



Tetra Tech EM Inc.

Northmont Business Park ♦ 1955 Evergreen Boulevard, Suite 300 ♦ Duluth, GA 30096 ♦ (678) 775-3080 ♦ FAX (678) 775-3138

August 4, 2004

Mr. Benjamin Franco
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303

**Subject: CERCLA Emergency Response Action Report
Bio-Labs, Inc.
Conyers, Rockdale County, Georgia
EPA Contract No. 68-W-00-120
TDD No. 4T-04-05-B-006**

Dear Mr. Franco:

The Tetra Tech EM Inc. (TtEMI) Superfund Technical Assessment and Response Team (START) is submitting five electronic copies of the CERCLA Emergency Response Action Report detailing activities conducted at Bio-Labs, Inc. This report summarizes field activities conducted at the site during the emergency response on May 25-26, 2004.

If you have any questions or need additional copies of the report, please contact me at (678) 775-3083 or Steve Pierce at (678) 775-3100.

Sincerely,

Neil Daniell, MS
START Project Manager

Enclosures (2)

cc: Matthew Monsees, EPA Project Officer
Don Rigger, EPA Emergency Response Section Chief (letter only)
R. Steve Pierce, START Leader (letter only)
John Mitchell, START Emergency Response Team Leader (letter only)
START File



**CERCLA EMERGENCY RESPONSE ACTION REPORT
BIO-LABS, INC.
CONYERS, ROCKDALE COUNTY, GEORGIA
EPA CONTRACT NO. 68-W-00-120
TDD NO. 4T-04-05-B-006**

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4, Emergency Response and Removal Branch
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303**

Prepared by



**Tetra Tech EM Inc.
Superfund Technical Assessment and Response Team Region 4
1955 Evergreen Blvd, Suite 300
Duluth, Georgia 30096**

**CERCLA EMERGENCY RESPONSE ACTION REPORT
BIO-LABS, INC.
CONYERS, ROCKDALE COUNTY, GEORGIA**


Revision 0

Prepared for

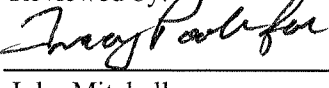
**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4
Atlanta, Georgia 30303**

Contract No.	:	68-W-00-120
TDD No.	:	4T-04-05-B-006
Date Prepared	:	August 4, 2004
EPA Task Monitor	:	Ben Franco
Telephone No.	:	(404) 562-8743
Prepared by	:	Tetra Tech EM Inc.
START Project Manager	:	Neil Daniell
Telephone No.	:	(678) 775-3083

Prepared by:


Neil Daniell
START Project Manager

Reviewed by:


John Mitchell
START Technical Reviewer

Approved by:


R. Steve Pierce
START Leader

CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 SITE BACKGROUND	1
3.0 EMERGENCY RESPONSE ACTIVITIES	4
4.0 CONCLUSIONS	7

Appendix

A	LOGBOOK
B	PHOTOGRAPHIC LOG
C	TABLE OF WITNESSES
D	AIR MONITORING DATA

FIGURES

<u>Figure</u>	<u>Page</u>	
1	SITE LOCATION MAP	2
2	SITE LAYOUT MAP	3

1.0 INTRODUCTION

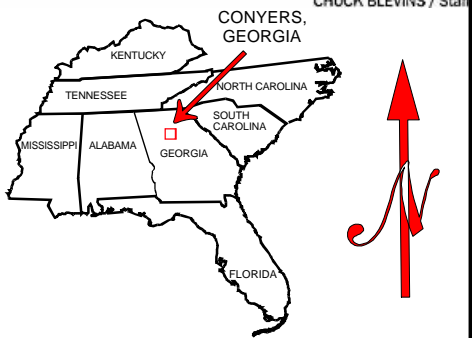
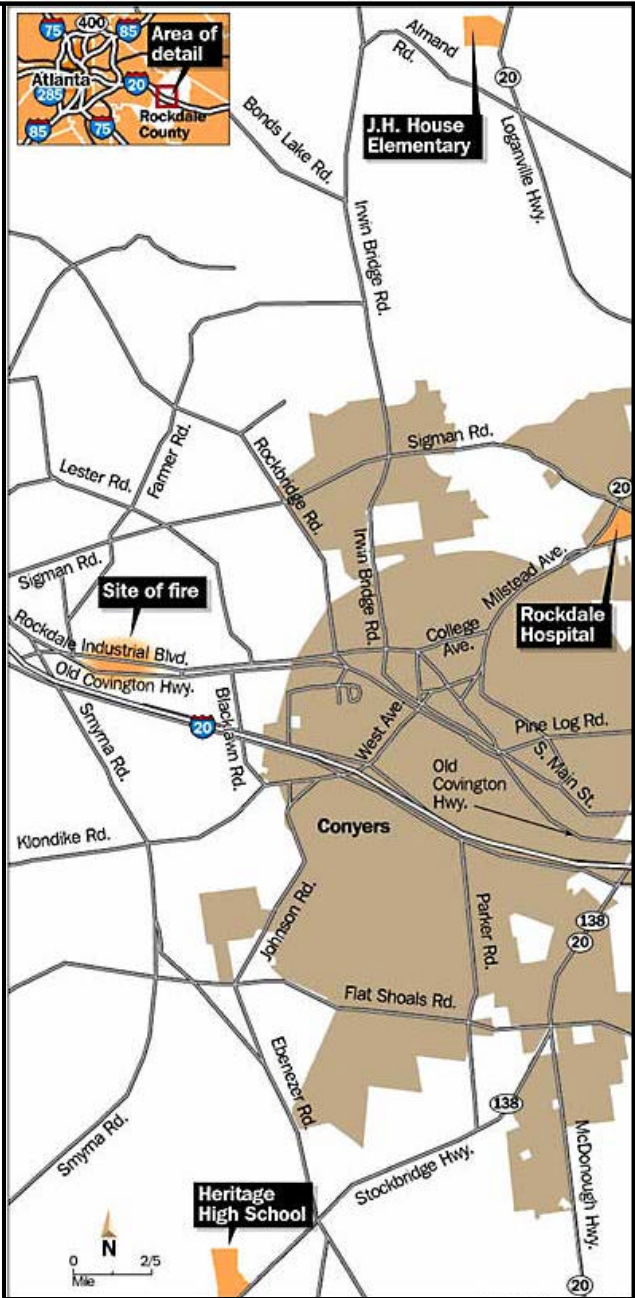
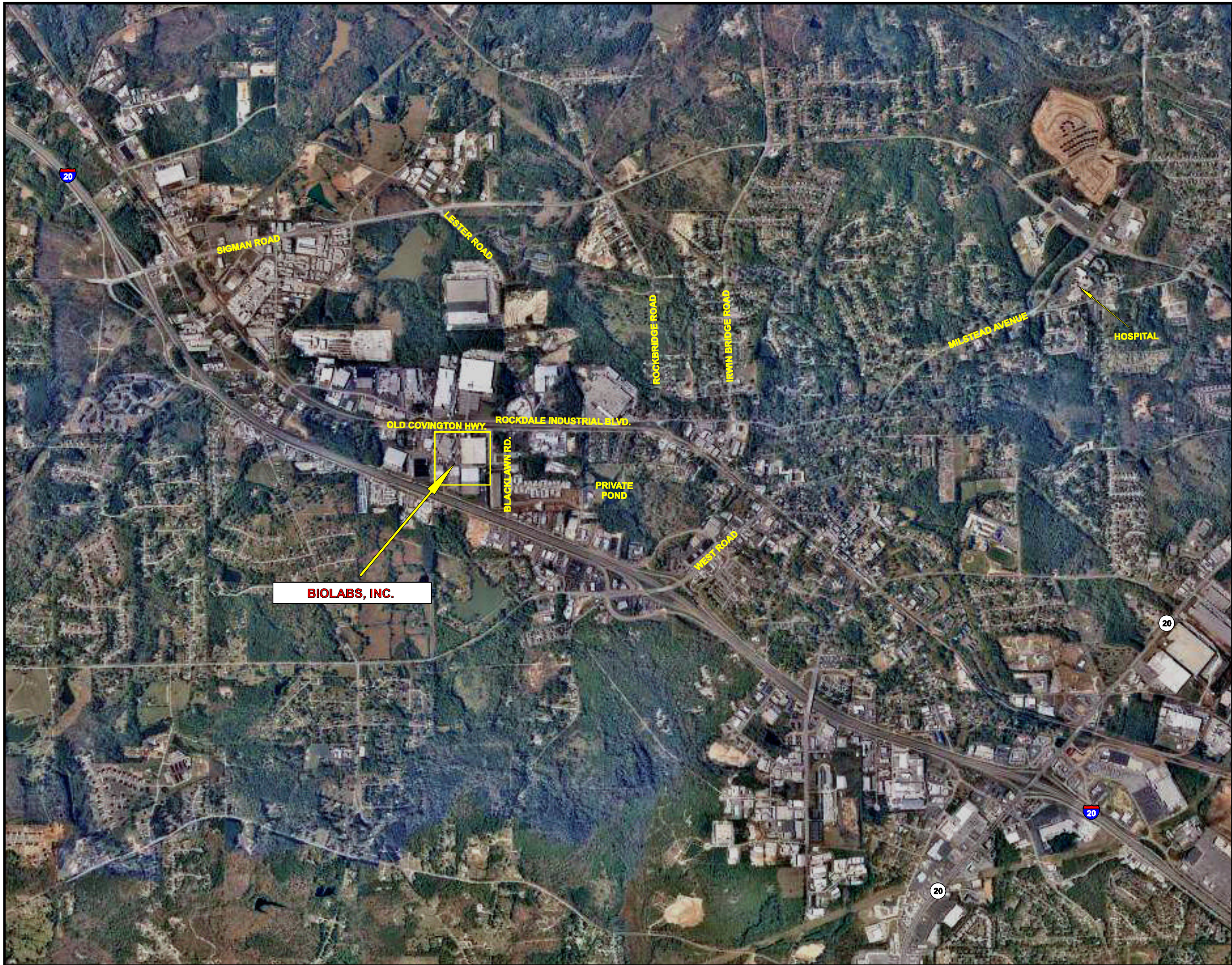
This report has been prepared under the provisions of Technical Direction Document (TDD) No. 4T-02-07-B-006, which the U.S. Environmental Protection Agency Region 4 (EPA) assigned to the Tetra Tech EM Inc. (TtEMI) Region 4 Superfund Technical Assessment and Response Team (START) under contract No. 68-W-00-120. The overall scope of this TDD, monitored by On-Scene Coordinator Benjamin Franco, was to provide technical assistance during emergency response activities at the Bio-Labs, Inc., fire near Conyers, Rockdale County, Georgia. Specific elements of the TDD included providing air monitoring, conducting multimedia sampling, documenting on-site conditions and activities with logbook notes (Appendix A) and photographs (Appendix B), and preparing a final report.

