

## Activity Hazard Analysis # 1

Activity/Work Task: <b>Mobilization / Site Setup</b>	Overall Risk Assessment Code (Mitigated RAC) (Use highest code)		(I, E) M		
- Project Location: Grant Mine, NT.	<b>Risk Assessment Code (RAC) Matrix</b>				
Job Number: 14-002	<b>Hazard Severity</b>				
Date Prepared: 01-09-2015	<b>Hazard Probability</b>				
Prepared by (Name/Title): Clell Crook – Site Superintendent	Catastrophic (I) – death, system loss, or severe environmental damage	Critical (II) – disabling injury, major system or environmental damage	Marginal (III) – recordable injury, minor system or environmental damage	Negligible (IV) – first aid, minor system impairment	
Reviewed by (Name/Title): Bob Johnson	Frequent level A	Likely level B	Occasional level C	Seldom level D	Unlikely level E
	E	E	H	H	M
	E	H	H	M	L
	H	M	M	L	L
	M	L	L	L	L
<b>Notes:</b> (Field Notes, Review Comments, etc.)	Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above)				
	"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				
	"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible				
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.				
	<b>RAC Chart</b>				
E = Extremely High Risk					
H = High Risk					
M = Moderate Risk					
L = Low Risk					

PRINCIPAL STEPS	HAZARDS	PRELIMINARY RAC	RECOMMENDED CONTROLS	MITIGATED RAC
Installation of Barriers and Site Control Measures	Unfamiliarity with: site hazards, project safety rules, hazard control procedures, chain of command, and emergency procedures.	(I,D) H	<ul style="list-style-type: none"> <li>All personnel shall attend the site orientation training. After personnel are trained in the contents of the SSHASP and AHAs are reviewed, they shall sign the Initial Employee Training acknowledgement Form.</li> <li>All personnel shall attend a daily Tailgate Safety Meeting.</li> <li>A Job Safety Analysis (JSA) shall be completed daily prior to beginning each work task in accordance with Delta Carter procedure Each JSA shall be amended as needed for changing conditions or increasing hazards.</li> </ul>	(I,E) M

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ACTIVITY Mobilization and Site Setup ANALYZED BY / DATE C. Crook 01-09-2015 REVIEWED BY/DATE B. Johnson 01-09-2015

PRINCIPAL STEPS	HAZARDS	PRELIMINARY RAC	RECOMMENDED CONTROLS	MITIGATED RAC
Installation of Barriers and Site Control Measures (continued)	Noise	(II,C) H	<ul style="list-style-type: none"> <li>All personnel shall wear earplugs whenever heavy equipment is operating or powered hand tools are used.</li> </ul>	(II,E) L
	Struck by vehicular traffic	(I,D) H	<ul style="list-style-type: none"> <li>A traffic control plan shall be prepared and implemented when working on or adjacent to roadways.</li> <li>All personnel shall wear Class 2 High visibility clothing when exposed to vehicle or equipment traffic.</li> </ul>	(I,E) M
	Sprains and strains from heavy lifting or overexertion	(II,C) H	<ul style="list-style-type: none"> <li>No individual employee is permitted to lift any object that weighs over 60 pounds.</li> <li>If working on a slope, personnel shall not carry a load in excess of 30 lbs.</li> <li>Multiple employees or the use of mechanical lifting devices are required for lifting objects over the 60-pound limit.</li> <li>Personnel shall use proper lifting techniques such as keeping back straight, lifting with legs, limiting twisting, and getting help in moving bulky/heavy materials and equipment.</li> </ul>	(II,E) L

