

# Fw: Black Leaf Chemical HASP Katrina Jones to: Debbie Jourdan

08/09/2010 11:16 AM

---- Forwarded by Katrina Jones/R4/USEPA/US on 08/09/2010 11:15 AM -----

From:

Ryan Stubbs < RStubbs@otie.com> Donna Seadler/R4/USEPA/US@EPA

To: Cc:

<GKowalski@otie.com>, Katrina Jones/R4/USEPA/US@EPA

Date:

08/09/2010 09:19 AM

Subject:

Black Leaf Chemical

Hi Donna,

Attached is the HASP for the upcoming field event at Black Leaf Chemical.

Regards,

### Ryan C. Stubbs

Environmental Scientist, START Region IV Oneida Total Integrated Enterprises 1220 Kennestone Circle, Suite 106

Marietta, GA 30066

Office: (678)355-5550 x5701

Cell: (678)255-5544 Fax: (770)528-0167 Email: rstubbs@otie.com





Black Leaf HASP\_for delivery.pdf

	AFETY PLAN FORM		ment is for th		JEDA	OTIE	la alv I a af Chamila	al Commons	
OTIE Health and Sat	ety Program use	of TN&Associa	ites its subco	ontractors, and	a EPA.	Site Name: B	lack Leaf Chemica	ai Company	
PROJECT NAME: PROJECT#:	Black Leaf Chemical Company TNA-05-003-0110	<del>.</del>	DATE:		8/4/20	10			
LOCATION:	1391 Dixie Highway		CLIENT:			EPA			
LOCATION.	Louisville, Jefferson County, Kentucky			ТАСТ/РНО	NE #.	SECTION AND A	Seadler (404) 562 -	8870	
	Louisvine, Jerielson County, Kentucky	4			CT PHONE #:	TBD	Seattlet (404) 302 -	- 8870	
INCIDENT DESCRI	DTION.	Ť	NI	OF PRELIM		IDD			
Franklin Ton Store Charles and Control of the Contr			NAME OF THE PARTY OF THE PARTY.					ZDED)1:1	1899
	ch includes surface soil sampling and collecting	ED	INFORM	ATION:	Кепшску Дераги	ment for Environ	mentai Protection (	KDEP) sampling pl	an
SANTON TO THE PROPERTY OF THE	be sampling. Geoprobe will be conducted by KD	EP OF	(d						
a subcontractor ANTICIPATED TAS	EVS.	TYPE:	Chaok as m	any as applical	10				
(e.g. collect surface so		IIIE.	Check as mo	ану аз аррисав	пе				
	rface and subsurface soil samples from approxim	ataly Active		()	Landfill	()	Spill	()	
	istrial property and from 2 background locations			O	Landini		Spin		
site.	istrial property and from 2 background locations	Inactive		(X)	Uncontrolled	()	Fire	$\alpha$	
site.		mactive		$(\Delta)$	Officontrolled	O	THE	O	
		Secure		(X)	Industrial	(X)	Military	$\bigcirc$	
		Seeme		(21)	maastrar	$(\Lambda)$	willitary		
		Unsecur	e	()	Recovery	()	Unknown	O	
		Enclosed	l space	$\odot$	Well Field	()	Other (specify)	()	
			21.00 B CO-20220	()		()	(-F))		
DESCRIPTION ANI	FEATURES: Include principal operations ar	d unusual featur	es (containers	. buildings, dik	es, power lines, hillsh	opes, rivers, etc.)			
	Company handled pesticides at the site between 1						erson County at 139	91 Dixie Highway, 1	Louisville.
	bordered to the north by a residential neighborho							8 3,	9
	res included an insecticide manufacturing buildi							om 1982 to 2001. S	ince 2001.
	arehouse storage, but it is currently abandoned.					-P			
the site was asea for w	arenouse storage, out it is earrently assundance.	oeverar stracta	ies remain or	i die property					
SURROUNDING PO	PULATION: (X) Residential () Indust	rial (X) Com	mercial	() Rural	() Urban	() Other:			

