

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: Sybil Kolon, Senior Environmental Quality Analyst,
Remediation Division

FROM: Carol Smith, Environmental Organic Unit Supervisor, ^{CS}
Laboratory Service Section, Remediation Division

DATE: July 22, 2011

SUBJECT: 1,4-Dioxane data review, Pall Corporation, Lab Order #10100069 –
Data Reviewed By - Patrick Rumler, Laboratory Scientist 12

The Standard Operating Procedure (SOP) provided (Document No. ELS-105 Revision D) is well written and the submitted data validates that the laboratory is following the SOP. The SOP is based on USEPA Method 1624 Revision B: Volatile Organic Compounds by Isotope Dilution GC/MS.

The QC data is acceptable. The reported outfall data is analyzed three times. The nonspiked sample is run first. The spiked sample and the spiked duplicate sample are analyzed next. The precision and the recoveries are acceptable.

A couple issues were discovered in the submitted data package. On 10/19/10 the data was quantified using an old quantitation method. On 10/22/10 and 10/29/10 the Quality Control (QC) data was quantified using a different method than the samples. This is not good laboratory practice.

USEPA Method 1624 appears to be a reasonable method for analysis of 1,4-dioxane as long as target detection limits are met.

If you have questions regarding this information please contact Carol Smith at 517-335-9550.