

<b>HEALTH AND SAFETY PLAN FORM</b> <b>OTIE Health and Safety Program</b>		<i>This document is for the exclusive use of OTIE its subcontractors, and EPA.</i>		<b>OTIE</b> <b>Site Name: Marblehill Drum ER</b>																																					
<b>PROJECT NAME:</b> <u>Marblehill Drum ER</u> <b>PROJECT#:</b> <u>TBD</u> <b>LOCATION:</b> <u>Marblehill, Dawson County, GA</u>		<b>DATE:</b> <u>1-Nov-10</u>  <b>CLIENT:</b> <u>EPA</u> <b>EPA CONTACT/PHONE #:</b> <u>Alyssa Hughes (404) 229-9530</u> <b>LOCAL/SITE CONTACT PHONE #:</b> <u>Eddie Williams (404) 6578660</u>																																							
<b>INCIDENT DESCRIPTION:</b> Spilling drums with unknown substances. Solvents are expected to be present.		<b>SOURCE OF PRELIMINARY INFORMATION:</b> <u>NRC Report</u>																																							
<b>ANTICIPATED TASKS:</b> <b>(e.g. collect surface soil samples):</b> Hazardous Categorization (HazCatting), drum sampling, air monitoring and documentation.		<table border="0" style="width: 100%;"> <tr> <td colspan="6"><b>TYPE:</b> <i>Check as many as applicable</i></td> </tr> <tr> <td>Active</td> <td style="text-align: center;">(X)</td> <td>Landfill</td> <td style="text-align: center;">()</td> <td>Spill</td> <td style="text-align: center;">(X)</td> </tr> <tr> <td>Inactive</td> <td style="text-align: center;">()</td> <td>Uncontrolled</td> <td style="text-align: center;">()</td> <td>Fire</td> <td style="text-align: center;">()</td> </tr> <tr> <td>Secure</td> <td style="text-align: center;">()</td> <td>Industrial</td> <td style="text-align: center;">()</td> <td>Military</td> <td style="text-align: center;">()</td> </tr> <tr> <td>Unsecure</td> <td style="text-align: center;">(X)</td> <td>Recovery</td> <td style="text-align: center;">()</td> <td>Unknown</td> <td style="text-align: center;">()</td> </tr> <tr> <td>Enclosed space</td> <td style="text-align: center;">()</td> <td>Well Field</td> <td style="text-align: center;">()</td> <td>Other (specify)</td> <td style="text-align: center;">(X)      Wildlife Mgt</td> </tr> </table>				<b>TYPE:</b> <i>Check as many as applicable</i>						Active	(X)	Landfill	()	Spill	(X)	Inactive	()	Uncontrolled	()	Fire	()	Secure	()	Industrial	()	Military	()	Unsecure	(X)	Recovery	()	Unknown	()	Enclosed space	()	Well Field	()	Other (specify)	(X)      Wildlife Mgt
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<b>DESCRIPTION AND FEATURES:</b> <i>Include principal operations and unusual features (containers, buildings, dikes, power lines, hillslopes, rivers, etc.)</i>  Forty (40) 55-GALLON DRUMS OF UNKNOWN WASTE WERE DUMPED IN THE DAWSON FOREST WILDLIFE MANAGEMENT AREA. DAWSON COUNTY FIRE DEPT. AND FORSYTH COUNTY HAZMAT RESPONDED TO TWO LEAKING DRUMS AT THE SITE. SITE HAS BEEN STABILIZED AND ACCESS TO THE AREA CLOSED FROM HUNTERS, CAMPERS, AND HIKERS. DNR LAW ENFORCEMENT HAS CONDUCTED AN INVESTIGATION. DRUMS ARE STILL PRESENT AND NEED TO BE CHARACTERIZED AND REMOVED. HAZMAT CHARACTERIZED TWO LEAKING DRUMS AND DETERMINED THAT THEY WERE INDUSTRIAL WASTES: PAINTS, CLEANERS, LACQUERS, EPOXIES, AND FIBERGLASS RESINS. DUMPING BELIEVED TO OCCURRED ON 10/29/2010.																																									
<b>SURROUNDING POPULATION:</b> ( ) Residential    ( ) Industrial    ( ) Commercial    (X) Rural    ( ) Urban    (X) Other:    Forrest																																									