HEALTH AND SAFETY PLAN FORM		This	document is for the exclusive	OTIE			
OTIE Health and Safety Program			use of TN&Assoc	iates its subcontractors, and EPA.	Site Name: Black Leaf Chemical Company		
HISTORY: Summarize conditions that relate to hazard. Include citizen complaints, spills, previous investigations or agency actions, known injuries, etc.  Black Leaf Chemical Company handled pesticides at the site between 1955 and 1970. The former facility is located on 29 acres in northwestern Jefferson County at 1391 Dixie Highway, Louisville, Kentucky. The site is bordered to the north by a residential neighborhood, to the south by a large rail yard, and to the east and west by industrial/commercial areas.  Former operation features included an insecticide manufacturing building and a laboratory and extraction room. A wood treatment operation also operated at the site from 1982 to 2001. Since 2001, the site was used for warehouse storage, but it is currently abandoned. Several structures remain on the property. A Phase I ESA in June 1999 identified underground storage tanks, asbestos-containing material, soil staining, and discolored pools of water, and stressed vegetation. In March 2010, KDEP conducted XRF screening at the facility and found elevated levels of lead and arsenic in surface soils.							
WASTE TYPES:	(X) Liquid	(X) Solid (	) Sludge	( ) Gas (X) Unknown	( ) Other:		
WASTE CHARAC  ( ) Corrosive  (X) Toxic  ( ) Inert Gas	TERISTICS: Check  ( ) Flammable  ( ) Volatile  ( ) Unknown	as many as applicable.  ( ) Radioactive  ( ) Reactive  ( ) Other, Specify:			Describe the Exclusion, Contamination Reduction, and Support Zones in terms on-site personnel will recognize probe when in operation. The safety officer near the Geoprobe is the y issues will be discussed prior to beginning any geoporbe activities.		
HAZARDS OF CO  (X) Heat Stress ( ) Cold Stress ( ) Explosive/Flamm ( ) Oxygen Deficien ( ) Radiological (X) Biological ( ) Other, Specify:	attach guidelines attach guidelines nable	(X) Noise ( ) Inorganic Chemical (X) Organic Chemicals ( ) Motorized Traffic ( ) Heavy Machinery (X) Slips, Trips, & Falls	ls	FACILITY'S PAST AND PRESH AND PRACTICES: The facility's past disposal methods			

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HEALTH AND SAFETY PLAN FORM		Tl.:1	C11	OTIE			
			for the exclusive				
OTIE Health and Sa	tety Program	use of TN&Associates its	subcontractors, and EPA.	Site Name: Black Leaf	Chemical Company		
HAZARDOUS MATE	RIAL SUMMARY:	Circle waste type and estin	nate amounts by category.	412	174		
CHEMICALS:	SOLIDS:	SLUDGES:	SOLVENTS:	OILS:	OTHER:		
Amount/Units:	Amount/Units:	Amount/Units:	Amount/Units:	Amount/Units:	Amount/Units:		
Pesticides							
Unknown							
Metals							
arsenic, lead							
OVERALL HAZA	RD EVALUATION:	( )High ( )Medium	(X)Low ( )Unknown				
JUSTIFICATION:		, , , , ,		hazards and the potentia	l of chemical hazards		
	due to the unknowns. All personnel need to wear hearing protection near the geoprobe activities.						
FIRE/EXPLOSION POTENTIAL: ( )High ( )Medium (X)Low ( )Unknown							
INFORMATION COM	MPLETE:	( )Complete	( )Incomplete	(X)Best Available at Cu	rrent Time		

HEALTH AND SAFETY PLAN FORM			This document i	is for the exclusive use of TN&Associates its subcontractors, and EPA.	OTIE
OTIE Health and Safety	Program				Site Name: Black Leaf Chemical Company
	NIOSH	OSHA			
	REL	PEL			
	(ST if Available)	(ST if Available)	IDLH		РНОТО
KNOWN	ppm or mg/m3	ppm or mg/m3	ppm or mg/m3	SYMPTOMS & EFFECTS	IONIZATION
CONTAMINANTS	(specify)	(specify)	(specify)	OF ACUTE EXPOSURE	POTENTIAL
Dieldrin	0.25 mg/m3	TWA 0.005 mg/m3	9 mg/m3	headache; chills, muscle aches; nausea, vomiting, diarrhea; anosmia, emphysema, proteinuria, mild anemia; [potential occupational carcinogen	NA
Lead	TWA 0.050 mg/m <sup>3</sup>	TWA 0.050 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypotension	NA
Arsenic	Ca C 0.002 mg/m3 [15-	-m TWA 0.010 mg/m3	5 mg/m3	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, respiratory irritation, hyperpigmentation of skin [potential occupational carcinogen]	, NA

