Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
EOEA No.: 14037
MEPA Analyst: Betsy Angus
Phone: 617-626-1029

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Berkshire Biodiesel**		
Street: **448 Hubbard Avenue**		
Municipality: **Pittsfield**	Watershed: **Housatonic River East Branch**	
Universal Transverse Mercator Coordinates:	Latitude:**18 648866 E** Longitude:**4702943 N**	
Estimated commencement date: **Fall 2007**	Estimated completion date: **Summer 2008**	
Approximate cost: **$50 million**	Status of project design: **50** %complete	
Proponent: **Berkshire Biodiesel LLC**		
Street: **600 Mamaroneck Avenue, Suite 400**		
Municipality: **Harrison**	State: **NY**	Zip Code: **10528**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Erik V. Mas, P.E., Project Manager**		
Firm/Agency: **Fuss & O'Neill, Inc.**	Street: **78 Interstate Drive**	
Municipality: **West Springfield**	State: **MA**	Zip Code: **01089**
Phone: **413-452-0445 x4433**	Fax: **413-846-0497**	E-mail: **emas@fando.com**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☐Yes ☒No

Has this project been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before? ☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes	☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): ***Executive Office of Transportation (EOT) Freight Rail Transportation Capital Improvement Grant in the amount of $3,057,000 to the municipalities of Dalton and Pittsfield***

Are you requesting coordinated review with any other federal, state, regional, or local agency? ☐Yes(Specify_____) ☒No

List Local or Federal Permits and Approvals:
Wetlands Notice of Intent – Pittsfield and Dalton
Sewer Connection Permit – Pittsfield Department of Public Works and Utilities

Special Review - Pittsfield Department of Community Development
Storage Tank License – City of Pittsfield
NPDES Stormwater General Permits (Construction and Industrial) - USEPA

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- ☐ Land
- ☐ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☐ Wetlands, Waterways, & Tidelands
- ☒ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	15 Acres		
New acres of land altered		8 Acres	
Acres of impervious area	1.8 Ac (Rail) 1.8 Ac (Biodiesel)	-1.5 Ac (Rail) +2.1 Ac (Biodiesel)	0.3 Ac (Rail) 3.9 Ac (Biodiesel) 4.2 Ac (Total)
Square feet of new bordering vegetated wetlands alteration		4,000 SF	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	28,300	18,000	46,300
Number of housing units	N/A	N/A	N/A
Maximum height (in feet)	54'	42'	54'
TRANSPORTATION			
Vehicle trips per day	450 (est.)	126	576 (est.)
Parking spaces	Approx. 50	0	Approx. 50
WATER/WASTEWATER			
Gallons/day (GPD) of water use	<1000	99,000	<100,000
GPD water withdrawal	0	0	0
GPD wastewater generation/ treatment	<1000	55,000	<56,000
Length of water/sewer mains (in miles)	N/A	<1*	<1*

State Permits & Approvals

- ☒ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☒ New Source Approval
- ☒ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

MA Board of Fire Prevention - Tank Registrations

MADEP VSQG Waste Oil Generator Registration

The existing facility has an active connection to the municipal sewer line. A new sewer connection to the Pittsfield municipal sanitary sewer system may be required. The length of new sewer line, if required, is anticipated to be significantly less than 1 mile.

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☒No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

A. PROJECT DESCRIPTION

The proposed project is comprised of two distinct but related components; construction of the first large-scale biodiesel production facility in Massachusetts, and a new rail siding connecting the biodiesel production facility to the adjacent CSX rail line. The production facility will be located in an existing industrial building at 448 Hubbard Avenue. 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 the current CSX operating regulations.

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 site of the proposed biodiesel facility is 8 acres and the proposed rail siding is 7 acres, totaling approximately 15 acres. A site locus map is included in Attachment A. A context plan showing the project site and the surrounding area is provided as Attachment B.