2.0 SITE BACKGROUND

Bio-Labs, Inc. (Bio-Labs), is a pool and spa care company located in Conyers, Georgia, about 30 miles east of Atlanta (see Figure 1). Site-specific geographic coordinates are latitude 33° 39'27" north and longitude 84° 0'33" west (Appendix D); the local address is 1700 Old Covington Highway, Conyers, Rockdale County, Georgia. On May 25, 2004, a fire broke out in Plant 14 Warehouse (Figure 2), a building that housed approximately 12.5 million pounds of pool chemicals and oxidizers (Federal Emergency Management Agency [FEMA] National Situation Report, May 26, 2004) (EPA Region 4 Pollution Report, Final) (see Figure 2). The local Rockdale County fire department responded to the blaze after a local police officer contacted the police dispatch.

Local authorities implemented a mandatory evacuation of residences and businesses within a 1.5-mile radius of the incident and urged voluntary evacuation of residents north of US Interstate 20 (I-20). Secondary roads adjacent to and leading into the affected area were closed, and I-20 was opened and closed intermittently as winds shifted. The Georgia Emergency Management Agency (GEMA) notified 21 counties in northeast and central Georgia about the plume and advised of them of plume modeling and air monitoring results. Temporary flight restrictions were put into effect by the Federal Aviation Administration.

GEMA, Environmental Protection Division (EPD) of the Georgia Department of Natural Resources, EPA, and the Agency for Toxic Substances and Disease Registry (ATSDR) responded to the scene (Appendix C). EPA contacted TtEMI START and requested that they responded to the scene to provide air monitoring and technical assistance.



BIOLABS FIRE
 CONYERS, ROCKDALE COUNTY, GEORGIA
 EPA CONTRACT No. 68-W-00-120
 TDD No. 4T-04-05-B-006

FIGURE 1 - SITE LOCATION MAP



S:\1\04\0506 BIOLABS\FIG. 1.DWG

SOURCE: AERIAL PHOTOGRAPH MODIFIED FROM USGS AERIAL PHOTOGRAPH: URBAN AREAS, CONYERS, GEORGIA, APRIL 6, 2002; RESOLUTION = 8 METERS. INSET MAP MODIFIED FROM ATLANTA JOURNAL CONSTITUTION ONLINE MAP, MAY 25, 2004. MAP NOT TO SCALE.



APPROXIMATE SCALE
1 inch = 2,346 feet



SOURCE: MODIFIED FROM USGS AERIAL PHOTOGRAPH:
URBAN AREAS, ATLANTA, GEORGIA, APRIL 6, 2002.
RESOLUTION = 2 METERS.

BIOLABS FIRE
CONYERS, ROCKDALE COUNTY, GEORGIA
EPA CONTRACT No. 68-W-00-120
TDD No. 4T-04-05-B-006

FIGURE 1 - SITE LAYOUT MAP



S:\1_040506 BIOLABS\FIG. 2.DWG

3.0 EMERGENCY RESPONSE ACTIVITIES

At the request of EPA, TtEMI START responded to the fire at the Bio-Labs facility on May 26, 2004. Team member Neil Daniell arrived at the scene at approximately 0845 hours and met with OSC Franco and OSC Rick Jardine. The OSCs briefed TtEMI START on the situation, and START Daniell began coordinating and mobilizing START resources for the response. A second TtEMI START team consisting Alan Whitt and Rich Kaiser arrived at the scene approximately 30 minutes later. The group briefly discussed site activities and began calibrating air monitoring equipment necessary to provide air monitoring support. Donna Majewski, Bio-Labs corporate representative, indicated that possible airborne contaminants were chlorine, hydrochloric acid, and hydrogen bromide. However, Ms. Majewski suspected that hydrogen bromide might not be present because the portion of the plant that should have contained bromide compounds had burned earlier in the morning.

TtEMI START performed both general and contaminant-specific air monitoring. General air monitoring was conducted using a Draegar MiniWarn 4-gas meter. The 4-gas meter measures percent oxygen, percent lower explosive limit (LEL), hydrogen sulfide, and carbon monoxide. TtEMI START conducted contaminant-specific air monitoring using MDA Scientific single-point monitors (SPM). SPMs were used to measure chlorine and hydrochloric acid.

Initial air monitoring of the plume was conducted by two teams because of the size of the plume and the need to find the outer reaches of the plume. The plume direction during initial air monitoring (1050 hours) was east and parallel to I-20 on the south and Old Covington Highway to the north. START Whitt and Kaiser, along with OSC Jardine, formed Team 1 and mobilized eastward down I-20 toward the eastern edge of the plume. Team 1 monitored for percent oxygen, percent LEL, hydrogen sulfide, carbon monoxide, chlorine, and hydrochloric acid. START Daniell formed Team 2 and mobilized eastward down Old Covington Highway toward the downtown district of Conyers and the evacuated areas. Team 2 monitored for chlorine.

The results of the initial monitoring indicated that hazardous atmospheres were not present outside of the visible plume (Table 1, Appendix D). Oxygen, percent LEL, hydrogen sulfide, and carbon monoxide were not detected at levels of concern. Team 1 did not detect chlorine or hydrochloric acid at any point along the eastern edge of the plume, beginning at Georgia Highway 20 and moving eastward to Georgia Highway 11. Team 1 also did not detect chlorine or hydrochloric acid along the southern edge of the plume and south of I-20. Team 2 found that chlorine gas was present in the plume above the NIOSH recommended exposure limit (REL). The REL for chlorine was exceeded along Old Covington Highway near Blacklawn Road. However, chlorine gas was not detected above the REL between West Road and Georgia Highway 20.

After the initial air monitoring results, the air monitoring teams returned to the staging area and met with a TtEMI START DiDi Fung and Bess Blyler (Team 3) at approximately 1300 hours. START Blyler and Fung brought additional EPA equipment that could be used to detect other compounds in the plume. The teams discussed the results of the initial sampling episode and decided to expand the search for other compounds based on compounds known to be present in the facility. Also, the group decided to concentrate air monitoring activities on the areas closest to the facility due to minimal levels detected beyond West Road.

TtEMI START calibrated the additional air monitoring equipment and set up six SPMs to monitor for hydrogen bromide, phosgene, hydrochloric acid, and chlorine. Team 2 and Team 3 combined to monitor the plume near the facility for hydrogen bromide, phosgene, hydrochloric acid, and chlorine. Team 1 went to check on a complaint in a nearby county and monitored for hydrochloric acid and chlorine. During the second monitoring event, the plume direction was initially east of the facility and then shifted toward the northeast. The thickest portion of the plume was initially near Blacklawn Road and 3rd Avenue SW, and the plume later migrated toward Lester Road and Rockdale Industrial Boulevard.

The results of the second air monitoring event indicated that hazardous concentrations were present in the plume (Appendix D). In the thickest portions of the plume, TtEMI START detected hydrogen bromide, and hydrochloric acid at concentrations above the PEL, and chlorine was detected at concentrations above the short-term exposure limit (STEL). Phosgene was detected by TtEMI START but at concentrations lower than the PEL. In the thinner portions of the plume, chlorine gas was detected at levels less than the REL. Outside of the plume, TtEMI START did not detect any compounds; however, the group noted a chlorine odor even when the levels were well below the PEL, thus indicating a low odor threshold for chlorine. No compounds were detected south of I-20 or between West Road and Georgia Highway 20, and Team 1 did not detect any compounds in the adjacent county. In addition, no compounds were detected at the Rockdale County Hospital and TtEMI START detected along Milstead Avenue.

During the second air monitoring event, runoff water was observed flowing from the Bio-Labs facility and into a storm water drain along Blacklawn Road (Figure 2). TtEMI START tested the water with pH paper and found the pH to be approximately zero. The outfall of the storm water drain was traced to a private pond on VFW Drive (Figure 2). Water flowing into the pond had a pH of zero (west side of VFW), and water in the pond had a pH of approximately 4 to 5. Further into the pond, the water had a pH of approximately 6. EPA and EPD were notified of the situation.

As night approached, support equipment and personnel were brought in to assist with air monitoring. The new equipment included single-gas monitors to detect hydrogen sulfide, hydrogen cyanide, and chlorine.

Cooler temperatures tend to cause vapors to linger closer to the ground, so TtEMI START expanded the air monitoring search based on data published in the Canadian Builders Digest, CBD-144, Toxic Gases and Vapours Produced at Fires. In addition, the U.S. Coast Guard (USCG) Gulf Strike Team (GST) was brought in to assist with air monitoring.

TtEMI START calibrated the additional air monitoring equipment and set up six SPMs to monitor for hydrogen bromide, phosgene, hydrochloric acid, and chlorine. Specific areas monitored during the third air monitoring event included the Rockdale County Hospital, Highway 138 North, Highway 20 North, House Elementary School, Lakeview Estates, and the Rocky Ridge Road area. These locations were discussed during an incident command conference call with EPA, GEMA, the Centers for Disease Control, and health department personnel. Teams 1, 2, and 3 combined to monitor north of Sigman Road and in the area that the plume was predicted to migrate. The USCG GST was stationed at the Rockdale County Hospital throughout the night. During the third monitoring event, the plume direction continued to be northeast of the facility, and the thickest portion of the plume was located near Lester Road and Rockdale Industrial Boulevard.

