UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RISK MANAGEMENT WORKSHEET

1. Organization and Location:	SPEC	CIF'	Y LO	OC/	4T	ION - STATE/DISTRICT/FIELD	D O	FFI	CE	OF	R U	NIT 2. Pag	ge 1 of: <mark>Enter total Number of Pages</mark>
Operation / Task: Wildland Fire Engine Suppre	ssion	Оре	eratio	ons		4. Beginning D Click here to en				Click (If not	here	ng Date: to enter a Date nths out, then FY or rebut no longer than 3YR) 6. Date	e Prepared: Click here to enter a date
7. Prepared by (Name / Duty Po	osition	n):	LIS	ΤN	<mark>۸۱</mark>	/IE(S) AND TITLE(S) – e.g. Jar	ne E	oe	, AF	=MC) in	coordination with Jo	hn Smith, FAL3
8. Identified Hazards:	Ha	azar	ess ds: Risł			10. Control Measures Developed for Identified Hazards: (Specific measures taken to reduce the probability of a hazard) Include all PPE	На	zard	s:	the Risk)		12. How to Implement to Controls: (May Be Fille By Hand)	
(Be Specific)	Nealigible	Minor	Moderate	Serions	Jeiti-O	(Be Specific)	Negligible	Minor	Moderate	Serious	Critical	(Be Specific)	(Be Specific)
Entrapment					х	Use Risk Management process. Maintain Situational Awareness and LCES. Apply Standard Firefighting Orders Mitigate for 18 Watch Out Situations. Ensure entrapment avoidance /Look Up, Look Down, and Around are used (IRPG green pages). Complete annual shelter deployment training.			Х			Maintain and reevaluat situation awareness. Change tactics accordingly. Discuss during project shift safety briefings: BLM Handbook 111: Chapter 8 Chapter 9.6 National Interagency Standards for Fire a Fire Aviation Operations (NFES 2724) CH7-Personal Protect Equipment CH13-Chainsaw Operators and Fallers	responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns.

8. Identified Hazards:	9. Assess the Hazards: (Initial Risk)	10. Control Measures Developed for Identified Hazards: (Specific measures taken to reduce the probability of a hazard) Include all PPE	11. Assess the Hazards: (Residual Risk)	12. How to Implement the Controls: (May Be Filled in By Hand)	13. Supervisors and Evaluation by: (Continuous Leader Checks, Buddy System, etc.)
(Be Specific)	Minor Moderate Serious	(Be Specific)	Negligible Minor Moderate Serious Critical	(Be Specific)	(Be Specific)
Snags/Falling Trees/Rolling Debris	x	Use required PPE: • Long Sleeve Shirt • Pants • Eye Protection • Hard Hat • Foot Protection • Hand Protection • Fire Shelter Observe LCES Fall snags or flag and direct traffic around area Alert others continuously about rolling debris. Look up and live. Crew members shall continuously communicate falling/rolling hazards as soon as they are identified. Walk slowly through brush. Be aware of surroundings. Use required PPE: • Long Sleeve Shirt • Pants • Eye Protection • Hard Hat • Foot Protection	X	6 Minutes for Safety	Every firefighter is responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns.

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(Be Specific)	Negligible	Minor	40.00	Moderate	Serions	Critical	(Be Specific)	Negligible	Minor	Moderate	Serious	Critical	(Be Specific)	(Be Specific)
Radiant Heat/Contact with Burning Debris				X			Hand Protection Fire Shelter Use required PPE: Long Sleeve Shirt Pants Eye Protection Hard Hat Foot Protection Hand Protection Fire Shelter			X	8		Incident Response Pocket Guide (PMS 461) Operational Engagement (Green Pages) Specific Hazards: Hazard Tree Safety (Gray Pages) Back Cover: Standard Firefighting Orders and Watch Out Situations Discuss during project and shift safety briefings: BLM Handbook 1112-2 Ch. 9.6 National Interagency Standards for Fire and Fire Aviation Operations (NFES 2724)	Supervisors shall ensure every firefighter has correct PPE, or they are removed from operations until such time they can meet PPE requirements. Every firefighter is responsible for their own
Poor visibility due to smoke or darkness				×			Work at a suitable distance from fire. No patches or decals on fire resistant clothing. Observe the Standard Firefighting Orders, Watch Out			x			 Ch. 7-Personal Protective Equipment Maintain Situational Awareness. 	safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns. Every firefighter is responsible for their own
- CONTROL CONT							Situations and LCES.						Awareness.	safety.

