Data Validation Report

Project/Site Name: OMEGA CHEMICAL SUPERFUND SITE

Report Number: 123191

Parameters: N-Nitrosodimethylamine (NDMA)

Method: 1625 MOD

Laboratory: MWH Laboratories, Monrovia, CA

Samples:

Sample ID	Sample Description	Sampling Date	Matrix
OC2-MW8A-W-0-12	Field Sample	3/4/04	Water
OC2-MW8B-W-0-13	Field Sample	3/4/04	Water
OC2-MW8C-W-0-14	Field Sample	3/4/04	Water
OC2-MW8D-W-0-15	Field Sample	3/4/04	Water
OC2-00-W-2-16	Field Sample	3/4/04	Water
OC2-MW9B-W-0-17	Field Sample	3/4/04	Water
OC2-MW10A-W-0-18	Field Sample	3/4/04	Water
OC2-MW11A-W-0-19	Field Sample	3/4/04	Water

Introduction/Summary

This data review report covers the sample delivery group and associated samples listed on the cover sheet. The analyses were per USEPA Method 1625 modified for N-Nitrosodimethylamine (NDMA) to attain low detection levels. The quality assurance and quality control procedures (QA/QC) were per project quality assurance plan and laboratory standard operating procedures (SOP).

This review is based on EPA Validation Functional Guidelines (1994 and later revisions) the following subsections correlate to these guidelines. The specific criteria is per method 1625, QAPP and laboratory SOP as described below. The sections below detail noted deviations from these criteria if any. Tables summarizing all data qualification flags are provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified criteria/protocols (P) or is of a technical advisory nature due to sample matrix (A).

Data qualifiers, if any, are summarized at the end of this report.

I. Holding Times

Samples were extracted within 7 days of collection and analyzed within 40 days of extraction as required.

II. GC/MS Instrument Performance Check

Per this method tuning is not implemented as for other GC/MS methods; the instrument is run in the CI mode with ammonia gas. Instrument performance was checked prior to initial calibration, daily and with calibration verification.

III. Initial Calibration

An initial calibration with a minimum of five calibration standards (8 standards, 1ppt to 150 ppt) was run.

The relative standard deviation (RSD) for each analyte was less than 20%, or r^2 (quadratic fit) was greater than 0.995.

Second source calibration check was run; percent deviation was less than 20% limit.

IV. Continuing Calibration

Continuing calibration was analyzed daily before sample analysis and after every 10 samples.

All calibration analytes had a relative percent deviation of less than 20%.

V. Blanks

Method blank analysis was performed at the frequency of once for every analytical batch (20 samples or less).

The concentrations of analytes in the method blanks were less than the reporting limits (2 ppt) and no detects were reported. The laboratory implements corrective action for detects above 0.5 ppt.

VI. System Monitoring Compounds/Internal standards

Internal standard compound d-14 NDPA (after extraction) and surrogate d6-NDMA (before extraction) were added to all laboratory blanks, LCS, MS/MSD and field samples. All recoveries for d6- NDMA were within laboratory limits (50-150 %). Recoveries for d-14 NDPA were within 70- 130%.

VII. Matrix Spike/Matrix Spike Duplicates

An MS/MSD was analyzed with these samples. All percent recoveries and RPDs were within criteria (70-130% recovery).

VIII. Laboratory Control Sample (LCS)

At least one laboratory control sample and a duplicate per analytical batch (20 samples or less) were analyzed.

All percent recoveries and RPDs were within criteria (70-130% recovery).

IX. Internal Standards

Internal standards were analyzed and monitored per the following criteria during data acquisition: for each sample: retention times were within 0.06 minutes relative to average of the initial calibration curve.

X. Compound Quantitation and Reporting Limits

The method d detection limits (MDLs) have been established by a MDL study by the laboratory and performed at least once every 12-month period.

Compound quantitation algorithms have been verified.

XI. System Performance

QC data at large indicate acceptable performance.

XII. Overall Assessment of Data

All data were found to be acceptable per specifications as noted above under introduction/summary with the exception of samples and analytes listed in the table at the end of this report if any.

OMEGA CHEMICAL SUPERFUND SITE NDMA Data Qualification Summary – Report # 123191

No data has been qualified for this report.

OMEGA CHEMICAL SUPERFUND SITE NDMA Blanks Data Qualification Summary – Report # 123191

No data has been qualified for this report.