Lauren Prentice, Director  
RE: Workshop – Zoning Code Text Amendment – Dressler Application, ZCA18-003, MODIFIED request to allow Organic Waste Processing Facilities in the Light Industrial (LI) zoning district.

## **Background**

In December of 2018 the County received an application for a Zoning Code Text Amendment application submitted by Mr. David Dressler representing a company called Bio-Environmental Resource Recovery International (BERRI). This was an out-of-cycle amendment application; permission to apply as such was granted approval by the Board of County Commissioners (by consent) in the summer of 2018 following a presentation and request by Mr. Dressler.

In his 2018 application, Mr. Dressler proposed that the County amend the Permitted Uses Table (Walla Walla County Code Section 17.16.014) to allow Organic Waste Processing Facilities in the Agriculture Residential zoning district (AR-10). This is a request to amend the County development regulations only. It is not a request to amend the Comprehensive Plan.

Currently, Organic Waste Processing Facilities are only allowed in the following zones:

- Primary Agriculture 40 (PA-40) (administrative conditional use permit required);
- Industrial Agriculture – Mixed (IA-M) (permitted outright); and
- Industrial Agriculture – Heavy (IA-H) (permitted outright).

Walla Walla County has a definition of ‘Organic Waste Processing Facility’ in Walla Walla County Code (WWCC) Chapter 17.08.

*WWCC 17.08.364 - Organic waste processing facility. "Organic waste processing facility" means a facility that is operated for the purpose of producing marketable compost, other soil amendments, and/or energy recovery from the on-site and/or off-site organic material fraction of the waste stream, provides a direct benefit/link to the agricultural operation on the premises and other agricultural lands in the vicinity, and is permitted, designed in compliance with the applicable regulations contained in the Washington Administrative Code Chapter 173-350. Feedstock may include, but is not limited to agricultural waste, industrial food processing waste, commercial and residential yard waste, biosolids, or food waste from local or regional sources."*

In December 2017 Mr. Dressler submitted a code interpretation request to the Community Development Department asking whether his project could be conducted within the Agriculture Residential 10-acre (AR-10) zoning district. Then Community Development Department (CDD) Director Tom Glover issued an interpretation that his project met the definition in the code for an ‘Organic Waste Processing Facility’ and this was not allowed in the AR-10 district per WWCC 17.16.014. This determination led Mr. Dressler to submit his original zoning code amendment application.

The Planning Commission reviewed Mr. Dressler's December 2018 application in workshop meetings on February 6 and March 20, 2019. After these meetings Mr. Dressler asked the Community Development Department to put processing of his application on hold.

### **Modified Request**

Mr. Dressler has submitted a revised request. Instead of proposing to make this use an allowed use in the Agriculture Residential 10 (AR-10) zoning district, he has proposed to allow it in the Light Industrial (LI) zoning district. The LI district is an Urban zoning district. As noted above, this use is permitted outright in two industrial zones, the Industrial Agriculture Mixed and Heavy districts. The IA zones are only located within the Attalia Urban Growth Area (UGA), so his proposal to amend the code to allow for this use to be located in the LI zone would provide options for these facilities to be located in the College Place, Walla Walla, and Burbank UGA's.

Mr. Dressler submitted revised application documents (Exhibits A and B) as well as a new one-page summary about his project. These documents are included as Attachments A-C.

### **Attachments**

- A. Revised ZCA18-003 Exhibit A
- B. Revised ZCA18-003 Exhibit B
- C. Summary of BERRI Project

### **Purpose of Workshop and Next Steps**

No recommendation is being requested of the Planning Commission at this workshop. A formal public hearing will be scheduled for a later date at which time the Commission will provide the opportunity for the public to make comment on the application, and then to provide a formal recommendation for the Board of County Commissioners to consider.

Exhibit A

July 27, 2020

Walla Walla County Planning and Zoning Commission  
310 W Poplar Street, Suite 200  
Walla Walla, WA 99362

To whom it may concern:

Bio-Environmental Resource Recovery International (BERRI) requests that the county allow Organic Waste Processing Facilities (17.08.364) in areas zoned as Light Industrial.

