PermaFix of South Georgia
103 DX 9017.0001.0199

Rite in the Rain.
ALL-WEATHER
UNIVERSAL
№ 371

Primary Site Manager: Paul Prys
Primary EPA Task Monitor: Chris Russell
Helen Mayoral
Bryan Vasser

1 of 1

11022316

INCH

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Rite in the Rain

ALL-WEATHER WRITING PAPER

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00522

LEGAL DOCUMENT
DO NOT DESTROY

2

Paul Prys & Helen Mayoral

2013_0815 arrived on site at 7:45am

Perma Fix

Gen. notes

- 55 gal. drum into a 500 gal. mixing unit – incident occurred.

- Containment wall leaked, runoff went down small "canal" to tributary of Creek drainage ditch Mud Creek

- Put out booms a little ways down from "canal" - drainage ditch

- Drainage ditch on South corner of facility of SWS

- Kendrick Carter – believes ~20,000 gallon were pumped in the evening. Started pumping ~9:30-10:00pm

- Objectives: use WQ meter in tributary & Mud Creek, get some samples as well. Use WQ meter on liquid in frack tank, hazcat & sample.

- 3 people injured

8/15/2013

Scale: 1 square =

4769

Travis Howell - (229) 300 4769
Georgia Petroleum, Inc.
Plant Manager

His observations:
~2:30 pm had explosion
~5:00 were able to return, fire out.
Saw valve open and closed it in their (Perma Fix)
Observed a sheen.

- SWS is GA Petroleum contractor
- HEPACO is contractor for Perma Fix.
- ATF showed up ~1500-1600.
- Also on scene, GA EPD Emergency Response, Valdosta Fire ~~Rescue~~ Department Valdosta Police Mobile Command

0815 Returned to ER van. Calibrated YSI 556 MPS (EPA # A79995)

Spec. cond	4.49 ms/cm cal.
pH 7	7.00 (26.07°C)
pH 4	4.00 (27.12°C)
ORP (30°C 244.5 mV)	244.5 mV
DO %	100.5 % (24

837.9 mmHg pressure

Scale: 1 square = [illegible] 08/15/2018

Rite in the Rain

0940 Departed truck for sampling & collecting samples for hazcat.

1000 - Sample taken at ~~drainage dit~~ dammed tributary behind facility

Location SW of Perma fix dammed runoff ditch/tributary

Temp: 25.16°C

S. Conductivity 0.591 mS/cm

DO %	84.8%	~6"
pH	5.66	below
ORP	225.5 mV	surface

Notes: Booms with product in it on the sides and oil pads on water surface. Oil slick/sheen on water surface

[Berm was breached during rain storm overnight]

Mud Creek appears to have high concentration of tannins

[signature] 8/15/2013

Scale: 1 square =

1020 location 2; ~~sample~~ reading taken downstream of confluence ~~and~~ of tributary and Mud Creek

Temp 24.98°C
Sp.Cond 0.061 mS/cm
DO% 45.0 %
pH 4.69
ORP 207.9 mV

- Notes: Slight sheen, cloudiness on tributary.

1024 location 3 reading taken about 20' downstream of confluence.

Temp 24.98°C
SpCond 0.061 mS/cm
DO% 46.7 %
pH 4.55
ORP 201.4 mV

* Sample taken from location 2 at confluence of tributary & Mud Creek 1029

8/15/2013

Scale: 1 square =

Rite in the Rain

1035 ~~So~~ Reading ~~taken~~ upstream of confluence of Mud Creek and tributary - really dark from tannins.

Temp: ~~24.98~~ 24.98°C
Sp. Cond: 0.060 mS/cm
DO%: 41.1%
pH: 4.46
ORP: 220.7 mV

~~50~~ 78 yards south from Spur, entry to Mud Creek (over culverts).

Met with C. Russell at 1140 to debrief him about the results of the water quality monitoring and assessment of site at confluence.