<b>HEALTH AND SAFETY PLAN FORM</b> <b>OTIE Health and Safety Program</b>		<i>This document is for the exclusive use of OTIE its subcontractors, and EPA.</i>	<b>OTIE</b> <b>Site Name: Marblehill Drum ER</b>
<p><b>HISTORY:</b>      <i>Summarize conditions that relate to hazard. Include citizen complaints, spills, previous investigations or agency actions, known injuries, etc.</i></p> <p>Drums leaking in dump areas. Drums are still present and need to be characterized and removed. Initial hazmat characterized two leaking drums and determined that they were industrial wastes: paints, cleaners, lacquers, epoxies, and fiberglass resins. dumping occurred on 10/29/2010. Refer to NRC Report for more details.</p>			
<b>WASTE TYPES:</b> <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Sludge <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Other:			
<b>WASTE CHARACTERISTICS:</b> <i>Check as many as applicable.</i>  <input type="checkbox"/> Corrosive <input checked="" type="checkbox"/> Flammable <input type="checkbox"/> Radioactive  <input type="checkbox"/> Toxic <input checked="" type="checkbox"/> Volatile <input type="checkbox"/> Reactive  <input type="checkbox"/> Inert Gas <input checked="" type="checkbox"/> Unknown <input checked="" type="checkbox"/> Other, Specify: <u>Acetone</u>		<b>WORK ZONES:</b> <i>Describe the Exclusion, Contamination Reduction, and Support Zones in terms on-site personnel will recognize</i>  TBD on site.	
<b>HAZARDS OF CONCERN:</b>  <input checked="" type="checkbox"/> Heat Stress <i>attach guidelines</i> <input type="checkbox"/> Noise <input checked="" type="checkbox"/> Cold Stress <i>attach guidelines</i> <input checked="" type="checkbox"/> Inorganic Chemicals <input checked="" type="checkbox"/> Explosive/Flammable <input checked="" type="checkbox"/> Organic Chemicals <input type="checkbox"/> Oxygen Deficient <input type="checkbox"/> Motorized Traffic <input type="checkbox"/> Radiological <input checked="" type="checkbox"/> Heavy Machinery <input checked="" type="checkbox"/> Biological <input checked="" type="checkbox"/> Slips, Trips, & Falls <input type="checkbox"/> Other, Specify: _____		<b>FACILITY'S PAST AND PRESENT DISPOSAL METHODS AND PRACTICES:</b> N/A - Material appears to have been dumped.	

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<b>OTIE Health and Safety Program</b>				<b>Site Name: Marblehill Drum ER</b>	
<b>HAZARDOUS MATERIAL SUMMARY:</b> <i>Circle waste type and estimate amounts by category.</i>					
<b>CHEMICALS:</b> <i>Amount/Units:</i>	<b>SOLIDS:</b> <i>Amount/Units:</i>	<b>SLUDGES:</b> <i>Amount/Units:</i>	<b>SOLVENTS:</b> <i>Amount/Units:</i>  Hydrocarbons  Alcohols  Ketones drums of acetone	<b>OILS:</b> <i>Amount/Units:</i>  Oily Wastes drums  Lubricants hydraulic	<b>OTHER:</b> <i>Amount/Units:</i>
<b>OVERALL HAZARD EVALUATION:</b> ( )High (X)Medium    ( )Low ( )Unknown <b>JUSTIFICATION:</b> Unkown materials.					
<b>FIRE/EXPLOSION POTENTIAL:</b> ( )High (X)Medium    ( )Low ( )Unknown					
<b>INFORMATION COMPLETE:</b> ( )Complete    ( )Incomplete    (X)Best Available at Current Time					