NA = Not Availab	ole NE = None Establish	ed	U = Unknown		
				you will use at the site.	
S = Soil	SW = Surface Water	T = Tailings	W = Waste	SD = Sediment	
A = Air	GW = Ground Water	SL = Sludge	D = Drums	OFF = Off-Site	

HEALTH A	AND SAF	ETY PLAN FORM	This	s document is fo	or the exclus	ive use of	OTIE	
OTIE Health	and Safety	Program	TN&Associ	ates its subcon	tractors, and	l EPA.	Site Name: Black	Leaf Chemical Company
Tas	k Descriptio	on / PPE / Personnel & R	esponsibilities	(attach additio	nal sheets as	necessary)		
Task 1	Soil samplin	ıg					Type	Hazard Schedule
Description							Intrusive	Low
Primary	Respiratory:	none		Contingency	Respirtory:	APR	Organic	,
Level	Eyeware:	Eye protection	9	Level	Eyeware:	×		
D	Boots:	Steel-Toe		C	Boots:	Steel-Toe		
	Gloves:	Inner: nitrile			Gloves:	Inner: Nitrile		
PPE:	Clothing:	Coveralls		PPE:	Clothing:	Tyvek		
Task 2	Subsurface	Soil Sampling near Geopr	obe	M			Type	Hazard Schedule
Description	4.100	Salar et alle de la composition de la material de la composition de la composition de la composition de la comp					Non-Intrusive	Low
Primary	Respiratory:	Year		Contingency	Respirtory:	APR	p-100	!
Level	the second of the second secon	Safety Glasses Ear protec	tion	Level	130	Hard Hat	Ear protection	
D	<b>€</b> 177	Steel-Toe	i i	C	0.54	Steel-Toe		
	Gloves:					Inner: Nitrile		
PPE:				PPE:		Tyvek Coverall		
Task 3							Type	Hazard Schedule
Description								
Primary				Contingency	Respirtory:		•	
Level		<u> </u>		Level				
11-11-12-12-12-12-12-12-12-12-12-12-12-1		te.		500-500 / G 500 / G 50	Boots:			
		<u>~</u>			Gloves:			
PPE:	1	5		PPE:	•			
Task 4			31		8		Type	Hazard Schedule
Description								
Primary	Respiratory:			Contingency	Respirtory:			
Level	Eveware:		9	Level	Eveware	y <del></del>		
	Boots:				Boots:	3		
	Gloves:	<del></del>			Gloves:	25		
PPE:		¥		PPE:	Clothing:			
		PONSIBILITIES			~ r ~ r · · · · · · · · · · · ·			
Name		Company/Agency	Training			Responsibilit	ies	
Ryan Stubbs		OTIE	40-Hr HAZWOPER					y Coord/Sampler
Stacey DeLaR	Leintrie .	OTIE	40-Hr HAZWOPER	č		Sampler		<b>*</b>
Nairimer Berri	PROFESO (\$600 PROFESORS TUE)	OTIE	40-Hr HAZWOPER			Sample Coord	linator	
Doug Fraley		OTIE	40-Hr HAZWOPER			GIS/Sampler		
Lou von Olde	nburg	OTIE	40-Hr HAZWOPER			Sampler		