BERRI has been looking for several years for an area where it can set up an Organic Waste Processing Facility. It has had numerous difficulties trying to secure a location. Currently Organic Waste Processing is allowed in areas zoned PA-40, IA-M, and IA-H. For the type of facility that BERRI desires to set up, it needs to be in proximity to Walla Walla and College Place, and have ready access to significant electrical power. The only areas designated IA-M and IA-H are located over near the Boise Cascade paper mill. BERRI has not been able to find an owner of any PA-40 zoned property that is interested in working with BERRI.

BERRI has found a party that is interested in working with us who owns property that is currently zoned Light Industrial.

Respectfully,

David Dressler  
President, BERRI

Exhibit B

July 23, 2020

Walla Walla Planning and Zoning Commission  
310 W. Poplar Street, Suite 200  
Walla Walla, WA 99362

To whom it may concern:

Bio-Environmental Resource Recovery International (BERRI) has reviewed the criteria specified by WWCC 14.15.060C and WWCC 14.15.070B.3.

BERRI has requested a change to the County's Zoning Code, Title 17, as related to allowing organic waste processing in areas designated Light Industrial. Currently organic waste processing is only allowed in areas designated as PA-40, IA-M, and IA-H. Currently IA-M and IA-H zoned properties are only in the vicinity of the Boise Cascade paper mill. BERRI has conducted a comprehensive search for any parcel of land that would meet BERRI's needs and comply with the present zoning restrictions. BERRI needs property that is in proximity to Walla Walla and College Place that has 3 phase power readily available. BERRI has had discussions with the Port Authority and this is not a direction in which it desires to move.

WWCC14,15,060C focuses on three criteria for the Community Development Department Review. These criteria are the following:

1. The amendment is consistent with the comprehensive plan.
2. The amendment is consistent with other development regulations, unless accompanied by amendments to such other development regulations, and
3. The amendment is appropriate for consideration at this time.

Regarding Criteria Number 1, BERRI has reviewed the documents related to the county's comprehensive plan. In particular, Chapter Six, says the following:

“About 98% of the County land lies outside of UGAs, with 89% of County lands in resource designations, 8% in rural designations, and about 1% in public uses, making rural and resource lands important for the County and those that choose to live or work in them.”

Under Applicable Grow Management Act Goals, a significant one deals with natural resource industries.

“Maintain and enhance natural resource based-industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses (RCW 36.70A.020(8))

Although, BERRI is planning on distributing the end product from the project as a soil amendment, due to slight contamination from plastic primarily, the product is really compost. Per the County information quoted above, a goal of the county is to conserve and enhance the productivity of agricultural lands. BERRI would like to share the following information, as it is written from the United States Composting Council, copyright 2018.

## **“Benefits of Compost and its Effects on Soils and Plants**

Thanks to its many attributes, compost is extremely versatile and beneficial in many applications. Compost has the unique ability to improve the properties of soils and growing media physically (structurally), chemically (nutritionally), and biologically. Although some equate the benefit of compost use to lush green growth, caused by plant-available nitrogen, the real benefits of using compost are long-term and related to its organic matter content.

### **Benefits of Using Compost**

Improves the soil structure, porosity, and density, thus creating a better plant root environment.

Increases infiltration and permeability of heavy soils, thus reducing erosion and runoff.

Improves water holding capacity, thus reducing water loss and leaching in sandy soils.

Supplies a variety of macro and micronutrients.

May control or suppress certain soil-borne plant pathogens.

Supplies significant quantities of organic matter.

Improves cation exchange capacity (CEC) of soils and growing media, thus improving their ability to hold nutrients for plant use.

Supplies beneficial microorganisms to soils and growing media.

Improves and stabilizes soil pH.

Can bind and degrade specific pollutants.

## **Physical Benefits**

### **Improved Structure**

Compost can greatly enhance the physical structure of soil. In fine-textured (clay, clay loam) soils, the addition of compost will reduce bulk density, improve friability (workability) and porosity, and increase its gas and water permeability, thus reducing erosion. When used in sufficient quantities, the addition of compost has both an immediate and long-term positive impact on soil structure. It resists compaction in fine textured soils and increases water holding capacity and improves soil aggregation in coarse-textured (sandy) soils. The soil-binding properties of compost are due to its humus content. Humus is a stable residue resulting from a high degree of organic matter decomposition. The constituents of the humus act as a soil 'glue,' holding soil particles together, making them more resistant to erosion and improving the soil's ability to hold moisture.