The biodiesel site currently consists of an industrial building of approximately 28,300 square feet. The building, which was originally constructed in 1982 and later expanded in 1986, currently contains office space, former research and development facilities, a parking lot, and a loading dock area. The remainder of the site of the proposed biodiesel production facility contains landscaped lawn and wooded areas. 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. Wetlands are also located southeast of the biodiesel facility site, adjacent to the CSX rail line. The proposed rail line will cross a second parcel which includes a separate industrial facility that is under the same ownership as the parcel containing the proposed biodiesel production facility. However, the adjacent industrial facility is not part of the proposed project. Attachment C contains a plan showing existing site conditions. A proposed conditions site plan is included as Attachment D.

Biodiesel is a clean-burning alternative fuel produced from domestic, renewable resources and contains no petroleum. It can be used in its pure form (B100) or blended with petroleum diesel and/or heating oil to create a fuel that can be used in engines, boilers, home furnaces and power generators without modification. Biodiesel reduces our dependence on foreign oil and reduces harmful emissions such as hydrocarbons, carbon monoxide and particulate matter when used to replace conventional diesel.

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. A description of the biodiesel manufacturing process is provided in Attachment H. Initially the facility will operate on refined, bleached and deodorized soybean oil ("RBD"). The facility will have dedicated space allocated for the future addition of crude de-gummed soybean oil and high free fatty acid (FFA) preprocessing systems. If future economic projections indicate that capability to process these and other feedstocks is feasible, additional preprocessing equipment may be added as future project capital improvements. The additions of these systems will likely increase the facility water consumption and wastewater production rates, however anticipated impacts remain well below EIR threshold levels.

At peek capacity, the biodiesel facility will require 24MMBTU/hr of steam and 2.5MW 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 distribution/transmission grid. To meet these initial criteria the power plant will be a nominal 10MW facility with an operating program designed to ensure the facility operates within non-major source emission profile. As the biodiesel facility capacity ramps up, additional preprocessing systems are added and a greater understanding of the regional power markets is gained, a major source permit will likely be sought to accommodate the operation of multiple preprocessing systems and expanded operation of the power plant. Expanded operating emissions are anticipated to remain well within EIR thresholds.

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 production process will emit methanol, a volatile organic compound from storage tanks and from process piping/components. Emissions from the major methanol processing steps will be controlled via condensation/recovery. The expected emission reduction through the use of condensation is 90 percent. The boilers will be dual-fuel, employing biodiesel as the primary fuel with natural gas as a back-up. Standard products of combustion will be emitted at non-major levels. Biodiesel is a substantially cleaner burning fuel than standard fuel oil, resulting in reductions of 45 to 65 percent for most pollutants.

The power plant will consist of two (2) engines with associated generators and heat recovery. The engines will use biodiesel, again resulting in substantial emission reductions when compared to standard diesel fuel. The engines will also employ a state of the art emissions control system for nitrogen oxides (NOx). The proposed Selective Catalytic Reduction system will reduce this pollutant up to 95 percent from uncontrolled levels.

The proposed rail siding will connect the proposed biodiesel production facility with the adjacent CSX rail line. This proposed single track connection to the CSX line will expand to three tracks to allow for preparation of trains for entry to the CSX rail line. At the biodiesel production facility, the siding expands to five (5) sidings serving the facility and one siding for public access. The proposed rail siding will cross a wetland area at the location of the existing rail spur crossing to minimize wetland disturbance. 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, in concert with the City of Pittsfield. The rail siding will be transferred to and owned by a municipal entity following construction.

B. ALTERNATIVES

Alternative sites and site configurations have been evaluated for the proposed project. Alternatives include:

1. Alternative Sites - Alternative sites that were considered include:

- *a. Pittsfield Economic Development Authority Site - This site is a former General Electric manufacturing facility, located closer to Downtown Pittsfield than the proposed site. This site is more accessible to rail and Route 90, would not require construction of a rail siding, and would require fewer wetland impacts. This facility was Berkshire Biodiesel's preferred site; however, the Authority plans to use the facility for offices.*
- *b. East Street Site - The City of Pittsfield suggested redevelopment of a closed softball facility on East Street in Pittsfield. Construction at this site may not include wetland impacts. However, this site is close to a residential neighborhood and would also require construction of a rail siding. The site would also result in the loss of a recreational facility that could potentially reopen.*
- *c. Petricca Industries and North Adams Sites - A site on Merrill Road in Pittsfield and a site in North Adams that were identified were too small to accommodate the proposed use.*
- *d. Hubbard Ave Site (Proposed Site) - This site was found to have adequate land, an appropriate building, laboratory space, and offices. An existing railroad siding was also available at the adjacent facility east of the site, although this siding has been abandoned since the early 1980s.*

