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July 12, 2013

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

PROJECT NAME : Environmental Remediation at 100 Bridge Street
PROJECT MUNICIPALITY : Great Barrington
PROJECT WATERSHED : Housatonic
EEA NUMBER : 15059
PROJECT PROPONENT : Community Development Corporation of South Berkshire
DATE NOTICED IN MONITOR : June 12, 2013

Pursuant to the Massachusetts Environmental Policy Act (M.G. L. c. 30, ss. 61-62I) 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 described in the Environmental Notification Form (ENF), the project entails bio-remediation to treat contaminants in the soil at the eight-acre former New England Log Homes site located at 100 Bridge Street in Great Barrington, adjacent to the Housatonic River and bounded to the north by Bridge Street, to the east by Bentley Avenue, and to the south by the Great Barrington Wastewater Treatment Plant. This brownfield site has been vacant for approximately 20 years. A fire in March 2001 destroyed approximately half of the vacant New England Log Homes buildings; the remaining buildings were demolished in 2012. The industrial activities performed at the site released dioxins, pentachlorophenol (PCP), metals, and/or petroleum hydrocarbons to the upper layer of the soil and/or to groundwater. The site is subject to the Massachusetts Contingency Plan (RTN 1-0682). The proposed project is intended to remediate the contamination on the site in order to facilitate its redevelopment. Most of the site is a flat compacted gravel industrial yard which was used by New England Log Homes for storage and a laydown area; some young second growth trees have grown up since the site was abandoned and a line of mature trees encircles the site.

Permits and Jurisdiction

The project is undergoing MEPA review and requires preparation of an Environmental Notification Form (ENF) pursuant to 301 CMR 11.03 (3)(b)(1)(d) and (2)(b)(2) because it requires a State Agency Action, will alter 5,000 or more square feet of Bordering or Isolated Vegetated Wetlands, and will disturb greater than two acres of designated Priority Habitat for rare species. The project will require a 401 Water Quality Certification (WQC) and a Tier 1B Permit for a waste site cleanup. The project must also comply with the Massachusetts Contingency Plan (MCP). The project also requires review by the Department of Fish and Wildlife's Natural Heritage and Endangered Species Program (NHESP) and the Massachusetts Historical Commission (MHC).

An Order of Conditions was issued for the project by the Great Barrington Conservation Commission that was not appealed. The project will also require a National Pollutant Discharge Elimination System (NPDES) Permit for Stormwater Discharge from Construction Activities from the U.S. Environmental Protection Agency (EPA) and a Section 404 Category II General Permit from the U.S. Army Corps of Engineers (ACOE).

Because the proponent is not seeking State Financial Assistance, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required State Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to wetlands, rare species, and hazardous waste.

Description of Bio-Remediation Process

The remediation of the site is proposed to be accomplished through an innovative bio-remediation process - essentially a farming operation - that will stimulate bacteria in the soils to break down the contaminants, which are generally concentrated in the upper 12 inches of the soil. The shallow soils across the entire site area are required to be remediated, including two wetland areas. The river bank is not required to be remediated. As noted above, the Great Barrington Conservation Commission has issued an Order of Conditions for the project and the restoration/replication of the wetlands. Any future redevelopment on the site will require the submission of a new Notice of Intent (NOI).

The site will be prepared for the bio-remediation process by installing erosion and sedimentation controls, decommissioning existing monitoring wells, capping catch basins, and removing trees and stumps within the work limits. Trees and other vegetation and stumps will be cleaned, chipped, and disposed of off-site. Trees along the river bank will remain with the exception of some dead trees, hazard trees or invasive trees, which will be flush-cut and removed, leaving the stumps in place. Low earthen berms will be installed at low points along the top of the river bank to retain surface water runoff on the site. Several existing stockpiles of bricks, concrete and wood chips will either be relocated to a section of the property where it can be remediated in a later phase of the work, or cleaned, crushed, and removed from the site for proper off-site disposal. The brick, concrete and wood chip stockpiles have been tested and are not considered to be hazardous waste. Residual soil on the stockpiled material will be cleaned off before crushing and off-site disposal. The soils surrounding the main building will be tested to confirm that residual asbestos does not remain from the demolition. If any asbestos is found, the soil in the affected area will be segregated for proper handling.

A temporary "farm-type" irrigation system will be installed around the perimeter of the property, drawing water from a temporary intake float in the Housatonic River. The irrigation system will be used for dust control and to maintain adequate soil moisture content. It is expected that an average of 30,000 gallons per day will be withdrawn during the 10-12 week bio-remediation process in 2013. The withdrawal is expected to be much less in 2014 due to the anticipated smaller surface area requiring bio-remediation treatment. The proponent has developed an irrigation monitoring and operation plan in consultation with NHESP and the Great Barrington Conservation Commission.

