NOTICE

Pursuant to guidelines promulgated by the Rhode Island Department of Environmental Management, Office of Waste Management ("OWM"), a public hearing will be conducted on April 25, 2012 at 7:00 p.m., at Newport Biodiesel, LLC, 312 Connell Highway, Newport, Rhode Island to allow public participation and comment with respect to the revised application, dated February 21, 2012, of Newport Biodiesel, LLC, 312 Connell Highway, Newport, RI to OWM for beneficial use determination (BUD) approval of increased recycling of waste vegetable oil into biodiesel at their facility.

A copy of Newport Biodiesel's revised BUD application can be obtained at OWM, located at 235 Promenade Street, Providence, Rhode Island 02908, during normal business hours. The application is also available on RIDEM's website. Questions may be directed to Christopher Shafer at OWM.

The public comment period will remain open for 14 days after the public hearing. Comments can be sent to OWM at the following address:

RIDEM Office of Waste Management
Attn: Christopher Shafer
Senior Environmental Scientist
235 Promenade Street
Providence, RI 02908
401-222-2797 ext. 7511
401-222-3812 (fax)

APPLICATION FOR A

BENEFICIAL USE DETERMINATION

FOR THE RECYCLING OF WASTE VEGETABLE OIL

INTO BIODIESEL

February 21, 2012

Submitted by:

Newport Biodiesel, LLC

312 Connell Highway

Newport, RI 02840

(401) 846-1117

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INTRODUCTION

Newport Biodiesel, LLC is a small business, created in 2006, to produce clean biodiesel from recycled Waste Vegetable Oil (WVO). The source of WVO is from restaurants in Rhode Island and the surrounding area. Since WVO is not defined as "recyclable material" this document is provided to support a Beneficial Use Determination (BUD) from the Rhode Island Department of Environmental Management (DEM).

In 2007, we completed construction of a production facility at 312 Connell Highway, in Newport RI. Over the next few years we continued to expand the facility so that it now has a capacity of 500,000 gallons per year, and in May of 2011 we produced our 1 millionth gallon of biodiesel. Later in 2011 we received a grant from the RI Economic Development Corporation to further expand the production capability, so that by summer of 2012 we will be capable of producing up to 1.5 million gallons of biodiesel per year.

We feel that we have demonstrated that the WVO is a relatively harmless waste material that does not cause any negative effects on the local environment, and we have shown that our process of creating biodiesel is a clean, efficient method for recycling of this waste. Finally, the resulting biodiesel provides an 85% improvement to the carbon intensity of fuel usage when compared to petroleum diesel.

RESPONSE TO BUD CONSIDERATIONS

1) How are any environmental hazards associated with recycling of solid waste be minimized or eliminated?

There are very few environmental hazards associated with the collection and utilization of WVO. The oil itself is a clean, viscous fluid that comes directly from restaurant kitchens, so it does not contain any contaminants. The most likely environmental hazard would be spills of the WVO. These are prevented through use of specially constructed, steel collection containers that are emptied using a vacuum system configured on our collection vehicles. Restaurant employees pour the vegetable oil directly into our containers and once that has happened; the entire system is enclosed, effectively eliminating the possibility of spills.

The production of biodiesel also minimizes the potential for environmental hazards. The process takes place at relatively low temperature (130^{o}F) within a fully self-

contained, sealed processing system. In this process, methanol is mixed with the WVO to produce biodiesel and glycerin. Liquid methanol and small amounts of acid are the only hazardous materials used in the process, and Newport Biodiesel has a comprehensive safety program to reduce the risk involved with these materials. We purchase the Methanol from registered dealers and store it for a short period in a specially constructed container, enclosed in a six foot high containment facility separated from the production building. The methanol is transferred to the processor through permanently installed pipes to insure that there is no exposure to the outside environment.

The glycerin created by the process is stored on site, then sold and shipped to Michigan Biodiesel, where it is further purified for sale as a commodity.

The only other possible environmental impact of our process would be emissions from a 280,000 BTU waste oil burner that is used for heating the tanks in the facility. Originally, we burned a mixture of 50% glycerin and biodiesel, however, we now burn 100% biodiesel, so the emissions are extremely low and discussions with the RI DEM Department of Air Quality confirmed that no air permit was required for boilers with a rating of less than 1,000,000 BTU's.

2) **To what degree will the recycled solid waste material be analogous to commonly used raw materials and how will the use of this material result in a viable and beneficial substitution of a discarded material for a commercial product or raw material?**

The WVO is very similar to oils produced directly from crops such as soybean, corn, peanuts etc. which are commonly used for biodiesel production. Obviously, when this oil is processed into biodiesel, it produces a valuable, clean and efficient fuel that is commercially viable.

