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# The Commonwealth of Massachusetts

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June 22, 2007

## CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE **ENVIRONMENTAL NOTIFICATION FORM**

PROJECT NAME:

Berkshire Biodiesel

PROJECT MUNICIPALITY:

Pittsfield/Dalton

PROJECT WATERSHED:

Housatonic

**EOEA NUMBER:** 

14037

PROJECT PROPONENT:

Berkshire Biodiesel, LLC

DATE NOTICED IN MONITOR:

May 23, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project does not require the preparation of an Environmental Impact Report (EIR).

#### Project Description

As outlined in the Environmental Notification Form (ENF), the proposed project is comprised of two distinct but related components: 1) construction of a large-scale biodiesel production facility; and 2) a new rail siding connecting the biodiesel production facility to an adjacent CSX rail line. The production facility will be located in an existing industrial building at 448 Hubbard Avenue in Pittsfield, MA.

The project site is part of a larger industrial park parcel called Ashuelot Park that was acquired by Crane & Company, Inc. in 1999 and 2001. The approximately 80-acre industrial park, which is located in both Pittsfield and Dalton, is the former Beloit Corp. manufacturing site. The site of the proposed biodiesel production facility is located entirely in Pittsfield with vehicular access from Hubbard Avenue to the west. The proposed rail siding is located primarily in Dalton and is accessed from the CSX rail line. The proposed biodiesel facility is 8 acres and the proposed rail siding is 7 acres, totaling approximately 15 acres. The proponent will enter into a long-term lease with Crane and Co. for the use of the project site.

The existing building at the biodiesel site will be converted to a biodiesel manufacturing process building. Liquid feedstock, process compounds and biodiesel will be stored in a proposed tank facility located within a spill containment area that will be north of the process building. Initially the facility will operate on refined, bleached and deodorized soybean oil. The facility will have dedicated space allotted for the future addition of crude de-gummed soybean oil and high free fatty acid (FFA) preprocessing systems. According to the proponent, if future economic projections indicate that capability to process these and other feedstocks is feasible, additional preprocessing equipment may be added, which will likely increase the facility water consumption and wastewater generation rates.

The proposed rail siding will be approximately 2,750 feet in length and will replace a nearby former siding no longer in use and unable to be reactivated under current CSX operating regulations. The siding will consist of a single track connection to the CSX rail line that quickly expands to three tracks to provide the necessary space to prepare trains for reentry to the CSX rail line. As the siding approaches the biodiesel facility it will expand to include five sidings serving the facility and one siding for public access. The siding will be constructed in part with funds granted by the Massachusetts Executive Office of Transportation (EOT) Freight Rail Transportation Capital Improvement Grant Program to the Town of Dalton and the City of Pittsfield.

The terms of the EOT grant dictate that a municipality has to own the rail siding once it is constructed. The proponent is currently in negotiations with Crane & Company, the City of Pittsfield and the Town of Dalton regarding a transfer of land and the future management and maintenance of the rail siding. The grant also mandates that the public must have access to the rail siding. According to plans submitted with the ENF, the proponent will construct a public access road around the western side of the site to provide access to one of the rail sidings.

In its comments on the ENF, the Berkshire Regional Planning Commission states that an announcement of a potential biomass plant has been made for a portion of the Ashuelot Park site and that the Town of Dalton's Industrial Commission has been working with Crane & Company to explore the feasibility of a business park on the site. It is likely that public access to the rail siding will be a factor in the build-out of the rest of the Ashuelot Park site. Representatives from Crane and Co, Inc. have stated that there are no specific projects or tenants identified for the remaining parcels in the industrial park, and that a Master Plan for the entire site is currently under development. While there may be a number of projects and different proponents for development at the Ashuelot Park site, the cumulative environmental impacts of the full build-out of the property may be significant. Therefore, in order to avoid a segmented review of all the individual projects on the site, I direct Crane & Co. to submit an Environmental Notification Form (ENF) to the MEPA office for the Ashuelot Park Master Plan prior to any other development at the industrial park.

#### Jurisdiction

The project is undergoing review pursuant to Sections 11.03(6)(b)(10) and 11.03(8)(b)(1) of the MEPA regulations because it requires construction of a new rail siding for the transportation of freight and because the proponent proposes the construction of a new major stationary source that will emit 82 tons of nitrogen oxide (NOx) and 159 tons of carbon monoxide (CO) per year.