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(Be Specific)	Negligible	Minor	Moderate	Serions	Critical	(Be Specific)	Negligible	Minor	Moderate	Serious	Critical	(Be Specific)	(Be Specific)
Inhalation (dust,smoke,CO)				X		Scout terrain during daylight or acquire map and brief with someone familiar with area. Consider spread potential, values, risks versus safety. imit exposure by: Work upwind when possible. Adjusting operational periods on mop-up to avoid periods of inversion. In heavy smoke conditions, consider establishing control lines where conditions allow for less smoke exposure to firefighters. Rotate personnel out of heavy smoke areas. Use equipment rather than people when possible in holding areas (sprinklers, retardant, foam, etc.). Allow secured areas to burn out (rely on burn-up instead of mop-up and use dozers or			X			Utilize the Risk Management process. Discuss during project and shift safety briefings: Incident Response Pocket Guide (PMS 461) Operational Engagement (Green Pages) Back Cover: Standard Firefighting Orders and Watch Out Situations Consider the Control Measures in strategies and tactics and identify them in shift plans and in ICS 215A forms during large incidents. Discuss during project and shift safety briefings: BLM Handbook 1112-2 Ch. 7	Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns. Use the buddy system. Supervisors will monitor crew health and welfare and mitigate accordingly. Encourage crew members to voice concerns.

8. Identified Hazards:	q	Δςς	200	s the		10. Control Measures Developed	11	Ass	200	s the	,	12. How to Implement the	13. Supervisors and
	На	zaro	ds:			for Identified Hazards: (Specific measures taken to reduce the probability of a hazard) Include all PPE	На	zard	ls:			Controls: (May Be Filled in By Hand)	Evaluation by: (Continuous Leader Checks, Buddy System, etc.)
(Be Specific)	Negligible	Minor		Moderate	50000	(Be Specific)	Negligible	Minor	Moderate	Serions	Critical	(Be Specific)	(Be Specific)
						other mechanized equipment to spread out burn piles).							
Insects/Snakes				X		Use required PPE: • Long Sleeve Shirt • Pants • Eye Protection • Hard Hat • Foot Protection • Hand Protection • Fire Shelter Fasten/tuck pant cuffs into boots, use repellents, and inspect body and clothing. Avoid areas where insects/snakes hide or have been seen (flag as needed). Carry medication if allergies exist.			X			All firefighters will be current in First Aid and CPR training. Discuss during project and shift safety briefings: • 6 Minutes for Safety • Bees and Wasps • BLM Handbook 1112-2 • Ch. 10.4 and 10.5 • Ch. 8 • National Interagency Standards for Fire and Fire Aviation Operations (NFES 2724) • CH7-Personal Protective Equipment	Supervisors shall ensure every firefighter has correct PPE, or they are removed from operations until such time they can meet PPE requirements. Every firefighter is responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns.
Poisonous/Infectious Plants				Х		Use required PPE: • Long Sleeve Shirt • Pants • Eye Protection • Hard Hat • Foot Protection • Hand Protection • Fire Shelter			X			Same as above. All firefighters will be current in First Aid and CPR training. Discuss during project and shift safety briefings: • 6 Minutes for Safety • Bees and Wasps	Supervisors shall ensure every firefighter has correct PPE, or they are removed from operations until such time they can meet PPE requirements.