The results of the third air monitoring event indicated that no hazardous gases were present north of Sigman Road (Appendix D). However, hazardous concentrations continued to be present in the plume but at levels lower than previously detected. In addition, fewer compounds were detected inside the plume. In the thickest portions of the plume, TtEMI START detected chlorine at concentrations above the REL and hydrogen cyanide above the National Institute of Occupational Safety and Health (NIOSH) recommended exposure limits (REL). Hydrogen sulfide was detected in the plume at concentrations greater than three times background levels, but below the REL.

During the early morning hours of May 26, 2004, concern was raised about communities east of Conyers. The plume direction had begun to migrate to the east, so monitoring efforts were shifted eastward toward Covington. The results of the air monitoring in the Covington area indicated that chlorine was present at levels near the PEL. However, no other compounds were detected.

On the morning of May 26, 2004, TtEMI START did a sweep of both areas (east and northeast of the facility) impacted by the plume. The results of the monitoring efforts indicated that low levels of chlorine and hydrogen cyanide were east of the Bio-Labs facility along Blacklawn Road. No compounds were detected along VFW Drive, and no compounds were detected north of Old Covington Highway. In addition, no compounds were detected along Highway 20 or in the neighborhoods west of Highway 20.

After the air monitoring sweep was completed, EPD requested that air monitoring be done along the private pond and the outfall from the pond. A major fish kill had resulted from the runoff entering the pond, and EPD was overseeing sampling of the pond. TtEMI START mobilized to the area and began air monitoring for hydrogen cyanide, hydrogen bromide, hydrogen chloride, chlorine, and phosgene. The results of the air monitoring event found that no compounds were present around the pond or along the outfall from the pond. Upon completion of air monitoring around the pond and the outfall, TtEMI START demobilized from the site.

According to the National Oil and Hazardous Substances Contingency Plan (NCP), 40 CFR 300.415 (b)(1), at any release where the lead agency determines that the release poses a threat to public health or welfare or the environment, the lead agency make take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release. Based on 40 CFR 300.415 (b)(1) and the analytical data collected for this site, future work at the Bio-Labs site may occur at the discretion of EPA's OSC.

4.0 CONCLUSIONS

On the morning of May 25, 2004, Plant 14 Warehouse on the Bio-Labs facility in Conyers, Georgia, caught fire. Local authorities implemented a mandatory evacuation for residences and businesses within a 1.5-mile radius of the incident and urged voluntary evacuation of residents north of US Interstate 20 (I-20). GEMA, Georgia EPD, EPA, and ATSDR responded to the scene, and EPA requested that TtEMI START provide air monitoring and technical assistance.

Tetra Tech mobilized to the Bio-Labs site and provided 35 hours of continuous support for the emergency response. Initial air monitoring of the plume was conducted by two teams because of the size of the plume and the need to find the outer reaches of the plume. The results of the initial monitoring indicated that hazardous atmospheres were not present outside of the visible plume. Chlorine gas and hydrochloric acid vapors were not detected at any point along the eastern edge of the plume, beginning at Georgia Highway 20 and moving eastward to Georgia Highway 11. TtEMI START also did not detect chlorine and hydrochloric acid along the southern edge of the plume or south of I-20. Chlorine gas was present in the plume above the OSHA PEL and above the STEL in the immediate area of the facility. The PEL was exceeded between West Road and the facility, and the STEL was exceeded in a valley along VFW Drive near 3rd Avenue SW. However, chlorine gas was not detected between West Road and Georgia Highway 20.

After the initial air monitoring results, TtEMI START brought in additional EPA equipment that could be used to detect other compounds in the plume. The teams discussed the results of the initial sampling episode and decided to expand the search for other compounds based on compounds present in the facility. The results of the second air monitoring event indicated that hazardous concentrations were present in the plume. In the thickest portions of the plume, TtEMI START detected hydrogen bromide, chlorine, and hydrochloric acid at concentrations above the PEL. Phosgene was detected by TtEMI START but at concentrations below the PEL. Only low levels of chlorine were detected immediately outside of the plume, and the level of chlorine detected was not above the PEL. No compounds were detected by TtEMI START south of I-20, at the Rockdale County Hospital, between West Road and Georgia Highway 20, or in the adjacent county.

During the second air monitoring event, runoff water was observed flowing from the Bio-Labs compound and into a storm water drain along Blacklawn Road. The outfall of the storm water drain was traced to a private pond on VFW Drive, where the water flowing into the pond had a pH of zero (west side of VFW) and water in the pond had a pH of approximately 4 to 5. TtEMI START notified EPA and the Georgia EPD of the situation.

During the early morning hours of May 26, 2004, concern was raised about communities east of Conyers. The results of the air monitoring in the Covington area indicated that chlorine was present at levels near the PEL. However, no other compounds were detected. On the morning of May 26, 2004, TtEMI START did a sweep of both areas (east and northeast of the facility) impacted by the plume and found low levels of chlorine and hydrogen cyanide east of the Bio-Labs facility along Blacklawn Road. No compounds were detected along VFW Drive, and no compounds were detected north of Old Covington Highway. In addition, no compounds were detected along Highway 20.

After the air monitoring sweep was completed, EPD requested that air monitoring be done along the private pond and the outfall from the pond. TtEMI START mobilized to the area and began air monitoring for hydrogen cyanide, hydrogen bromide, hydrogen chloride, chlorine, and phosgene. The results of the air monitoring event found that no compounds were present around the pond or along the outfall from the pond. Upon completion of air monitoring around the pond and the outfall, TtEMI START demobilized from the site. Based on 40 CFR 300.415 (b)(1) and the analytical data collected for this site, future work at the Bio-Labs site may occur at the discretion of the EPA OSC.

APPENDIX A
LOGBOOK NOTES
(17 Pages)

CONTENTS

PAGE REFERENCE DATE

START personnel 5/25/04

- Alan Whitt
- Rich Kaiser
- Neil Daniell
- Didi Fung
- Bess Blyler
- Tiffany Messier
- Charlie Parker

"Rite in the Rain"



ALL-WEATHER WRITING PAPER

ALL-WEATHER
HORIZONTAL LINE BOOK

Name Conyers Chemical Fire
"BIOLAB"

Address _____

Phone _____

Project _____

This book is printed on "Rite in the Rain" All-Weather Writing Paper - A unique paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather. For best results, use a pencil or an all-weather pen.

Specifications for this book:

Page Pattern		Cover Options	
Left Page	Right Page	Polydura Cover	Fabrikoid Cover
Lined	Lined	Item No. 390N	Item No. 390NF

0925 Next Daniel Arrives on site
0945 Arrives @ Biolab Fines
owned by Great Lakes Chemical

@ Conyers, GA.

- Spm for Cl^- & HCL.

We'll split-up to monitor

2 locations. Set-up PM suite
for chlorines & HCL

1050 BACKGROUND 0.50pm HCL &
CHLORINE. LSL 0.0 %
 O_2 20.50%, CO 0.0 ppm
 H_2S 1.0 ppm. ~~ENTRANCE (R)~~
ENROUTE TO I-20 S TO
BEGEN ^{MONITORING} ~~MONITORING~~.

1055 DOWN FULL FAC TO DRIVE
I-20 S. BEGEN MONITORING

EXIT 90 - MONITORING BACK-
GROUND ON PM INSTRUMENT
EXIT #82 - BACKGROUND ON ALL

INSTRUMENT

11:02 STATIONARY READINGS AT

→ Will Rouse

20.6 % O_2 ; LSL 0.0, H_2S
1.0 ppm HCL & Cl^- 0.2 ppm
GPS COORDINATES: 33° 37' 42" N
084° 04' 55" WEST

TO

1107 MOVING (HOT SPOTS)

1113 STATIONARY | 33° 37' 42" N
← 083 50 55 W

ALMOST AW. 0.0 LSL 20.6 % O_2

3.0 ppm CO 1.0 ppm H_2S
0.0 ppm CHLORINES & HCL
LIGHT
HAZAR
MOVING TO EXIT #98

1121 EXIT #90 STATIONARY REMAINING

LSL 0.0 Cl^- 20.7, CO 0.0

H_2S 0.0; HCL & CHLORINE -
0.0 ppm.

LIGHT
HAZAR

33 36 34 N - 083 53 02 W

CONTINUING TO EXIT #98

1131 EXIT #98

0.0 - LSL O_2 - 20.9
CO - 0.0 ppm H_2S - 0.0 ppm

HCL & Cl^- - 0.0 ppm

GPS 33 36 40 N 083 49 57 W

→ Will Rouse

Remove fuel tanks. Atmosphere
is clearing. Moving to
Exit #101

1039 - Relay Readings (EPA - Rock)
DOT @ Exit #99 15 foot move
to Exit #101

1042 Stationary Readings (Exit #101)
LSC - 0.0 O₂ - 20.9 CO₂ 3.0
H₂S - 0.0; HCL & CL - 0.0 ppm
GPS: 33 36 34 N; 083 41 58 W

1202 Heading East on I-20
to Madison. Will complete
investigation & take additional
readings

1205 Hit Rest Area

1210 Back on the Road - continuing
on I-20 East to Madison

1220 Arrive on Madison (Exit #113)
Laboratory conversions start @
GA 83 I-20
Readings!
LSC - 0.0 O₂ - 20.9 →

[Signature]

CO - 0.0 ppm H₂S - 0.0 ppm
HCL & CL - 0.0 ppm
GPS: 33 33 34 N
083° 30' 02 W

EPA (Rock) takes Conf call on this
time. EPA purchase maps
Starts Employee Reporting Order Barlock this A.M.
No ODR @ this time

1237 Downtown Madison - Readings!
LSC - 0.0; O₂ - 20.9, CO - 0.0, H₂S - 0.0
HCL & CL - 0.0 ppm
GPS: 33 35 37 N; 083 37 15 W
EPA (Rock) OK Conference Call

1254 Head to Residence 1386 Cedar Dr.
to investigate individual complaint
from early A.M.

1302 Arrive @ 1386 Cedar Dr.
Residence! LSC - 0.0; O₂ - 20.9, CO - 0.0 ppm
H₂S - 0.0 ppm; HCL & CL - 0.0 ppm
GPS: 33 35 24 N, 083 27 10 W

1304 Depart 1386 Cedar Dr.

1312 Return to EPA (Rock) - Descend
to Head Back to command post
[Signature]

1351 BANK I-20 ROADBLOCK @

EXIT #98

LSC-0.0, O₂-20.9 CO-0.0 ppm

H₂S-0.0 ppm HCL & CL-0.0 ppm

GPS-33 30 45 N, 083 44 43 W

Partly cloudy, Hazy & HOT
~~clear~~

1411 EXIT #84 ON I-20 WEST

READINGS (STATIONARY)

LSC-0.0, O₂-20.9, CO-0.0 ppm

H₂S-0.0 ppm, HCL & CL 0.0 ppm

GPS: 33 38 09 N; 083 58 32 W

CONTINUES W TOWARD COMMING POST.

