

**Groundwater & Leachate Monitoring Report for
Gormanston (Waste Licence W0151-01),
Quarter 3, 2008**

Sept 2008

Murphy Environmental

**Sarsfieldstown
Gormanston
Co. Meath**

MU0103

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Executive Summary

1. Murphy Environmental (a division of Murphy Concrete Manufacturing Ltd.) operates a restoration and recovery facility for inert waste at its site at Gormanston, Sarsfieldstown, Co. Meath. The site is an active sand and gravel pit. Restoring the site will serve to return it to its original condition and integrate it into the surrounding landscape.
2. In Quarter 3, 2008 quarterly monitoring of groundwater and leachate was carried out by Patel Tonra Ltd on the 1st and 2nd of July as required under Waste Licence W0151-01.
3. Exceedances of Drinking Water Directive limits in groundwater were noted for the following parameters during Quarter 3, 2008 monitoring:
 - Ammoniacal Nitrogen
 - Total Coliforms
 - Faecal Coliforms
4. Exceedances of EPA trigger levels in groundwater were noted for the following parameters during Quarter 3, 2008 monitoring:
 - Conductivity
 - Chloride
5. Ammoniacal Nitrogen was found to exceed its Drinking Water limit value in MW-2, MW-4 and TW-2. TW-2 is up-gradient of any potential onsite pollution sources in the area. It is likely to be associated with agricultural and sewage pollution sources. Similar results have been consistently found in previous sampling rounds at various positions on or close to the site. MW-2 and MW-4 consistently have greater levels than the Drinking Water Level for Ammoniacal Nitrogen.
6. Coliform analysis was repeated in Q3, 2008 as results were relatively high in Q2, 2008. Q3, 2008 Total coliform results, again showed exceedances of limit values in MW-1 MW-3, MW-4, MW-5, MW-6, MW-14, MW-16, MW-19, MW-20, MW-22, MW-24, MW-25 and PW-3.
7. Faecal coliforms exceeded Drinking Water limit values for MW-3, MW-5, MW-14, MW-16, MW-19, MW-22 and MW-24.
8. There were five exceedances of the EPA trigger levels for conductivity. These were in MW-17, MW-19, MW-20, MW-21 and MW-22.
9. There were three exceedances of the EPA trigger levels for chloride. These were in MW-4, MW-17 and MW-22.
10. Leachate monitored at the Gormanston site for Quarter 3, 2008 was found to be in exceedance of the Drinking Water Directive (98/83/EEC) limits for ammoniacal nitrogen in L-4, and has been consistently high at this location. L-1, L-2 and L-3 were dry.