The soils on the site will be broken up with a 'ripper' to a depth of about 18 inches. Large rocks and any remaining concrete foundations will be removed, cleaned of soil, crushed and properly disposed of as construction debris at an off-site location. Upon completion of the site preparation, the area within the work limits, including the two wetland areas on the site, will be tilled/plowed by a tractor making multiple passes. When needed, the irrigation system will be periodically cycled to control dust and to optimize the moisture content of the soil.

Soil amendments in the form of compost, manure, urea nitrogen and lime will be applied across the surface of the site and tilled into the soil to increase total organic carbon, promote rapid reproduction of indigenous soil bacteria, and facilitate effective bio-degradation of the contaminants. Then an enzymic "Factor" will be applied. This is a proprietary formulated product designed and prepared by BioTech Restorations LLC to separate the chlorine bonds of the contaminants in the soil and allow the natural bacteria to digest the organic material and break down the chemical compounds. The "Factor" will be incorporated into the soil by multiple passes of the cultivator/tiller and the site will be irrigated to maintain levels that are optimum for the soil bacteria. At seven- to ten-day intervals following the initial treatment, the site will be tilled/plowed to maintain aerobic conditions. Monitoring and testing will occur prior to and during the treatment period which is estimated to run for about 10 to 12 weeks from August through mid-October, 2013.

At the end of the growing season, the treated soil will be sampled to determine concentrations of dioxin, PCPs, etc., remaining in the treated soils. If the concentrations remain above the risk-based cleanup goal, a determination will be made about which follow-up alternative(s) to implement during 2014. Follow-up alternatives include:

- continue bio-remediation during a second growing season;
- move affected soils to the southern portion of the site where redevelopment is expected to occur several years in the future and continue bio-remediation there; or
- move soils with concentrations exceeding the cleanup goal to location(s) on-site where future permanent structures (pavement and/or building slabs) or clean soil cover will prevent contact or exposure.

Review of the ENF

Project Alternatives

The remediation of the contaminated soils on the site is mandated by the MCP. Studies and analyses have been conducted on the site for over 10 years, and many alternatives have been studied and reported to MassDEP. In 2012, DEP agreed that no permanent on-site treatment was feasible and the only feasible alternative for a temporary solution was to install a two-foot thick cap on the site to prevent

exposure to contaminants. Because the site includes wetlands and floodplains, the capping alternative would require wetland replication and compensatory flood storage at another off-site location.

The proponent is proposing an innovative process for bio-remediation of the dioxins, PCP, and other contaminants as described above. Recent studies of the process are reported to be favorable. This methodology is expected to allow the contaminated soils in the wetlands to be remediated and ultimately restored and replicated on-site. The floodplain filling that otherwise would have been required by the two-foot thick cap will also be significantly reduced. It is expected that some form of a cap (building pad, pavement, soil cover, etc.) will still be required to prevent exposure to any residual contamination, but that the cap thickness may be reduced by lowering the residual concentrations and incorporating the cap elements into whatever redevelopment ultimately occurs on the site.

Removal and off-site disposal of all contaminated soils on the site may be financially infeasible. However, as recommended by the Berkshire Regional Planning Commission (BRPC), if contaminated soils are to be moved from one portion of the site to another, the proponent should consider off-site disposal of small amounts of contaminated soils in a manner appropriate for hazardous waste as allowable under the MCP. If possible and feasible, it would appear to be preferable for hazardous materials to be disposed of in a permanent fashion at a licensed facility rather than remaining on the site under an Activity Use Limitation (AUL).

Rare Species

The NHESP has determined that this project, as currently proposed, will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species and, therefore, will not result in a prohibited "take" of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that described in the ENF may require an additional filing with NHESP pursuant to the Massachusetts Endangered Species Act (MESA).

Wetlands

The site is bounded on the west by the Housatonic River and includes a total of 3.56 acres of Riverfront Area. The buildings removed from the site in 2012 occupied a total of 43,929 square feet (sf) within the Riverfront Area. Several other structures, driveways, and other impervious surfaces were also removed, some within the Riverfront Area. The proposed bio-remediation does not propose any direct impacts to Riverfront Area.