HEALTH AND SAFETY PLAN FORM OTIE Health and Safety Program				This document is for the exclusive use of OTIE its subcontractors, and EPA.		OTIE Site Name: Marblehill Drum ER	
KNOWN CONTAMINANTS	NIOSH REL (ST if Available) ppm or mg/m3 (specify)	OSHA PEL (ST if Available) ppm or mg/m3 (specify)	IDLH ppm or mg/m3 (specify)	SYMPTOMS & EFFECTS OF ACUTE EXPOSURE	PHOTO IONIZATION POTENTIAL		
Acetone	REL 250 ppm	TWA 1000 ppm (590 mg/m3)	2500 ppm (10% LEL)	Irritation eyes, nose, throat; head, dizz, CNS depress; derm	9.69 eV		
Kerosene/Fuel Oil	TWA 100 mg/m3	None	N.D.	Irritation eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid)	N/A		
Methyl Ethyl Ketone (MEK)	200 ppm (TWA)	200 ppm (TWA)	3000 ppm	ER: inh, ing, con. SY: irr eyes, skin, nose, head, dizz, vomit, derm. TO: eyes, skin, resp, sys, CNS	9.54 eV		
Mineral Spirits	--	--	--	Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available.	N/A		
NA = Not Available		NE = None Established		U = Unknown			
S = Soil		SW = Surface Water		T = Tailings			
A = Air		GW = Ground Water		SL = Sludge			
		W = Waste		D = Drums			
				SD = Sediment			
				OFF = Off-Site			
Attach, to this plan, an MSDS for each chemical you will use at the site.							

HEALTH AND SAFETY PLAN FORM		This document is for the exclusive use of OTIE its subcontractors, and EPA.		OTIE Site Name: Marblehill Drum ER	
Task Description / PPE / Personnel & Responsibilities (attach additional sheets as necessary)					
<b>Task 1 Description</b>	Air monitoring and documentation.			<b>Type</b> Non-Intrusive	<b>Hazard Schedule</b> Low
<b>Primary Level</b>	Respiratory: _____	<b>Contingency Level</b>  C	Respiratory: APR	P100 combo	
	Eyewear: Safety Glasses		Eyewear: _____		
	Boots: Steel-Toe		Boots: Steel-Toe		
D	Gloves: Inner: _____		Gloves: Nitrile		
<b>PPE:</b>	Clothing: _____	<b>PPE:</b> Clothing: _____			
<b>Task 2 Description</b>	Drum sampling			<b>Type</b> Intrusive	<b>Hazard Schedule</b> Med
<b>Primary Level</b>	Respiratory: SCBA	<b>Contingency Level</b>  C	Respiratory: Respirator	P100 combo	
	Eyewear: _____		Eyewear: _____		
	Boots: Steel-Toe		Boots: Steel-Toe		
B	Gloves: Nitrile		Gloves: Nitrile		
<b>PPE:</b>	Clothing: Tyvek	<b>PPE:</b> Clothing: _____			
<b>Task 3 Description</b>	Hazardous Categorization (HAZ CAT)			<b>Type</b> Intrusive	<b>Hazard Schedule</b> Low
<b>Primary Level</b>	Respiratory: Respirator P100 Combo	<b>Contingency Level</b>  D	Respiratory: _____		
	Eyewear: _____		Eyewear: _____		
	Boots: Steel-Toe		Boots: Steel-Toe		
C	Gloves: Nitrile		Gloves: Nitrile		
<b>PPE:</b>	Clothing: Tyvek	<b>PPE:</b> Clothing: Tyvek			
<b>Task 4 Description</b>				<b>Type</b>	<b>Hazard Schedule</b>
<b>Primary Level</b>	Respiratory: _____	<b>Contingency Level</b>  	Respiratory: _____		
	Eyewear: _____		Eyewear: _____		
	Boots: _____		Boots: _____		
	Gloves: _____		Gloves: _____		
<b>PPE:</b>	Clothing: _____	<b>PPE:</b> Clothing: _____			
<b>PERSONNEL AND RESPONSIBILITIES</b>					
<b>Name</b>	<b>Company/Agency</b>	<b>Training</b>	<b>Responsibilities</b>		
Ryan Stubbs	OTIE	40/8 hr HAZWOPER	ALL		
Nairimer Berrios-Cartagena	OTIE	40/8 hr HAZWOPER	ALL		

