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RD/RA WETLAND WA-1 STATEMENT OF WORK
THE MASSACHUSETTS ELECTRIC COMPANY
SALEM ACRES SUPERFUND SITE
SALEM, MASSACHUSETTS

I. INTRODUCTION AND PURPOSE

This Remedial Design/Remedial Action ("RD/RA") Wetland WA-1 Statement of Work ("WA-1 SOW") defines the response activities and deliverable obligations that the Massachusetts Electric Company ("MEC") will perform to implement the work required at the Salem Acres Superfund Site, in Salem, MA (the "Site"), under the RD/RA Consent Decree between the Environmental Protection Agency ("EPA") and the MEC, as amended by this WA-1 SOW. This WA-1 SOW defines work to be accomplished in a portion of wetland WA-1, adjacent to the SL-4 area. Areas outside the WA-1 area may be utilized as needed for the remedial activities. The WA-1 area is shown on Figure 2.

II. DESCRIPTION OF REMEDY

The selected remedy consists of the excavation of a portion of the fly ash from a section of the WA-1 wetland adjacent to the SL-4 Area and disposal at permitted landfill facility or recycling facility. The fly ash excavation will extend from the western limit of remediation performed previously by the MEC for the SL-4 Area to a distance of 30 feet to the east. This 30 foot distance is based on the observation and experience that human accessibility in the wetland beyond 30 feet is highly unlikely due to the fact that beyond this point, the wetland would not support much weight. The excavation will extend to the north and south limits of fly ash defined in the Draft Exploration, Sampling, and Analysis Report, WA-1 Wetland, Salem Acres Superfund Site, prepared by GEI Consultants, Inc. and Menzie-Cura & Associates, dated December 18, 1998 ("WA-1 Report"). The excavation will extend to the depths necessary to encounter the natural soils that underlie the fly ash. The excavation will be performed "in-the-wet" (i.e., the excavation area will not be dewatered) and verification of fly ash removal will be based on visual examination of the excavated materials. Target excavation depths will be estimated based on the results of previous explorations in WA-1, which are presented in the WA-1 Report. Confirmatory analyses will not be required to verify removal. The characteristics of fly ash found at this site, including concentrations of arsenic, have previously been identified through pre-design studies and remediation of the SL-4 area and the recent exploration of the wetland itself.

Following removal of the fly ash, the excavation will not be backfilled but will remain open to form a ponded area. It is recognized that the water in the excavation will be turbid with some suspended fly ash during excavation but will settle out after completion of excavation activities. Disturbed areas above the level of the water in the excavation will be restored by the placement of topsoil and seed. The edges of the excavation will be sloped to no steeper than 2H:1V. An approximately 6-inch-thick layer of sand or crushed

stone (smaller than 3/8 inch nominal diameter) will be placed over the side slope (to the bottom of slope below the water) along the western edge of the excavation.

III. REMEDIAL DESIGN

Remedial design activities will consist of the following:

Pre-Design Studies: Limited pre-design field and laboratory studies have been performed to determine in-place densities, excavated densities, water contents, and drainage characteristics of the fly ash. This work included laboratory density and water content determinations performed on undisturbed tube samples of fly ash obtained during the Exploration, Sampling and Analysis program (see WA-1 Report), excavation of 4 test pits in the WA-1 wetland, and density and water content determinations of fly ash excavated from the test pits. The results of the field and laboratory studies will be summarized in a brief memorandum, which will be included as an attachment to the Narrative Report (discussed below). No additional pre-design studies will be required.

Design Documents: The design documents will consist of design drawings and a Narrative Report. The drawings will depict existing conditions, site management facilities (exclusion and contaminant reduction zones, stockpile drainage area, truck loading area, and equipment and personnel decontamination pad), the approximate extent of the excavation and post-excavation topographic contours, and site restoration. The Narrative Report will describe the requirements for remedial action ("RA"), including construction sequencing, truck traffic restrictions, site management, dust monitoring and control, personnel and equipment decontamination procedures, site security, erosion control, site preparation, and analytical requirements for imported fill materials that will remain on site. The Narrative Report will refer to applicable portions of the Project Operations Plan that was prepared for the SL-4 RD/RA for detailed requirements for various site activities. A memorandum summarizing the results of the pre-design studies (described above) will be included as an attachment to the Narrative Report.

An access road and truck turn-around area will be constructed on the DA-1 Area to access the portion of WA-1 to be remediated. The design of these facilities will be the responsibility of the construction contractor selected for the RA and will not be shown on the design drawings.

The design drawings and Narrative Report will be submitted to the EPA for review and approval or modification. The EPA will provide the Massachusetts Department of Environmental Protection ("DEP") reasonable opportunity for review and comment.

Selection of the Permitted Landfill: Bids will be solicited from permitted landfills for the hauling and disposal of the excavated fly ash and other contaminated materials removed from the site. A list of the permitted landfills from which bids will be requested has been provided to the EPA for review and approval.

Alternate Selection of Disposal to Re-Use/Recycling Facility: If the fly ash can be beneficially reused or recycled at a recycling facility, alternate disposal at the facility can take place. The chosen facility (ies) must be in compliance with state, federal and local requirements and be submitted to the EPA for review and approval.

Public Meeting: MEC, or its representatives, along with EPA and DEP, will attend and participate in an informal neighborhood meeting to be held at the Barcelona Avenue gate to discuss concerns that neighborhood residents may have concerning the RA. The meeting will be held following EPA approval of the design documents and prior to beginning the RA. The EPA will arrange the meeting and notify neighborhood residents.

