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June 1, 2007

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

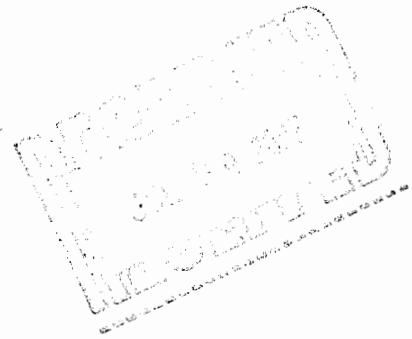
Dear Mr. Martin,

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-An Kubale*  
for Joseph Kubale

Enclosure



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Environmental Chemistry Consulting Services, Inc.

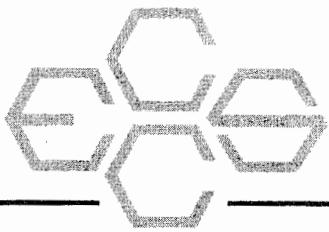
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2525 Advance Road • Madison, WI 53718 • Phone (608) 221-8700 • FAX (608) 221-4889

**Technical Memorandum**

**Kuhlman Electric Corporation (KEC)**

**Crystal Springs, Mississippi**



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## TECHNICAL MEMORANDUM

June 1, 2007

To: Robert Martin  
Martin and Slagle

From: Joseph Kubale *Kubale*  
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 November 8, 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 – November ‘06**

TABLE 1

	Depth	Date Collected	Time Collected	Date Analyzed	Reporting Limit ug/l	Mississippi - Volatiles Detected in Water										W1745 CSW Dup
						W1737 CSW WA8 005	W1738 CSV WA3 005	W1739 CSW FB 005	W1740 CSW WA1 005	W1741 CSW WA2 005	W1742 CSW WA5 005	W1743 CSW WA6 001	W1744 CSW TP 005			
VOLATILES						< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Chloromethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Vinyl Chloride	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Bromomethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Chloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Trichlorofluoromethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,1-Dichloroethene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Methylene Chloride	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
trans-1,2-Dichloroethene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,1-Dichloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
cis-1,2-Dichloroethene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
2,2-Dichloropropane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Bromochloromethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Chloroform	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,1,1-Trichloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,1-Dichloropropene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Carbon Tetrachloride	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Benzene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,2-Dichloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Trichloroethene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,2-Dichloropropane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Dibromomethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Bromodichloromethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
cis-1,3-Dichloropropene	2.0	v	v	v	v	2.0	v	2.0	v	2.0	v	2.0	v	2.0	v	v < 2.0
Toluene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
trans-1,3-Dichloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,1,2-Trichloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Tetrachloroethene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,3-Dichloropropane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Dibromochloromethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,2-Dibromoethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Chlorobenzene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
1,1,2-Tetrachloroethane	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0
Ethyl Benzene	1.0	v	v	v	v	1.0	v	1.0	v	1.0	v	1.0	v	1.0	v	v < 1.0

