**Section 391.440 Additional Precautions**

a) If the requirements of Subpart D cannot be met, additional environmental precautions such as groundwater monitoring, soil analyses, plant tissue sampling and analysis shall be included as permit conditions as necessary to assure compliance with the Environmental Protection Act and 35 Ill. Adm. Code, Subtitle C, Subchapter l.

b) If groundwater monitoring is required, a minimum of 3 saturated zone groundwater monitoring wells (1 upgradient and 2 downgradient) shall be provided at each land application site. Additional wells may be required depending upon the size of the site, hydrogeology, direction of groundwater movement, sludge quality and other considerations.

1) The design, construction and operation of the groundwater monitoring system shall be done in accordance with the regulations adopted pursuant to Title V of the Act and policies of the Division of Land Pollution Control.

2) The location of groundwater monitoring wells is site specific and the hydrogeology of the particular site shall be considered in the design.

3) The wells must be sampled monthly and analyzed for parameters including, but not limited to, nitrates, electrical conductivity, chlorides, pH, hardness and heavy metals.

c) Yearly plant tissue sampling and analysis may also be required to determine the uptake characteristics and heavy metal concentrations of the plant tissue and grain. Plant tissue sampling and analyses shall be the responsibility of the generator and of those utilizing the sludge.

d) The plant tissue monitoring and groundwater monitoring results of Subsections b and c will be reviewed by the Agency to determine future controls and frequency of monitoring.