

3.3.2 Overburden Groundwater

Listed below is a table indicating all parameters which have historically exceeded NYSDEC Part 703 groundwater standards at the Lindley South Landfill. The table also includes a "trend" review of each exceeded parameter over time to see if it has increased, decreased or demonstrated no trend over time. Trend determinations have been deciphered by examining both the historical water quality data included in Appendix C of the Lindley South Landfill 2011 & 2012 Environmental Monitoring Annual Report. Greater detail discussing the water quality results obtained from the 2011-2012 monitoring events are included in this report.

Overburden Unit						
Parameter	GW-1	GW-4	MW-1	MW-2S	MW-3	MW-4
pH	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Turbidity	Decreasing	Decreasing	Decreasing/ No Trend	Decreasing	Decreasing	Decreasing
Color	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Alkalinity	No Trend	No Trend	No Trend	No Trend	Decreasing	Decreasing
Total Hardness	No Trend	No Trend	Decreasing	No Trend	No Trend	Decreasing
Total Dissolved Solids	No Trend	No Trend	No Trend	No Trend	No Trend	Decreasing
Chloride	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Sulfate	Decreasing	No Trend	No Trend	No Trend	No Trend	No Trend
Boron	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Ammonia	No Trend	No Trend	No Trend	No Trend	Decreasing	No Trend
COD	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Phenols	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Arsenic	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	No Trend
Cadmium	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Chromium	No Trend	No Trend	Decreasing	No Trend	No Trend	No Trend
Iron	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing
Lead	No Trend	No Trend	Decreasing	No Trend	Decreasing	Decreasing
Magnesium	No Trend	No Trend	Decreasing	No Trend	No Trend	Decreasing
Manganese	Decreasing	No Trend	Decreasing	No Trend	Decreasing	Increasing/ No Trend
Sodium	No Trend	No Trend	Decreasing	No Trend	Decreasing	No Trend

Overburden Unit						
Parameter	GW-1	GW-4	MW-1	MW-2S	MW-3	MW-4
Selenium	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Silver	No Trend	No Trend	Decreasing	No Trend	No Trend	No Trend
Thallium	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Zinc	No Trend	No Trend	Decreasing	No Trend	Decreasing	No Trend

A review of historical groundwater quality data was conducted to examine the consistency with the reported exceedances. The majority of the groundwater quality data obtained from closure to present has remained generally consistent over time. A slight impact from the landfill has been observed at monitoring locations MW-2S, MW-3, and GW-4; however, these locations continue to demonstrate consistent groundwater quality over time.

3.3.3 Bedrock Groundwater

The only Bedrock Unit monitoring well at the landfill is located on the northeast corner of the site. The well represents site downgradient bedrock groundwater quality and is installed ninety-five (95) feet deep. With no upgradient Bedrock Unit monitoring location we are unable to compare the groundwater quality within MW-2D to naturally occurring water quality within the Bedrock Unit at the landfill. This makes it difficult to determine if any specific groundwater standard exceedance is a naturally occurring phenomenon or potentially a landfill influence indicator. What can be observed and examined is the consistency of each parameter over time. Groundwater quality within this location has remained consistent since the landfill closure.