

DWSRF Guidance Document Number 18
Project Design Review for Petroleum Contamination and Hazardous Waste Sites

This guidance document outlines a procedure to be used by the Division to identify actual and potential contaminated soils and groundwater within the area of water supply construction projects funded under the DWSRF. The purpose of this procedure is to either avoid areas of contamination during the planning and design of water systems or to make provisions for dealing with them during construction and system operation. Normally file and document research for potential contamination will be conducted at the time of 60% review of the preliminary engineering work product, especially for larger projects (subject to further clarification as to when exactly the determination should be made). The research will be done by the DWSRF Program Specialist or the Vermont Rural Water Association (Association), or their designee. Findings of potential contamination in an area designated for construction will result in referral to appropriate WSD staff and the project design engineer for further consideration, which could include redesign to avoid areas of potential contamination, field investigation to characterize the degree and extent of the contamination, and contract provisions to appropriately deal with the contamination during construction.

A. Project Identification

Projects to be evaluated under these procedures will be identified by the DWSRF Program Specialist or designee based on the probability of contaminated soil or groundwater existing in the project area. The identification will normally occur when the scope of preliminary engineering services is reviewed. The initial determination will normally be reconsidered at the time of the 60% preliminary engineering review, especially for larger projects.

B. Preliminary Evaluation

(1) Database and GIS search, and Source Protection Plan review at the 60% Preliminary Engineering Review conducted by the DWSRF Program Specialist or designee

- (a) GIS overlay of Underground Storage Tanks (UST), spill sites, petroleum release sites (Leaking Underground Storage Tank - LUST), operating facilities handling hazardous materials (RCRA) and hazardous waste sites (GIS entries not necessarily complete)
- (b) Underground storage tank permit data base
- (c) Spill database
- (d) Petroleum release site lists
- (e) Hazardous waste site lists

(2) Research of potential contamination sources found during review of databases

- (a) Review facility or site files
- (b) Interview Waste Management Division facility or site manager

(3) Division of Historic Preservation Files search at the time of the archeological file review by the Association for evidence of historic sources of contamination

- (a) Insurance maps
- (b) Land use maps
- (c) Other local maps
- (d) Photographs

(4) Site Visit in conjunction with the archeological or State Environmental Review Process (SERP) walk-over conducted by the Association or DWSRF Program Specialist to identify:

- (a) Current industrial and Above Ground Storage Tank (AST) locations
- (b) Farm supply stores (fertilizer/pesticide)
- (c) Former industrial and AST sites
- (d) Former gasoline stations
- (e) Former general stores
- (f) Former fuel distributors

C. Preliminary Evaluation Report

Summary memorandum of funding prepared by the DWSRF Program Specialist and distributed to the water system, its design engineer and appropriate WSD staff.

- (a) Known contaminated sites (LUST and hazardous)
- (b) Current UST sites
- (c) Former tank sites
- (d) Potential hazardous sites
- (e) Recommendations

D. Additional Investigations

Subsurface field investigations (e.g., soil borings and test pits) may be conducted by the design engineer to confirm the presence or absence of soil and groundwater contamination. Waste Management Division Tank Inspectors or Technical Services staff may be present during the field work to screen soils using field instruments, and they may take groundwater samples for analysis. If they cannot be present the design engineer will be responsible for the screening.

E. Project Modifications, Contract Provisions, and Eligible Costs

- (1) On the basis of file and site walk over information and/or field investigations, a Senior Division Engineer will negotiate system relocation, design changes or special construction provisions with the water system and its design engineer.
- (2) If construction is to occur in a contaminated or potentially contaminated area, special provisions and bid items to cover the handling of the contamination will be included in the construction contract. The Senior Division Engineer will coordinate these provisions with the water system, its design engineer, the Construction Section of the Department's Facilities Engineering Division, and the Sites Management Section of the Waste Management Division.
- (3) Should contamination be found or suspected in the project area, involved staff will discuss probable costs and eligibilities under applicable funding programs before the final design and contract documents are completed. The water system and its design engineer will be informed of the Department's conclusions.

F. Unanticipated Contamination

Should previously unknown contamination be discovered during construction, work will cease

and the Senior Division Engineer, Waste Management Sites Manager, and the Facilities Engineering Construction Chief will be notified. These three officials will discuss the situation and attempt to reach agreement on how the Department will proceed. The system owner, design engineer, and potential responsible party and contractor will be contacted before any final decision is made.

Honorable Jim Douglas, Governor Jonathan Wood, Secretary Laura Pelosi, DEC Commissioner

This guidance and related environmental information are available electronically via the internet. For information visit us through the Vermont Homepage at <http://www.vermont.gov> or visit VT WSD directly at <http://www.vermontdrinkingwater.org>

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