HEALTH AND SAFETY PLAN FORM			This document is for the exclusive use of	OTIE
OTIE Hea	lth and Safety Program		TN&Associates its subcontractors, and EPA	Site Name: Black Leaf Chemical Company
	Equipment:		Indicate type as necessary. Attach additional sheets if needed.	
Tasks:	Instrument:	Level:	Action Guidelines:	Comments:
1 & 2	Particulate Dust Monitor	THE REPORT OF THE PARTY.	Less than 2.5 mg/m3	Any continuous dust generated during
	STARY SECTION AS DESCRIPTION	Level C	at or greater than 2.5 mg/m3	sampling activities. Any visual dust
	Dust Generated by			detected addtional monitoning may be
	■ 370 cod Nati Nisocio conte. ■ 10	an supplied		required.
Tasks:	Instrument:	Level:	Action Guidelines:	Comments:
	,	-		<del></del>
	\$			
Tasks:	Instrument:	Level:	Action Guidelines:	Comments:
ANALYS AND ANALYSIS OF THE PROPERTY OF THE PRO	Select Kattabad selection of the control of the con	0.000		and a substitution of the control of
Tasks:	Instrument:	Level:	Action Guidelines:	Comments:
Tasks:	Instrument:	Level:	Action Guidelines:	Comments:
Tasks:	Instrument:	Level:	Action Guidelines:	Comments:

HEALTH AND SAFETY PLAN FORM  This document is for the exclusive uses	se of TN&Associates its OTIE			
OTIE Health and Safety Program subcontractors, and	EPA. Site Name: Black Leaf Chemica	al Company		
EMERGENCY CONTACTS	EMERGENCY CONTACTS NAME	PHONE		
Site Telephone TBD EPA Release Report # TN&Assoc 24-Hr Emergency # 312-296-9186	Health and Safety Manager Project Manager Ron Bugg Site Safety Coordinator Ryan Stubbs Client Contact (EPA RPM) Donna Seadler	414-234-7845 312-296-9186 678-255-5544		
Facility Management Other (specify) CHEMTREC Emergency #: 1-800-424-9300	Other (EPA HRS coordinator) State Agency KDEP State Spill Number Fire Department	502-564-6716 911		
CONTINGENCY PLANS: Summarize below  Contact corporate Health and Saftey officer, William Fink, at 414-234-7845 or Ron Bugg at 312 220-7000 (ext 26) or by cell phone 312 296-9186. The soil sampling activity includes collecting undetermined amount of subsurface samples using a geoprobe. All safety issues with working near the geoprobe will be conducted prior to beginning Geoprobe activities.	Police Department State Police Health Department Poison Control Center Occupational Physician Dr. Jerry Berke, Health Resources	911 911 502-574-6650 800-222-1222 800-350-4511		
The foreman of the geoprobe will be the safety officer and will be responsible for the individuals working near the geoprobe. No personnel without geoprobe training will not be permitted to work on or near the area where the geoprobe is being utilized and will stay (approx 5 to 10 feet) away from the sample location. Sample collection via the core will be collected away from the geoprobe sampling area. The sleeves will be cut using the proper	MEDICAL EMERGENCY Hospital Name: Jewish Hospital Hospital Address: 200 Abraham Flexner Way, Louisville, Name of Contact at Hospital: Emergency Room	PHONE 502-587-4011		
tools.	Name of 24-Hour Ambulance:  Route to Hospital: (see attached sheet)  Exit site towards Dixie Hwy, turn right on Dixie Hwy.  Turn R onto Dumesnil St.  Turn L onto S. 15th St.  Turn R onto Oak St.			
HEALTH AND SAFETY PLAN APPROVALS	Turn L onto S. Brook St. Turn R onto Abraham Flexner Way.			
Prepared by Stacey DeLaReintrie Date 8/4/2010  DHSC Signature Ronald Bugg (approval) Date 8/5/2010  HSM Signature Date	Distance to Hospital: ~3.2 miles	-1		

#### HEALTH AND SAFETY PLAN SIGNATURE FORM

#### **OTIE Health and Safety Program**

All site personnel must sign this form indicating receipt of the H&SP. Keep this original on site. It becomes part of the permanent project files. Send a copy to the Health and Safety Manager (HSM).

Black Leaf Chemical Company / TNA-05-003-0110				
START Region IV				
08/23/10				

I understand, and agree to comply with, the provisions of the above referenced H&SP for work activities on this project. I agree to report any injuries, illnesses or exposure incidents to the site Health and Safety Coordinator (SHSC). I agree to inform the SHSC about any drugs (legal and illegal) that I take within three days of site work.