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(Be Specific)	Nealigible	Minor	Moderate	Serions	Critical	(Be Specific)	Negligible	Minor	Moderate	Serions	Critical	(Be Specific)	(Be Specific)
						Change clothing that has come in contact with Poisonous/Infectious plants, avoid smoke of burning Poisonous/Infectious plants. Train on plant identification.						 BLM Handbook 1112-2 Ch. 10.3 Ch. 8 National Interagency Standards for Fire and Fire Aviation Operations (NFES 2724) CH7-Personal Protective	Every firefighter is responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns.
Fatigue						Maintain a high level of physical fitness. Ensure work/rest guidelines are followed. Limit shifts to 16 hours when possible. Utilize a reasonable work pace. Allow adequate rests while on the fireline. Provide showers, comfortable eating areas, and quiet sleeping areas (sign and rope off sleeping area).			X			Supervisors should outline expectations of fatigue management during operational briefings. Discuss during project and shift safety briefings: National Interagency Standards for Fire and Fire Aviation Operations (NFES 2724) CHT-Work/Rest CH13-Physical Fitness Minutes for Safety Fatigue and Stress Incident Response Pocket Guide (PMS 461)	Every firefighter is responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice concerns.

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(Be Specific)	Nealiaible	Minor	Moderate	Serions	Critical	(Be Specific)	Negligible	Minor	Moderate	Serions	Critical	(Be Specific)	(Be Specific)
Heat Related Illness				X		Follow NWCG Heat Illness			X			Human Factor Barriers to Situation Awareness Strategies and testing	Supervisors will monitor
						Prevention (HIP) Guide Firefighters are current in First Aid/CPR training to recognize signs of heat illness.						Strategies and tactics should account for options and mitigations and be noted in shift plans. All employees will be current with CPR/First Aid training. Discuss during project and shift safety briefings: NWCG Heat Illness Prevention Guide 6 Minutes for Safety Heat Disorders and Hypothermia BLM Handbook 1112-2 Ch. 10.6 and 10.7 Incident Response Pocket Guide (PMS 461) Emergency Medical Care Guidelines (Red Pages)	Supervisors will monitor crew health and welfare and mitigate accordingly. Firefighters are encouraged to voice concerns.
Thunderstorms/Lightening				X		Situational awareness and hazard control			X			Brief on Thunderstorm Safety guidelines Discuss during project and shift safety briefings: • 6 Minutes for Safety • Thunderstorm Safety • BLM Handbook 1112-2 • Ch. 3.11	Every firefighter is responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met.

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(Be Specific)	Negligible Minor Moderate Serious	(Be Specific)	Negligible Minor Moderate Serious	(Be Specific)	(Be Specific)
				 Incident Response Pocket Guide (PMS 461) Specific Hazards,	Firefighters are encouraged to voice concerns.
High Noise Levels	X	Wear hearing protection when working around loud noises. Hearing protection is required at 85 decibels (dBA).	X	Employee and supervisor training. Discuss during project and shift safety briefings: • BLM Handbook 1112-2 • Chapter 7.4 • National Interagency Standards for Fire and Fire Aviation Operations (NFES 2724) • CH7-Personal Protective Equipment	Supervisors shall provide and replace, as necessary, a variety of Hearing- Protection Devices (HPD) in designated high-noise (>85dBA) areas. Supervisor will evaluate effectiveness of HPD.
Extreme Fire Behavior	X	Maintain Situational Awareness and LCES. Apply Standard Firefighting Orders and mitigate for 18 Watch Out Situations. Ensure entrapment avoidance /Look Up, Look Down, and Around are used. Complete annual shelter	X	Maintain and reevaluate situation awareness. Change tactics accordingly. Discuss during project and shift safety briefings: National Interagency Standards for Fire and Fire Aviation	Every firefighter is responsible for their own safety. Oversight and evaluation will be provided by supervisor/fireline leadership to ensure safety standards are met. Firefighters are encouraged to voice