1420 EXIT #80 @ I-20 W

STATIONARY READINGS:

LSC-0.0; O₂-20.9, CO-2 ppm

H₂S-0.0 ppm HCL & CL-0.0 ppm

GPS: 33 39 34 N; 084 01 17 W

1424 STATIONARY READING

LSC-0.0 O₂-20.9 CO-2 ppm

H₂S-0.0 ppm

HCL & CL-0.0 ppm

GPS 33 40 08 N; 084 02 25 W →
J. McDaniel

CONTINUES TO COMMING POST

1430 BACK @ COMM. POST. ADJUSTING

NEW/ADDITIONAL INSTRUCTIONS

EQUIPMENT: SPM mfg by: ANDA Scientific

1433 ~~1430~~ BEGIN NEW MONITOR MISSION

~~1544~~ HCL & CL-0.0 ppm

1440 GPS: 33 40 31 N

084 02 16 W

CL-0.24 ppm

~~1544~~ HCL 2.20 ppm

1448 CL-0.61 ppm

GPS 33 40 27 N

084 02 07 W

1450

~~1550~~ GPS: 33 40 27 N

084 01 48 W

HCL 0.0 CL-0.08 ppm

J. McDaniel

HCL 0.00 ppm
CL 0.12 ppm

1658 GPS: 33 40 28 N
084 02 18 W
CL ~~0.00~~ ppm
HCL 0.0 ppm

1700 33 40 38 N
084 02 22 W
CL - 0.17 ppm
HCL 0.90 ppm

MISSION #3

1750 GPS: 33 40 33 N 84 02 18 W
HCL ~~0.57~~ (15+)
CL 0.61 0.95
(1.50+)

1753 HCL 15.0+ ppm
CL ~~1.50~~ + 1.50+ ppm
GPS: 33 40 28 N
084 02 25 W

David Samuel

CL 0.08 ppm
HCL 0.0 ppm

1496 ~~1496~~ ^{Rock} Brewer rd (fines ca.)

1818 GPS: 33 40 20 N 084 01 47 W
CL: 0.0 ppm
HCL 0.0 ppm
} INBETW
& ROCKBROOKS

1829 GPS:
CL 0.0 ppm
HCL 0.0 ppm

1840 DISCOVERED LOW pH ^{0.00} RUNOFF
33 40 17 N
084 02 33 W

Blackhawk rd. ^{FROM} ~~ROAD~~ of Biology Faculty
WATER RID ACROSS PARK LOT, THROUGH
GRASS FIELD

1850 TEST VFW LOTS 33 40 14 N
INLET - LOW pH ~ 1.0 84 02 04 W
+ BROMENS

~~David Samuel~~ ENTRANCES @ CREEK 1-2
AT MOUTH of CREEK. ALL 5 TROU
NOTIFIED DNR ~~THAT~~ ^{THAT} BRUCE VIA TRUCK →

GPS: 33° 41' 08" N, 84° 01' 22" W
CL: 0.0 ppm
HCL: 0.0 ppm

(KINGSTON)
+
JAMES
BRIDGE
GPS: 33° 41' 14" N 084° 01' 23" W
CL: ~~0.0 ppm~~ → 0.07 ppm
HCL: 0.0 ppm

1927
S. JAMES
&
JAMES
BRIDGE
GPS: 33° 41' 20" N 084° 01' 19" W
CL: 0.09 ppm TO 0.09 ppm
HCL: 0.00 ppm

1929
JAMES BRIDGE
&
KINGSTON
CL: 0.12 ppm → 0.08 ppm
HCL: 0.0 ppm
BSGN RETURN TO COMMAND POST

1936 | RETURN TO COMMAND POST
START ALON WHITT & RICH
Kaiser offsite. START C. PARKER &
T. MESSIER onsite.

2000 OSC'S ON SITE CURRENTLY
K. JONES, B. FRANCO, R. JARDINE, &
T. BYRD. NO AIR MONITORING AT THIS

B. Blyler

time. OSC'S & START
Daniell in meet meetings.
START Blyler & Messier
Messier updating our monitoring
data base.

2021³⁰ Currently START onsite
Blyler, Parker, Fung, Messier &
Daniell. OSCs still in
meetings. Coast Guard
on site 5-person team.
Weather currently, wind + temp
~~are~~ No at this time, dark
night haze over moon.

23:31 - PREPARE TO DEPART SITE,
to obtain more readings
of CL
• PRESS: CHARLIE
• R. JARDINE - DIOLI FUNG
• H. DANIELLS, T. MESSIER
T. BYRD.
23:35 - DEPART SITE, 1st STOP
HOSPITAL.

HCl Cl₂ PHOSGENE HBr HCN

OUTTER PERIMETER OF PLUME
H₂ (HYDROGEN SULFIDE)

LOCATION/TIME

IRWIN/Sigma

(CLOUD FALL)

@ 23:55

NO READINGS

J. Donald

ROCKDALE HOSP.

@ 23:55

NO READINGS

Sigma/Walnut
CIRVE

70-138 24:06

INTERSECTION

38 40 N
 W

⊙ ⊙ ⊙ ⊙ ⊙ ⊙

Donald

J. Neal

NO READINGS

23:55- ARRIVE @ ROCKDALE

HOSPITAL

R. JARDINE MOB TO

INFORM HOSPITAL ADMIN.

OF CG SET-UP TO OBTAIN
READINGS.

23:58- SET-UP IN UPPER PARKING
LOT, NO READINGS ACQUIRED

START WEDNESDAY May 26, 2004

24:02- DEPART HOSPITAL, TO BEGAN
ROUTE

24:06- BEGAN ON GA20N
NO READINGS

24:08- PROCEED JCT 138(E) @
LEFT @ WALNUT GROVE Rd
FOR ABOUT 3 MILES @
READINGS

24:13 PASSING OVER YELLOW
RIVER 2.6 MILES FROM
INTERSECTION ~~OF WALNUT GROVE~~
WALNUT GROVE @
33° 41' 28.04" N
83° 57' 7.143" W
NO READINGS, ~~ALSO~~ STRONG ODOR

24:19 4 MILES ON WALNUT
GROVE, STRONG ODOR,
NO READINGS 0.00PPM

24:20- 138E - WHITE RD
STRONG ODOR,
NO READINGS 0.00PPM
33° 42' 04" N
83° 56' 89" W

24:22- LEFT ONTO WHITE RD
SLIGHT ODOR, NO READINGS
ON OUTER EDGE OF PLUME.
RESIDENTIAL AREA.

24:29- INTERSECTION OF BLACK/
WHITE ST. OBSERVED
ODOR.

24:30 INTERSECTION OF
WHITE/HIGHTOWER (W)
NO READINGS OBTAINED 0.00PPM
33° 47' 80" N
83° 57' 94" W
J. Millmore

24:33 - PROCEED ON WHITE ST.
STILL IN RESIDENTIAL AREA.

24:35 2100 ^{HIGHTOWER} ~~WATERED~~ FIRE STATION
#5 (NO READINGS)

24:37 - INTERSECTION HIGHTOWER
GA 20 33° 44' 27"
83° 59' 53"
NO READINGS 0.00PPM

24:39 PROCEED @ (L) ON GA 20 HWY
HEADING

24:43 - J. H. HOUSE SCHOOL ELEM.
NO READINGS 0.00PPM
33 43 31
84 00 37
America Red Cross Station
M.M. 5 (DIABETER RELF
Station)

24:46 - PROCEED ON HWY GA 20'S

J. M. Daniel

24:52 - GA HWY 20 (S) - YELLOW RIVER
33° 41' 54"
83° 59' 01"
NO READINGS 0.00PPM

24:57 - MILSTEAD / SIGMAN Rd
L (NO READ 0.00PPM)

01:31 → PROCEED TO MOVE CLOSER
TO PLUME. TO GATHER
ST. PT. READINGS 0. COVINGTON /
Main St. ENTERING
COMMERCIAL AREA

01:36 - PLUME MOVED TO EAST
IRWIN BR. / MAIN ST.
STRONG ODOR
33 40 44 N
84 01 48 W
PROCEED INTO PLUME -
STRONG ODOR

J. M. Daniel

01:42 ROCKBRIDGE/MAIN

1.3 HCN
0.0 HCL
0.0 PHOS.
0.0 HBR
2.0 Hy. Cyanide
0.80 CL (PPM)
.45 CL (Daniels)

01

01:45 LITHONIA LIGHTING
HCN Cyn. 2.1-2.7
CL .79 PPM SPM
CL .50 (Daniels)

