



# **Appendix H Updated APA in Manchester**

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## **GUIDELINES FOR ROAD & HIGHWAY CONSTRUCTION/RECONSTRUCTION IN STATE AQUIFER PROTECTION AREAS**

- **Drainage System Design Criteria.**
  - Select best management practices from the DEP stormwater manual based on treatment effectiveness and low groundwater pollution potential.
  - Sheetflow and swale collection is encouraged, where possible, outside of immediate wellfield area.
  - Catch basins and curbs should be used in immediate wellhead area to divert and control runoff and spills away from wellhead.
  - Dry wells or similar subsurface leaching structures should not be used for stormwater disposal from paved or other areas that have high potential to pollute groundwater; existing structures which have high potential to pollute groundwater should be removed or converted.
  - Gross particle/oil separators (swirl concentrator type) may be used for pretreatment of consecutive catch basins. Deep catch basins (minimum 4' deep and tight construction, with baffles, may also be used).
  - Stormwater discharge points shall outlet to aboveground land surface or basin type structures. Significant or critical discharge points should have a basin designed with a forebay (tight soil or lined) capable of containing an 8,000-10,000 gallon spill volume and 3-6 feet above water table, 4 feet above bedrock.
  - Potential strategic groundwater monitoring should be considered.
  
- **Stormwater Pollution Prevention Measures**
  - Ways to minimize pollutant load (sand, salt, etc.) should be examined.
  - Deicing management areas should be established including low salt use areas, alternative chemical or sand methods.
  - Wellhead protection signs shall be posted in clear visibility of the highway at the entrance and exit points of the aquifer protection area and at ½ mile intervals.
  
- **Temporary Construction Measures.**
  - Significant fuel, chemical or other hazardous materials storage and handling should be located outside wellfield area and aquifer protection area if possible.
  - Any necessary temporary storage should be aboveground, protected from rainfall, and on a impervious containment surface.
  - An emergency spill and response plan should be developed, including coordination with the water supplier.

# AQUIFER PROTECTION AREA

Manchester Water Department  
New State Road Wellfield

## Legend

- ▲ Aquifer Protection Area Wells
- Final, Adopted
- Final, Not Adopted
- Preliminary