Instructed to get together with HEPACO take a few samples from the frack tank and get readings from them, as well as run through hazcat. (ignitability).

1150 Gave 3 16oz wide mouth clear jars to HEPACO to fill 3/4 way with

Scale: 1 square = [illegible] 8/15/2013

water taken
Samples from the frack tank. (HEPACO - J.T. Cochran) Sample jars 3, 4 & 5.

1156 Instructed by OSC C. Russell to calibrate the AreaRAEs in case of deployment in the near future.

~~HMayoral~~

Calibration
Steel RAE Unit 4, confirmed date & time
Steel RAE Unit 3, confirmed date & time

Unit 4 Steel RAE Calibration
08/15/2013 @ 1250
Mixed Air
Exp. date 10/23/2013 Manuf date 07/12 Lot #: HAM-413-B

50% LEL (CH_4)	BUMP	Isobutylene 100 ppm
20.9% O_2		Exp. 10/2015
10 ppm H_2S		Lot LTK092-RR-CM
50 ppm CO		Bump:

~~HMayoral 8/15/2013~~

Scale: 1 square = _____

Rite in the Rain

Unit 3 Steel RAE Calibration

8/15/2013 1305

Mixed 10/23/13 exp. Manuf 07/12 · lot # HAM413-8

50% LEL %	Bump 49%	Isobutylene 100 ppm
20.9 O_2%	20.9%	10/2015 · lot # LTK092-RR-CM
10 ppm H_2S	10 ppm	Bump: 100 ppm
50 ppm CO	50 ppm	

Unit 1 Steel RAE Calibration

8/15/2013 ~~1325~~ 1635

Mixed Exp ~~10/2~~ 04/2014 · lot ~~LTD293-RR-CM~~

exp 3/2015 · Lot # 1472031

50% Methane %(LEL)	Bump 49% LEL	Isobutylene 100 ppm exp. 10/2015 Lot LTK092-RR-CM
18.0% O_2	17.9% O_2	
10 ppm H_2S	10 ppm H_2S	Bump: 101 ppm
50 ppm CO	48 ppm CO	

Unit 2

Last calibrated 08/02/2013

bump tested

48 %LEL	Cal gas 50% LEL (CH4)	Isobutylene 100 ppm bump test
17.8% O_2	18.0% O_2	96.8 ppm
9 ppm H_2S	10 ppm H_2S	
49 CO	50 CO	

~~8/15/2013~~

~~Hmayoral~~

Scale: 1 square = _____

MultiRAE 095-508250 Calibration
Mixed gas 8/15/2013 1440
Exp. 04/2014 Bump test

Lot#	10 ppm H_2S
LTD293-RR-CM	49 ppm CO
10 ppm H_2S	49% LEL
50 ppm CO	18% O_2
50% LEL	
18.0% O_2	

Isobutylene: 100 ppm
exp. date 10/2015, Lot #: LTK092-RR-CM
Bump test: 99.4 ppm

MultiRAE 095- 518698/452
8/15/2013 @ 1453
Exp. 04/2014 Lot # LTD293-RR-CM

	BUMP TEST	
10 ppm H_2S	10	
50 ppm CO	50	Isobutylene
50% LEL	49	100 ppm
18.0% O_2	18.0	exp. 10/2015
		LTK092-RR-CM
		Bump: 99.8 ppm

[signature] 8/15/2013

~~MultiRAE Pro (EPA) Unit 37~~
~~8/15/2013 1606~~
~~Mixed gas cal~~
~~10 ppm H_2S~~
~~50 ppm CO~~ 48

~~Isobutylene~~
~~10 ppm~~
~~exp. 06/13/2013~~
~~11347 ppb~~
~~Lot #: 930871~~
~~(from truck)~~

MultiRAE Pro (EPA)
Unit 37
8/15/2013 1606
Mixed gas exp. 03/2015
Lot #: 1472031

10 ppm H_2S
~~CO~~ 50 ppm CO
50% LEL CH_4(LEL)
18.0% O_2

Passed

~~9.9 ppm H_2S~~
~~48 ppm CO~~
~~49% LEL~~
~~18.0% O_2~~

Isobutylene 10 ppm
exp 06/13/2013 Lot 930871
Bump test: 11347 ppb

9.9 ppm H_2S
49 ppm CO
48% LEL
18.0% O_2

were pulling into tank from dammed tributary = hence more sediment in sample.

