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January 18, 2013

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January 18, 2013,
Zoning Conditional Use Permit Application
Kittitas County Community Development Services

Project Narrative Question 11:

A conditional use permit may be granted when the following criteria are met. Please describe in detail how each criteria is met for this particular project (attach additional sheets as necessary):

- A. The proposed use is essential or desirable to the public convenience and not detrimental or injurious to the public health, peace or safety or to the character of the surrounding neighborhood.**
- B. The proposed use at the proposed location will not be unreasonably detrimental to the economic welfare of the county and that it will not create excessive public cost for facilities and services by finding that: (1) it will be adequately serviced by existing facilities such as highways, roads, police and fire protection, irrigation and drainage structures, refuse disposal, water and sewers, and schools; or (2) that the applicant shall provide such facilities; or**
- C. Demonstrate that the proposed use will be of sufficient economic benefit to offset additional public costs or economic detriment.**

A. Response to Item 11: The proposed use is essential or desirable.

Quoted from the Washington State Web Site: <http://www.ecy.wa.gov/beyondwaste/>

"Washington State's Waste Reduction Plan

Beyond Waste is the Washington state plan for managing solid waste. This 30-year plan has a clear and simple goal: eliminate wastes whenever we can and use the remaining wastes as resources. This will contribute to economic, social, and environmental health."

Avoiding wastes is the smartest, cheapest, and healthiest approach to waste management. The Beyond Waste Plan shifts from a reactive approach, focusing on management and clean-up, to a proactive approach, with an emphasis on preventing waste in the first place.

The Beyond Waste Plan focuses on five areas or initiatives:

1. Moving Toward Beyond Waste with Industries
2. Reducing Small Volume Hazardous Materials and Wastes
3. Increasing Recycling of Organic Materials
4. Making Green Building Practices Mainstream
5. Measuring Progress Toward Beyond Waste"

The PacifiClean - Elk Heights Organics Recycling Facility is in alignment with and supportive of Item 3 of the Beyond Waste Plan.

"We can transition to a society where waste is viewed as inefficient, and where most wastes and toxic substances have been eliminated. This will contribute to economic, social, and environmental vitality."

Quote from Ecology Publication No. 04-04-015

The PacifiClean Elk Heights Project will contribute to the economic, social, and environmental vitality of Kittitas County and surrounding region.

i) Food waste, yard waste, and other compostable organics will be kept out of the landfill.

Landfill space is limited as the establishment of new landfills is becoming increasingly difficult. It is essential that the existing landfill capacity that we now have be used only as needed. Decomposition of organics in an anaerobic environment generates methane and other greenhouse gases which contribute to global warming. Decomposition also generates by-products which are high in Biochemical Oxygen Demand (BOD), low pH (highly acidic), and mobilize metals in the groundwater. Removing this source of organics from the landfill decreases the risk of contamination to the ground and surface waters of the state.

ii) Organics will be made available to agricultural farm land in central and eastern Washington to support crop production and improve agricultural soils for future generations.

Upon full build-out, this facility will have the capacity to process an estimated 320,000 tons per year of incoming feedstocks (green waste, food waste and biosolids) to produce approximately 128,000 tons per year of organic soil amendment. The finished product will contain slow release Nitrogen, Phosphorous and Potassium (NPK) as well as a full spectrum of micro-nutrients. In addition much needed organic carbon will support soil biodiversity, improve soil tilth, decrease soil erosion, and increase the moisture holding capacity of the soil for decreased irrigation needs and improved drought resistance.

The compost products produced by the Elk Heights Facility will be certified by the US Compost Council's Seal of Testing Assurance (STA) Program and the Washington State Organic Food Program. All compost products will be tested regularly as required by the Washington Department of Ecology regulations, USCC STA Program, and Washington Dept of Agriculture to assure product quality.

iii) The PacifiClean Elk Heights Project supports sustainability.

For many years, the environmental objective has been to protect the quality of the water, soil, and air resources. While this is still a high priority, the emphasis also includes sustainability and

the prudent use of our limited natural resources. The motto "Reduce, Reuse, Recycle" is fully embraced by the PacifiClean Project Team.

iv) The PacifiClean Elk Heights Project is convenient for acceptance of feedstock and distribution of product.

PacifiClean Elk Heights will be accepting feedstocks primarily from King and Snohomish Counties. In addition, there will be sufficient capacity to accept feedstocks from local counties and municipalities.

The route from the Puget Sound Region will be over Interstate 90's Snoqualmie Pass, the lowest route in the State over the Cascades. Interstate-90 is a direct non-stop freeway with a travel distance of 90 miles from Seattle to PacifiClean Elk Heights. Access to the site from I-90 is along Thorp Prairie Road; a total of 2 miles. Trucks delivering material from west of the Cascades will not pass through any Kittitas County towns or residential areas.

Finished compost products will be utilized for agriculture to support crop production in the Ellensburg and Yakima regions.

As required by Kittitas County, the Thorp Prairie Road has been tested by a licensed civil engineering company to assure it is constructed to withstand the added incoming and outgoing truck traffic.

The site and access is very convenient for the intended use.

v) The PacifiClean Elk Heights Project will provide full time local employment and living wages.