01

01:48 CL 1.20 PPM RR on Main
33 40 45
84 02 14
PLUME DUE EAST
* HIGH OF PLUMB
STRONG ODOR

J. Daniels

01:55 - 1601 DIOLAB READINGS OF CL
DROPPED 0.00 PPM BURNING
OF BLDG. ACROSS STREET
Ashley - INDUSTRIAL PARK

02:00 - PROCEED BACK INTO
PLUME

02:04 MAIN/WESTER
HCN 3.6 ppm - 5.5 ppm
CL 1.50 ppm
HBR 0.0 ppm
Pho. 0.0 ppm
HCL - 0.0 ppm
HCN - 4.4 ppm - 5
33 40 46
84 02 30

02:09

HBR - 0.00 ppm
Pho - 12.0 ppm
CL - 0.0 ppm
33 40 45 @ America Lighting
84 02 02 ELECTRIC

J. Daniels

NE and has RISEN

02:18 PACTIV Package Co.
HCN 0.0 - 1.3 ppm
CL .35 - .50

02:33 Northridge / Rocky Ridge
CL - 0.00
HBR - 0.00
Phos - 0.00
~~HBR~~ - 0.00
HCN - 0.00 - 0.05
33 41 49
84 01 15
AREA OF EVACUATION
RESIDENTIAL

02:37 FARMER / IRWIN Bridge
33 42 15
84 01 94
0.00 NO PETITIONS

J. McDaniel

to CONVEYERS Covington
to CHECK LOCAL SCHOOLS
B/C THEY ARE STILL IN
SESSION.

04:22 EX#93 OFF I-20E
@ HAVY 142

04:24 33° 36' 06" ↓
83° 49' 58"

@ EXXON ST. FLASH FLOOD

HC - 0.4
HS₂ - 0.0
CL - 0.0 - 0.0
HC1 0.0
HCN 0.0
Pho. 0.0
HBR 0.0

04:30 - E 142

04:33 B78 W (SR) 12
TOWARD Covington

J. McDaniel

04:39- EMORY ST.
33 36 15
83 51 85

HCM .8 ppm

04:43 819 MM 10
33 35 44
83 52 53
HCM .5 ppm

04:47 819 MM - 2 MILES
33 31 77
83 52 91
HCM .7 ppm
@ B&H PAINT BODY
SHOP

04:55 81N MM-12
33 36 60
83 52 01
HCM 1.0

J. K. Daniel

04:59 81N (EMORY ST.)
PALMER STONE ELEM.
SCHOOL
33 36 90
83 52 04
HCM .5 ppm

~~05:10~~ Back

05:10 BACK ON-SITE CONDUCTED
MEETING EXPLAIN SHIFT
CHANGES, AND DUTIES
FOR NEXT CREW.

05:30 - LOADED INFORMATION
ONTO SPREADSHEET
OF SAMPLE LOCATIONS.
MONITORING WILL
CONTINUE UNTIL OTHER
WBE NOTIFIED.

J. K. Daniel

- LA - COAST GUARD
• DATA RAM 6-10 MG
• CL - 7.2 PPM

07:00 - DEPART COMMAND POST

ROCKDALE
07:05 - BIOLAB - 1601 INDUSTRIAL

33 40 67

84 02 38

0 - NO DETECT

07:08 - LESTER / INDUSTRIAL

33 40 46

84 02 43

CL - .13 PPM

HCN ~~1.0~~ .1

STRONG ODOR

07:11 RR - E OF LESTER

Partly

CL .22

HCN ~~1.0~~ 1.5

STRONG ODOR

by Neil Donald

0 - DETECT

07:23 MAIN / IRWIN

0 - DETECT

07:28 - PROGRESSING DOWN R.R.

adjacent

0 - DETECT

07:30 ENTERED DOWNTOWN

CONVEYES 0 - DETECT

07:31 MAIN / MILSTEAD AVE

ROCKDALE COURTHOUSE

958

1515 WEAVER

0 - DETECT

07:37 - COLLEGE - SPRINGWOOD

1171 - 1421

0 - DETECT

07:40 - Coast Guard @ Hospital

called w/ 96 mg particulate

HE SPOKE W/ HOSPITAL ADMIN

and they decided to turn

App. back on, due to vital

equipment

07:42 LAKEVIEW / MCLEODS CORNER
1251 → 1125 →

STRONG ODDOR, DUTTER EDGE
OF PLUME (RESIDENTIAL)
0-DETECT

07:48 CONYER STATION Residential
PLUME ENCOMPING AREA.

08:08 - MTN. VIEW - IRWIN BRIDGE
0-DETECTION

08:11 SIGMA - SIGMA E
0-DETECTION

08:16 - ROCKDALE HSP.
0-DETECT PROCEEDING
DOWN MILSTAD

WIND SHIFT 5
to 89 par.

J. McDaniel

08:33 - WEST / 3rd
NO DETECT, ODDOR

08:37 1650 WEST ST.
.25 CL
4.8 HCN -
.55 CL

08:44 1.5 HCN BLACKLAWN / OLD
.89 CL COL.

08:46 DEEWOOD / BLACKLAWN
0-DETECTION

08:51 HCN - 3.5
DIRECTLY IN FRONT
OF BIOLAB.

09:33 - Coast Guard (Ed) GATHERED
LAST READING 6-9 PARTICULATES
BREAKING DOWN EQUIPMENT
TO MOB TO ROCKDALE CO.
COURTHOUSE, TO SET-UP
AIR MONITORING.

J. McDaniel

10:45 - START PERSONNEL, & EPA
PERSONNEL ALONG W/ ONE
COAST GUARD DEPART
COMMAND POST TO GATHER
NEXT ROUND OF AIR
MONITORING READINGS.

10:30 - GPOKE W/ C. GUARD Ed
@ ROOKDALE COURTHOUSE
NO NEW ADDITIONAL INFORMATION
WAS OBTAINED.

11:00 OSC - SPURLING OFF-SITE
TO ATTEND MEETING W/
OTHER OFFICIALS TO GATHER
INFORMATION OF STATUS TO
SITE.

12:00 ARC - PUBLIC HEALTH OFFICIAL
INFORMS US OF THE LIMITS
TO RELEASE

J. McDaniel

1300 SIMX SCHEIDEL, MITCHELL,
AND KAISER ARRIVED. START MITCHELL
TAKES MESSIER AND PARKER BACK TO
START OFFICE.

START SCHEIDEL, KAISER, AND WHITT
ARE STAGED TO ASSIST OSC & FEINGOLD
AND BASS TO MONITOR A CREEK
(ATMOSPHERE ABOVE CREEK, TO BE EXACT)
FOR THE FOLLOWING GASES USING SPM
INSTRUMENTS:

- PHOSPHENE
- HCN
- HBr
- HCl
- Cl₂

THERE WILL BE THREE SAMPLING POINTS:

1. ON TANYARD BRANCH BELOW VFW LAKE
AND ABOVE I 20.
2. ON TANYARD BRANCH SOUTH OF I 20.
3. ON ALMAND CREEK NEAR FLAT SHOALS
ROAD, SOUTH OF WHERE TANYARD BRANCH
DISCHARGES INTO ALMAND CREEK.

AT EACH SAMPLING POINT, THE VAPOR
WILL BE MEASURED AT TWO SEPARATE
POINTS:

J. McDaniel

A. JUST ABOVE CREEK LEVEL

B. BREATHING ZONE ABOVE CREEK
(FALE LEVEL)

John

DATA TABLE

SAMPLING POINT	PHOTO No.	SAMPLING LOCATION	time	AIR CONCENTRATIONS									
				DISSOLVED O ₂ (PPM) WATER LEVEL	SO ₂ (PPM) BREATHING ZONE	H ₂ S (PPM) WATER LEVEL	HCN (PPM) BREATHING ZONE	HCl (PPM) WATER LEVEL	HCl (PPM) BREATHING ZONE	HBr (PPM) WATER LEVEL	HBr (PPM) BREATHING ZONE	Cl ₂ (PPM) WATER LEVEL	Cl ₂ (PPM) BREATHING ZONE
1		Below dam at VWF Lake (trib. to Tanyard)	1110	0	0	0	0	0	0	0	0	0	0
2		S of IZO Tanyard Branch	1125	0	0	0	0	0	0	0	0	0	0
3		N of Flat Shoals, Tanyard Branch	1142	0	0	0	0	0	0	0	0	0	0
ADDITIONAL MEASUREMENTS													
4.		VIA SWS 1555 ROCKDALE BLVD. (AT ENTRANCE) ^(QVA)	1205	—	0	—	0	—	0	—	0	—	0.11 THEN 0
5.		RIVERSIDE (EAST AND NORTH PERIMETERS)	1747 1851	—	0	—	0	—	0	—	0	—	0 0.12 0.28
6.		STAGING AREA	1741	—	0	—	0	—	0	—	0	—	0
										0.4 PPM (PRESSED RESET AND GOT 0.0 PPM)			
7.		BALLFIELDS, SOUTH MAIN (MAY BE LEGION FIELDS)	1830	—	0	—	0	—	0	—	0	—	0

Michael

Flat Shoals are dead, some
were seen alive.

Michael

APPENDIX B

PHOTOGRAPHIC LOG

(11 Pages)

(Original photographs and negatives are on file at the Tetra Tech EM Inc. START office)



OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Smoke plume originating from Plant Warehouse 14. Note: Old Covington Highway is in the lower right portion of the photograph.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Northwest

TDD Number: 4T-04-05-B-006 **Date:** May 25, 2004

Photographer: John Spink, Atlanta Journal
Constitution Online



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Firefighters dousing Plant 14 Warehouse with water. Note: Old Covington Highway (top of photograph) and Rockdale Industrial Boulevard (extreme top) are shown in the background.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Northeast

TDD Number: 4T-04-05-B-006 **Date:** May 25, 2004

Photographer: Staff, Atlanta Journal Constitution
Online



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Firefighters using ladder trucks to spray water on the fire.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: East

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: Phil Skinner, Atlanta Journal
Constitution Online



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Smoke plume parallel to Interstate 20 (foreground).