Frack tank
Frack tank
Frack tank

Sample 3 4417
Sample 4 26377
Sample 5 4563

Sample 3 had more sediment, 4 & 5 had time for the sediment to settle out.

Scale: 1 square = _____

[signature] 8/15/2013

~~At 1655, Sample taken~~

At ~1500? Sample 6 was taken from the area where the explosion took place, on the SE portion of the facility

At ~1655 Sample 7 was taken from a tanker ~~to determine~~ within the facility to hazcat.

~1840 - took sample from the decon line ~~for~~ to test for pH, as requested by OSC C. Russell for HEPACO Captain.

1845 - requested back at 0800 next day. and released from site.

~~Demobilize~~ 19 Left site at 1945

Helen Mayoral 8/15/2013

August 16, 2013 Reys, Mayoral

0780 START Reys and Mayoral on-site.
Spoke w/ OSC Russell. Will prepare AREARAEs and multiRAEs for field use. Structural engineer on-site ~~to be~~ for PERMAFIX to determine stability of overhead structure damaged in fire. Area located on south end of building in drum storage area.

0900 START Mayoral began bump testing AREA RAEs and MULTIRAEs. START Reys will replace the CO and H_2S sensors with HCN and Cl_2 sensors in units AREA RAE 3 (A80780) and AREA RAE 1 (~~A80783~~) A80782

0915 Bump tested AREARAEs
Mixed, exp. 03/2015, Lot #: 1472631
Isobutylene, 100 ppm, exp. 10/2015, LTK892-RR-CM

	UNIT 1	UNIT 2	UNIT 3	UNIT 4
50 ppm CO	42 ppm	62 ppm	49 ppm	46 ppm
100 ppm VOC	101 ppm	97.3 ppm	100 ppm	101 ppm
10 ppm H_2S	9 ppm	9 ppm	9 ppm	9 ppm
50% LEL	48%	48%	53%	49%
18.0% O_2	18.3%	18.0%	17.5%	17.5%
	A80782	A80779	A80780	A80781

Scale: 1 square = Mayoral 8/16/2013

~~Recalibrated~~ Unit 2, A 80779 using same mixed cal gas as previous bump.

Mixed, exp 3/2015, Lot #: 1472031 Isobutylene 100 ppm exp. 10/2015 Lot #: LTK0092-RR-CM

50 ppm CO	50 ppm CO	
~~100p~~ 10 ppm H_2S	10 ppm H_2S	
50% LEL	49 % LEL	
18.0% O_2	18.0 % O_2	
	BUMP	Bump: 100 ppm

1000 MultiRAE Bump Test 1000

Mixed, exp. 03/2015, Lot # 1472031

Isobutylene 100 ppm, exp. 10/2015, Lot: LTK0092-RR-CM

UNIT #:	508250	518698
50 ppm CO	48 ppm	48 ppm
10 ppm H_2S	10	11 ppm
50% LEL	51 %	50%
18.0% O_2	17.9%	17.9%
100 ppm VOC	100 ppm	100 ppm

1100 Prys prepared to entered facility with Valdosta Fire Department, ATF, and members of HEPACO

~1115 Entered facility

1120 Mayoral tasked to get TWA 1000 FID up and calibrated.

Helen Mayoral 8/16/2013

1135 Mayoral began calibration of AreaRAE #3 & #1 for HCN & Cl_2 Sensors, while TVA warmed up.

HCN cal gas: Exp. 11/2013, Lot #: 3-093-732

Cl_2 cal gas: exp. 10/31/2013, Batch#: Lot #: D211125 SN: PDI 34897

	Bump Unit 1	Bump Unit 3
10ppm HCN	10ppm	9 ppm
10ppm Cl_2	Not collected	Not collected