PRINTED NAME	SIGNATURE	DATE
Ryan Stubbs		
Nairimer Berrios-Cartagena		
Stacey DeLaReintrie		
Doug Fraley		
Lou von Oldenburg		

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#### HEALTH AND SAFETY PLAN FORM

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OTIE

Decontamination Appendix Page 1 of 4

Site Name:

**Red Panther** 

#### OTIE Health and Safety Program DECONTAMINATION PROCEDURES

Station 16

Inner Glove

liner.

Removal

16. Remove inner gloves and deposit in container with plastic

	ATTACH SI	TE MAP INDICATING EXCLUSION, DECONTAMIN	ATION, AN	D SUPPORT Z	ONES
		Maximum Measures for	Level A Deco	ontamination	
Station 1	Segregated Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross-contamination. During hot weather operations, cool down stations may be set up in this area.	Station 17	Inner Clothing Removal	17. Remove inner clothing. Place in container with plastic liner. Do not wear inner clothing off-site since there is a possibility that small amounts of contaminants might have been transferred in removing the fully-encapsulated suit.
Station 2	Boot Cover / Glove Wash	Scrub outer boot covers and gloves with decon solution or detergent and water.	Station 18	Field Wash	18. Shower if highly toxic, skin corrosive or skin absorbable materials are known or suspected to be present. Wash hands
Station 3	Boot Cover / Glove Rinse	3. Rinse off decon solution from station 2 using copious amounts of water.			and face if shower is not available.
Station 4	Tape Removal	Remove tape around boots and gloves and deposit in container with plastic liner.	Station 19	Redress	19. Put on clean clothes.
Station 5	Boot Cover Removal	5. Remove boot covers and deposit in container with plastic liner.		Minimum	Measures for Level A Decontamination
Station 6 Station 7	Outer Glove Removal Suit and Boot Wash	Remove outer gloves and deposit in container with plastic liner.      Wash encapsulating suit and boots using scrub brush and decon solution and detergent/water. Repeat as many times as necessary.	Station 1	Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of crosscontamination. During hot weather operations, cool down stations.
Station 8	Suit and Boot	Rinse off decon solution using copious amounts of water.  Repeat as many times as necessary.			may be set up in this area.
Station 9	Tank Change	9. If an air tank change is desired, this is the last step of the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boot covers donned and joints taped. Worker returns to duty.	Station 2	OG, Boots, and Gloves Wash and Rinse	Scrub outer boots, outer gloves and fully-encapsulating suit with decon solution or detergent water. Rinse off using copious amounts of water.
Station 10	Safety Boot Removal	10. Remove safety boots and deposit in container with plastic liner.	Station 3	OB and Glove Removal	Removal outer boots and gloves. Deposit in container with plastic liner.
Station 11	Fully Encapsulating Suit and Hard Hat Removal	11. Fully encapsulated suit is removed with assistance of a helper and laid out on a drop cloth or hung up. Hard hat is removed. Hot weather rest station may be set up within this area for personnel returning to the site.	Station 4	Tank Change	4. If worker leaves exclusion zone to change air tank, this is the last step of the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boot covers donned and joints taped. Worker returns to duty.
Station 12	SCBA Backpack Removal	12. While still wearing facepiece, remove backpack and place on table. Disconnect hose from regulator valve and proceed to next station.	Station 5	Boot, Gloves, and OG Removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.
Station 13	Inner Glove Wash	13. Wash with decon solution that will not harm the skin. Repeat as many times as necessary.	Station 6	SCBA Removal	SCBA backpack and face piece is removed. Avoid touching face with fingers. SCBA is deposited on plastic sheets.
Station 14	Inner Glove Rinse	14. Rinse inner gloves with water. Repeat as many times as necessary.	Station 7	Field Wash	7. Hands and face are thoroughly washed. Shower as soon as possible.
Station 15	Face Piece Removal	15. Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.		OG = Outer G	arment OB = Outer Boot

