Site capacity:

The maximum allowable flow to the spray field is as follows:

$$\text{Site capacity} = \frac{A_{Site}\ (\text{acres}) \times \text{WLR (in/week)} \times 43{,}560\ \text{ft}^2/\text{acre} \times 7.48\ \text{gal/ft}^3}{12\ \text{in/ft}}\ \text{gal/week}$$

$$= \frac{54.9 \times 2.0 \times 43{,}560 \times 7.48}{12}$$

= 2,981,334 gal/week maximum or 0.43 MGD (7-day average)

5.3.2 Groundwater Monitoring Requirements:

The intent of monitoring is to determine the influence of the land treatment system on the quality of the groundwater. Groundwater leaving the spray field boundaries must meet drinking water maximum contaminant levels (MCLs).

In accordance with EPD requirements for all municipal LAS facilities, groundwater will be monitored for the following parameters:

Parameter (units)
Depth to Groundwater (feet)
Nitrate, as N (mg/L)
pH (standard units)
Specific Conductivity (µmhos/cm)
Escherichia Coli (#/100mL)

Groundwater monitoring at the site is conducted in one upgradient (B1), in one midgradient (O-1) and four downgradient (P-1, P-2, P-3, and P-4) wells.

5.3.3. Soil Monitoring Requirements:

The intent of monitoring is to determine the influence of the treated wastewater on the soil chemistry/composition. It will also aid the permittee with operation and maintenance of the land treatment system.

In accordance with EPD requirements for all municipal LAS facilities, requirements to conduct soil fertility tests, as well as Cation Exchange Capacity and Percent Base Saturation analysis (depending on pH results), have been included in the draft permit.