1200 START PRYS RETURNED to RESPONSE truck. Assisted START mayoral with TVA1000 calibration.

1225 START PRYS RE-ENTERED facility to conduct air monitoring and escort OSHA, GAEPD, and Perma-Fix insurance adjusters. START mayoral calibrated TVA1000 and continued uploading photos to EPA OSC website. START PRYS monitored air using MultiRAE Plus (# 095-508250). Breathing zone monitoring ranged from 0.4-13.2 ppm. LATE NOTE: Air monitoring during previous entry ranged from 0.4-18ppm. Air monitoring in mixing unit (point where drums are emptied into unit)

Scale: 1 square = [illegible] 8/16/2013

August 16, 2013 Prys, Mayoral

1225 Resulted in a VOC range of 2.1–9.0 ppm with a spike of 45 ppm. VOCs were monitored during both entries. CO, N_2S, and LEL were Ø and O_2 was 20.9% during both entries. Start Prys collected a sample from the mixing unit using a bailer. Sample requested for HAZCAT at request of ATF.

1330 Start Prys returned to response truck. Assisted start Mayoral with calibrating/troubleshooting AreaRAE Cl_2 sensor. OSC Russell arrived to truck and start updated him on-site activities. Contacted QSI Parker with troubleshooting Cl_2 sensor. Calibrated AreaRAE units 1 and 3.

1400 A trackhoe with a thumb attachment arrived on-site for HEPACO. HEPACO will use a shear and the trackhoe to remove the damaged structural areas so personnel can work safely. ~~St~~ PP Shear to be on-site morning of 8/17/13.

Scale: 1 square

Mayoral 8/16/2013

Rite in the Rain

August 16, 2013 Phys, Maynard

1500 Updated logbook and continued updating photos on EPA OSC website.

~~1545 OSC Russell dismissed~~ (PP)

1600 ~~1530~~ Began HAZCAT on sample from mixing unit. OSC Russell informed start HAZCAT of other samples from FRAC TANKS not necessary since HEPACO sent samples off for analysis.

1645 OSC Russell dismissed start for the day. START packed up equipment.

1730 START off-site.

16 AUG 2013

August 17, 2013 Pays, Mayoral

0800 START Pays AND Mayoral on-site. Spoke with OSC Russell. Tasked to deploy AREA RAEs 1+3 and to put Cl_2 and HCN sensors in AREA RAEs 2+4.

0830 START mayoral conducted bump test on AREA RAEs 1+3. START Pays AND OSC Russell walked the site to look for monitoring locations.

Bump test on Steel AREA RAEs

Mixed gas exp. 11/2015 · Lot # 1472031

Isobutylene 100ppm. exp date 10/2015 · Lot #: LTK092-RR-CM

	Unit 1	Unit 2	Unit 3	Unit 4
100ppm VOC	100ppm	99 ppm	100 ppm	100 ppm
50% LEL	48%	47%	52%	48%
18.0% O_2	18.0%	18.0%	18.0%	17.5%
10ppm Cl_2	9.8ppm		10.1 ppm	
10 ppm HCN	11 ppm	9 ppm	10 ppm	10 ppm

0845 START Pays installed Cl_2 and HCN sensors in AREA RAE 4. Turned unit on to warm sensors.

0980 START pays AND mayoral deployed units 1+3 on-site. Unit 1 was hung on the

Scale: 1 square = ~~[illegible]~~ 8/17/2013 in the Rain.