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: North

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: John Spink, Atlanta Journal Constitution
Online



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Upwind view of the smoke plume.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Northwest

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: John Spinks, Atlanta
Journal Constitution



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Upwind view of the plume as seen from the Bernie Bourdon Bridge.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Southwest

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: John Spink, Atlanta Journal Constitution
Online



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Color changes in the smoke plume.

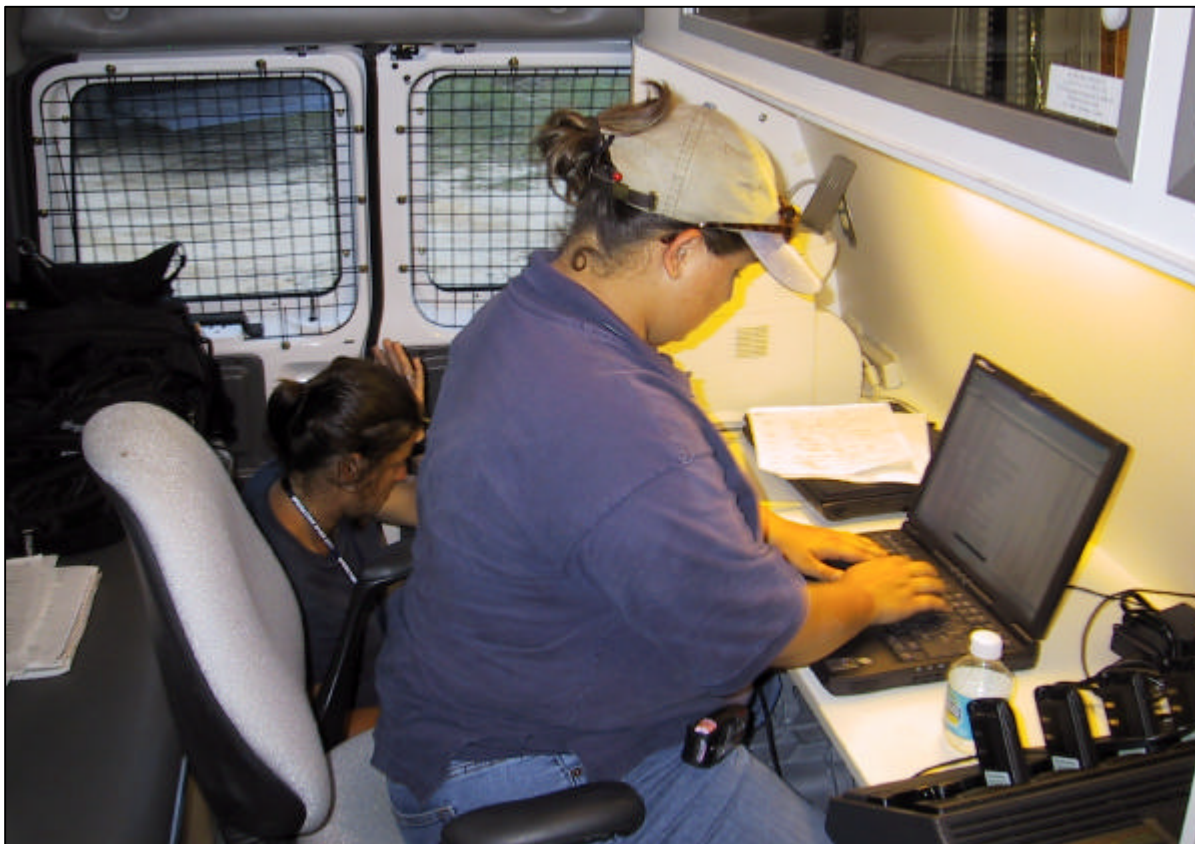
Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Southeast

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: Staff, Atlanta Journal Constitution



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: TtEMI START managing data collected during the response

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Not applicable

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: Charles Parker,
Tetra Tech EM Inc. (TtEMI)

Witness: Bess Blyler
TtEMI



**OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: Air monitoring equipment set up for collecting data from the plume. Note: Additional air monitoring equipment used by START and EPA is inside the vehicle, with the intake hoses deployed outside of the vehicle.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

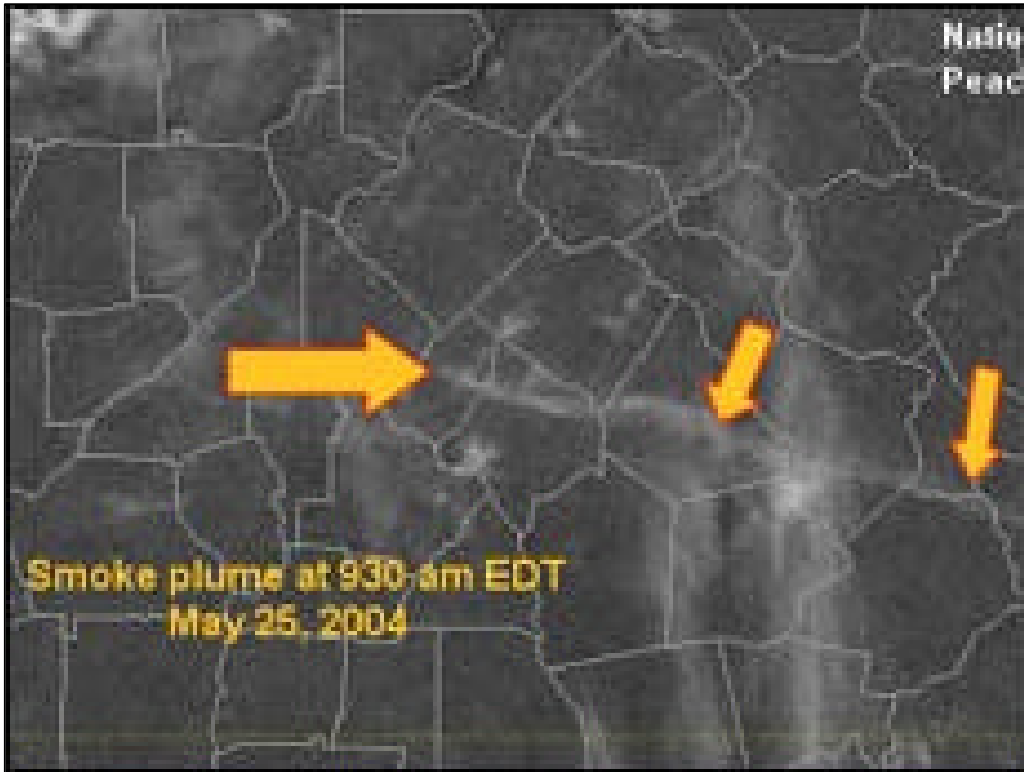
Orientation: Not applicable

TDD Number: 4T-04-05-B-006

Date: May 25, 2004

Photographer: Charles Parker,
TtEMI

Witness: Bess Blyler,
TtEMI



OFFICIAL PHOTOGRAPH NO. 10
U.S. ENVIRONMENTAL PROTECTION AGENCY

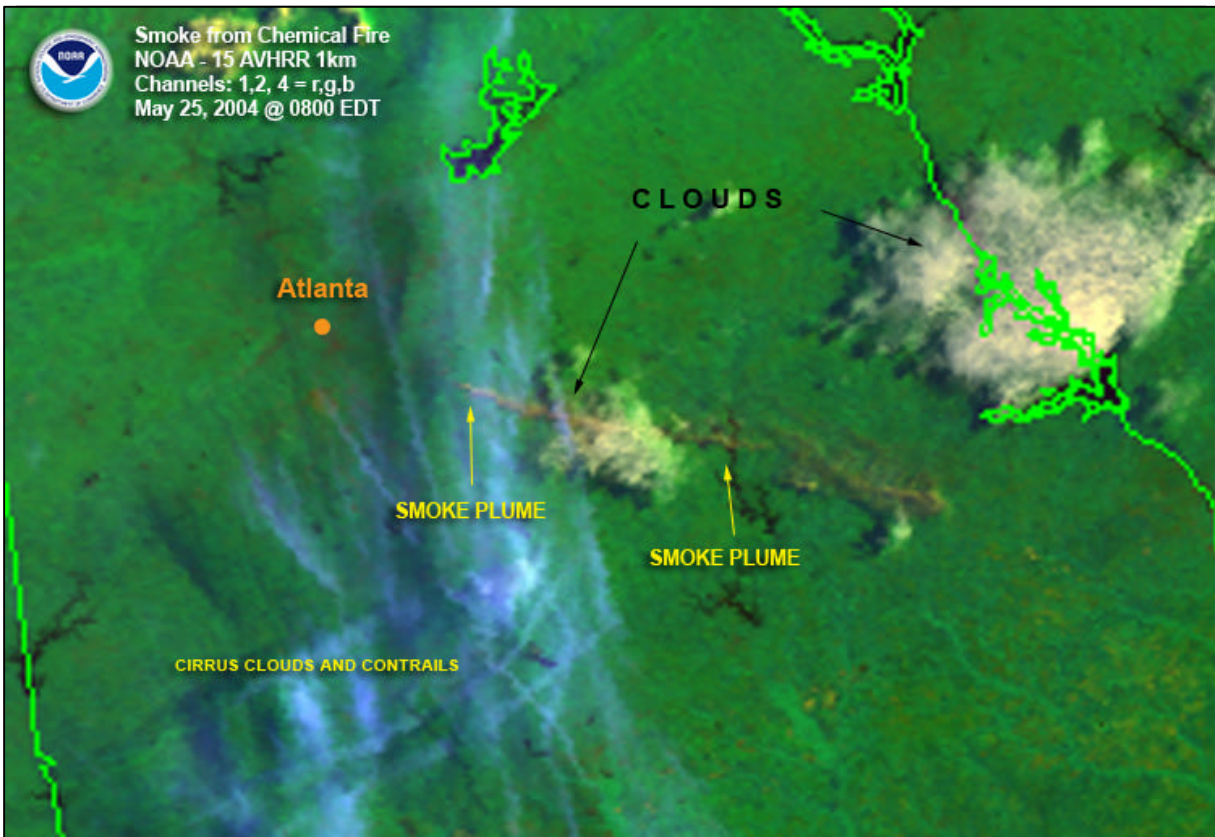
Subject: GOES Satellite image of the smoke plume.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Not applicable

TDD Number: 4T-04-05-B-006 **Date:** May 25, 2004

Photographer: National Weather Service,
Peachtree City, Georgia



**OFFICIAL PHOTOGRAPH NO. 11
U.S. ENVIRONMENTAL PROTECTION AGENCY**

Subject: One kilometer spatial resolution satellite image of the smoke plume. Note: the smoke plume is well over 100 miles long from the origination point.