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PRINCIPAL STEPS	HAZARDS	PRELIMINARY RAC	RECOMMENDED CONTROLS	MITIGATED RAC
	Slips, trips, and falls	(III,B) M	<ul style="list-style-type: none"> <li>• Workers shall inspect area for uneven terrain, slopes, obstructions and watch for objects that may protrude from the ground and create a trip hazard.</li> <li>• Personnel shall take extra precautions, such as establishing firm handholds, wearing suitable footwear, and walking slowly when walking on wet, rocky, or uneven terrain.</li> <li>• Remove debris from walkways and mark other trip hazards.</li> <li>• Stairways, walkovers, or ramps shall be installed where personnel must walk or step over equipment.</li> </ul>	(III,D) L
Installation of Barriers and Site Control Measures (continued)	Slips, trips, and falls – (continued)	(III,B) M	<ul style="list-style-type: none"> <li>• Fall protection is required for all personnel working <math>\geq 6</math> feet above the ground surface in accordance with Parsons Procedure HS-301, <i>Fall Protection</i>.</li> <li>• Maintain good housekeeping.</li> <li>• Maintain proper illumination in work areas.</li> <li>• Personnel shall not jump from elevated surfaces.</li> </ul>	(III,D) L

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	Injury from use of power and hand tools	(II,C) H	<ul style="list-style-type: none"> <li>• Personnel shall maintain a steady pace when using tools and take adequate rest periods.</li> <li>• Tools shall be appropriate for the task and maintained in good condition.</li> <li>• Inspect all power and hand tools before each use.</li> <li>• Only trained and authorized personnel will use hand and power tools.</li> <li>• Keep electric cords untangled and out of the way of rotating tools.</li> <li>• Use pneumatic or double-insulated power tools when possible.</li> <li>• Protect electric tools with ground fault interrupters (GFCI).</li> <li>• Minimum PPE will include safety glasses with side-shields, hard hat, safety-toed work boots, and cut-resistant gloves.</li> <li>• Items to be handled shall be inspected for sharp edges prior to being handled.</li> </ul>	(II,E) L

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Installation of Barriers and Site Control Measures (continued)	Electrical shock	(I,D) H	<ul style="list-style-type: none"> <li>All electrical work shall comply with National Electric Code standards and the arc-flash PPE requirements of NFPA 70E.</li> <li>Only qualified electricians shall wire electrical connections.</li> <li>Extension cords, power tools, and lighting equipment shall be inspected before each use, protected from damage, and kept out of wet areas.</li> <li>Electrical cords and wiring shall be kept clear of walking areas, roads, and/or covered, buried, or otherwise secured.</li> <li>Monitor weather conditions. Outdoor/field operations shall cease during electrical storms or when lightning is observed in the area.</li> </ul>	(I,E) M
			<ul style="list-style-type: none"> <li>Items to be handled shall be inspected for sharp edges prior to being handled.</li> <li>Personnel shall wear leather gloves when handling sharp materials.</li> <li>Personnel shall be aware of and avoid pinch point hazards.</li> </ul>	(III,D) L
	Hand injuries (cuts/lacerations)	(III,C) M	<ul style="list-style-type: none"> <li>Employees shall be instructed on the identification and avoidance of snakes, poisonous plants, and insects.</li> <li>Use insect repellents containing DEET to prevent insect bites.</li> <li>Wear long-sleeved shirts/trousers or Tyvek coveralls to avoid skin contact with prolonged sun exposure, plants, or other skin irritants.</li> <li>Wear sunscreen and re-apply frequently as needed.</li> </ul>	(III,D) L
	Biological hazards/Bites/Allergic reactions	(III,C) M	<ul style="list-style-type: none"> <li>Employees shall be instructed on the identification and avoidance of snakes, poisonous plants, and insects.</li> <li>Use insect repellents containing DEET to prevent insect bites.</li> <li>Wear long-sleeved shirts/trousers or Tyvek coveralls to avoid skin contact with prolonged sun exposure, plants, or other skin irritants.</li> <li>Wear sunscreen and re-apply frequently as needed.</li> </ul>	(III,D) L

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Installation of Barriers and Site Control Measures (continued)	Heat Stress	(L,D) H	<ul style="list-style-type: none"> <li>• Monitor for heat stress in accordance with Shaw E &amp; I Procedure No. HS400, "Heat Stress" and the requirements of the APP.</li> <li>• Drink plenty of water and minimal carbonated or caffeine-containing beverages.</li> <li>• Personnel shall take required breaks to cool down as needed.</li> </ul>	(L,E) M

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