

Lambton Facility

Bio-monitoring Program



Bio-monitoring Program

For 15 years, chemicals in the environment around the site have been measured and monitored.

The bio-monitoring program collects information about selected chemicals that occur in the local environment and monitors changes annually and over time.

The program was conducted by a multidisciplinary team of scientists with expertise in soil chemistry, ecology, ecological risk assessment and agronomy from an independent consulting company. The team has extended experience in the field of environmental effects monitoring. University of Guelph scientists have provided input and peer review.

Site selection, sample collection and laboratory testing follow scientific methods.

Samples of crops (e.g. soybeans), natural grasses (e.g. brome grass), soil and ditch sediment are collected for

analysis and sent to laboratories that have been previously identified and tested for their excellence in quality control and quality assurance.

More than 60 organic (e.g. DDT) and inorganic (e.g. Lead) chemicals and chemical combinations are monitored.

Annual results are compared with results of previous years and available guidelines; and assessed as part of longer-term trends. The data is charted over time to observe trends.

Bio-monitoring Program Status: 2006 Field Year Summary

The locations chosen for the bio-monitoring study were carefully selected to demonstrate if there were any environmental changes to the terrestrial environment surrounding the Lambton Facility. Testing was completed on a broad range of chemicals. This study also recognized that the area evaluated could be impacted by other sources either locally or from other regional or global sources.

Results from this monitoring indicated that the concentrations of monitored chemicals were within the expected levels for this area in Ontario. If variations from expected levels were observed; additional investigations were completed to further determine if these changes had any significance.

15 years of bio-monitoring work at Lambton indicates that the environment surrounding the facility hasn't changed over time. The trends over time and the levels seen here are within the range that we would find elsewhere in Ontario.

For more information on the bio-monitoring program, please refer to Appendix L of the 2007 Annual Landfill Report now available in the Resource Centre online at www.cleanharbors.com/lambton.