IV. REMEDIAL ACTION

A general description of the RA is provided in Section II of this WA-1 SOW. Additional RA requirements are described below:

Stockpile Drainage Area: A stockpile drainage area will be constructed adjacent to the excavation. Water draining from the stockpiled fly ash into the excavation area will be filtered through hay bales and a silt fence.

Decontamination Pad: An equipment and personnel decontamination pad will be constructed adjacent to the excavation. Water generated by decontamination operations will be filtered through hay bales and silt fence and be allowed to drain into the excavation. Vehicles and equipment will be cleaned prior to entering the truck loading area and decontamination pad to prevent any road dirt and grease from being released to the wetland. Excavation and trucks carrying contaminated materials will be decontaminated prior to leaving the site. Decontamination water will either be provided by a tanker truck or from the municipal waterline located just outside the site on Barcelona Avenue.

Air Monitoring: Air monitoring during the RA will consist of periodic dust monitoring downwind of the excavation and stockpile drainage area and at the Barcelona Avenue gate and personnel air monitoring for arsenic. The dust monitoring will be performed using hand-held equipment at least twice a day during construction activities.

Truck Traffic: Truck traffic on Barcelona Avenue will be limited to the hours between 7:00 am and 5:00 pm. A truck speed limit of 15 miles per hour will be strictly enforced. Heavy trucks will not be allowed to enter Ravenna Avenue.

Site Security: The Barcelona Avenue gate will remain locked at all times that MEC, or its representatives, are not on site. 24-hour security will not be required.

Analytical Requirements: Imported fill and topsoil that will remain on site will be sampled and analyzed for volatile organic compounds (VOCs), semi-volatile organic

compounds (sVocs), pesticides, PCBs, and Safe Drinking Water Act (SDWA) metals using standard EPA SW-846 methods. Quality Assurance/Quality Control (QA/QC) documentation provided with the analytical results will consist of a laboratory project narrative describing the sample conditions upon receipt and all analytical quality control deviations experienced during analysis. Reports of results will include organic fraction surrogate spike percent recoveries, blank sample results, laboratory control sample (LCS) results, and matrix spike/matrix spike duplicate percent recoveries and relative percent differences. The report will provide all sample dilution factors used, the percent dry weight of solids, specific method references, and the applicable quality control limits used by the laboratory to evaluate analytical system performance.

Maximum concentrations of compounds for fill materials to be used on site which are listed in the RA Work Plan for the SL-4 Area shall be complied with.

The receiving landfill or recycling facility will require sampling and analysis of the fly ash and contaminated materials disposed off site to ensure compliance with the requirements of their permit. Copies of the waste characterization analyses will be provided to EPA.

Removal of Temporary Site Facilities: Fill placed to construct the stockpile drainage area, the decontamination pad, and the truck loading area will be disposed of at the receiving landfill or recycling facility accepting the fly ash. All of the fill used to construct these facilities and the upper 3 to 4 inches of the underlying existing soils will be hauled to the receiving landfill or recycling facility for disposal if a geosynthetic membrane liner is not used in their construction. If a geosynthetic membrane liner is used in the construction of these facilities, only the fill above the liner, and the liner itself, will be disposed of at the receiving facility. Underlying soils shall be removed if the liner is found to be damaged in such a way as to allow contamination through to soils below. If a liner is used, fill will be placed below the liner and will be graded to blend into the existing topography. The fill will be covered with topsoil and seed after the liner is removed.

Fill placed to construct the access road and truck turn-around area on DA-1 will either be hauled off-site for reuse or be graded to blend into the existing topography and covered with topsoil and seed. If it is found that waste has fallen off a truck, that area of fill shall be removed along with the contaminated materials.

Pest Control Plan: A pest control plan will not be necessary due to the lack of pest inhabitants observed during past remedial actions.

Office Facilities: Temporary office facilities will not be required on-site.

Completion of Construction Report: Upon completion of construction, the contractor will prepare a brief Completion of Construction Report to document site activities including

quantities of materials imported, quantities of materials excavated and removed, dates of various activities, the results of air monitoring, unusual occurrences during construction, and restoration efforts. The Completion of Construction Report will be factual in nature and will not render an opinion on the attainment of remediation goals. The Completion of Construction Report will be submitted to EPA for review and approval or modification. The EPA will provide the DEP reasonable opportunity for review and comment.

Final Construction Inspection: After completion of the RA, a final construction inspection will held at the site. The inspection will be attended by MEC, the RD and RA contractors, EPA and DEP.

Demonstration of Compliance Report: A Demonstration of Compliance Report will not be required for this work.

Monthly Progress Reports: Monthly Progress reports will not be required.

These elements of the RA will be more fully described in the Narrative Report, which will serve as an RA Work Plan.

V. SCHEDULE

All work under this WA-1 SOW shall be completed by September 22, 1999. The proposed schedule for the RD/RA is shown on Figure 1.

RD/RA WETLAND WA-1 STATEMENT OF WORK
THE MASSACHUSETTS ELECTRIC COMPANY
SALEM ACRES SUPERFUND SITE
SALEM, MASSACHUSETTS

The undersigned Massachusetts Electric Company agrees to perform the work at the Salem Acres Superfund Site described in the attached Wetland WA-1 Statement of Work. In addition, Massachusetts Electric Company and EPA agree to incorporate the attached Wetland WA-1 Statement of Work into the Consent Decree between EPA and Massachusetts Electric Company, dated April 8, 1994, as a minor modification to the Statement of Work attached to the Consent Decree.

MASSACHUSETTS ELECTRIC COMPANY

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