

**JOB SAFETY ANALYSIS**



Activity Name: Hard Rock Investigations using Diamond Core Drilling Activity Number:  
 Activity Description & Purpose: Rock Coring - Method to retrieve core samples from hard rock by investigating existing subsurface conditions and materials to determine their physical/mechanical and chemical properties that are relevant to the proposed structure.

Date Prepared: 04/01/2009		Typical Crew Size:	Typical Material		PPE Required
Typical Equipment			Description	Class Code	Safety Boots, Hardhat, ReflectORIZED Vest, Safety Glasses, Dust Mask, Hearing Protection, Appropriate Gloves
Description	Class Code				
P/U 4X4	10	3 to 11 Depending on traffic control  (Crew sizes may vary due to different site conditions such as in travel lane, off road drilling - within 12' of edge of road or many feet off road, winter conditions, summer conditions, day time or night time drilling)	n/a	n/a	
Drill Rig	942				
Drill Truck Mounted	945				
Water Truck	634				
Trailer - Lowboy	606				
(H Night Drilling)					
Light Pier	913				
(If Traffic Control is needed)					
Arrow Board/VMB	902-903				

Sequence of Job Tasks	Potential Hazards	Safe Job Procedures	Never
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1) Preplan	N/A	Orientation - Safety Meetings - Tailgate Talks. Develop Traffic Control Plan and discuss it with everyone involved. Notify the Traffic Management Center and Public Relations, Utilize Uniformed Law Enforcement when available.	Use unsafe equipment
2) Underground and Overhead Utilities	Buried power, gas & water lines, fibre optics, overhead lines	Insure UNCC clearance and non-member utilities are contacted and cleared	
2) Pretrip	Tripping, Falling, Pinching, Crushing, Burns, Lifting, Bending, Pulling, Twisting	Always perform equipment inspections before and after operations (pre and post)	Lift with your back, no loose clothing
3) Loading Equipment	Backing truck or equipment into objects/ people or off the side of a trailer, Unsecured loads, Tripping, Falling, Pinching, Crushing, Moving Parts, Burns, Lifting, Bending, Pulling, Twisting	If using ATV Drill Rig - Use a spotter. Do a walk around. Proper loading/ unloading of equipment. Secure loads. Display appropriate warning signs. Wear appropriate PPE- if using Truck mounted drill rig - be sure all transported equipment and tools are properly secured.	Load equipment without a spotter. Travel with unsecured loads
4) Traffic Control Setup	Tripping, Falling, Pinching, Crushing, Moving Parts, Burns, Lifting, Bending, Pulling, Twisting, Backing equipment into objects/ people, Traffic	Follow your traffic control plan (MHT) and insure the plan is on location. Mark all overhead obstructions with cones, signs, or flags. Always use attenuator trucks when available and TEST your plan and insure it is working properly.	Set up traffic control without an approved plan, lift with your back
	Worn/adequately traffic control devices	Use clean and legible traffic control devices	
	Getting struck by traffic or equipment	Use identified escape routes in your traffic control plan - always have a set of eyes watching traffic	Never turn your back to oncoming traffic
	Signs blowing over	Use sandbags	
5) Perform Task	Tripping, Falling, Pinching, Crushing, Moving parts, Flying debris, Noise, Dust, Backing truck/ equipment into objects/ people, Overhead & Buried Utilities/ bridges/ signs/ obstructions, Weather- lightning/ heat/ Hazardous Materials, Falling Rocks	Use trained personnel to operate equipment. Follow all procedures outlined in the Driller Safety Handbook.	Operate unsafe equipment, Work in an unsafe/ negligent manner
6) Traffic control removal	Tripping, Falling, Pinching, Crushing, Moving Parts, Burns, Lifting, Bending, Pulling, Twisting, Backing equipment into objects/ people, Traffic	Remove signs and other safety devices in accordance with Methods of Handling Traffic. Always use attenuator/ trucks when available, notify the traffic management center and public relations when work is completed, utilize law enforcement when available, wear appropriate PPE	Take your eyes off traffic
7) Unloading equipment	Backing truck or equipment into objects/ people, Unsecured loads, Tripping, Falling, Pinching, Crushing, Moving Parts, Burns, Lifting, Bending, Pulling, Twisting	Use a spotter, Do a walk around, Proper unloading of equipment. Wear appropriate PPE	Unload equipment without a spotter, Lift with your back
8) Post Trip	Tripping, Falling, Pinching, Crushing, Burns, Lifting, Bending, Pulling, Twisting	Always perform equipment inspections before and after operations (pre and post)	

Notes and Specifications Instructions	Other Related Resources
	Regional MHT
	Driller Safety Handbook
	MMS Manual
	MUTCD
	PD 80.1, Personal Protective Equipment
	M & S Standards
	Lane Closure Strategy Book