TABLE I  
Assessing Volatiles Detection

Kuhlman Electric - Crystal Springs, 1

**Table 2**

**QC Results – November'06**

TABLE 2  
QC Report

Lab # associated with qc samples: W1737 through W1745

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1741	W1741		

Date Analyzed: 11/8/06 11/8/06 11/8/06

Compound	% Rec	% Rec	% RPD	ug/L
Dichlorodifluoromethane	96.2%	92.0%	4.5%	< 1.0
Chloromethane	90.8%	108%	17.1%	< 1.0
Vinyl Chloride	95.0%	106%	11.3%	< 1.0
Bromomethane	101%	106%	4.6%	< 1.0
Chloroethane	101%	107%	6.2%	< 1.0
Trichlorofluoromethane	106%	111%	4.2%	< 1.0
1,1-Dichloroethene	108%	115%	6.3%	< 1.0
Methylene Chloride	109%	114%	5.0%	< 1.0
trans-1,2-Dichloroethene	105%	113%	7.3%	< 1.0
,1-Dichloroethane	180%	116%	43.2%	< 1.0
cis-1,2-Dichloroethene	115%	111%	3.2%	< 1.0
2,2-Dichloropropane	111%	111%	0.7%	< 1.0
Bromochloromethane	114%	107%	6.3%	< 1.0
Chloroform	117%	114%	3.1%	< 1.0
1,1,1-Trichloroethane	107%	108%	0.9%	< 1.0
1,1-Dichloropropene	104%	103%	0.8%	< 1.0
Carbon Tetrachloride	105%	105%	0.6%	< 1.0
Benzene	107%	107%	0.2%	< 1.0
1,2-Dichloroethane	112%	106%	6.1%	< 1.0
Trichloroethene	106%	101%	4.8%	< 1.0
1,2-Dichloropropane	108%	105%	3.4%	< 1.0
Dibromomethane	106%	101%	4.4%	< 1.0
Bromodichloromethane	81.8%	75.8%	7.6%	< 1.0
cis-1,3-Dichloropropene	93.6%	92.2%	1.5%	< 2.0
Toluene	104%	104%	0.2%	< 1.0
trans-1,3-Dichloropropene	97.2%	93.8%	3.6%	< 1.0
1,1,2-Trichloroethane	101%	99.8%	1.2%	< 1.0
Tetrachloroethene	102%	106%	3.8%	< 1.0
1,3-Dichloropropane	101%	99.8%	1.4%	< 1.0
Dibromochloromethane	99.4%	98.4%	1.0%	< 1.0
1,2-Dibromoethane	96.4%	93.8%	2.7%	< 1.0
Chlorobenzene	103%	106%	2.9%	< 1.0

TABLE 2  
QC Report

Lab # associated with qc samples: W1737 through W1745

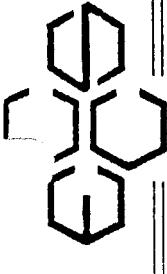
Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1741	W1741		

Date Analyzed: 11/8/06 11/8/06 11/8/06

Compound	% Rec	% Rec	% RPD	ug/L
1,1,1,2-Tetrachloroethane	101%	104%	3.3%	< 1.0
Ethyl Benzene	103%	105%	1.9%	< 1.0
Xylenes, Total	105%	106%	1.1%	< 2.0
Styrene	101%	107%	5.2%	< 1.0
Bromoform	97.8%	98.6%	0.8%	< 2.0
Isopropylbenzene	99.2%	107%	7.4%	< 1.0
1,1,2,2-Tetrachloroethane	96.0%	103%	7.0%	< 2.0
Bromobenzene	102%	108%	5.1%	< 1.0
1,2,3-Trichloropropane	105%	100%	5.1%	< 2.0
-Propylbenzene	102%	110%	7.2%	< 1.0
2-Chlorotoluene	104%	110%	5.4%	< 1.0
1,3,5-Trimethylbenzene	104%	112%	7.2%	< 1.0
4-Chlorotoluene	105%	110%	4.5%	< 1.0
tert-Butylbenzene	102%	110%	7.4%	< 1.0
1,2,4-Trimethylbenzene	103%	112%	8.0%	< 1.0
sec-Butylbenzene	106%	113%	6.8%	< 1.0
1,3-Dichlorobenzene	104%	108%	4.0%	< 1.0
p-Isopropyltoluene	101%	109%	7.4%	< 1.0
1,4-Dichlorobenzene	106%	113%	6.0%	< 1.0
n-Butylbenzene	102%	109%	6.8%	< 1.0
1,2-Dichlorobenzene	101%	105%	4.5%	< 1.0
1,2-Dibromo-3-Chloropropane	81.8%	96.4%	16.4%	< 2.0
1,3,5-Trichlorobenzene	97.6%	108%	10.1%	< 1.0
1,2,4-Trichlorobenzene	91.2%	102%	11.6%	< 1.0
Hexachlorobutadiene	99.4%	110%	10.3%	< 1.0
Naphthalene	84.8%	89.8%	5.7%	< 3.0
1,2,3-Trichlorobenzene	94.6%	104%	9.8%	< 1.0