#### **Maximum Measures for Level B Decontamination**

		Maximum Measures for	LCVCI D DCC	ontammation	
Station 1	Segregated Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross-contamination. During hot weather operations, cool down stations may be set up in this area.	Station 18	Field Wash	18. Shower if highly toxic, skin corrosive or skin absorbable materials are known or suspected to be present. Wash hands and face if shower is not available.
Station 2	Boot Cover / Glove Wash	Scrub outer boot covers and gloves with decon solution or detergent and water.	Station 19	Redress	19. Put on clean clothes.
Station 3	Boot Cover / Glove Rinse	3. Rinse off decon solution from station 2 using copious amounts of water.		Minimum	Measures for Level B Decontamination
Station 4	Tape Removal	Remove tape around boots and gloves and deposit in container with plastic liner.	Station 1	Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on
Station 5	Boot Cover Removal	5. Remove boot covers and deposit in container with plastic liner.			plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross-
Station 6	Outer Glove Removal	Remove outer gloves and deposit in container with plastic liner.			contamination. During hot weather operations, cool down stations may be set up in this area.
Station 7	Suit and Safety Boot Wash	7. Wash chemical resistant splash suit, SCBA, gloves and safety boots. Scrub with long handle scrub brush and decon solution. Wrap SCBA regulator (if belt mounted type) with plastic to keep out of water. Wash back pack assembly with sponges or cloth.	Station 2	OG, Boots, Gloves Wash and Rinse	Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using copious amounts of water.
Station 8	Suit, SCBA, Boot and Glove Rinse	Rinse off decon solution using copious amounts of water.	Station 3	Outer Boot and Glove Removal	Removal outer boots and gloves. Deposit in container with plastic liner.
Station 9	Tank Change	9. If worker leaves exclusion zone to change air tank, this is the last step of the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boot covers donned and joints taped. Worker returns to duty.	Station 4	Tank Change	4. If worker leaves exclusion zone to change air tank, this is the last step of the decontamination procedure. Worker's air tank is exchanged, new outer gloves and boot covers donned and joints taped. Worker returns to duty.
Station 10	Safety Boot Removal	Remove safety boots and deposit in container with plastic liner.			
Station 11	SCBA Backpack Removal	11. While still wearing face piece, remove backpack and place on table. Disconnect hose from regulator valve.	Station 5	Boot, Gloves and OG Removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.
Station 12	Splash Suit Removal	12. With assistance of helper, remove splash suit. Deposit in container with plastic liner.	Station 6	SCBA Removal	SCBA backpack and face piece is removed. Avoid touching face with fingers. SCBA is deposited on plastic sheets.
Station 13	Inner Glove Wash	13. Wash inner gloves with decon solution.			
Station 14	Inner Glove Rinse	14. Rinse inner gloves with water.	Station 7	Field Wash	7. Hands and face are thoroughly washed. Shower as soon as possible.
Station 15	Face Piece Removal	15. Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.		OG = Outer G	earment
Station 16	Inner Glove Removal	16. Remove inner gloves and deposit in container with plastic liner.			
Station 17	Inner Clothing Removal	17. Remove inner clothing. Place in container with plastic liner. Do not wear inner clothing off-site since there is a possibility that small amounts of contaminants might have been transferred in removing the fully-encapsulated suit.		Decontamina	ation Appendix Page 2 of 4
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Maximum Measures for Level C Decontamination				Minimum Measures for Level C Decontamination		
Station 1	Segregated Equipment Drop	1. Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of crosscontamination. During hot weather operations, cool down stations may be set up in this area.	Station 1	Equipment Drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of crosscontamination. During hot weather operations, cool down stations may be set up in this area.	
Station 2	Boot Cover / Glove Wash	Scrub outer boot covers and gloves with decon solution or detergent and water.	Station 2	Gloves Wash	Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using	
Station 3	Boot Cover / Glove Rinse	3. Rinse off decon solution from station 2 using copious amounts of water.		and Rinse	copious amounts of water.	
Station 4	Tape Removal	Remove tape around boots and gloves and deposit in container with plastic liner.	Station 3	OB and Glove Removal	Removal outer boots and gloves. Deposit in container with plastic liner.	
Station 5	Boot Cover Removal	5. Remove boot covers and deposit in container with plastic liner.	Station 4	Canister or Mask Change	4. If worker leaves exclusion zone to change canister (or mask), this is the last step of the decontamination procedure. Worker's canister (or mask) is exchanged, new outer gloves and boot covers donned and joints taped. Worker returns to duty.	
Station 6	Outer Glove Removal	Remove outer gloves and deposit in container with plastic liner.				
Station 7	Suit and Boot Wash	7. Wash splash suit, gloves and safety boots. Scrub with long handle scrub brush and decon solution.				
Station 8	Suit, Boot and Glove Rinse	Rinse off decon solution using copious amounts of water.	Station 5	Boot, Gloves and OG	Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.	
Station 9	Canister or Mask Change	9. If worker leaves exclusion zone to change canister (or mask), this is the last step of the decontamination procedure. Worker's canister (or mask) is exchanged, new outer gloves and boot covers donned and joints taped. Worker returns to duty.	Station 6	Face Piece Removal	Face piece is removed. Avoid touching face with fingers. Face piece is deposited on plastic sheet.	
Station 10	Safety Boot Removal	Remove safety boots and deposit in container with plastic liner.	Station 7	Field Wash	7. Hands and face are thoroughly washed. Shower as soon as possible.	
Station 11	Splash Suit Removal	11. With assistance of helper, remove splash suit. Deposit in container with plastic liner.	OG = Outer Garment OB = Outer Boot			
Station 12	Inner Glove Wash	12. Wash inner gloves with decon solution.				
Station 13	Inner Glove Rinse	13. Rinse inner gloves with water.				
Station 14	Face Piece Removal	Remove face piece. Deposit in container with plastic liner.  Avoid touching face with fingers.				
Station 15	Inner Glove Removal	15. Remove inner gloves and deposit in container with plastic liner.				