Location: Bio-Labs, Inc.
Conyers, Rockdale County, Georgia

Orientation: Not Applicable

TDD Number: 4T-04-05-B-006 **Date:** May 25, 2004

Photographer: National Oceanic and Atmospheric Administration,
National Climatic Data Center

APPENDIX C
TABLE OF WITNESSES

(1 Page)

TABLE OF WITNESSES
Bio-Labs Site
Conyers, Rockdale County, Georgia

Benjamin Franco, On-Scene Coordinator
Rick Jardine, On-Scene Coordinator
Steve Spurlin, On-Scene Coordinator
Katrina Jones, On-Scene Coordinator
Terrance Byrd, On-Scene Coordinator
Brook Bass, On-Scene Coordinator
Amy Feingold, On-Scene Coordinator
U.S. Environmental Protection Agency, Region 4
Emergency Response and Removal Branch
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303
(404) 562-8767

Neil Daniell, START Project Manager
Alan Whitt
Rich Kaiser
Didi Fung
Bess Blyler
Charles Parker
Tiffany Messier
John Schendel
Superfund Technical Assessment and Response Team, Region 4
Tetra Tech EM Inc.
1955 Evergreen Blvd, Suite 300
Duluth, Georgia 30096
(678) 775-3080

APPENDIX D
AIR MONITORING DATA
(7 Pages)

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
Tuesday, May 25, 2004									
1050 - 1300			Old Covington Hwy & Blacklawn	-	-	0.53		-	-
1050	N33 40 4.4	W84 01 28.0	West SW Ave & West SW Circle	-	-	0.26		-	-
1100	N33 76 20	W84 00 45	Exit 82	-	-	0	1	-	-
1113	N33 37 42	W83 56 55	Exit 98	-	-	0	0	-	-
1121	N33 36 34	W83 53 02	Continue to exit 98	-	-	0	0	-	-
1131	N33 36 40	W83 45 58	Continue to exit 98	-	-	0	0	-	-
1142	N33 36 34	W83 41 58	Exit 101	-	-	0	0	-	-
1220	N33 33 34	W83 30 02	Exit 113	-	-	0	0	-	-
1237	N33 35 37	W83 28 15	Downtown Madison	-	-	0	0	-	-
1050 - 1300	N33 39 54.7	W84 01 40.7	West Ave. at Chevron Station	-	-	0.31	-	-	-
1050 - 1300	N33 39 57.5	W84 01 35.9	West Ave. First National Bank	-	-	0.24	-	-	-
1050 - 1300	N33 39 55	W84 01 40.7	Dogwood Drive	-	-	0.18	-	-	-
1050 - 1300	N33 39 58.9	W84 01 34.3	West Ave. at Family Dollar	-	-	0.1	-	-	-
1050 - 1300	N33 39 56.7	W84 01 37.8	West Ave. at Piggly Wiggly	-	-	0.14	-	-	-
1050 - 1300	NA	NA	West Ave. & I-20	-	-	0.09	-	-	-
1050 - 1300	NA	NA	Dogwood Drive and Taylor Street	-	-	0.31	-	-	-
1050 - 1300	N33 39 37.8	W84 01 22	Dogwood Drive and Bryant Street	-	-	0	-	-	-
1050 - 1300	NA	NA	Dogwood Drive and Harley	-	-	0	-	-	-
1050 - 1300	N33 38 10.3	W83 58 38.4	Dogwood Drive and Glen Rd	-	-	0	-	-	-
1050 - 1300	N33 19 11.6	W84 00 21.5	Highway 138 and Citgo Station	-	-	0	-	-	-
1050 - 1300			Old Covington Hwy and Gees Mill Rd	-	-	0	-	-	-

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
HCl = Hydrochloric Acid
HCN = Hydrogen Cyanide
H₂S = Hydrogen Sulfide
Cl = Chlorine

HBr PEL = 3 parts per million
HCl PEL = 5 parts per million
HCN PEL = 4.7 parts per million
H₂S TWA = 10 parts per million
Cl PEL = 5 parts per million
Phosgene TWA = 0.1 parts per billion

ppm = parts per million
ppb = parts per billion
+ = concentrations exceeded saturation point of instrument
** = detected concentrations fluctuated at reporting location
- = non detect

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
1302	N33 35 24	W83 27 10	1386 Cedar Drive	-	-	0	0		
1320	N33 40 57.4	W84 00 2.3	Rockdale Hospital	0	0	0	-	-	-
1331	N33 40 59.1	W84 00 3.2	Sigman Rd & Milstead	0	0	0	-	-	-
1334	N33 41 15.4	W83 59 49.7	Broad & Hwy 20	0	0	0	-	-	-
1345	N33 40 27.8	W84 00 53.7	Milstead & College	0	0	0	-	-	-
1347 - 07:31	N33 40 54.9	W83 59 37.0	Milstead & Main (Rockdale Court House)	0	0	0	-	-	-
1351	N34 36 45	W83 44 43	Exit 98	-	-	0	0		
1353	N33 40 8.49	W84 01 21.4	West Ave & Green Street (Old Covington)	0	0	1.4	-	-	-
1402	NA	NA	New Subdivision (Bridal Bridge Walk)	0	0	1.47	-	-	-
1403	N33 39 54	W84 01 41.6	Dogwood Dr & West Ave	0	0	0.2	-	-	-
1410	N33 40 16	W84 02 05	VFW Drive toward 3rd Ave (By VFW Lake)	0.6	0	1.48	-	-	-
1410	N33 40 16	W84 02 05	VFW Drive toward 3rd Ave (By VFW Lake)	0.4	0	1.48 - 0.66**	-	-	-
1410	N33 40 16	W84 02 05	VFW Drive toward 3rd Ave (By VFW Lake)	0	0	1.48 - 0.66**	-	-	-
1411	N33 40 18.7	W84 01 56.6	VFW Drive toward 1st Ave (By VFW Lake)	0	0	0.22 - 0.30**	-	-	-
1411	N33 38 09	W83 58 32	Exit 84	-	-	0	0		
1420	N33 40 15.3	W84 02 22.2	Blacklawn & Olympic	1	0	0	-	-	-
1420	N33 39 34	W84 01 17	Exit 80	-	-	0	0		
1421	N33 40 15	W84 02 09	Olympic Culdesac	1.2	0	0.17	-	-	-
1422	N33 40 21	W84 02 22	Blacklawn behind Bio-Labs	9	0	1.5	-	-	-
1424	N33 40 08	W84 02 24	-	-	-	0	0		
1424	N33 40 08	W84 02 24	-	-	-	0.24	0		
1428	N33 40 21	W84 02 22	Blacklawn at behind Bio-Labs	5.4	17	1.5	-	-	-

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
HCl = Hydrochloric Acid
HCN = Hydrogen Cyanide
H₂S = Hydrogen Sulfide
Cl = Chlorine

HBr PEL = 3 parts per million
HCl PEL = 5 parts per million
HCN PEL = 4.7 parts per million
H₂S TWA = 10 parts per million
Cl PEL = 5 parts per million
Phosgene TWA = 0.1 parts per billion

ppm = parts per million
ppb = parts per billion
+ = concentrations exceeded saturation point of instrument
** = detected concentrations fluctuated at reporting location
- = non detect

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
1511	N33 39 55.4	W84 01 43	Iris & Klondike	0	0	-	-	-	-
1559	N33 39 5.7	W83 59 7.1	Old Covington Hwy & Command Post	0	0	-	-	-	-
1600	NA	NA	Fire & Rescue Water Tower	0	0	-	-	-	-
1637	NA	NA	East on Rockdale Industrial	0	0	-	-	-	-
1645	N33 40 31	W83 40 21	(Entering Plume)	9	21	0.42	0.9		
1645	N33 40 31	W83 40 21	(Entering Plume)	2.2	26	-	-	-	-
1646	N33 40 28	W84 02 15.5	Lester & Rockdale	0	0	0	-	-	-
1646	N33 40 27.6	W84 02 11.5	Rockdale Industrial	4.1	0	0.21	-	-	-
1646	N33 40 31	W84 02 16	-	-	-	0	0		
1647	N33 40 27.1	W84 01 58.7	Rockdale Industrial	9	0	0.21	-	-	-
1648	N33 40 27.1	W84 01 48.7	Rockdale Industrial	1.1	0	0.09	-	-	-
1648	N33 40 27	W84 02 07	-	-	-	0.61	2.2		
1648			Lester & Rockdale Industrial	-	-	0.41	-	-	-
1648			Rockdale Industrial "American Electric"	-	-	0.29	-	-	-
1648			Rockdale Industrial "American Electric"	-	-	0.42	-	-	-
1648	N33 40 39.7	W84 01 46.6	Harvel & Rockbridge	-	-	0.09	-	-	-
1650	N33 40 27	W84 01 48	-	-	-	0.08	0		
1651	N33 40 27.4	W84 01 46.5	Rockdale Industrial & Rockbridge & Main	1	0	0.08	-	-	-
1652	N33 40 39.7	W84 01 46.6	Rockbridge & Harvel	0	0	0.5	-	-	-
1653	N33 40 39	W84 01 47	-	-	-	0.12	0		
1654	N33 40 39.7	W84 01 46.6	Rockbridge & Harvel	1.3	0	-	-	-	-
1657	N33 40 27	W84 01 46.6	Rockbridge into Plume	9	20	1.45	-	-	-