3) **How will the proposed recycling and reuse of the solid waste in question protect the natural resources of the State. In addition to discussing how and to what extent the reuse of the solid waste in question will conserve the limited and finite capacity of the State's solid waste landfills, your response must also address why the proposed use of the recycled solid waste will not present a threat to public health or the State's groundwater, surface water, air, or other environmental resources.**

The recycling of WVO protects the natural resources of the State, both directly and indirectly. Directly it removes a potential source of landfill contamination, however, the indirect influences through reduction of petroleum diesel use are most important. As indicated above, the use of biodiesel, produced from recycled WVO results in an 85% reduction in the carbon intensity relative to petroleum diesel. In addition, the reduction of carbon monoxide, particulate matter, sulfur oxides and sulfates are all essentially eliminated through use of biodiesel.

With regard to the impact on the local environment, our processor is completely enclosed in our facility, and therefore, presents minimal risk to local environmental resources. We have constructed a concrete berm around our facility and our operations conducted over the past four years have not had a significant spill.

The only significant waste product of our process is glycerin and that has consistently been sold to Michigan Biodiesel over the period of our operations.

4) To what extent is there a guaranteed end market for the recycled waste material to be produced?

The market for biodiesel is established and is growing. The State has two commissions working at this time to discuss the possibility of mandating a percentage of biodiesel to be included in both heating oil and on road fuel. Even with our expanded production, Newport Biodiesel would not be able to meet the demand created by these mandates. To date we have readily sold all of our biodiesel to local distributors.

5) Why will the proposed recycling and reuse of solid waste not degrade the environment?

As described in the responses to Questions 1 and 3, the production of biodiesel from WVO is inherently a clean and safe process. Newport Biodiesel has established procedures to ensure clean collection and storage of WVO prior to the production process and once at our facility all processes are completely enclosed. The final product is distributed through Oil Distribution companies who have extensive protection and procedures associated with petroleum diesel that insure safe use of our product.

6) Identify and discuss the controls that will be used to properly and safely recycle and reuse the solid waste.

a. The quantity of solid waste material to be received and recycled:

Over the past four years Newport Biodiesel has increased the collection and purchasing of WVO from approximately 300,000 gallons per year in 2008 to

more than 750,000 gallons in 2010. During that time, we have not had a single significant spill of WVO.

b. The maximum quantity of solid waste material to be stored at the site at any one time:

Since we process the WVO continuously, the amount of WVO held on site at any one time is substantially less than the annual throughput. Following completion of the RI-EDC expansion, we will have a capacity for 36,000 gallons of raw WVO and 12,000 gallons of pre-processed WVO ready for introduction to the biodiesel processor.

c. The source of solid waste, including the name and address of the generator:

Appendix I to this report provides a listing of the restaurants that are now part of our network in Rhode Island and vicinity. In addition to these restaurants we also purchase WVO from various vendors throughout New England. That WVO has been preprocessed off-site and is delivered to Newport Biodiesel in large tanker trucks. It is pumped directly into our WVO storage tanks.

d. A detailed narrative and schematic diagram of the production, manufacturing, and/or residue process by which the waste material is produced:

The WVO used in this process is a normal waste product created when restaurants deep fry food. This oil is changed periodically and the old oil is put in a container for pick-up by a rendering company. Newport Biodiesel has replaced the rendering company and provides the restaurant with all of the equipment to store the WVO until it is picked up. Once the WVO is transported to Newport Biodiesel, it is heated and allowed to settle. During this process particulates settle out and are removed. The particles are taken to a composting facility, Earth Source, in Raynham, Massachusetts.

e. The expected consistency of the waste material:

The consistency of the WVO is very high. The major source of variability is in the quality of oil used for cooking, however, almost all restaurants now use polyunsaturated oil, so there is very little difference between restaurants, and all of the oil is mixed as it is transported from the restaurant to the production facility.

f. How the generator has minimized the quantity and toxicity of the waste material:

There is no toxicity related to WVO as it is derived directly from the cooking process.

g. Adequate and regular inspection of the waste material on receipt:

The WVO is visually inspected prior to pumping into the collection truck. There is virtually no chance for contamination as the WVO is pumped directly from the truck into WVO settling tanks at the production facility.

h. Adequate site controls relating to the storage, handling and processing of the waste material, including the extent to which the recycled solid waste material will be handled to minimize loss:

The Newport Biodiesel processing facility emphasizes careful management of both the WVO and the resulting biodiesel fuel. All storage tanks are located within a concrete berm to contain any spills that might occur. To date there have been virtually no spills outside of that berm. As described above, once the WVO is pumped from the container at the restaurant, it is never exposed to the atmosphere again.

i. Adequate controls for handling and disposing of any residual solid wastes, including the location of final disposal for any residual solid wastes:

As indicated in the response to Question 3, the only residual waste from production of biodiesel is glycerin, which is stored on site, then sold to Michigan Biodiesel.

j. Appropriate odor, sediment, storm water (runoff) and erosion control measures:

The entire biodiesel process takes place within a cement berm inside our facility. Should a spill occur, the WVO would be drained through a specifically designed floor drain to a catch tank below grade. As discussed above, once the WVO is collected, it and the resulting biodiesel are never exposed to the atmosphere again. Therefore, there is virtually no odor issue at our plant.

7) Explain why the proposed recycling of solid waste is not simply an alternative method of disposal. The Director may require information regarding the estimated value of the solid waste material before and after it is recycled.