Identified Hazards:				s the		10. Control Measures Developed				s the		12. How to Implement the	13. Supervisors and
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				-		probability of a hazard) Include							System, etc.)
						all PPE							
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						deployment training.						Operations (NFES	concerns.
												2724)	
												CH7-Personal Protective	
												Equipment	
												6 Minutes for Safety Extreme Fire Behavior 1	
												and 2	
												 Incident Response 	
												Pocket Guide (PMS	
												461)	
												 Operational Engagement 	
												(Green Pages) ○ Back Cover: Standard	
												Firefighting Orders and	
												Watch Out Situations	
Mop-Up and Water Application				X		Limit exposure by:			X			Mop-up to the degree	Every firefighter is
						 Work upwind when possible. 						necessary to make the	responsible for their own
						 Adjusting operational periods 						likelihood of escape very	safety.
						on mop-up to avoid periods of						low; based on experience,	O
						inversion.						terrain, fuel types and fuel	Oversight and evaluation
						Allow secured areas to burn						conditions, and	will be provided by
						out (rely on burn-up instead of						current/predicted weather	supervisor/fireline
						mop-up and use dozers or						conditions. PPE References:	leadership to ensure safety standards are met.
						other mechanized equipment						Red Book, Ch. 7	Stanuarus are IIIet.
						to spread out burn piles).						BLM Handbook 1112-2,	Firefighters are
						Avoid stanning in halos						Ch. 8	encouraged to voice
						Avoid stepping in holes, depressions and ash pits.						J.1. 0	concerns.
						ucpressions and asit pits.						Discuss during project and	33.1001110.
						Use required PPE:						shift safety briefings:	
						Long Sleeve Shirt						BLM Handbook 1112-2	
						Pants						○ Chapter 8	
						Eye Protection ANSI Z87.1						○ Chapter 9.6	
						Standard							
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(Be Specific)	Negligible	Minor	Moderate	Serions	Critical	(Be Specific)	Negligible	Minor	Moderate	Serions	Critical	(Be Specific)	(Be Specific)
						Hard Hat Foot Protection Hand Protection Fire Shelter BLM will supply non-prescription protective eyewear meeting ANSI Z87.1 standard. Avoid high nozzle pressure and seep nozzles a safe distance from ground. Use fog nozzle when applicable.						 National Interagency Standards for Fire and Fire Aviation Operations (NFES 2724) CH7-Personal Protective Equipment 6 Minutes for Safety Ash Pit Incident Response Pocket Guide (PMS 461) Other References: Minimum Impact Suppression Tactics (White Pages) 	
Engine Operations (Mobile Attack))		Frain personnel in the proper mobile attack methods. Have a qualified individual scouting in front of the engine to dentify hazards. Put engine in 4x4 before it is needed. Make sure adequate separation s maintained between vehicle			X			Train and practice until all personnel know their jobs and are comfortable performing them. Discuss during project and shift safety briefings: • BLM Handbook 1112-2 • Chapter 4 • National Interagency Standards for Fire and Fire Aviation	Continuous supervision throughout mobile attack operation by engine supervisor.

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						and personnel running the hose						Operations (NFES	
						nozzles.						2724)	
												o CH7-Driving Standards	
						Make sure driver always has a						6 Minutes for Safety	
						visual on people working around						○ Driving Safety	
						the engine.							
						Have I CEC in place and longue							
						Have LCES in place and known							
						to all engine crew personnel.							
						Do not ride on engine at any							
						time.							
Engine Operations						Engine is parked in safe						Train and practice until all	Continuous supervision
(Stationary Attack)						location/distance from potential						personnel know their jobs	throughout stationary
(=,						fire.						and are comfortable	attack operation by engine
												performing them.	supervisor.
						Engine is chocked and							•
						access/egress routes are						Discuss during project and	
						identified.						shift safety briefings:	
												National Interagency	
						LCES is in place and known to						Standards for Fire and	
						all engine personnel.						Fire Aviation	
						an origine perconner.						Operations (NFES	
						Trigger points and						2724)	
						disengagement protocols are in						○ CH7-Driving Standards	
						place and known.						 6 Minutes for Safety 	
												 Parking Safely on Slopes 	
						If access to top of engine is							
						necessary, ensure 3 points of							
						contact are made (both feet and							
						one hand).							
Click here to enter identified hazard.						Click here to enter Control Measure.						Click here to enter Controls.	Click here to enter Evaluation.