There are two wetland areas on the project site: a bordering vegetated wet meadow wetland in the southeast quadrant of the site with an area of 12,996 sf; and a manmade ditch that functions as an intermittent stream outlet to the river. A second linear ditch measuring 4,432 sf carries runoff from Bentley Avenue and its uphill drainage area to a culvert that runs beneath the site and discharges to the river. Testing on the site indicates that the soils in both of the wetland areas are contaminated with dioxins and must be remediated. The Great Barrington Conservation Commission issued an Order of Conditions for the project, including the alteration of the wetland and restoration/replication of the wetlands. The proponent is proposing to create a single 18,000-sf restoration/replication area to compensate for the alteration of the two existing wetlands. The larger 13,000-sf wetland will be restored

as a wet meadow. The smaller 4,400-sf linear wetland is proposed to be replicated adjacent to the larger wetland and planted with a mix of shrubs and trees.

The bio-remediation project proposes to withdraw water directly from the Housatonic River at a rate of approximately 30,000 gallons per day (GPD), which would not require a Water Withdrawal Permit under the Water Management Act. However, the project will require a 401 Water Quality Certification. The application should describe all aspects of the project, including whether the site – once remediated – would be completely or partially capped.

In its comments, the BRPC expresses its concern that the Housatonic River is known to have periods of low flows. Therefore, negative impacts could reasonably be expected under those conditions from a 30,000 gpd withdrawal. Withdrawals from the river will be used to control dust and maintain a minimum moisture level in the soil. Presumably, these actions would be required under dry conditions and potentially when water levels are low and the river is most vulnerable. I recommend that a minimum flow should be established and the proponent should develop an alternative plan to provide the necessary water if flows within the Housatonic River are not adequate.

Compensatory Flood Storage

Although the bio-remediation does not in itself require compensatory flood storage, it is expected that the ultimate redevelopment of the site will upon its completion. The design of the future redevelopment project will have to take special account of grading within the floodplain. Some on-site compensatory flood storage is available near the southeast corner of the site, and some was reserved from the previous demolition. It is expected that the final cover would be constructed as part of the future redevelopment. In the interim, the site will be fenced and vegetated to prevent exposure. The bio-remediation process will not address contaminated groundwater, but a Permanent Solution is anticipated for soil. A Temporary Solution is anticipated for groundwater at this time. An Activity and Use Limitation (AUL) will be placed on the completed site.

Additionally, it is not known whether off-site compensatory flood storage will be needed. Prior to any redevelopment of the site, the proponent should develop a compensatory flood storage plan that documents that off-site flood storage is available if needed.

Potential Requirement for a Notice of Project Change

I acknowledge the concerns expressed by the BRPC with regard to the potential segmentation of this project evidenced by the fact that the ENF does not describe the ultimate redevelopment plan for this site. While the MEPA regulations include an explicit provision with regard to segmentation, It is further understood that it is fairly typical to submit an ENF for remediation alone when the full impacts from the future redevelopment of the site are unknown. Typically, the MEPA Office has dealt with this issue by requiring the submission of a Notice of Project Change (NPC) at a later date in order to assess the environmental impacts posed by the redevelopment itself.

The removal of the contaminated buildings was funded by two federal agencies and one state quasi-public agency, as well as from the BRPC Brownfields Revolving Loan Fund Program based on a redevelopment plan that was provided to those agencies. However, the ENF appears to indicate that no

redevelopment plan is in place. In the absence of knowing whether the ultimate redevelopment of the site will entail Financial Assistance from the Commonwealth or require State Agency Permits, I cannot definitively require the submission of a NPC at this time as it is not clear whether MEPA jurisdiction would extend to the redevelopment. On the other hand, if the redevelopment entails Financial Assistance from the Commonwealth or require State Agency Permits, the submission of a NPC would certainly be required, regardless of whether MEPA review thresholds would be exceeded. At a minimum, the proponent should notify the MEPA Office when a redevelopment program has been identified in order to determine if the submission of a NPC is required.

Construction Period

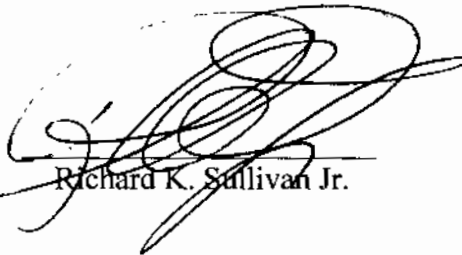
The proponent should note MassDEP's comments regarding construction and demolition activities, asbestos removal, construction period air quality mitigation measures, recycling of solid waste, and spill prevention.

Conclusion

The review of the ENF has served to adequately disclose the potential impacts associated with this project. Based on review of the ENF, consultation with relevant state agencies, and a review of comment letters, I find that no further MEPA review is warranted. The project may proceed to permitting.

July 12, 2013

Date



Richard K. Sullivan Jr.

Comments received:

06/14/2013 Natural Heritage and Endangered Species Program (NHESP)
07/02/2013 Berkshire Regional Planning Commission (BRPC)
07/08/2013 MassDEP Western Regional Office (WERO)

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