In Phase I of Operation, which will last 1 to 5 years, the Elk Heights Compost Facility is projected to process half of the total design capacity, or 160,000 tons per year. During Phase I Operation approximately 11 employees will be hired and trained to manage all areas of the facility. At final and complete build-out, Phase II Operation, (planned for 2014 - 2019) the compost facility will employ a total of 18 staff, most of whom will be hired locally.

The employees will be hired for their specific skills, aptitude and attitude. They will be hired for the long term and developed and trained to advance within the employee staff framework. PacifiClean Elk Heights will be committed to providing wages that will support a family.

In addition to workplace safety, benefits, and competitive compensation packages, PacifiClean intends to offer a number of programs to build rewarding careers, support work/life balance, and contribute to the overall personal and professional development of the employees.

PacifiClean Elk Heights is exploring the following types of employee support programs:

- Flexible workplace options, including remote meeting and telecommuting.
- Local hiring whenever possible to reduce commute time and increase the positive life balance of employees.
- Community involvement through company-sponsored volunteering , such as building gardens in the community.

- A wellness program, Weight Watchers, yoga, and personal training.

vi) PacifiClean Elk Heights will become a part of the community.

PacifiClean Elk Heights will:

- Invest in the Kittitas County community in order to better understand the concerns and needs of neighbors.
- Ensure the community has qualified representation at PacifiClean Elk Heights and this representative will have access to upper management so that the community concerns are addressed.
- Build goodwill in the community by being part of events, social activities, and community improvement projects which help encourage common goals between the PacifiClean Elk Heights team and the local residents and businesses.

Specific outreach activities and efforts include:

- School outreach - on compost education, and sponsoring school initiatives.
- Neighbor engagement - attending homeowners association and council meetings; listening and educating residents about composting operations and odor mitigation measures.
- Collaborating with municipal customers - educating on composting facilities and processing, providing compost facility tours, helping staff events, co-hosting workshops, and delivering presentations.
- Outreach to businesses - providing presentations at Chamber events and donations of compost products for business and neighborhood improvement projects.
- Local press - making connections between recycling organics, saving money, and the local economy and jobs.

vii) A commitment to reducing greenhouse gas and diesel-related emissions associated with organics management.

PacifiClean Elk Heights proposes to reduce GHGs. PacifiClean Elk Heights will do so through smart technology, such as anaerobic digestion and the use of biogas; electric, hybrid, CNG-powered equipment; and green facility design including translucent tipping structure, solar site lighting, and more.

viii) Incorporate best technology selected from other operations.

The staff involved in this project has reviewed technology used within the compost industry. The objective is to select technologies that will allow this operation to exist with minimal impact on the surrounding rural landscape and community.

Technologies selected include:

1. Tipping Building: All tipping of feedstock will be within a building to allow containment and treatment of any residual odor and VOC emissions.

2. Inside Feedstock Preparation: The tipping building will be 180 ft X 120 ft to allow, screening and mixing of food waste, green feedstock, and biosolids to take place inside the building with treatment of evacuated air.

3. Electrical Feedstock Preparation: Grinding equipment and mixing equipment used daily inside the building will be powered using electric motors which will decrease fossil fuel use, noise and emissions.

4. Building Evacuation into Biofilters: The tipping building will be evacuated by blowers able to displace and treat four building volumes per hour and have limited openings to assure inward air movement at the doors and other openings.

5. Engineered High Efficiency Biofilters: Evacuated air from the building will be directed to four biofilters which use sand and inert soil rather than the standard wood residual media. This is a more efficient system proven successful in many facilities across the nation. Odor removal of 95 to 99% is guaranteed by the manufacturer of this biofiltration system. The expected biofilter media life is 20 years.

6. Gore Cover System Composting: The first stage in the composting process will use the GORE® Cover system for aeration and processing during the most biologically active and critical step in the compost process. In the first 28 days of composting it will be critical to have the material covered to control VOC emissions, odors, moisture, temperature, and air quality. The objective is to provide sufficient oxygen, contain odorous emissions, keep the environment suitable for bacteria to thrive, reach temperatures that destroy pathogens, and produce a high quality finished product. The GORE® Cover system has proven in many applications to achieve these goals.

7. Redundant Equipment and Process: Redundant operations that include two processing sides, two trailer tippers, two conveying systems, two leachate tanks and two storm water collection ponds. Redundancy allows for exchanging equipment, processes side changes if necessary, and availability of spares in times of breakdown.

8. Stormwater Recycle: Water collection from the site surface during the fall, winter, and spring will be routed to stormwater ponds. This water will be used for water addition to the compost process, dust management and irrigation during the spring, summer, and early fall.

The design of the stormwater system will eliminate the need to discharge water collected from the operating areas and utilization much like a farm.

Water from above the site will be routed around the site.

9. Anaerobic Digestion:

As part of Construction Phase II an anaerobic digester will be constructed to produce renewable methane gas (Condensed Natural Gas or CNG) for use in generating electricity and operating a fleet of transport vehicles. The by-product of the anaerobic digestion process (“digestate”) would then be further processed by aerobic composting.