

July 4, 2007

Robert Martin
Martin and Slagle
P.O. Box 1023
Black Mountain, NC 28711

Dear Mr. Martin,

Enclosed is the Technical Memorandum for VOC work recently performed at the Kuhlman Electric Corporation (KEC) facility in Crystal Springs, MS. If you have any questions concerning this information, give me a call.

Sincerely,

Kari Ann Kellam
for Joseph Kubale

Enclosure

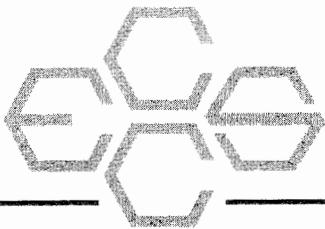
Environmental Chemistry Consulting Services, Inc.

2525 Advance Road • Madison, WI 53718 • Phone (608) 221-8700 • FAX (608) 221-4889

Technical Memorandum

Kuhlman Electric Corporation (KEC)

Crystal Springs, Mississippi



TECHNICAL MEMORANDUM

July 4, 2007

To: Robert Martin
Martin and Slagle

From: Joseph Kubale *Kak*
ECCS

Re: Field Analytical Methods
Volatile Organic Compounds (VOC)
Kuhlman Electric Corporation (KEC)
Crystal Springs, MS

Introduction

This Technical Memorandum provides documentation of the field analytical test methods used to analyze well water samples collected March 2006 near the Kuhlman Electric Corporation (KEC) facility in Crystal Springs, MS. The samples were analyzed by purge and trap GC/MSD for the VOCs listed below.

Narrative

Waters

Water samples were analyzed for VOCs directly by purge and trap GC/MSD.

The following report limits were used for water samples. The reporting limit units are in ug/L.

Purge and Trap GC/MSD

Dichlorodifluoromethane	1.0
Chloromethane	1.0
Vinyl chloride	1.0
Bromomethane	1.0
Chloroethane	1.0
Trichlorofluoromethane	1.0
1,1-Dichloroethene	1.0
Methylene chloride	1.0

Purge and Trap GC/MSD

trans-1,2-Dichloroethene	1.0
1,1-Dichloroethane	1.0
cis-1,2-Dichloroethene	1.0
2,2-Dichloropropane	1.0
Bromochloromethane	1.0
Chloroform	1.0
1,1,1-Trichloroethane	1.0
1,1-Dichloropropene	1.0
Carbon tetrachloride	1.0
Benzene	1.0
1,2-Dichloroethane	1.0
Trichloroethene	1.0
1,2-Dichloropropane	1.0
Dibromomethane	1.0
Bromodichloromethane	1.0
cis-1,3-Dichloropropene	1.0
Toluene	1.0
trans-1,3-Dichloropropene	1.0
1,1,2-Trichloroethane	1.0
Tetrachloroethene	1.0
1,3-Dichloropropane	2.0
Dibromochloromethane	1.0
1,2-Dibromoethane	1.0
Chlorobenzene	1.0
1,1,1,2-Tetrachloroethane	1.0
Ethyl benzene	1.0
Xylenes, total	2.0
Styrene	1.0
Bromoform	2.0
Isopropylbenzene	1.0
1,1,2,2-Tetrachloroethane	2.0
Bromobenzene	1.0
1,2,3-Trichloropropane	2.0
n-Propylbenzene	1.0
2-Chlorotoluene	1.0
1,3,5-Trimethylbenzene	1.0
4-Chlorotoluene	1.0
tert-Butylbenzene	1.0
1,2,4-Trimethylbenzene	1.0
sec-Butylbenzene	1.0
1,3-Dichlorobenzene	1.0
p-Isopropyltoluene	1.0
1,4-Dichlorobenzene	1.0
n-Butylbenzene	1.0
1,2-Dichlorobenzene	1.0
1,2-Dibromo-3-chloropropane	2.0
1,3,5-Trichlorobenzene	1.0
1,2,4-Trichlorobenzene	1.0
Hexachlorobutadiene	1.0
Naphthalene	3.0
1,2,3-Trichlorobenzene	1.0

A summary of test results is provided in Table 1. A summary of method blanks and matrix spike/matrix spike duplicate data is provided in Table 2.

In addition copies of the chain of custody sheets can be found in appendix A.

- A) Chain of custody sheets for samples
- B) FEDEX shipping label for SGS Environmental Services
- C) Chain of custody sheets for samples sent to SGS Environmental Services

VOC Method Summary

Water Samples

Water samples were provided by the client to the field lab in 40mL VOC vials. A 10mL aliquot of the sample was withdrawn from the vial with a 10mL Luer-Lok™ syringe. 10 µL of a 25µg/mL surrogate and internal standard solution was added to the sample in the 10 mL syringe. The sample was then immediately loaded onto a Tekmar ALS 2016 autosampler with a Tekmar LSC 2000 purge and trap concentrator for GC\MSD analysis.