### **Moisture Management**

The addition of compost may provide greater drought resistance and more efficient water utilization. Therefore, the frequency and intensity of irrigation may be reduced. Recent research also suggests that the addition of compost in sandy soils can facilitate moisture dispersion by allowing water to more readily move laterally from its point of application.

## **Chemical Benefits**

### **Modifies and Stabilizes pH**

The addition of compost to soil may modify the pH of the final mix. Depending on the pH of the compost and of the native soil, compost addition may raise or lower the soil/compost blend's pH. Therefore, the addition of a neutral to slightly alkaline compost to an acidic soil will increase soil pH if added in appropriate quantities. In specific conditions, compost has been found to affect soil pH even when applied at quantities as low as 10-20 tons per acre. The incorporation of compost also has the ability to buffer or stabilize soil pH, whereby it will more effectively resist pH change.

### **Increases Cation Exchange Capacity**

Compost will also improve the cation exchange capacity of soils, enabling them to retain nutrients longer. It will also allow crops to more effectively utilize nutrients, while reducing nutrient loss by leaching. For this reason, the fertility of soils is often tied to their organic matter content. Improving the cation exchange capacity of sandy soils by adding compost can greatly improve the retention of plant nutrients in the root zone.

## **Provides Nutrients**

Compost products contain a considerable variety of macro and micronutrients. Although often seen as a good source of nitrogen, phosphorous, and potassium, compost also contains micronutrients essential for plant growth. Since compost contains relatively stable sources of organic matter, these nutrients are supplied in a slow-release form. On a pound-by-pound basis, large quantities of nutrients are not typically found in compost in comparison to most commercial fertilizers. However, compost is usually applied at much greater rates; therefore, it can have a significant cumulative effect on nutrient availability. The addition of compost can affect both fertilizer and pH adjustment (lime/sulfur addition). Compost not only provides some nutrition, but often makes current fertilizer programs more effective.

## **Biological Benefits**

### **Provides Soil Biota**

The activity of soil organisms is essential in productive soils and for healthy plants. Their activity is largely based on the presence of organic matter. Soil microorganisms include bacteria, protozoa, actinomycetes, and fungi. They are not only found within compost, but proliferate within soil media. Microorganisms play an important role in organic matter decomposition which, in turn, leads to humus formation and nutrient availability. Microorganisms can also promote root activity as specific fungi work symbiotically with plant roots, assisting them in the extraction of nutrients from soils. Sufficient levels of organic matter also encourage the growth of earthworms, which through tunneling, increase water infiltration and aeration.

### **Suppresses Plant Diseases**

Disease incidence on many plants may be influenced by the level and type of organic matter and microorganisms present in soils. Research has shown that increased population of certain microorganisms may suppress specific plant diseases such as pythium and fusarium as well as nematodes. Efforts are being made to optimize the composting process in order to increase the population of these beneficial microbes.

## **Additional Benefits of Compost**

Some additional benefits of compost have been identified, and has led to new uses for it. These benefits and uses are described below.

## **Binds Contaminants**

Compost has the ability to bind heavy metals and other contaminants, reducing both their leachability and absorption by plants. Therefore, sites contaminated with various pollutants may often be improved by amending the native soil with compost. The same binding affect allows compost to be used as a filter media for storm water treatment and has been shown to minimize leaching of pesticides in soil systems.

## **Degrades Compounds**

The microbes found in compost are also able to degrade some toxic organic compounds, including petroleum (hydrocarbons). This is one of the reasons why compost is being used in bioremediation of petroleum contaminated soils.

## **Wetland Restoration**

Compost has also been used for the restoration of native wetlands. Rich in organic matter and microbial population, compost and soil/compost blends can closely simulate the characteristics of wetland soils, thereby encouraging the reestablishment of native plant species.

## **Erosion Control**

Coarser composts have been used with great success as a mulch for erosion control and have been successfully used on sites where conventional erosion control methods have not performed well. In Europe, fine compost has been mixed with water and sprayed onto slopes to control erosion.

## **Weed Control**

Immature composts or ones which possess substances detrimental to plant growth (phytotoxins), are also being tested as an alternative to plastic mulches for vegetable and fruit production. While aiding in moisture conservation and moderating soil temperatures, immature composts also can act as mild herbicides.