0920 fence near the "No smoking" sign located along the east side of the south wall on the GA Petroleum side of the fence. Unit 3 was hung on the south side of a trailer (blue) located on the east side of damaged drum storage area. 8 (ft)

0945 START Prys installed the Cl_2 and HCN sensors on AREA RAE 2. START Mayoral calibrated AREA RAE 4

Calibration of HCN & Cl sensors on Unit 2 & Unit 4 using 10 ppm HCN cal gas, exp. 11/2013, Lot #: 3-Ø93-732; using Cl_2 cal gas, exp. 10/31/2013, Batch #: 0211125

Bump test results are listed in Table on page 17. Chlorine sensors were not bump tested to conserve low cal gas.

10:15 1020: Unit 4 (HW) was ~~calibrated~~ (HW) deployed along yellow metal platform on NW corner of damaged drum storage area.

1045 Unit 2 HCN & Cl_2 sensors were calibrated by START Mayoral. 10 ppm HCN cal gas, exp. 11/2013, Lot 3-Ø93-732

Scale: 1 square = ~~Amayoral~~ 8/17/2013

10 ppm Cl_2 cal gas, exp. 10/31/2013, Batch #: 0211125
Bump test for HCN recorded on Table on page 17. Cl_2 sensor was not bump tested to conserve on low cal gas.
Radio button on Unit 2 was on during calibration and may have been recorded on data log.

1110-1115 ~~Unit~~ START Prys and Mayoral deployed Unit 2. Unit 2 was placed about 20 feet north of the damaged drum storage area on the north side of the silver storage tanker trailer.

1140 START Mayoral took inventory of cal gases. START Prys updated OSC Russell on status of gases, and discussed personnel support. OSC Russell decided only one START was required for site support. START Prys and Mayoral will demobolize from site at ~~1600~~ 1600 today and be replaced by START Vasser.

M Mayoral 8/17/2013

Scale: 1 square = _____

Rite in the Rain

8-17-13

1300 - Image added to ProRAE Remote for better visualization of air monitoring sites that were deployed along the perimeter and within the facility.

1425 - Instructed to change lower alarm limits on the AreaRAEs for VOCs from 5.0 ppm to 50 ppm, by OSC Russell.

1500 AreaRAE Host and generator were moved from the response truck to the guard house in front of the facility. There were no issues during the transition.
START Prys documented the crushing of drums by HEPACO staff.

1525 START Prys and Mayoral began packing up response truck.

1600 Demobilized from site to transition with START Vasser for personnel change.

1930 START Vasser arrives at site and completes a site walk with OSC Russell

2015 Demobilize from Site.

Bryan Vander 8-17-13

Scale: 1 square = _____

8-18-13

0745 Arrive on site and begin bump testing Area Raes.
Unit 4 displayed lamp issues yesterday but cleared out this morning.
Unit 3 was exposed to heavy rain yesterday and did not start up properly. Unit 3 has water inside and wase put outside to dry.
0855 Unit 1, 2, 4 pass bumptests/calibrations and are deployed
1000 - Attend Ops meeting
Goal for today is to remove the roof over the receiving area and evaluate unopened drums. Also one drum of concern was identified based on manifests. It contains 4 smaller containers of methyl isocyanate.
1430 Hepaco completes removal of roof
1602 Hepaco enters to evaluate drums in receiving area.
1435 Entry complete and team exits through decon.
1440 Rain begins to move in so Area Raes