2. Alternative Site Layouts - Alternative facility layouts were considered for the proposed site, including:

a. Using the Existing Railroad Siding - The existing railway siding was considered for use for the proposed facility. This alternative would require extending the siding to the proposed facility and would result in minimal or no wetland impact. However, CSX determined the switch was located on a curve in the main line and could not be reopened in its current configuration.

b. Constructing a New Rail Siding - The following constraints are imposed on the new siding design by CSX:

- *The switch cannot be installed on a curve or within 200 feet of a bridge,*
- *The maximum grade and horizontal curve radius is limited,*
- *CSX locomotives must be able to pull railroad cars onto and from the site without pushing onto the main line,*

These constraints severely limit alternative siding layout designs. The proposed alignment meets all of CSX criteria, although wetland replication will be required. This alternative is currently anticipated to result in 4,000 square feet of wetland disturbance. The location of the rail siding also defines the location of the feedstock and biodiesel storage area, which is located near the siding for loading and unloading purposes.

C. POTENTIAL MITIGATION MEASURES

The following alternative mitigation measures would be required for the alternatives described above:

1a. The Pittsfield Economic Development Authority Site currently includes the majority of the infrastructure that is required by the proposed biodiesel production process, and the site appears to be located greater than 100 feet from wetland resources and greater than 200 feet from streams. However, the Authority preferred another use of this site.

1b. Locating the facility at the East Street site also appears to be unlikely to result in wetland impacts, since wetlands may not be present at the site. However, the loss of the recreational resource and location of the site near a residential neighborhood is likely to result in public opposition.

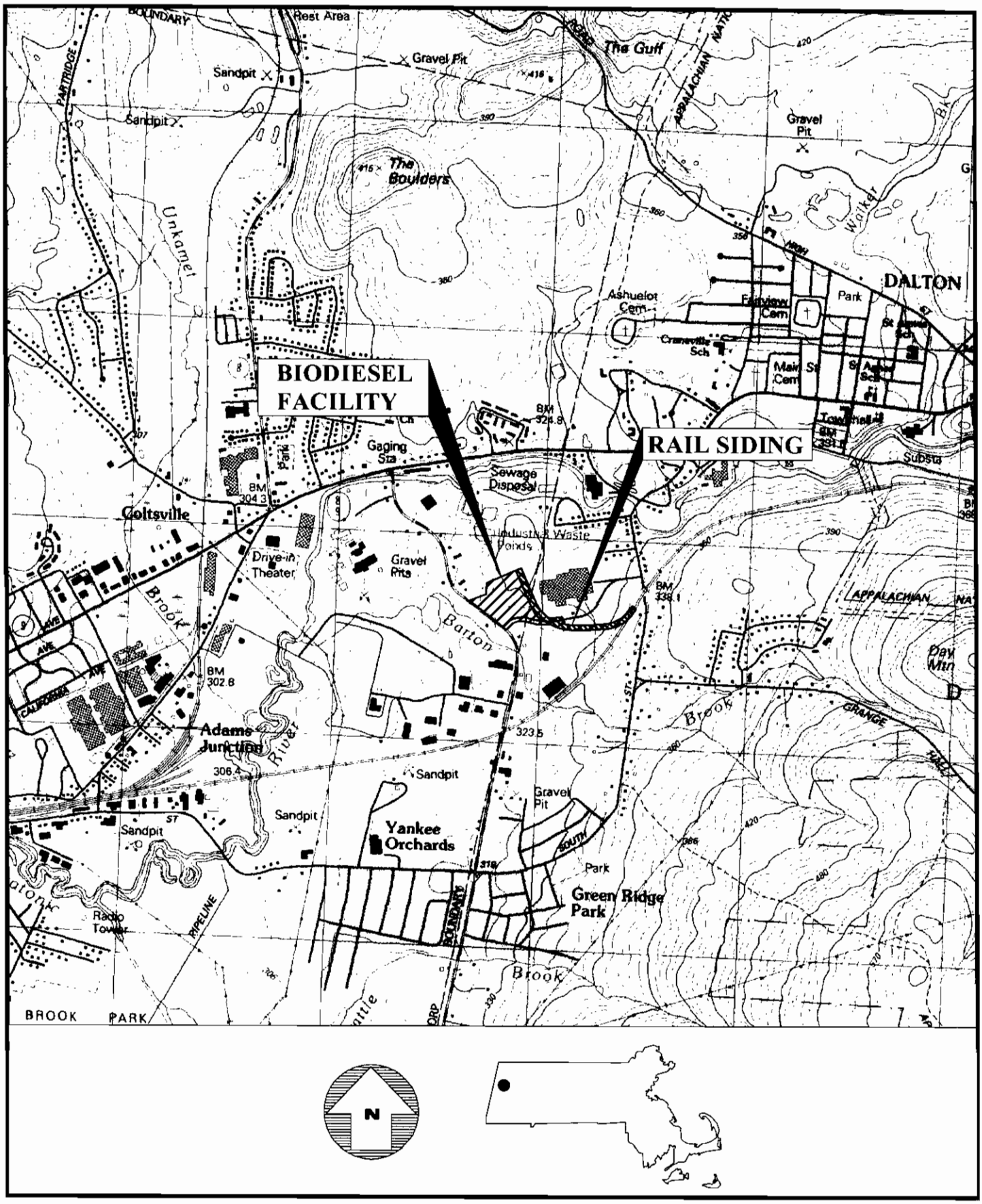
1c. The Petricca Industries and North Adams Sites are too small for the proposed use.