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<b>OTIE Health and Safety Program</b>		<b>Site Name: Marblehill Drum ER</b>		
<b>Monitoring Equipment:</b>		Specify by task. Indicate type as necessary. Attach additional sheets if needed.		
<b>Tasks:</b>	<b>Instrument:</b>	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
All	Combustible Gas Indicator - LEL  Multi Rae	<10%	Continue Activities	Follow these requirements no matter what level of protection you are in during site activities.
		10-20%	Proceed with caution	
		>20%	Exit area - consider engineering controls	
<b>Tasks:</b>	<b>Instrument:</b>	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
All	Photoionization Detector  Multi Rae			PID Response Factor multiplier = 1.4 for acetone concentrations 10-250 ppm
		0-50 ppm	Proceed with caution	
		51-500 ppm	Upgrade to Level C PPE	
		>500	Upgrade to Level B PPE	
<b>Tasks:</b>	<b>Instrument:</b>	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
All	Flame Ionization Detector	0-50 ppm	Level D (unless collecting waste samples)	FID response factor multiplier = 0.9 for acetone concentrations 10-250 ppm
		51 - 500 ppm	Level C	
		> 500 ppm	Level B	
<b>Tasks:</b>	<b>Instrument:</b>	<b>Level:</b>	<b>Action Guidelines:</b>	<b>Comments:</b>
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<b>OTIE Health and Safety Program</b>																																													
<b>EMERGENCY CONTACTS</b>  Site Telephone _____ EPA Release Report # _____ OTIE 24-Hr Emergency # <span style="float: right;">678-255-5524</span> Facility Management _____ Other (specify) _____ CHEMTREC Emergency #: <span style="float: right;">1-800-424-9300</span>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 60%;">EMERGENCY CONTACTS</th> <th style="text-align: left; width: 20%;">NAME</th> <th style="text-align: left; width: 20%;">PHONE</th> </tr> </thead> <tbody> <tr> <td>Health and Safety Manager</td> <td>Ryan Stubbs</td> <td>678-255-5544</td> </tr> <tr> <td>Project Manager</td> <td>Greg Kowalski</td> <td>678-255-5524</td> </tr> <tr> <td>Site Safety Coordinator</td> <td>Nairimer Berrios-Cartag</td> <td>678-538-5342</td> </tr> <tr> <td>Client Contact (EPA)</td> <td>Alyssa Hughes</td> <td>404-229-9530</td> </tr> <tr> <td>Other _____</td> <td></td> <td></td> </tr> <tr> <td>State Agency</td> <td>Ga EPD</td> <td></td> </tr> <tr> <td>State Spill Number</td> <td></td> <td></td> </tr> <tr> <td>Fire Department</td> <td></td> <td>911</td> </tr> <tr> <td>Police Department</td> <td></td> <td>911</td> </tr> <tr> <td>State Police</td> <td></td> <td>911</td> </tr> <tr> <td>Health Department</td> <td></td> <td></td> </tr> <tr> <td>Poison Control Center</td> <td></td> <td>800-848-6946</td> </tr> <tr> <td>Occupational Physician</td> <td>Dr. Jerry Berke, Health Resources</td> <td>800-350-4511</td> </tr> </tbody> </table>			EMERGENCY CONTACTS	NAME	PHONE	Health and Safety Manager	Ryan Stubbs	678-255-5544	Project Manager	Greg Kowalski	678-255-5524	Site Safety Coordinator	Nairimer Berrios-Cartag	678-538-5342	Client Contact (EPA)	Alyssa Hughes	404-229-9530	Other _____			State Agency	Ga EPD		State Spill Number			Fire Department		911	Police Department		911	State Police		911	Health Department			Poison Control Center		800-848-6946	Occupational Physician	Dr. Jerry Berke, Health Resources	800-350-4511
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<b>CONTINGENCY PLANS:</b> <i>Summarize below</i> Exit area and move to safe location. Contact Program Manager Greg Kowalski (678-255-5524), START Operations Manager Russell Henderson (678-255-6156), or Corporate Health and Safety Officer, William Fink (414-234-7845).	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 80%;">MEDICAL EMERGENCY</th> <th style="text-align: left; width: 20%;">PHONE</th> </tr> </thead> <tbody> <tr> <td>Hospital Name:</td> <td><b>Piedmont Mountainside Hospital</b></td> </tr> <tr> <td>Hospital Address</td> <td><i>1266 Highway 515 South, Jasper, GA 30143</i></td> </tr> <tr> <td>Name of Contact at Hospital:</td> <td></td> </tr> <tr> <td>Name of 24-Hour Ambulance:</td> <td>911</td> </tr> <tr> <td>Route to Hospital:</td> <td>(see attached sheet)</td> </tr> </tbody> </table>			MEDICAL EMERGENCY	PHONE	Hospital Name:	<b>Piedmont Mountainside Hospital</b>	Hospital Address	<i>1266 Highway 515 South, Jasper, GA 30143</i>	Name of Contact at Hospital:		Name of 24-Hour Ambulance:	911	Route to Hospital:	(see attached sheet)																														
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<b>HEALTH AND SAFETY PLAN APPROVALS</b>		Distance to Hospital <span style="float: right;">22.3 mi – about 38 mins</span>																																											
Prepared by <u>Nairimer Berrios-Cartagena</u> DHSC Signature <u><i>Greg Kowalski</i></u> HSM Signature _____	Date <u>11/1/2010</u> Date <u>11/1/2010</u> Date _____																																												

## 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).

**SITE NAME/NUMBER:** Marblehill Drum ER / TBD

**DIVISION/LOCATION:** OTIE-START, Marietta, Georgia

**DATE:** November 1, 2010

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		
Alyssa Hughes		



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<b>OTIE Health and Safety Program</b>					<b>Site Name:</b>
<b>DECONTAMINATION PROCEDURES</b>					
<b>ATTACH SITE MAP INDICATING EXCLUSION, DECONTAMINATION, AND SUPPORT ZONES</b>					
<b>Maximum Measures for Level A Decontamination</b>					
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 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	2. 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 and face if shower is not available.
Station 3	Boot Cover / Glove Rinse	3. Rinse off decon solution from station 2 using copious amounts of water.			
Station 4	Tape Removal	4. 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.	<b>Minimum Measures for Level A Decontamination</b>		
Station 6	Outer Glove Removal	6. Remove outer gloves and deposit in container with plastic liner.	Station 1	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.
Station 7	Suit and Boot Wash	7. Wash encapsulating suit and boots using scrub brush and decon solution and detergent/water. Repeat as many times as necessary.			
Station 8	Suit and Boot	8. Rinse off decon solution using copious amounts of water. Repeat as many times as necessary.			
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	2. 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	3. 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	5. 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	6. 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 Garment      OB = Outer Boot  Decontamination Appendix Page 1 of 4		
Station 16	Inner Glove Removal	16. Remove inner gloves and deposit in container with plastic liner.			

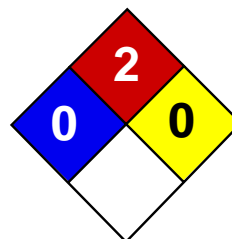
### Maximum Measures for Level B Decontamination

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 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	2. 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.	<b>Minimum Measures for Level B Decontamination</b>		
Station 4	Tape Removal	4. Remove tape around boots and gloves and deposit in container with plastic liner.			
Station 5	Boot Cover Removal	5. Remove boot covers and deposit in container with plastic liner.	Station 1	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.
Station 6	Outer Glove Removal	6. Remove outer gloves and deposit in container with plastic liner.	Station 2	OG, Boots, Gloves Wash and Rinse	2. Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using copious amounts of water.
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 3	Outer Boot and Glove Removal	3. Removal outer boots and gloves. Deposit in container with plastic liner.
Station 8	Suit, SCBA, Boot and Glove Rinse	8. Rinse off decon solution using copious amounts of water.	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 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 5	Boot, Gloves and OG Removal	5. Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.
Station 10	Safety Boot Removal	10. Remove safety boots and deposit in container with plastic liner.	Station 6	SCBA Removal	6. SCBA backpack and face piece is removed. Avoid touching face with fingers. SCBA is deposited on plastic sheets.
Station 11	SCBA Backpack Removal	11. While still wearing face piece, remove backpack and place on table. Disconnect hose from regulator valve.	Station 7	Field Wash	7. Hands and face are thoroughly washed. Shower as soon as possible.
Station 12	Splash Suit Removal	12. With assistance of helper, remove splash suit. Deposit in container with plastic liner.	OG = Outer Garment    Decontamination Appendix Page 2 of 4		
Station 13	Inner Glove Wash	13. Wash inner gloves with decon solution.			
Station 14	Inner Glove Rinse	14. Rinse inner gloves with water.			
Station 15	Face Piece Removal	15. Remove face piece. Deposit in container with plastic liner. Avoid touching face with fingers.			
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.			

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 cross-contamination. During hot weather operations, cool down stations may be set up in this area.	Station 1	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.
Station 2	Boot Cover / Glove Wash	2. Scrub outer boot covers and gloves with decon solution or detergent and water.	Station 2	OG, Boots, and Gloves Wash and Rinse	2. Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using copious amounts of water.
Station 3	Boot Cover / Glove Rinse	3. Rinse off decon solution from station 2 using copious amounts of water.			
Station 4	Tape Removal	4. Remove tape around boots and gloves and deposit in container with plastic liner.	Station 3	OB and Glove Removal	3. 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	6. 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	8. Rinse off decon solution using copious amounts of water.	Station 5	Boot, Gloves and OG	5. 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	6. Face piece is removed. Avoid touching face with fingers. Face piece is deposited on plastic sheet.
Station 10	Safety Boot Removal	10. 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	14. 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.			
Station 16	Inner Clothing Removal	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 suit.			
Station 17	Field Wash	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.			
Station 18	Redress	18. Put on clean clothes.			

Minimum Measures for Level D Decontamination			Containment and Disposal Method
Station 1	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.	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.
Station 2	OG, Boots, Gloves Wash and Rinse	2. Scrub outer boots, outer gloves and chemical resistant splash suit with decon solution or detergent water. Rinse off using copious amounts of water.	
Station 3	OB and Glove Removal	3. Removal outer boots and gloves. Deposit in container with plastic liner.	
Station 4	Boot, Gloves, OG Removal	5. Boots, chemical-resistant splash suit, inner gloves removed and deposited in container with plastic liner.	<b>Medical Emergency Decontamination Procedures</b>  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.  <b>Injury Involving Potential for Contact with Contaminated Clothing and Skin</b>  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
Station 5	Field Wash	7. Hands and face are thoroughly washed. Shower as soon as possible.	
OG = Outer Garment      OB = Outer Boot			
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.			

Decontamination Appendix Page 4 of 4



Health	0
Fire	2
Reactivity	0
Personal Protection	H

## Material Safety Data Sheet

### Mineral spirits MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Mineral spirits

**Catalog Codes:** SLM3616

**CAS#:** 64475-85-0

**RTECS:** WJ8925000

**TSCA:** TSCA 8(b) inventory: Mineral spirits

**CI#:** Not applicable.

**Synonym:**

**Chemical Name:** Not available.

**Chemical Formula:** Not available.

#### Contact Information:

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

##### Composition:

Name	CAS #	% by Weight
Mineral spirits	64475-85-0	100

**Toxicological Data on Ingredients:** Mineral spirits LD50: Not available. LC50: Not available.

#### Section 3: Hazards Identification

##### Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

##### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

**Eye Contact:** Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

**Skin Contact:**

B	2-Butanone	Formula: CH <sub>3</sub> COCH <sub>2</sub> CH <sub>3</sub>	CAS#: 78-93-3	RTECS#: EL6475000	IDLH: 3000 ppm
	Conversion: 1 ppm = 2.95 mg/m <sup>3</sup>	DOT: 1193 127			
	Synonyms/Trade Names: Ethyl methyl ketone, MEK, Methyl acetone, Methyl ethyl ketone				
	Exposure Limits: NIOSH REL: TWA 200 ppm (590 mg/m <sup>3</sup> ) ST 300 ppm (885 mg/m <sup>3</sup> ) OSHA PEL†: TWA 200 ppm (590 mg/m <sup>3</sup> )				Measurement Methods (see Table 1): NIOSH 2500, 2555, 3800 OSHA 16, 84, 1004
	Physical Description: Colorless liquid with a moderately sharp, fragrant, mint- or acetone-like odor.				
Chemical & Physical Properties: MW: 72.1 BP: 175°F Sol: 28% Fl.P: 16°F IP: 9.54 eV Sp.Gr: 0.81 VP: 78 mmHg FRZ: -123°F UEL(200°F): 11.4% LEL(200°F): 1.4% Class IB Flammable Liquid		Personal Protection/Sanitation (see Table 2): Skin: Prevent skin contact Eyes: Prevent eye contact Wash skin: When contam Remove: When wet (flamm) Change: N.R. Provide: Eyewash		Respirator Recommendations (see Tables 3 and 4): NIOSH/OSHA 3000 ppm: Sa:Cf£/PapOv£/CcrFOv/ GmFOv/ScbaF/SaF §: ScbaF: Pd, Pp/SaF: Pd, Pp: AScba Escape: GmFOv/ScbaE	
Incompatibilities and Reactivities: Strong oxidizers, amines, ammonia, inorganic acids, caustics, isocyanates, pyridines					
Exposure Routes, Symptoms, Target Organs (see Table 5): ER: Inh, Ing, Con SY: Irrit eyes, skin, nose; head; dizz; vomit; derm TO: Eyes, skin, resp sys, CNS				First Aid (see Table 6): Eye: Irr immed Skin: Water wash immed Breath: Fresh air Swallow: Medical attention immed	

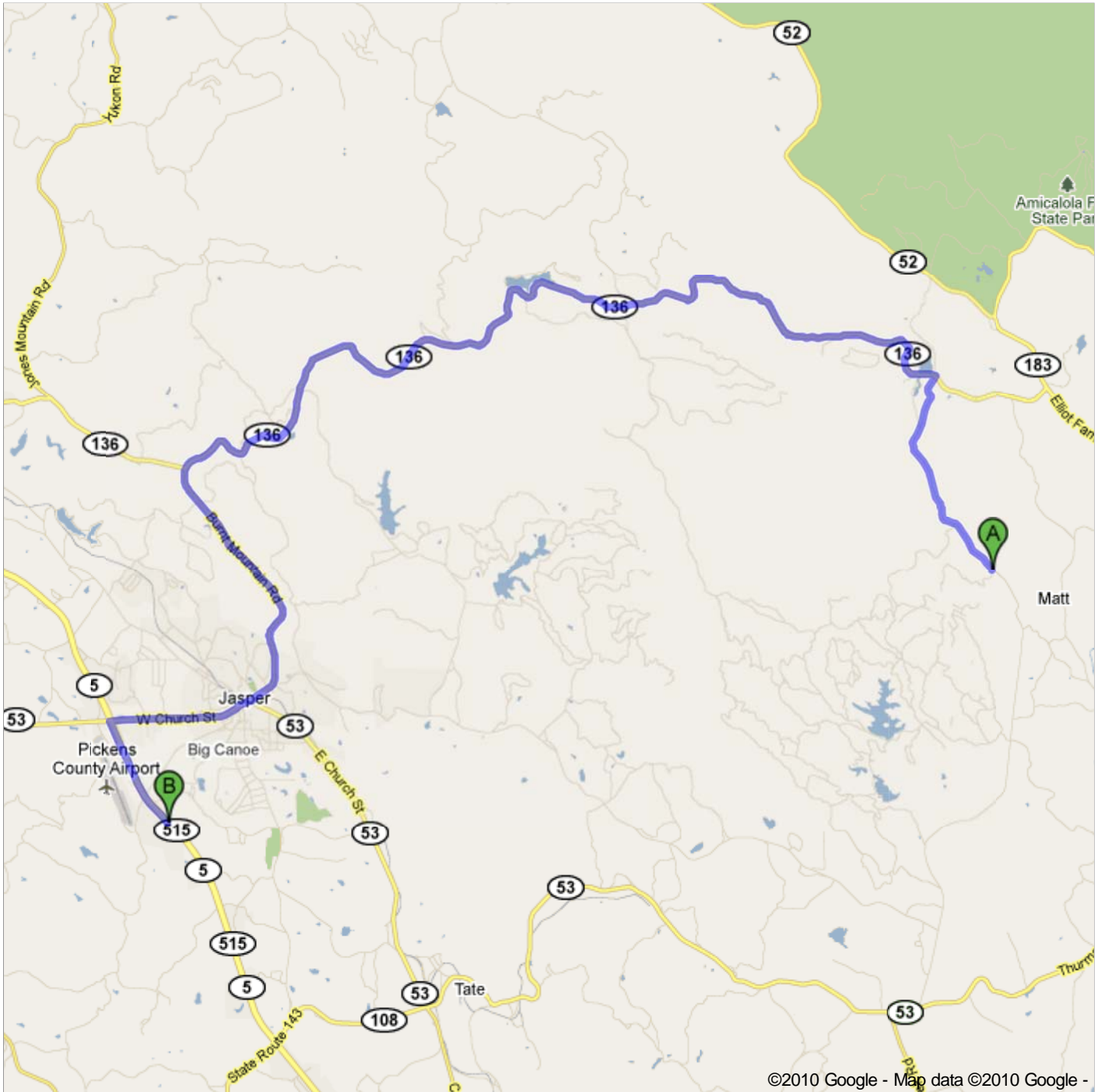
<b>2-Butoxyethanol</b>		<b>Formula:</b> C <sub>4</sub> H <sub>9</sub> OCH <sub>2</sub> CH <sub>2</sub> OH	<b>CAS#:</b> 111-76-2	<b>RTECS#:</b> KJ8575000	<b>IDLH:</b> 700 ppm
<b>Conversion:</b> 1 ppm = 4.83 mg/m <sup>3</sup>		<b>DOT:</b> 2369 152			
<b>Synonyms/Trade Names:</b> Butyl Cellosolve®, Butyl oxitol, Dowanol® EB, EGBE, Ektasolve EB®, Ethylene glycol monobutyl ether, Jeffersol EB					
<b>Exposure Limits:</b> <b>NIOSH REL:</b> TWA 5 ppm (24 mg/m <sup>3</sup> ) [skin] <b>OSHA PEL†:</b> TWA 50 ppm (240 mg/m <sup>3</sup> ) [skin]				<b>Measurement Methods (see Table 1):</b> <b>NIOSH</b> 1403 <b>OSHA</b> 83	
<b>Physical Description:</b> Colorless liquid with a mild, ether-like odor.					
<b>Chemical &amp; Physical Properties:</b> <b>MW:</b> 118.2 <b>BP:</b> 339°F <b>Sol:</b> Miscible <b>F.I.P:</b> 143°F <b>IP:</b> 10.00 eV <b>Sp.Gr:</b> 0.90 <b>VP:</b> 0.8 mmHg <b>FRZ:</b> -107°F <b>UEL(275°F):</b> 12.7% <b>LEL(200°F):</b> 1.1% Class IIIA Combustible Liquid		<b>Personal Protection/Sanitation (see Table 2):</b> <b>Skin:</b> Prevent skin contact <b>Eyes:</b> Prevent eye contact <b>Wash skin:</b> When contam <b>Remove:</b> When wet or contam <b>Change:</b> N.R. <b>Provide:</b> Quick drench		<b>Respirator Recommendations (see Tables 3 and 4):</b> <b>NIOSH</b> <b>50 ppm:</b> CcrOv*/Sa* <b>125 ppm:</b> Sa:Cf*/Paprov* <b>250 ppm:</b> CcrFOv/GmFOv/PapTOv*/ScbaF/SaF <b>700 ppm:</b> SaF: Pd, Pp <b>§:</b> ScbaF: Pd, Pp/SaF: Pd, Pp: AScba <b>Escape:</b> GmFOv/ScbaE	
<b>Incompatibilities and Reactivities:</b> Strong oxidizers, strong caustics					