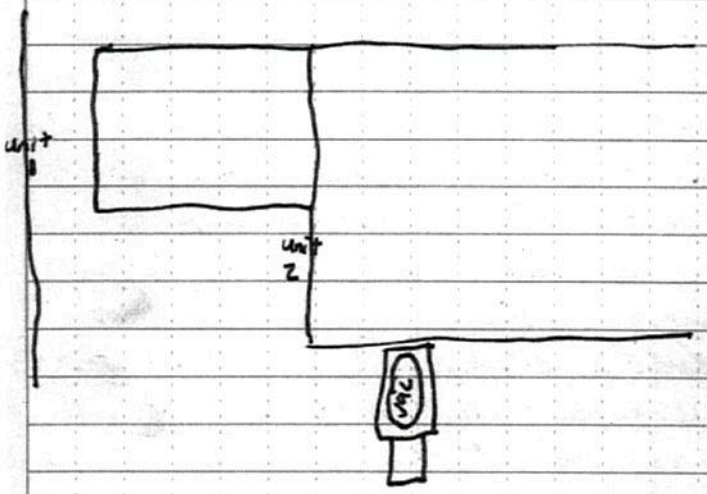
Scale: 1 square = _____ Rite in the Rain
8-18-13

8-18-13

are taken down.

1700 Ops meeting

Area Rae Locations for the day



Approximately 15 drums were identified during entry. Goal for rest of afternoon is to crush empty drums and begin opening drums with contents.

1936 Demobilize from site to Hotel

~~[illegible]~~ 8-18-13

Scale: 1 square = _____

8-19-13

0740 START arrives at site and begins calibrating 3 AreaRaes, 1 MultiRae, and TVA-1000.

Unit #	HCN	VOC	Cocktail	Cl_2
AreaRae 1				
AreaRae 2				
AreaRae ~~3~~4				
MultiRae				
TVA 1000 - Methane -				

0815 Area Raes placed around receiving area pad

0902 Hepaco punches a hole in the suspected isocyanate drum to release any potential pressure

0915 Hepaco made entry to evaluate and overpack the suspected isocyanate drum. Hepaco confirmed the contents of the drum appeared to match the inventory contents. Hepaco overpacks the drum. EPA collects sample from the drum with several ruptured glass containers.

1000 OSC attends Ops meeting

Bryan Vance 8-19-13

Scale: 1 square = _____

Rite in the Rain

8-19-13

1000 START attempts to run sample on HazMat ID. No library match. Drop of sample in water sinks but after shaking leaves a milky solution. After completing cyanide test, negative result. Upon comparing FTIR spectrum to Chlordane shows many similarities but is not an exact match.

1215 START collects water quality parameters.

Temp = 32.06 °C	Cond = 8.54 mS/cm³
DO% = 18 %	pH - 7.06
ORP = 135	FID - 10 ppm

WQP collected from tertiary containment area.

1300 Georgia Power begins working to restore power to Georgia Petroleum.

1730 Georgia Power completes work on-site.

1820 START departs site and refills gas tank and gas can

[illegible]

8-19-13

Scale: 1 square = _____

8-20-13

0732 START arrives on site and begins preparing Area Raes and multiRae.

Unit	HCN	VOC
AR1	caled 10	caled 100
AR2	caled 10	caled 100
AR4	bump 10	caled 100
MR	bump 10	bump 101

0830 Hepaco begins staging drums on receiving pad for popping and sampling

0912 Hepaco begins Level B entry to collect samples for Haz Cating

0955 START begins running samples on Haz Mat ID

Drum	Result		
1	Ammonium Chloride	10	oil
2	Oil/Water mix	11	oil/solvent mix
3	~~Solid-Sand Blast Media~~	12	Solid-SBM
4	Solid-Sand Blast Media	13	Solid-SBM
5	Solid-SBM	14	Latex paint
6	Solid-SBM	15	solid-clay
7	Solid-SBM	~~16~~ 3	Hepaco-oil
8	Resin		yesterday
9	oil	17	pesticide-(chlordane)

Scale: 1 square = [signature]

8-20-13

Rite in the Rain

8-20-13

11:30 Attend Ops meeting

12:00 Attend waste disposal meeting

13:00 Hepaco collects 2 samples from secondary containment for bench testing. START assists Hepaco with bench test for compatibility of drums from receiving area and secondary containment liquids. Drums 1, 2, 3, 8, 9, 10, 11, 14, 15; Receiving Pad liquids and secondary containment liquids were combined in small scale. No reactions were observed. PID noted no readings FID = 14 ppm max.