The project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit and an Industrial NPDES Permit from the U.S. Environmental Protection Agency (EPA); a Sewer Connection Permit, Comprehensive Plan Approval and Waste Oil Generator Registration from the Department of Environmental Protection (MassDEP); Tank Registrations with the MA Board of Fire Prevention; Orders of Conditions from the Pittsfield and Dalton Conservation Commissions; a Sewer Connection Permit from the Pittsfield Department of Public Works and Utilities; Special Review from the Pittsfield Department of Community Development; and a Storage Tank License from the City of Pittsfield.

The construction of the rail siding is being funded with an EOT Freight Rail Transportation Capital Improvement Grant in the amount of \$3,057,000 which was awarded to the municipalities of Dalton and Pittsfield. Because the project is receiving financial assistance from the Commonwealth, MEPA jurisdiction is broad and extends to all aspects of the project that may cause Damage to the Environment.

#### Stormwater

The ENF provided preliminary information on the project's stormwater management system and proposed Best Management Practices (BMPs). More detailed information on the project's stormwater impacts and proposed mitigation must be clarified during the local wetlands permitting process. According to the ENF, runoff from the redeveloped and newly constructed portions of the site will be directed to a stormwater management area located south of the proposed rail siding. The stormwater management area will consist of a stormwater quality basin that will detain and treat stormwater prior to discharge. Potential spills and leaks will be contained by a secondary containment system associated with the outdoor aboveground storage tanks, and spill pans below the rail siding that will direct spills into the tank farm secondary containment system.

According to the proponent, the stormwater management system for the proposed project will comply with the applicable standards of the Massachusetts Stormwater Management Policy (SMP). Portions of the site are considered to have higher potential pollutant loads and therefore the project is subject to Standard #5 of the SMP. Stormwater management within such areas is required to include source reduction and pretreatment. The proponent should clarify with MassDEP and the local Conservation Commissions which portions of the project are considered redevelopment and which are considered new development for the purposes of SMP compliance.

#### Wetlands

Wetlands are located west of the biodiesel facility site and Barton Brook is located approximately 180 feet southwest from the entrance to the site across Hubbard Avenue. The 200-foot Riverfront Area associated with Barton Brook extends onto a small portion of the site near the northerly Hubbard Avenue site entrance. Wetlands are also located southeast of the biodiesel production facility, adjacent to the CSX rail line. The proposed rail siding will cross this wetland area at the location of the existing rail spur to minimize wetland disturbance.

The proponent considered several alternatives regarding the layout of the rail siding. Use of the existing rail siding would require extending the siding to the proposed facility and would result in minimal wetland impact. However, CSX determined that the switch for the existing siding was located on a curve in the mainline and could not be reopened in its current configuration. CSX imposes a number of constraints on new siding design. The proposed alignment meets all CSX criteria but will result in the alteration of bordering vegetated wetlands (BVW). The proponent is still refining the design of the rail siding with CSX. According to the proponent, the 4,000 sf of alteration as proposed in the ENF is a conservative estimate, and impacts will more likely approximate 2,500 sf. The proponent has committed to constructing a wetland replication area at a minimum 1:1 ratio for the proposed alteration. The proposed wetland crossing will feature an open-bottom culvert constructed according to the Massachusetts River and Stream Crossing Standards.

The project will result in impacts to 300 sf of Riverfront Area due to a driveway curb cut. In addition, work associated with the public siding and tank farm access road is proposed in the 100-foot buffer zone to a red maple swamp to the northeast of the biodiesel facility. Buffer zone impacts have not yet been quantified. The proponent should note comments from the Berkshire Regional Planning Commission (BRPC) regarding the possibility of shifting the proposed driveway extension in the northwest corner of the site to avoid or minimize buffer zone impacts.

The proponent must obtain Orders of Conditions from the Dalton and Pittsfield Conservation Commissions before commencement of the project. The proponent should note comments from the BRPC and Berkshire Environmental Action Team (BEAT) regarding the management and control of invasive species at the project site.

#### Water & Wastewater

Water for the proposed project will be supplied by the City of Pittsfield municipal water supply system via an existing connection along Hubbard Avenue. The project as outlined in the ENF is expected to require approximately 99,000 gallons per day (gpd) of water. In its comments on the ENF, the BRPC notes that the City of Pittsfield is currently determining the adequacy of the existing 6 inch water line to the site. The proponent should note that the construction of new municipal water lines as part of the project may require the filing of an NPC with MEPA. According to the ENF, incoming city water may be conditioned via a reverse osmosis (RO) treatment system prior to use in the biodiesel production facility and other processes. MassDEP

notes in its comments that no drinking water permit is required if the treated water is used for process water only. If the treated water is to be used for potable purposes, the facility would require registration as a consecutive public water system and a permit to install treatment per 310 CMR 22.00.

The project requires a Sewer Connection Permit from MassDEP. The project is anticipated to generate approximately 55,000 gpd of wastewater, to be discharged to the municipal system. The difference between the project's wastewater generation and water demand is due to cooling tower evaporation and condensate loss. The proponent is currently exploring the potential inclusion of an onsite wastewater pretreatment facility. This issue will be further addressed in the MassDEP sewer connection permit application.

According to the ENF, the City of Pittsfield has indicated that there is sufficient capacity in the existing municipal systems to provide water and accommodate wastewater flows from the project. The Pittsfield Wastewater Treatment Facility has a 28.7 million gallons per day (MGD) capacity. The average daily flow to the plant is approximately 50% of capacity. If water consumption or wastewater generation increases as a result of project expansion or additional preprocessing equipment, an NPC may be required.

#### Air Quality

Air emissions will occur from three general processes: 1) the biodiesel production process, 2) boilers for producing process steam required by the biodiesel production process, and 3) an on-site power plant. The biodiesel manufacturing process and the proposed power plant are both subject to permitting and review by MassDEP. According to the ENF, the project is anticipated to result in the generation of 82 tons per year of NOx and 159 tons per year of CO at expanded capacity. The biodiesel production process will emit methanol, a volatile organic compound. Emissions from major methanol processing steps will be controlled via condensation/recovery. The engines for the power plant will employ an emissions reduction control system for NOx. According to the proponent the proposed Selective Catalytic Reduction system will reduce this pollutant up to 95% from uncontrolled levels.

The biodiesel facility will be powered by a reciprocating engine-based electrical generation system. At peak capacity, the biodiesel facility will require 24 MMBTU/hour of steam and 2.5 MW of electricity in its initial configuration. The electricity and the majority of the steam will be produced onsite from a proposed power plant that will be constructed southeast of the process building and fueled primarily with biodiesel produced on-site. The project will seek to sell excess renewable energy to the regional transmission and distribution grid. To meet these initial criteria the power plant will be a nominal 10 MW facility with an operating program designed to ensure that the facility operates within a non-major source emission profile.

The proponent acknowledges in the ENF that production at the facility will ramp up to a production capacity of 50 million gallons per year over a period of 3 to 5 years. As the biodiesel facility capacity ramps up and additional preprocessing systems are added, a major source permit will likely be sought to accommodate the expanded operations. The data presented on potential

emissions in the ENF represents maximum impacts at full capacity. Initially the project will qualify as a non-major source per MassDEP regulations, but will require permitting as a major source in the future. Transition from a non-major source to a major source and application of a new state permit from MassDEP qualifies as a material change according to 301 CMR 11.10(6) and therefore will require the filing of a Notice of Project Change (NPC) with MEPA and possible further environmental review. The proponent also notes that a major source permit will require additional dispersion modeling and public review of the project's potential air quality impacts.

#### **Construction Activities**

During construction, the proponent should implement measures to control transient traffic, noise and dust impacts. Construction activities must conform to current MassDEP Air Pollution Control Regulations and Solid Waste Management regulations. The proponent should note detailed comments from MassDEP regarding the minimization of construction period impacts.

#### Conclusion

I have determined that the ENF has sufficiently defined the nature and general elements of the Berkshire Biodiesel project and proposed measures to avoid and mitigate environmental impacts. I am satisfied that any remaining issues can be adequately addressed during the state and local permitting and review process. The proposed project, as described in the ENF, requires no further review under MEPA. I remind the proponent that changes to the project as outlined at 301 CMR 11.11(6) and discussed in this Certificate may require the submittal of a Notice of Project Change.

June 22, 2007

Date

an A. Bowles

Cc:

George Waldheim, Crane & Company

30 South Street Dalton, MA 01226

### Comments Received:

6/7/2007 Berkshire Regional Planning Commission 6/11/2007 Berkshire Environmental Action Team

6/12/2007 Department of Environmental Protection, Western Regional Office

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