The conversion of WVO to biodiesel is a complete recycling of the waste material. When we started this effort, the WVO had no value, and restaurants were actually paying for it to be removed. Because of the impact of biodiesel production, it is now

considered a commodity and we actually pay the restaurant for the WVO. Biodiesel is now considered a valuable alternative fuel and the future continues to look good for this industry.

8) **What degree of processing has the solid waste undergone and degree of further processing is required, if any? The applicant must demonstrate that any mixing of different types of material improves the usefulness of the recycled solid waste material.**

   There is no processing of the WVO prior to introduction to the production facility.

9) **Where the project in question includes the reuse of any soil impacted by known or suspected contamination….., the applicant must demonstrate the use of these materials at the location in question.**

   This process does not involve any reuse of soil; therefore, this question is not applicable to this application.

10) **Whenever the proposed end use for a recycled product involves land application, the applicant shall address the need for applicable engineering standards and controls in accordance with Solid Waste Regulations…….**

    This process does not involve any land application of the recycled product; therefore, this question is not applicable to this application.

11) **Provide a characterization plan that includes protocols for sample collection and analyses designed to provide a representative characterization of the waste material.**

    We do not take extensive samples of the WVO provided by the restaurants. When we make the original agreement with the restaurant we verify the vegetable oil used and develop a mutually agreed protocol to insure that no contaminants are introduced to the WVO. Upon collection, our employees make a visual inspection of the WVO to verify that no contamination has occurred. Since no samples are taken, the subsections to this question do not apply to this application.

12) **Any person involved in the storage, handling, processing or use of solid waste for the beneficial reuse shall be required to provide financial assurance that:**

    a. **The project approved in the BUD will be completed: and/or**

       We have successfully constructed and expanded our facility in Newport over the past four years. In 2011, we were awarded a grant from RI-EDC which

will allow us to further expand our production capacity to 1.5 million gallons per year. During that time we have developed a network of nearly 1000 restaurants and we have a fleet of six vehicles that manage the WVO collection operation. All of our biodiesel is produced to ASTM specifications and we are consistently selling our product to distributors in Rhode Island and New England. We have established an insurance policy through Dwyer Insurance that provides $1M coverage for each pollution event, with a maximum of $2M coverage per year. In addition, we have an umbrella policy that provides another $1M coverage. We are certain to be able to support any issues that may arise as the result of an accident.

b. Any unused solid waste/beneficial reuse material will be properly removed and disposed of upon completion of the project or if project operations cease for any reason.

In the event that Newport Biodiesel ceased to operate, there would be three sources of waste that would require disposal: unprocessed vegetable oil, glycerin and waste food scraps. In addition any unused methanol, acid and biodiesel would require removal. The following companies will provide removal/disposal services:

Michigan Biodiesel will purchase all glycerin left on site:

Hallman Septic Service will collect all WVO and food scraps for a fee of $0.35 per gallon. The total WVO on site storage is 42,000 gallons. The total cost for removing that oil would be $14,700, however, since clean WVO has a market price of more than $3.00 per gallon, it would certainly be sold prior to closing down the facility.

Astro Chemicals will collect all methanol and acid free of charge.

Malloy Biodiesel will purchase all biodiesel left on site.

Waste Management maintains two four yard solid waste dumpsters on site. Our service agreement calls for weekly pick-up for both dumpsters at a rate of $380 per month.

Apart from the cost of removing, transporting and disposing of the individual waste streams, the cost of housekeeping to clean and sanitize the facility if Newport Biodiesel were to go out of business will be minimal. The facility and our equipment is kept very clean and a steam cleaner is used daily to maintain the site in that manner.

The total costs of closure as outlined above would be on the order of $15,000 less the value of WVO and biodiesel that might be on site. To cover the costs of closure, Newport Biodiesel would be willing to continue in the same manner as the past four years, and provide a check on a quarterly basis, to be held in escrow by DEM, that would only be cashed in the event that Newport Biodiesel were unable to cover the cost of closure from existing funds.

13) Additional information as required at the discretion of the Department.

Newport Biodiesel is prepared to provide additional information as required.

14) Certify that the applicant, the facility where the solid waste is processed for reuse and the facility where the processed material is to be used are not the subject of any actual or potential statutory or regulatory environmental violations (state or federal), or if actual or potential violations exist, that the processing of the waste or its use are part of a final settlement or remedy approved by DEM.

Previous research has confirmed that there are no environmental violations at 312 Connell Highway, the site of Newport Biodiesel and that this site does not occur on any of the following lists:

a. L-UST: Known presence of leakage from underground storage tanks

b. CERCLA: EPA inventory of sites where unauthorized release to the environment of hazardous materials has occurred.

c. DSR site: Sites that RIDEM has determined that an unauthorized release to the environment of hazardous materials has occurred.

The owner of the property has certified that there are no violations relating to the property at 312 Connell Highway and Newport Biodiesel certifies that over the four year period of operations at this site, no release of hazardous materials has occurred.