## **Appendix A**

### **Chain of Custody Sheets for Samples**



**Environmental Chemistry  
Consulting Services, Inc.**

2525 Advance Road

Phone 608-221-8700

Madison, WI 53718

FAX 608-221-4889

**CHAIN OF CUSTODY**

No. 013333

Project Number:	Mail Report To:			Page <u>1</u> of <u>1</u>	Turn Around (circle one) Normal Rush			
Project Name:	Company: MARTIN & SCOTT			Report Due:				
Project Location:	Address:			Invoice To:				
Sampled By (Print):	Chuck Peck			P.O. No.:	Quote No.:			
Sample Description	Collection Date	Time	Matrix	Total Bottles	Preserv' Requested	Analysis	Comments	Laboratory Number
CSW-WA8-005	11/16/08	0830	W	4	A	82608 + 1, of blank		W1737
CSW-WA3-005		0845		10	A/B			W1738
CSW-FB-005		0910		4	A			W1739
CSW-WA1-005		0915		4	A			W1740
CSW-WA2-005		0920		4	A			W1741
CSW-WA5-001		0945		4	A			W1742
CSW-WA6-001		1000		4	A			W1743
CSW-TP-005		1010		4	A			W1744
Duplicate		—		9	A/B			W1745
<i>[Handwritten Signature]</i>								
*Preservation Code	Relinquished By: <i>Chuck Peck</i>			Date/Time: 11/16/08 10:30	Received By: <i>Raymond Marshall</i>	Date/Time: 11/16/08 10:30		
A=None B=HCL C=H <sub>2</sub> SO4	Relinquished By: <i>Chuck Peck</i>			Date/Time: <i>11/16/08 10:30</i>	Received By: <i>Raymond Marshall</i>	Date/Time: <i>11/16/08 10:30</i>		
D=HNO <sub>3</sub> E=EnCore F=Methanol								
G=NaOH O=Other(indicate)								
Custody Seal: Present/Absent	Intact/Not Intact	Seal #s			Receipt Temp: Temp Blank Y N			
Shipped Via:								
						WHITE - REPORT COPY		
						YELLOW - LABORATORY COPY		
						PINK - SAMPLER/SUBMITTER		

## **Appendix B**

FEDEX shipping label for SGS Environmental Services

From Please print and press hard.

Sender's FedEx  
Account Number

Date 11/9/06

Name Chuck Peel Phone (601) 992-2792

Company Peel Consulting

Address 140 Chapel Lane Dept./Floor/Suite/Room

City Madison State MS ZIP 39110

Your Internal Billing Reference  
First 24 characters will appear on invoice.

To Recipient's Name SAMPLE RECEIPT Phone (910) 350-1903

Company PARADIGM ANALYTICAL LABS

Recipient's Address 5500 BUSINESS DR Dept./Floor/Suite/Room  
We cannot deliver to P.O. boxes or P.O. ZIP codes.

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

City WILMINGTON State NC ZIP 28405-8446

0331513763



Ship and track packages at [fedex.com](http://fedex.com)

Simplify your shipping. Manage your account. Access all the tools you need.

Form ID No. 0215

Sender's Copy

Packages up to 150 lbs.

FedEx First Overnight  
Earliest next business morning delivery to select locations.  
Saturday Delivery NOT available.

4a Express Package Service

- FedEx Priority Overnight  
Next business morning. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx 2Day  
Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Express Saver  
Third business day. Saturday Delivery NOT available.

FedEx Envelope rates not available. Minimum charge: One-pound rate.

\* To most locations.

4b Express Freight Service

- FedEx 1Day Freight\*  
Next business day. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

- FedEx 2Day Freight  
Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

Packages over 150 lbs.

- FedEx 3Day Freight  
Third business day. Saturday Delivery NOT available.

\*\* To most locations.

\* Call for Confirmation:

5 Packaging

- FedEx Envelope\*  FedEx Pak\*  
Includes FedEx Small Pak,  
FedEx Large Pak, and FedEx Sturdy Pak.
- FedEx Box  FedEx Tube  Other

\* Declared values limit \$500.

6 Special Handling

- SATURDAY Delivery  
NOT Available for  
FedEx Standard Overnight,  
FedEx First Overnight, FedEx Express  
Saver, or FedEx 3Day Freight.

- HOLD Weekday  
at FedEx Location  
NOT Available for  
FedEx First Overnight.

- HOLD Saturday  
at FedEx Location  
Available ONLY for  
FedEx Priority Overnight and  
FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

- No  Yes  
As per attached  
Shipper's Declaration.

- Yes  
Shipper's Declaration  
not required.

- Dry Ice  
Dry Inn, UN 1846 \_\_\_\_\_ kg  
 Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- 7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.  
 Sender  Recipient  Third Party  Credit Card  Cash/Check

FedEx Acct. No. 1811-4189-1

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. 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.

FedEx Use Only

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. *Fee applies.*

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

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

519

Rev. Date 11/05 Part #158279 ©1994-2005 FedEx PRINTED IN U.S.A. SRF

## **Appendix C**

Chain of Custody Sheets for samples sent to SGS Environmental Services