8. Identified Hazards:	H). As Haza Initia	rds:		•	D H ta	0. Control Measures Developed for Identified D	F	1. As Iazai Resid	rds:					to Implement the c: (May Be Filled in d)	Eval Lead	Supervisors and uation by: (Continuou der Checks, Buddy em, etc.)
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Click here to enter identified hazard.			Тп			Click	k here to enter Control Measure.		Т				С	lick here t	o enter Controls.	Click h	ere to enter Evaluation.
Click here to enter identified hazard.							k here to enter Control Measure.						_		o enter Controls.		ere to enter Evaluation.
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Click here to enter identified hazard.						Click	k here to enter Control Measure.						С	lick here t	o enter Controls.	Click h	ere to enter Evaluation.
14. Remaining Risk Level After Control Measures Are Implemented: (INDICATE HIGHEST REMAINING RISK		N		SLI uper		BLE or)	MINOR (Associate/Assistant Mgr. Branch Chief)	. /			OD eld				SERIOU (District Mana		CRITICAL (State Director/Associate
LEVEL WITH "X")																	
MODERATE: Brief (Note: if the person p	Risi repa ial r	<i>k D</i> o arino risk	eci s g th	sio ne fo	<i>n À</i> orm	<i>utho</i> sigr	roval/Authority Signature I ority at that level on Conn ns this block, the signature measures taken and appro	<i>tro</i> e in	<i>Is a</i> dica	nd ites	Co s on	<i>ntr</i> ly t	<i>ol l</i> hat	Measu the ap	res used to repropriate risk d	duce i ecisio	<i>risks</i>) n authority
Printed Name / Signature																	

INSTRUCTIONS

- 1. Organization conducting the Risk Assessment and the location of the operation.
- 2. If more than one page is used, indicate number of pages. (For example: Page 1 of 3)
- 3. In general terms, identify the operation/task(s) to be performed.
- 4. Enter the date that the operation/task(s) is/are to begin.
- 5. Enter the date that the operation/task(s) is/are to end.
- 6. Enter the date that the Risk Assessment was prepared.
- 7. Enter the name and duty position of the person completing the form.
- 8. Identify specific hazards associated with the operation/task(s.) It is important to be specific and start at the beginning, the preparation phase (equipment draw/transportation of equipment) of the operation. (For example: unfamiliar equipment, inexperienced operators, improperly configured equipment, challenging terrain, natural hazards, hazardous chemical use, span of supervision, location of work, types of roads, confined spaces, pinch points.)
- 9. Assess the initial risk using the risk assessment matrix.
- 10. Identify control measures for each identified hazard in block 8.
- 11. Assess the residual risk, the risk remaining after control measures are taken into consideration, using the risk assessment matrix.
- 12. Identify how the controls will be implemented (For example: SOPs, tailgate safety briefings, written/oral policy statements/directions, familiarization training, Right to Know training, use of PPE, use of spotters.)
- 13. Enter the specific individual(s) or method(s) used to supervise and evaluate the provisions of the Risk Assessment. (For example: supervisor/leader on site, buddy system, employee crosstalk.)
- 14. Check the appropriate remaining level of risk.
- 15. The authority accepting the risk should sign this block; however, if the authority is notified and accepts the risk, the person completing the form can note same sign block 15. (See "Note" in block 15.)