1d. The Hubbard Ave site will require mitigation for wetland impacts at the proposed rail crossing. Mitigation will include replacement of wetlands at a ratio of one or more units of replacement wetlands to one unit of wetlands lost. Additionally, the proposed crossing will be designed following the Massachusetts River and Stream Crossing Standards. The stormwater management system for the proposed redevelopment project will also comply with the MA Stormwater Management Policy relative to construction and post-construction stormwater runoff. Other mitigation measures, which are described elsewhere in this ENF, are summarized below:

- *Emissions control system to limit emissions of NOx from fuel burning sources at the proposed power plant, and operational controls as required by a state air quality permit.*
- *Spill containment measures for the rail and truck loading and unloading operations and storage tank facility consistent with local, state, and federal regulations.*
- *Adequate site access by fire protection equipment and other fire protection design measures associated with the rail siding, tank farm, biodiesel production facility, and power plant.*
- *Minor improvements to the facility driveway entrance and signage to facilitate fuel truck access to the site and internal site traffic circulation.*
- *Potential pretreatment of the facility wastewater discharges to the municipal sanitary sewer system under state and local sewer connection permits.*

2a. No loss of wetland areas would occur if the existing siding could be used at the Hubbard Ave site. However, this siding cannot be reopened since it does not meet current railroad design standards.

2b. The proposed design of the railroad siding at the Hubbard Ave site is limited by numerous design standards, safety constraints, and site constraints. The proposed design meets all of these requirements, while other alignments would not. Proposed mitigation measures are described above in Item 1d.



SCALE: HORZ.: 1" = 2000' VERT.: DATUM: HORZ.: VERT.: 0 1000 2000 GRAPHIC SCALE	FUSS & O'NEILL *Disciplines to Deliver* 78 INTERSTATE DRIVE, WEST SPRINGFIELD, MA 01089 413.452.0445 www.FandO.com	BERKSHIRE BIODIESEL SITE LOCUS 448 HUBBARD AVENUE PITTSFIELD MASSACHUSETTS	PROJ. No.: 20070242.A10 DATE: APRIL 2007 ATT. A

UCS: MS VIEW: L:MAN: CTB: