

## APPENDIX C

### DEFINITIONS

1. AQUIFER  
A geologic formation, group of formations, or part of a formation capable of yielding useable quantities of ground water to wells or springs. An aquifer may be deemed "significant" if it provides sufficient quantities of water to satisfy large water use demands.
2. COMMUNITY WATER SYSTEM  
A public water supply system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
3. COMPARABLE QUALITY  
The quality of the raw sources of drinking water used in the Review Area, considering, in a general way, both the types of contaminants that are present and their relative concentrations.
4. COMPARABLE QUANTITY  
An alternative source capable of reliably supplying water in quantities sufficient to meet the current year-round needs of the review area that is served by ground water. In determining sufficient needs, population growth and increasing water needs over time may be considered.
5. GROUND WATER RESERVOIRS  
Stratified drift deposits having a saturated thickness greater than or equal to 40 feet and a transmissivity greater than or equal to 4000 feet squared per day which have been designated to be potentially significant sources of water. Locations of significant fractured bedrock may also be considered ground water reservoirs.
6. LAND USE ACTIVITIES  
Residential, municipal, commercial, industrial, agricultural and natural activities occurring on the land surface. Each New England State Wellhead Protection Program provides guidance on the types of land use activities that should be inventoried as potential sources of contamination to ground water (see Table 1).
7. LOCAL WELLHEAD PROTECTION PROGRAM  
Program developed in accordance with approved State Wellhead Protection Program requirements which describes background information on the recharge area to a public water supply well and outlines management measures to protect such drinking water supplies. Components of a local program depend upon State requirements and may include: Wellhead Protection Area delineation, inventory of potential sources of contamination, identification of local planning team, list of management measures and

## APPENDIX C

contingency planning.

8. PUBLIC WATER SUPPLY SYSTEM

A system to supply the public with piped water for human consumption, having at least fifteen (15) service connections or regularly serving an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. A system includes all sources and facilities involved in collecting, treating, storing and distributing the water.

9. RECHARGE AREA

The land surface area which receives precipitation recharge that will move to the well naturally or under pumping conditions.

10. REVIEW AREA

Delineated area based initially on a two-mile radius from the boundaries of the facility or contamination area. The dimensions of the Review Area can be expanded or reduced based on hydrogeologic settings. This Review Area shall be larger than the "site" boundaries in order to depict a broader view of ground water assessment and uses. The current area of contamination is not necessarily static and may be affected by future stresses outside the contaminated area (e.g. installation of pumping wells).

11. SATURATED THICKNESS

The thickness of an aquifer measured from the water table to an essentially impermeable boundary; such boundary is typically taken to be the top of the bedrock surface.

12. SENSITIVE ECOLOGICAL SYSTEM

An aquatic or terrestrial ecosystem located in a ground water discharge area and supporting a unique habitat (i.e. habitat for a listed or proposed endangered or threatened species, or land management areas specifically designated and managed for the purpose of ecological protection).

13. SOLE SOURCE AQUIFER

An aquifer petitioned by local communities and designated by the United States Environmental Protection Agency, which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should the aquifer become polluted.

14. TRANSMISSIVITY

A measure of the ability of an aquifer to transmit water. It can be quantified by multiplying the hydraulic conductivity by the saturated thickness.

15. WELLHEAD PROTECTION AREA (WHPA)

## **APPENDIX C**

A three dimensional land surface and subsurface zone surrounding a public water supply well or wellfield which encompasses the volume of materials through which water will move to the well(s).

## APPENDIX C

### LIST OF CATEGORIES OF POTENTIAL SOURCES OF GROUNDWATER CONTAMINATION<sup>1</sup>

#### Higher Risk

Airports-Commercial (maintenance & repair, fuel storage)	Landfills & Dumps
Automotive Repair Shops	Machine Shops
Automotive Body Shop	Metal & Drum Cleaning/Reconditioning
Boat Builders & Refinishers	Paint Shops
Bus & Truck Terminals	Photographic Processors
Chemical Manufacturers	Printers and Blueprint Shops
Dry Cleaners	Railroad Yards
Fuel Oil Distributors	Repair Shops (engines, appliances, etc.)
(product storage, equipment maintenance & storage)	Rust Proofers
Furniture Strippers, Refinishers	Service Stations (gas stations)
Industrial Manufactures	Waste Storage, Treatment & Recycling (hazardous and non-hazardous)
Junkyards and Salvage Yards	

#### Moderate Risk

Agriculture Related Activities (pesticide & fertilizer storage & application, machinery maintenance & fueling)	Pipeline (oil & sewers)
Asphalt, Coal, Tar & Concrete Companies	Prisons
Dredge Disposal Sites	Research Laboratories
Medical Facilities (hospitals, clinics laboratories)	Road Salt Storage
Military Facilities (past & present)	Schools, Colleges, Trade Centers
Nursing Homes	Wastewater Treatment Plants (past or present sludge disposal)
	Wood Preservers

#### Lower Risk

Animal Care & Holding Areas (stables kennels, pet shops)	(meat packers, dairies, bakeries)
Auto Parts Stores	Funeral Homes & Cemeteries
Beauty Salons	Golf Courses
Construction Sites	Hotels & Motels
Food Processors	Land Application of Sewage Sludge
	Laundromats

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<sup>1</sup>From Wellhead Protection Inventory Guidance

## APPENDIX C

Nurseries  
Residential Development  
    (lawn care, septic systems)  
Restaurants & Taverns  
Retail Shopping Centers, Malls  
Sand & Gravel Mining Operations  
Sawmills  
Stormwater Management Facilities  
    (leaching systems)  
Transmission Line Rights of Way  
Transportation Corridors (road  
    deicing, materials transport)  
Utility Substations/Transformers  
Waste Transfer Stations