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
HCl = Hydrochloric Acid
HCN = Hydrogen Cyanide
H₂S = Hydrogen Sulfide
Cl = Chlorine

HBr PEL = 3 parts per million
HCl PEL = 5 parts per million
HCN PEL = 4.7 parts per million
H₂S TWA = 10 parts per million
Cl PEL = 5 parts per million
Phosgene TWA = 0.1 parts per billion

ppm = parts per million
ppb = parts per billion
+ = concentrations exceeded saturation point of instrument
** = detected concentrations fluctuated at reporting location
- = non detect

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
1700	N33 40 28	W84 02 15.4	Lester & Rockbridge	9 – 3**	15 – 22**	0.42	-	-	-
1700	N33 40 38	W84 02 22	-	-	-	0.17	0.9		
1700			Rockdale Industrial Park on Rockdale Industrial	-	-	1.45	-	-	-
1700			Rockdale Industrial & Lester	-	-	0.42	-	-	-
1747	N33 40 33	W84 02 18	1209 Lester Ave	9+	12	-	-	-	-
1747	N33 40 33	W84 02 18	1209 Lester Ave	9+	21	-	-	-	-
1749			Indian Blvd & Rockdale	9+	33	-	-		
1749			1209 Lester Ave	-	-	0.51	-		
1749			1209 Lester Ave	-	-	0.55	-		
1749			1209 Lester Ave	-	-	0.84	-		
1749			1209 Lester Ave	-	-	1.26	-		
1750	N33 40 33	W84 02 18	1209 Lester Ave	-	-	0.61	5.7		
1751	N33 40 28	W84 02 25	1555 Rockdale Industrial Blvd "VIASYS"	9+	21	-	-		
1751	N33 40 28	W84 02 25	1555 Rockdale Industrial Blvd "VIASYS"	9+	28	-	-		
1751	N33 40 28	W84 02 25	1555 Rockdale Industrial Blvd "VIASYS"	9+	31	-	-		
1753	N33 40 28	W84 02 25	1555 Rockdale Industrial Blvd "VIASYS"	-	-	1.5	15.0+		
1753	N33 40 28	W84 02 25	1555 Rockdale Industrial Blvd "VIASYS"	-	-	0.66	-		
1753	N33 40 28	W84 02 25	1555 Rockdale Industrial Blvd "VIASYS"	-	-	0.54	-		
1803			1601 Rockdale Industrial Blvd Bio-Labs DIST	-	-	1.5	-		
1811	N33 40 59	W84 01 49	1496 Rockbridge Fire Station #7	0	0	-	-		
1813	N33 40 59	W84 01 49	1496 Rockbridge Fire Station #7	-	-	0.06	-		
1813	N33 40 59	W84 01 49	1496 Rockbridge Fire Station #7	-	-	0.11	-		

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
HCl = Hydrochloric Acid
HCN = Hydrogen Cyanide
H₂S = Hydrogen Sulfide
Cl = Chlorine

HBr PEL = 3 parts per million
HCl PEL = 5 parts per million
HCN PEL = 4.7 parts per million
H₂S TWA = 10 parts per million
Cl PEL = 5 parts per million
Phosgene TWA = 0.1 parts per billion

ppm = parts per million
ppb = parts per billion
+ = concentrations exceeded saturation point of instrument
** = detected concentrations fluctuated at reporting location
- = non detect

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
1813			Rockbridge Road & Sigman	-	-	0	-		
1814	N33 40 59	W84 01 49	-	-	-	0.08	0		
1817	N33 40 28	W84 01 47	Main & Rockbridge	0	0	-	-		
1817			Main and Ellington	0	0	-	-		
1817			Green & Ellington	0	0	-	-		
1818	N33 40 20	W84 01 47	-	-	-	0	0		
1820			Main & Rockdale Bridge Road	-	-	0	-		
1827			Green & Neemore	0	0	-	-		
1827			VFW & Dogwood	0	0	-	-		
1914			Irwin Bridge & Main	0	0	-	-		
1919			Irwin Bridge & Mountain View	0	0	-	-		
1920	N33 41 08	W84 01 27	-	-	-	0	0		
1920	N33 41 14	W84 01 23	Kingston and Irwin Bridge	0	0	0.07	0		
1923	N33 41 14	W84 01 23	Kingston and Irwin Bridge	-	-	0.06	-		
1926	N33 41 14	W84 01 23	Kingston and Irwin Bridge	-	-	0.06	-		
1926	N33 41 14	W84 01 23	Kingston and Irwin Bridge	-	-	0.09	-		
1927	N33 41 20	W84 01 19	Sigman and Irwin Bridge	0	0	0.08	0		
1929			Irwin Bridge and Kingston	-	-	0.12	0		
1929			Irwin Bridge and Kingston	-	-	0.08	0		
1929			Irwin Bridge and Kingston	-	-	0.08	-		
1929			Irwin Bridge and Kingston	-	-	0.11	-		
2336	N 33 32 18	W81 43 81	EPA Mobile Command Post	0	0	0	0	0	0
2356	N33 40 57.4	W84 00 2.3	Rockdale Hospital	0	0	0	0	0	0

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
HCl = Hydrochloric Acid
HCN = Hydrogen Cyanide
H₂S = Hydrogen Sulfide
Cl = Chlorine

HBr PEL = 3 parts per million
HCl PEL = 5 parts per million
HCN PEL = 4.7 parts per million
H₂S TWA = 10 parts per million
Cl PEL = 5 parts per million
Phosgene TWA = 0.1 parts per billion

ppm = parts per million
ppb = parts per billion
+ = concentrations exceeded saturation point of instrument
** = detected concentrations fluctuated at reporting location
- = non detect

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
Wednesday May 26, 2004									
2408			Junction 138 East (3 miles East of Walnut Grove)	0	0	0	0	0	0
2413	N33 41 28	W83 57 71	Yellow River	0	0	0	0	0	0
2420	N33 42 04	W83 57 89	138 East & White Road	0	0	0	0	0	0
2430	N33 43 80	W83 57 94	White Road & West Hightower	0	0	0	0	0	0
2437	N33 44 27	W83 59 53	Hightower & GA Hwy 20	0	0	0	0	0	0
2443	N33 43 31	W84 00 37	J.H.House Elementary School @ Chandler Rd (Disaster Relief)	0	0	0	0	0	0
2452	N33 41 54	W83 59 81	Ga. Hwy 20 South and Yellow River	0	0	0	0	0	0
0136	N33 40 44	W84 01 48	Irwin Bridge & Main Street	0	0	0	0	0	0
0142			Rockbridge & Main	0	0	0.8 - .45 **	0	1.3	2
0145			Lithonia Lighting (Rockbridge & Main)	0	0	0.5 - 0.79**	0	2.1 - 2.7**	0
0148	N33 40 45	W84 02 14	Railroad Crossing on Main Street	0	0	1.2	0	0	0
0205	N33 40 45	W84 02 14	Railroad Crossing on Main Street	0	0	1.5		3.6 - 5.5 **	4.4 - 5**
0209	N33 40 45	W84 02 02	American Electric Lighting	0	12	0	0	0	0
0233	N33 41 49	W84 01 15	-	0	0	0	0	0.05	0
0237	N33 42 15	W84 01 94	Farmer Rd & Irwin Bridge Road	0	0	0	0	0	0
0404	N33 36 66	W83 49 58	Flash Floods Station	0	0	0	0	0.4	0
0439	N33 36 15	W83 51 85	Emory Street	0	0	0	0	0.8	0
0443	N33 45 44	W83 52 52	81 South at mile marker 10	0	0	0	0	0.5	0
0447	N33 34 77	W83 52 91	81 South at milie marker 12 (B&H Body Shop)	0	0	0	0	0.7	0
0459	N33 36 90	W83 52 04	Palmer Stone Elementary School	0	0	0	0	0.5	0
07:05	N33 40 67	W84 02 38	1601 Rockdale Industrial Blvd	0	0	0	0	0	0

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
HCl = Hydrochloric Acid
HCN = Hydrogen Cyanide
H₂S = Hydrogen Sulfide
Cl = Chlorine

HBr PEL = 3 parts per million
HCl PEL = 5 parts per million
HCN PEL = 4.7 parts per million
H₂S TWA = 10 parts per million
Cl PEL = 5 parts per million
Phosgene TWA = 0.1 parts per billion

ppm = parts per million
ppb = parts per billion
+ = concentrations exceeded saturation point of instrument
** = detected concentrations fluctuated at reporting location
- = non detect

Air Monitoring Data for Bio-Lab Fire in Conyers, Georgia.

Sample Time	Latitude	Longitude	Street Address	Analyte Readings					
				HBr (ppm)	Phosgene (ppb)	Cl (ppm)	HCl (ppm)	HCN (ppm)	H2S (ppm)
07:09	N33 40 46	W84 02 43	Lester and Industrial	0	0	0.13	0	0.13	0

Note: Numbers in bold indicate concentrations that were detected above a level of concern

HBr = Hydrogen Bromide
 HCl = Hydrochloric Acid
 HCN = Hydrogen Cyanide
 H₂S = Hydrogen Sulfide
 Cl = Chlorine

HBr PEL = 3 parts per million
 HCl PEL = 5 parts per million
 HCN PEL = 4.7 parts per million
 H₂S TWA = 10 parts per million
 Cl PEL = 5 parts per million
 Phosgene TWA = 0.1 parts per billion

ppm = parts per million
 ppb = parts per billion
 + = concentrations exceeded saturation point of instrument
 ** = detected concentrations fluctuated at reporting location
 - = non detect