GC/MSD Procedure:

Identification of target compounds was done by matching retention times and mass spectra of peaks found in samples to those found in a VOC calibration standard using the internal standards as time reference peaks. Quantitation was performed by the internal standard technique using a seven point standard curve generated from 5, 10, 20, 50, 100, 250, and 500 ng standards. These levels equate to 0.5, 1.0, 2.0, 5.0, 10, 25 and 50 µg/L for water samples.

A Hewlett-Packard 5890 gas chromatograph with a 30m x 0.32mm RTX-624 micro-capillary column interfaced to a Hewlett-Packard 5972 MSD was used. The data system included a Hewlett-Packard Enviroquant chromatography workstation for data handling.

Quality control consisted of the following items:

- Initial calibration with % relative standard deviation less than 15% of individual response factors obtained from analysis of calibration standards
- Continuing Calibration Verification standards analyzed at a frequency of every ten samples
- Surrogate standard additions to samples
- Blank samples analyzed at a minimum of one per day
- Matrix spike and Matrix Spike Duplicate samples analyzed for every twenty samples
- Information documented in Field Logbook 150.

Table 1

Sample Results – March‘06

TABLE 1

Kuhlman Electric - Crystal Springs, I
W1547 W1548 W1549
CSW CSW CSW
FB WA1 WA2

TABLE 1

TAF

Table 2

QC Results – March'06

TABLE 2
QC Report

Lab # associated with qc samples: W1547 through W1554

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
Spike			
W1552	W1552		

Date Analyzed: 3/16/06 3/16/06 3/16/06

Compound	% Rec	% Rec	% RPD	ug/L
Dichlorodifluoromethane	87.8%	77.0%	13%	< 1.0
Chloromethane	91.4%	86.8%	5%	< 1.0
Vinyl Chloride	94.8%	93.0%	2%	< 1.0
Bromomethane	100%	93.0%	7%	< 1.0
Chloroethane	96.4%	79.8%	19%	< 1.0
Trichlorofluoromethane	99.6%	97.4%	2%	< 1.0
1,1-Dichloroethene	98.8%	95.2%	4%	< 1.0
Methylene Chloride	109%	101%	8%	< 1.0
trans-1,2-Dichloroethene	102%	98.4%	4%	< 1.0
,1-Dichloroethane	106%	102%	4%	< 1.0
cis-1,2-Dichloroethene	100%	98.6%	1%	< 1.0
2,2-Dichloropropane	94.8%	94.6%	0%	< 1.0
Bromochloromethane	112%	109%	3%	< 1.0
Chloroform	106%	111%	-5%	< 1.0
1,1,1-Trichloroethane	109%	105%	4%	< 1.0
1,1-Dichloropropene	90.2%	90.0%	0%	< 1.0
Carbon Tetrachloride	96.4%	94.8%	2%	< 1.0
Benzene	99.8%	94.4%	6%	< 1.0
1,2-Dichloroethane	112%	106%	6%	< 1.0
Trichloroethene	96.6%	98.0%	-1%	< 1.0
1,2-Dichloropropane	103%	102%	1%	< 1.0
Dibromomethane	120%	109%	10%	< 1.0
Bromodichloromethane	109%	106%	3%	< 1.0
cis-1,3-Dichloropropene	98.0%	94.6%	4%	< 2.0
Toluene	97.4%	95.4%	2%	< 1.0
trans-1,3-Dichloropropene	101%	99.6%	1%	< 1.0
1,1,2-Trichloroethane	113%	107%	5%	< 1.0
Tetrachloroethene	96.2%	95.8%	0%	< 1.0
1,3-Dichloropropane	110%	103%	7%	< 1.0
Dibromochloromethane	109%	102%	7%	< 1.0
1,2-Dibromoethane	110%	107%	3%	< 1.0
Chlorobenzene	97.8%	98.0%	0%	< 1.0

TABLE 2
QC Report

Lab # associated with qc samples: W1547 through W1554

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1552	W1552		

Date Analyzed: 3/16/06 3/16/06 3/16/06

Compound	% Rec	% Rec	% RPD	ug/L
1,1,1,2-Tetrachloroethane	103%	102%	1%	< 1.0
Ethyl Benzene	95.2%	97.0%	-2%	< 1.0
Xylenes, Total	95.1%	98.2%	-3%	< 2.0
Styrene	96.6%	97.4%	-1%	< 1.0
Bromoform	115%	113%	2%	< 2.0
Isopropylbenzene	90.2%	95.4%	-6%	< 1.0
1,1,2,2-Tetrachloroethane	119%	118%	1%	< 2.0
Bromobenzene	106%	106%	0%	< 1.0
1,2,3-Trichloropropane	121%	118%	3%	< 2.0
i-Propylbenzene	97.4%	100%	-3%	< 1.0
2-Chlorotoluene	102%	104%	-2%	< 1.0
1,3,5-Trimethylbenzene	96.8%	104%	-7%	< 1.0
4-Chlorotoluene	103%	104%	-1%	< 1.0
tert-Butylbenzene	95.4%	103%	-8%	< 1.0
1,2,4-Trimethylbenzene	99.4%	104%	-5%	< 1.0
sec-Butylbenzene	96.4%	98.4%	-2%	< 1.0
1,3-Dichlorobenzene	100%	104%	-4%	< 1.0
p-Isopropyltoluene	91.0%	100%	-9%	< 1.0
1,4-Dichlorobenzene	98.0%	100%	-2%	< 1.0
n-Butylbenzene	92.0%	101%	-9%	< 1.0
1,2-Dichlorobenzene	99.6%	104%	-4%	< 1.0
1,2-Dibromo-3-Chloropropane	118%	124%	-5%	< 2.0
1,3,5-Trichlorobenzene	94.8%	103%	-8%	< 1.0
1,2,4-Trichlorobenzene	98.6%	113%	-14%	< 1.0
Hexachlorobutadiene	93.4%	101%	-8%	< 1.0
Naphthalene	104%	114%	-9%	< 3.0
1,2,3-Trichlorobenzene	101%	115%	-13%	< 1.0

Appendix A

Chain of Custody Sheets for Samples

Appendix B

FEDEX shipping label for SGS Environmental Services

I From Please print and press here.

Date 3/15/06 Sender's FedEx Account Number

Chuck Peel Phone (601) 898-2792

Company Peel Consulting

Address 140 Chapel Lane

Dept./Floor/Suite/Room

City Madison State MS ZIP 39110

2 Your Internal Billing Reference

First 24 characters will appear on invoices.

OPTIONAL

3 To

Recipient's Name

Phone (910) 350-1903

Company PARADIGM ANALYTICAL LABS

Recipient's Address 5500 BUSINESS DR

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City WILMINGTON

State NC

ZIP 28405-8446

0318539504

Try online shipping at fedex.com.

By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

Questions? Go to our Web site at fedex.com or call 1.800.GoFedEx 1.800.463.3339.

4a Express Package Service To add SATURDAY Delivery, see Section E.

Packages up to 150 lbs.

FedEx Priority Overnight
Next business morning.*

FedEx Standard Overnight
Next business afternoon.*

FedEx First Overnight
Earliest next business morning
delivery to select locations.*

FedEx 2Day
Second business day.*

FedEx Express Saver
Third business day.*
FedEx Envelope rate not available. Minimum charge: One-pound rate.

FedEx 3Day Freight
Third business day.**

4b Express Freight Service To add SATURDAY Delivery, see Section E.

Packages over 150 lbs.

FedEx 1Day Freight*
Next business day.**

FedEx 2Day Freight
Second business day.**

FedEx 3Day Freight
Third business day.**

* Call for Confirmation:

* Declared value limit \$500.

5 Packaging

FedEx Envelope*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

FedEx Box

FedEx Tube

Other

6 Special Handling

SATURDAY Delivery
Available ONLY for
FedEx Priority Overnight, FedEx 2Day,
FedEx 1Day Freight, and FedEx 2Day
Freight to select ZIP codes.

Does this shipment contain dangerous goods?

No Yes
Shippers Declaration
not required.

Yes
Shippers Declaration
not required.

Dry Ice
Dry Ice, UN 1845 _____ kg
 Cargo Aircraft Only

Include FedEx address in Section 3.

HOLD Saturday
at FedEx Location
NOT Available for
FedEx First Overnight.
Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

FedEx Acct. No.
Credit Card No.

Exp.
Date

Total Packages	Total Weight	Total Declared Value*
\$.00	

*Our liability is limited to \$100 unless you declare a higher value. See back for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

No Signature
Required
Package may be left without
obtaining a signature
for delivery.

Direct Signature
Anyone at recipient's
address may sign for delivery.
Fee applies.

Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 5/05 Part #168279 ©1994-2005 FedEx PRINTED IN U.S.A. SRF

Appendix C

Chain of Custody Sheets for samples sent to SGS Environmental Services