<b>Exposure Routes, Symptoms, Target Organs (see Table 5):</b> <b>ER:</b> Inh, Abs, Ing, Con <b>SY:</b> Irrit eyes, skin, nose, throat; hemolysis, hema; CNS depres, head; vomit <b>TO:</b> Eyes, skin, resp sys, CNS, hemato sys, blood, kidneys, liver, lymphoid sys			<b>First Aid (see Table 6):</b> <b>Eye:</b> Irr immed <b>Skin:</b> Soap wash prompt <b>Breath:</b> Resp support <b>Swallow:</b> Medical attention immed		

**Directions to Piedmont Mountainside Hospital**

1266 Highway 515 South, Jasper, GA 30143 - (706) 692-2441

**22.3 mi – about 38 mins**

Directions from Marblehill Drum ER to hospital.





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1. Head **north** on **Wildcat Dr** toward **Steve Tate Rd**

go 282 ft  
total 282 ft



2. Turn **left** at **Steve Tate Rd**  
About 7 mins

go 2.9 mi  
total 2.9 mi



3. Turn **left** at **GA-136 W**  
About 18 mins

go 12.5 mi  
total 15.4 mi

4. Continue onto **Burnt Mountain Rd**  
About 6 mins

go 3.6 mi  
total 18.9 mi



5. Slight **right** at **E Church St**  
About 4 mins

go 1.8 mi  
total 20.8 mi



6. Turn **left** at **GA-5 S/GA-515 W**  
Destination will be on the right  
About 3 mins

go 1.5 mi  
total 22.3 mi



Piedmont Mountainside Hospital

1266 Highway 515 South, Jasper, GA 30143 - (706) 692-2441

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These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2010 Google

Directions weren't right? Please find your route on [maps.google.com](http://maps.google.com) and click "Report a problem" at the bottom left.