17:00 Ops meeting
CTEH will be coming in Wednesday afternoon or Thursday morning
Sludge can be solidified. Sludge should be sampled beforehand and a bench scale test with flyash will be conducted.

1900 START departs site following a survey with the TVA. AreaRae VOCs = 0 TVA = 20+ ppm

[illegible] 8-20-13

Scale: 1 square = _____

8-21-13

0730 START arrives on site and calibrates area rues

0800 START places Area Rues around the receiving area pad.

815 Hepaco makes entry to overpack Chloroform drums located in secondary containment and relatively intact with legible labels.
Night operations removed most liquid, debris, and some sludge from receiving area pad. Those cleaning operations will continue after the chloroform drums are overpacked.

0930 EPA and START observe sheen in the tertiary water and ask RP to place boom at the drain prior to release. Start collects WQ parameters
Temp - 27.9°C DO - 28.5%
pH - 7.3 Cond - .405
ORP - 141

1000 Attend ~~START~~ BV ~~meeti~~ Ops meeting

[signature] Vasser 8-21-13

Scale: 1 square = _____ Rite in the Rain

8-21-13

1000 - 1199 ~~drums~~ containers impacted

1030 Hepaco continues cleaning receiving area pad and crushing drums in secondary containment. Hepaco also begins moving drums from secondary containment to rolloffs.

1530 EPA takes down Area Raes due to impending rain. The PID is not getting readings but FIDs are so EPA AreaRaes will not be set up after the rain

1700 Attend Ops meeting

1730 Screen receiving pad with FID and discuss monitoring operations with CTEH. FID readings continue to decrease on the pad as they pressure wash. Earlier in the day max of 100ppm currently max ~ 40 ppm

1845 Screen pad max ~ 20 ppm

2000 START departs site Hepaco remains working on decon of the receiving area

[signature] 8-21-13

Scale: 1 square = _____

8-22-13

0800 START arrives at site and begins site walk.

0840 Discuss operations with Hepaco HSS and learn the pad is currently reading avg ~5ppm max ~10 ppm Weather is rainy this morning

1000 Attend Ops Meeting

1115 START and Hepaco complete a bench ~~test~~ scale compatibility test using a 5-pt composite of sludge and liquid from secondary containment and fly ash on site. Note no temperature change >2°F and a rise in FID readings during mixing but not in resting state.

LTEH has 3 Area Rads on South fenceline and is making regular surveys with the TVA during site activities.

1230 Hepaco begins sheering the roof over secondary containment to open reach to more drums.

Page Vaun 8-22-13

Scale: 1 square = _____

Rite in the Rain

8-22-13

1706 Attend Ops meeting.
State requests a memo from PermaFix describing the compatibility test similar to what is described in their permit.

1745 START and Hepaco provide technical support to redo the test.
Initial temp - 72°F Initial VOC - 200-500 ppm
Mixing temp - 76°F Mixing VOC - 3000+ ppm
post Mixing temp - 73°F post Mixing VOC - 200-500 ppm
PermaFix will prepare a memorandum or checklist describing the results

1800 High Vapor levels are noted throughout the work area when measuring with FID.
The vent of the Vac truck is emitting >500 ppm within 10 ft of vent.
Downwind of Vactruck >50 ppm beyond SE corner of building.
At secondary containment wall: >500 ppm
In excavator ~2-6 ppm during mixing

2000 START departs site

~~[illegible]~~
8-22-13

Scale: 1 square = _____

8-23-13

0700 START fills gas of truck on way to site.

0705 START arrives at site. Take FID around site. SW corner of containment is approximately 150 ppm. Hepaco will reestablish Level C exclusion zones and try to exhaust Vac truck vent higher into the air to avoid accumulating on site.

1000 Attend ops meeting

1108 START and EPA demobilize from site

8-23-13

end of logbook

Scale: 1 square = _____