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**REMOVAL SITE EVALUATION  
METEOROLOGICAL TOWER PROJECT JULY  
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**REMOVAL SITE EVALUATION**

**METEOROLOGICAL TOWER PROJECT**

**Feed Materials Production Center**

**U. S. Department of Energy**

July, 1993

## REMOVAL SITE EVALUATION METEOROLOGICAL TOWER PROJECT

### INTRODUCTION

DOE/EH-0173T, Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance, requires that each DOE site establish and maintain a meteorological monitoring program. This program should record representative conditions of the site for two purposes: to assess the impacts of planned and unplanned airborne releases on public health and safety and to show demonstrate compliance with applicable federal, state, and local laws, regulations, and orders. Also, DOE 5400.5, Radiation Protection of the Public and the Environment, states that the monitoring and surveillance programs be of high quality, and that it is a policy to adopt and implement standards generally consistent with those of the Nuclear Regulatory Commission for DOE facilities. Additionally, any special meteorological monitoring requirements imposed by other regulatory agencies should be considered when implementing the meteorological program.

Two such standards, EPA-6000 (Vol IV), Quality Assurance Handbook for Air Pollution Measurements, and NRC Regulatory Guide 1.23, Meteorological Programs in Support of Nuclear Power Plants (DRAFT), state that the distance between wind instruments and any obstruction be at least ten (10) times the height of that obstruction. Currently, the FEMP meteorological tower is not in compliance with current guidelines and regulations that address meteorological programs due to the trees that surround the tower.

The scope of the Meteorological Tower Project includes replacement and upgrade of the instruments that are approaching their life expectancy and need replacement in compliance with current regulations. Additionally, to eliminate interference with meteorological readings, trees within approximately 350 feet of the existing tower must be cleared. The trees will be cut as close as possible to the ground and the tree stumps left in place to become natural habitat for the area fauna, eventually returning to the soil as natural decay progresses. Part of the felled trees will be placed in brush piles that will serve as wildlife habitat and the remaining trees will be mulched for use elsewhere on site. Additional work outlined in the "Wildlife Management Plan" for the area includes disking an area in preparation for planting wild flowers the following spring.

This Removal Site Evaluation (RSE) has been completed by the DOE under authorities delegated by Executive Order 12580 under Section 104 of CERCLA and is consistent with Section 300.410 of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). This RSE addresses the aforementioned work to complete the Meteorological Tower Project. This RSE has been completed to support the decision as to whether the project conditions warrant a removal action.

### SOURCE TERM

Previous surveys and samples from this area of the FEMP have indicated that low levels (slightly above background) of radioactive contamination may be present at the project site. A preliminary radiological survey will be performed and the project site will be monitored by Radiological Safety personnel to ensure that construction practices are appropriate for the contamination levels present.

RCRA regulated metals and organics have not been detected in soil samples taken near the project site. Based on this information and the prior use of the area, RCRA regulated metals and organics are not suspected contaminants. Regardless, soil and debris will be handled in accordance with Removal Action 17, "Improved Storage of Soil and Debris" and SSOP -0044 "Management of Soil, Debris & Waste from a Project."

Historical records and process knowledge of the work area do not reveal any known use of hazardous chemicals within the project area.

### **EVALUATION OF THE MAGNITUDE OF THE POTENTIAL THREAT**

To manage the hazards and prevent the spread of any possible radiological contamination that may be present, the following controls, among others, will be implemented during the Meteorological Tower Project.

- Physical barriers will be positioned around the work area to prevent unauthorized access.
- Protective clothing and respiratory protection will be provided for workers, as required.
- Appropriate materials and containers will be available to contain radiologically contaminated materials, as required.

While these controls will be implemented as required, no waste is expected to be generated from this project.

### **ASSESSMENT OF THE NEED FOR REMOVAL ACTION**

Consistent with Section 40 CFR 300.410 of the NCP, the Department of Energy shall determine the appropriateness of a removal action. Eight factors to be considered in this determination are listed in 40 CFR 300.415 (b)(2). The following apply specifically to this project:

#### **40 CFR 300.415 (b)(2)(i)**

Actual or potential exposure to hazardous substances or pollutants or contaminants to nearby populations, animals, or food chain.

#### **40 CFR 300.415 (b)(2)(v)**

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

Based on the controls described above and the levels of contamination at the project site the threat from and potential of a release or migration of uranium from this project is negligible. Thus, while the above criteria can be applied to this project, it does not constitute the need for a removal action.

**APPROPRIATENESS OF A RESPONSE**

Based on the evaluation of all the above factors, it has been determined that a removal action will not be necessary and this project should be continued as a best management practice in support of the CERCLA remediation process and waste management. Furthermore, the controls planned in conjunction with this construction activity and management procedures established in accordance with Removal Action 17 are adequate to mitigate any hazards created by contamination at this site and to prevent deterioration of existing site conditions.