## **A Bright Future**

With these many benefits and its myriad of applications, from the traditional growing of plants to novel uses in storm water management and climate change mitigation, the production and use of compost has a bright future indeed! “



Regarding Criteria Number 2, the amendment is consistent with other development regulations, unless accompanied by amendments to such other development regulations. BERRI is unaware of a conflict with other development regulations.

Regarding Criteria Number 3, the amendment is appropriate for consideration at this time, BERRI shares the following. BERRI and Planning and Zoning personnel have already had two meetings with the County Commissioners and they have been supportive of the idea.

In preparing for the Planning Commission Review, under Section 14.15.070, Section B, Item 3, the following criteria are listed:

- a. The amendment is consistent with the comprehensive plan; and
- b. The amendment meets a definable public need; and
- c. The amendment is in the long term interest of the county.

As related to consistency with the comprehensive plan, BERRI feels that information shared regarding Section 14.15.060 well covers this point.

As relating to meeting a definable public need, the process that BERRI is attempting to introduce can be of great value both here in the United States as well as in many countries around our planet. Currently waste is mainly being land-filled and in some cases it is burned in waste-to-energy facilities. In a number of countries overseas, municipal solid waste is just dumped into the ocean. Land-filling just results in additional land needing to be designated for this purpose, in lieu of waste being utilized for more productive purposes. Also, landfills are significant generators of methane. Methane is twenty times worse for the environment than carbon dioxide is. Waste-to-energy facilities are typically very expensive to construct and still have ash as a waste byproduct. As related to waste being dumped into the ocean, the issues are self evident. With BERRI's process, a valuable soil amendment is the primary end product. This end product enhances the soil, and agriculture is a primary industry that Walla Walla county desires to develop and enhance. BERRI's process also eliminates methane.

Regarding the amendment being in the long term interest of the county, as compost is added to the soil, it further enhances the soil every time it is added. In addition, there are minimal limits as to how much compost can be added to soil and there are thousands of acres in our county that can benefit.

BERRI feels that its proposal is compliant with the goals specified by the WWC Planning and Zoning Commission in regards to long term plans for the County.

Respectfully,

David Dressler  
President, BERRI

## Attachment C

Bio-Environmental Resource Recovery International (BERRI) feels that it can significantly improve the current method of processing municipal solid waste.

BERRI has conducted numerous tests to confirm that its end product, a soil amendment, is safe and valuable. I have shared some of the tests we have with various people in the city and the county.

BERRI realizes that what it is proposing could have a significant impact on how things are done in relation to the landfill. I ask that the city and county look at the potential benefits that BERRI could be offering the city, county, and many other places around our planet if the process proves out as anticipated.

Our process should dramatically increase the life span of landfills, potentially saving cities significant amounts of money in needed new permits, new liners, monitoring wells, the costs of digging out the pits for the liners, the costs related to the large specialized equipment needed for compacting the municipal solid waste, and the cost of daily land covering.

According to the reading that BERRI has done, landfills are the third largest generators of methane in the United States. Methane is 20 to 30 times more dangerous to our environment than carbon dioxide. BERRI's process could significantly reduce or potentially eliminate methane generation as far as new MSW.

BERRI's end product is a composted soil amendment. There are many benefits to compost. It enriches the soil in various ways. It improves soil structure and porosity, thus creating a better plant root environment. It supplies a variety of beneficial macro and micronutrients. It helps to control or suppress certain soil borne plant pathogens. Additionally, studies indicate that when adequate amounts of compost are applied, it can significantly reduce the amount of water that needs to be applied to crops. This has a two-fold benefit. By reducing the amount of water needed on crops, it can help protect our water table. In addition, it can save farmers significant amounts of money due to savings in the amount of electricity they must pay to irrigate their crops.

The shredders that we will use pulverize glass to sand. An additional benefit that may be reaped is that the plastic, which is a challenge for the landfills and does not break down readily, could be shredded and mixed with asphalt for our roads. There are studies that validate this application and it is actually being done in a number of places around our planet. It can also be repurposed for other applications such as roofing tiles and paving stones.

BERRI has conducted a number of tests involving processing bio-solids and we are readily able to process bio-solids as well. It is my understanding that when bio-solids are land applied that very detailed records are needed to be maintained as to which acreage has had them applied, and the amount that is applied. There are also limits on which crops can be grown on the acreage. With composted bio-solids, none of the restrictions apply.

BERRI hopes to be able to bring an exciting and valuable technology to our area that could eventually be beneficial for many other places on our planet.