Inner Clothing

suit.

Removal

Field Wash

Redress

Station 16

Station 17

Station 18

16. Remove inner clothing soaked with perspiration and place in

container with plastic liner. Do not wear inner clothing off-site since there is a possibility that small amounts of contaminants might have been transferred in removing the fully-encapsulated

17. Shower if highly toxic, skin corrosive or skin absorbable materials are known or suspected to be present. Wash hands

and face if shower is not available.

18. Put on clean clothes.

Decontamination Appendix Page 3 of 4

Minimum Measures for Level D Decontamination						
Equipment Drop	1. Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of crosscontamination. During hot weather operations, cool down stations may be set up in this area.	S S F				
OG, Boots, Gloves Wash and Rinse	Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using copious amounts of water.					
OB and Glove Removal	Removal outer boots and gloves. Deposit in container with plastic liner.	Ī				
Boot, Gloves, OG Removal	5. Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.	2				
Field Wash	7. Hands and face are thoroughly washed. Shower as soon as possible.	r				
	Equipment Drop  OG, Boots, Gloves Wash and Rinse  OB and Glove Removal  Boot, Gloves, OG Removal	Equipment Drop  1. Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners.  Segregation at the drop reduces the probability of cross-contamination. During hot weather operations, cool down stations may be set up in this area.  OG, Boots, Gloves Wash and Rinse  OB and Glove Removal  Boot, Gloves, OG Removal  Segregation at the drop reduces the probability of cross-contamination. During hot weather operations, cool down stations may be set up in this area.  2. Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using copious amounts of water.  3. Removal outer boots and gloves. Deposit in container with plastic liner.  5. Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.  7. Hands and face are thoroughly washed. Shower as soon as				

#### Sampling Equipment Decontamination

All equipment will be cleaned prior to entering the Site.

Equipment will be tripled rinse consisting of non-phosphate detergent and tap water solution, rinse with potable water, and rinse with de-ionized water. If soap and water alone cannot remove contamination, additional procedures may be used such as steam cleaning.

#### **Heavy Equipment Decontamination**

All equipment will be cleaned prior to entering the Site.

All vehicles and heavy equipment used in the EZ will be decontaminated in the CRZ and inspected prior to leaving the site. A Certification of Decontamination form will be included in the daily safety log. All vehicles and equipment will be decontaminated according to the procedures described below:

Vehicles and heavy equipment contaminated with Contaminates of Concern (COCs) from the site excavation activities will be placed on a decontamination pad and sprayed down with a pressure washer. This pad will be constructed as a bermed liner and equipped with a pump and suitable container for waste water generated from the equipment decontamination process. Soils and fines that cannot be pumped will be shoveled from the liner following spraying down of vehicles and equipment and transported to appropriate soil stockpiles on-site.

