



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Commonwealth of Massachusetts
Division of Capital Asset Management
One Ashburton Place
Boston, MA 02108

Re: CRWSC - Medfield
45 Hospital Road
Former Medfield State Hospital
RTN 2-3020799

Attention: John O'Donnell
Deputy Director

Immediate Response Action Plan
Conditional Approval
310 CMR 40.0000
M.G.L. c.21E

Dear Mr. O'Donnell:

On July 20, 2011, the Massachusetts Department of Environmental Protection (MassDEP) received a "Draft Immediate Response Action Plan" for the Construction and Demolition Area (the "C&D Area") at the former Medfield State Hospital. The Immediate Response Action (IRA) Plan proposes excavating contaminated soil and debris, emplacing a temporary sediment cap within the adjacent Charles River, and reconstructing the river bank to eliminate continued leaching and/or erosion of soil resulting in petroleum contamination of sediment that has is or likely to result in impacts to surface water as a condition of Substantial Release Migration (SRM). On August 16, 2011, MassDEP received a Phase III Feasibility Evaluation in support of the IRA Plan. On August 19, 2011, Mass DEP hosted a technical meeting with stakeholders, including Town of Medfield municipal officials, Public Involvement Plan petitioners, members of the State Hospital Environmental Reuse Committee (SHERC), and the Charles River Watershed Association (CRWA).

Based upon review of the IRA Plan and accompanying Phase III Feasibility Evaluation, consideration of comments received by stakeholders and permitting agencies, MassDEP approves the IRA, subject to the following conditions:

1. Temporary capping of the approximately 800 sq. ft. of contaminated sediment exceeding sediment toxicity benchmarks and all work within the Charles River channel is to be completed by October 31, 2011.
2. Vacuum dredging of the temporarily capped sediment, preferably from the shore, will be conducted and completed by October 31, 2012, contingent upon receiving approval from the US Army Corps of Engineers (USACOE) and other permitting agencies.

IRA Plan Conditional Approval

Page 2

C&D Area, Fmr. Medfield State Hospital
45 Hospital Rd., Medfield, MA
RTN 2-3020799

3. The Division of Capital Asset Management (DCAM) shall submit quarterly IRA Status Reports to MassDEP. In addition to IRA Status Report content, required by 310 CMR 40.0425, status reports shall provide a summary of the dredging permitting progress to include all correspondence with USACOE and permitting agencies, updates relative to milestone deadlines, and required actions. The first such IRA Status Report shall be submitted to MassDEP by December 31, 2011.
4. In the event that dredging of contaminated sediment is not allowed by USACOE or other permitting agencies, DCAM shall submit a revised Phase III Feasibility Evaluation to identify a feasible remedial alternative, meeting the requirements of 310 CMR 40.0850. The revised Phase III Feasibility Evaluation shall be submitted within 60 days from which DCAM receives notification of dredging denial.
5. Any dewatering and wastewater discharge conducted during the implementation of the IRA Plan must meet the requirements of Management Procedures for Remedial Wastewater and Remedial Additives, per 310 CMR 40.0040.
6. To ensure that site conditions within the Charles River remain stable, confirmatory sampling of sediment and surface water shall be conducted by November 30, 2011. Laboratory analyses of sediment and surface water will include MassDEP's CAM 14 Metals, Extractable Petroleum Hydrocarbons (EPH) and EPH target analytes, and Volatile Organic Compounds.
7. Inspection of the sediment cap shall be conducted by June 1, 2012, to ensure that it remains intact and has not been transported or damaged by winter and spring river flow. The cap shall be repaired or replaced as needed, if inspection indicates the cap has been damaged or has moved such that contaminated sediment has been exposed.
8. Further confirmatory sediment sampling shall be conducted by June 30, 2012, and within 30 days of completion of dredging or by November 30, 2012, whichever is sooner.
9. All monitoring wells damaged or destroyed during performance of the IRA shall be replaced by November 30, 2011. Sampling of groundwater shall be conducted by December 13, 2011, for the same analytes as sediment and surface water. Additional groundwater monitoring wells and piezometers shall be installed to adequately define the nature and extent of contamination, as required by 310 CMR 40.0904.
10. At a minimum, groundwater and surface water sampling shall be conducted on a quarterly basis through December 31, 2013; groundwater and surface water sampling shall be conducted biannually in March and October after December 31, 2013, through October 31, 2016.
11. DCAM shall consider the use of bioengineering alternatives to riverbank rip rap, if engineering concerns of liner anchoring, erosional stabilization, and long term durability can be addressed. If unable to implement bioengineered rip rap alternatives

IRA Plan Conditional Approval

Page 3

C& D Area, Fmr. Medfield State Hospital
45 Hospital Rd., Medfield, MA
RTN 2-3020799

as part of the IRA, DCAM shall provide a technical evaluation of rip rap alternatives conducted by an independent consultant with expertise and experience in bioengineering technologies. The evaluation of rip rap alternatives shall be submitted with the first IRA Status Report, due December 31, 2011. Concrete shall not, in any case, be used as rip rap.

12. Stabilization and reconstruction of the riverbank, conducted as part of the IRA, shall not be considered as a basis of infeasibility on a technical or cost-benefit basis to address bioengineering rip rap alternatives or future comprehensive response actions to remediate the co-located chlorinated volatile organic compound release to the extent required by 310 CMR 40.0000.
13. If future monitoring of groundwater, surface water or sediment indicate that the remedy is not performing as designed to control the migration and transport of contaminants, as evidenced by increasing extent and contaminant concentrations, additional remedial action alternatives will be required to maintain conditions of No Substantial Hazard or No Significant Risk, as applicable per 310 CMR 40.1000.

MassDEP appreciates the attention and cooperation of DCAM regarding these matters. If you have any questions, please contact me at (508) 767-2803.

Sincerely,



Mark E. Baldi
Section Chief, Audits
Bureau of Waste Site Cleanup

September 8, 2011

Date

cc: Carol Cornelison, Commissioner, Division of Capital Asset Management
Martin Suuberg, Regional Director, MassDEP-CERO
Mary Gardner, Deputy Regional Director, BWSC, MassDEP-CERO
Ms. Leslee Willets, Conservation Agent, Medfield Conservation Commission
Mr. Michael Sullivan, Town of Medfield Administrator
Mr. John Thompson, LSP, SHERC Chairman
Ms. Margaret Van Deusen, Director, Charles River Watershed Association
Ms. Andrea Stiller, LSP, ADS Environmental Engineering, LLC
Mr. Frank Ricciardi, LSP, Weston and Sampson, Inc.
Mr. William Massaro, PIP Petitioner
PIP Repository, Town of Medfield Public Library
CERO File:Database