Personnel engaged in decontamination will be in a rain suit, hardhat equipped with a face shield, with shin guards to protect from the blast and overspray of the pressure washer used for heavy equipment decontamination.

### Containment and Disposal Method

The decontamination rinsate will be collected, packaged in drums and temporarily stored at the site. After analytical results are available, the waste will be profiled and transported under appropriate documentation for disposal in accordance with applicable law and regulations. The PPE will be collected and bagged for disposal as a solid waste. If spills should occur, prompt cleanup with dedicated equipment from onsite spill response inventory will be used.

#### **Medical Emergency Decontamination Procedures**

The following procedures are to be used for providing emergency medical treatment to personnel sustaining injury while working in the exclusion area of the site. The procedures are to be used by site/safety personnel, emergency medical staff/ambulance crewmembers, and hospital emergency room staff ONLY when the nature of the medical emergency supersedes SOPs for chemical decontamination when exiting the exclusion area. Although specific contaminants, by nature, must be dealt with on a case-by-case basis, the following procedures generally will be followed.

#### Injury Involving Potential for Contact with Contaminated Clothing and Skin

An initial assessment of the injured person will be performed first, to determine if the employee has suffered a spinal/head injury. Potential spinal/head injuries may require some PPE to be left on the injured employee. However, emergency decontamination procedures must be used to remove as much potential contamination as possible. If the initial assessment does not provide evidence of a spinal/head injury, all protective clothing (hard hat, outer boots, and gloves) will be removed by personnel at the site before the injured person is transferred to an ambulance. This can be performed anywhere on the site although when at all possible, it should be performed in the CRZ. Contaminated protective clothing must be cut off to prevent cross contamination. Emergency clothing removal and decontamination of potentially contaminated skin expedites decontamination of the injured person in the CRZ and prevents contamination of emergency vehicles, emergency staff, and emergency room facilities. Pre-surgery preparation for the injured person would consist of normal soap and water rinsing and is conducted by EMS personnel

Decontamination Appendix Page 4 of 4





Trip to 200 Abraham Flexner Way Louisville, KY 40202-2877 3.27 miles - about 8 minutes

Notes	
To Jewish Hospital	



## 1391 Dixie Hwy, Louisville, KY 40210-1772

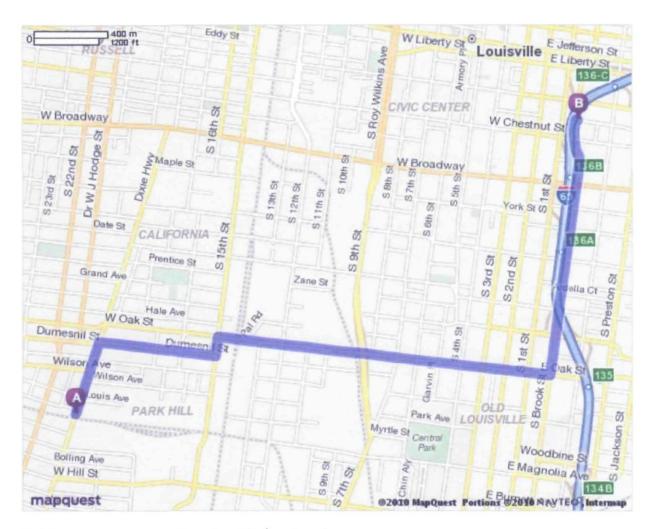
START	<ol> <li>Start out going NORTH on DIXIE HWY / US-60 BR toward WOODLAND AVE.</li> </ol>	go 0.3 mi
•	2. Turn RIGHT onto DUMESNIL ST.	go 0.5 mi
•	3. Turn LEFT onto S 15TH ST.	go 0.0 mi
•	4. Turn RIGHT onto W OAK ST.	go 1.4 mi
•	5. Turn LEFT onto S BROOK ST.	go 1.1 mi
•	6. Turn RIGHT onto ABRAHAM FLEXNER WAY.	go 0.0 mi
END	7. 200 ABRAHAM FLEXNER WAY is on the RIGHT.	go 0.0 mi



200 Abraham Flexner Way, Louisville, KY 40202-2877

Total Travel Estimate: 3.27 miles - about 8 minutes

Route Map Hide



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