

Task Hazard Analysis

JOB/TASK Heavy Wrecking
Work Area PG&E Kern Power Plant

DATE 5/20/13

Permits(s) Required and attached **YES** **NO**

Major Steps of Task:	Recognized/Unanticipated Hazards:	Safe Plan:	Tools Required to do the job safely:
Inspect the area to be demolished prior to start of task.	Heavy equipment, heavy steel beams, concrete footings, uneven surfaces, chemicals, slippery surfaces, fall hazards, falling materials, impalement hazards, eye hazards, exposure to non-Company personnel, heat stress.	-What is the task? -What could go Wrong? -What could be done to make it safer? -What have we done to communicate the hazard?	-Safety briefings prior to the start of work in the morning. -Behavior Based Safety (BBS) -Competent Person -SM 11, Demolition -Hard hat, safety glasses, hearing protection as needed, leather gloves, Reflective high visibility vest, jacket or shirt, work boots.
Structure Dismantlement – Excavators, hydraulic breakers, cranes, track & rubber tire loaders, hot work, dust suppression	-Overhead Work / Power lines. -Crushing hazards from equipment. -Flammable liquids -Hot surfaces -Limited work space -Uneven surfaces -Open excavations/trenches	-Hazard Recognition -Maintain safe distance -Maintain eye contact with operators -Communication between operators and ground personnel. -Daily equipment inspection and maintenance -Hazard/Warning	-Hard hat, safety glasses, hearing protection as needed, leather gloves, Reflective high visibility vest, jacket or shirt, work boots. -2 way radio communication with personal and operator
Hot Work (See <u>Torch Cutting Metal Coated with Lead Paint THA</u>)			
Concrete Breaking - Hydraulic hammer to break concrete, separate re-bar	Noises, flying concrete chips, rebar, uneven surfaces, heavy equipment.	-Hearing and eye protection required. -Maintain safe distance from equipment. -Get operators attention before approaching equipment. -Operator will inspect area prior to starting task.	-Hard hat, safety glasses, hearing protection as needed, leather gloves, Reflective high visibility vest, jacket or shirt, work boots. -2 way radio communication with personal and operator
Concrete slab removal / concrete and asphalt floors removal / footings	See THA for Concrete Demo		
Underground utility removal / Excavation / Trenching / Backfilling	Dust, Excavation-trenching, backfilling, compaction. -Cave-in/slope failure -Heavy equipment	-Slope or bench excavation according to soil type -Use shoring if mandated by size of excavation/trench and soil type -If hazardous materials have or might be present, air monitor excavation prior to entry.	-Hard hat, safety glasses, hearing protection as needed, leather gloves, Reflective high visibility vest, jacket or shirt, work boots. -Water Truck -Spotter on site -Make sure utility clearance is current -Competent person on-site

Loading of scrap metals, concrete debris, and trash into end dumps/roll-off bins	-Falling materials, heavy equipment operations, pinch/crush points	-Communication between operators and laborers. -No personnel under buckets -No personnel in trailers or roll-off bins (check first prior to loading). -Get operators attention prior to approaching heavy equipment. -Do not overload trailers/roll-off bins. -Back up alarms & mirrors are in place and in good condition.	-2 way radio communication with personal and operator -Safety briefing with drivers of trucks. -Haul route defined and communicated to operators, drivers & laborers. -Hard hat, safety glasses, hearing protection as needed, leather gloves, Reflective high visibility vest, jacket or shirt, work boots. -2 way radio communication with personal and operator
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Adjacent Work/Processes and/or co-occupancy Yes No Other workers adjacent, above, below
 Notified them of our presence Coordinated with adjacent work supervisor/customer operator Can work safely

TEAM MEMBERS SIGNATURES

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The signature of the Supervisor certifies the completion of the Hazard Assessment and Safe Plan of Action by the crew.

Supervisor's Signature: _____ Date _____

Instructions: 1. Write the name of the job or task in the space provided. 2. Conduct a walk-through survey of work area. 3. Write the steps of the task in a safe sequence. 4. List all possible hazards involved in each step as well as reaction to failure. 5. In the Safe Plan column, provide the corrective actions that will be taken to keep the hazard from becoming an accident or injury. 6. In Tools column list tools needed to do the job, additional safety equipment, etc. 7. Have each team member that helped develop and will use this STA sign in the spaces provided at the bottom. 8. Review the STA at the end of the task for improvements. (NOTE: THE WORK SHALL STOP IF CONDITIONS CHANGE, JOB CHANGES, OR DEFICIENCY IN PLAN IS NOTED.)

Review checklist on page 3

Safe Plan of Action Checklist (Check the items that apply)

Permits/Clearances	Hazards	Safe Plan	
<input checked="" type="checkbox"/> Utility Clearance Obtained			
<input type="checkbox"/> Confined Space	<input type="checkbox"/> Overhead Utilities	<input type="checkbox"/> Power de-energization required <input type="checkbox"/> Required clearance distance = 10 ft.	<input type="checkbox"/> Insulation blankets required <input type="checkbox"/> Wire watcher required <input type="checkbox"/> Safe work zone marked
<input type="checkbox"/> Critical Lift	<input checked="" type="checkbox"/> Crane or other Lifting Equipment	<input checked="" type="checkbox"/> Signalman assigned <input checked="" type="checkbox"/> Tag lines in use <input checked="" type="checkbox"/> Lifting equipment inspected	<input checked="" type="checkbox"/> Area around crane barricaded <input checked="" type="checkbox"/> Personnel protected from overhead load
<input type="checkbox"/> Hoisting & Rigging Safety Review	<input checked="" type="checkbox"/> Underground Utilities	<input checked="" type="checkbox"/> Reviewed as-builts <input type="checkbox"/> Required clearance distance = ____ ft.	<input type="checkbox"/> Subsurface surveys <input type="checkbox"/> Received dig permit <input type="checkbox"/> Safe work zone marked
<input type="checkbox"/> Boom Assembly and Breakdown	<input type="checkbox"/> Electrical	<input type="checkbox"/> Lock Out/Tag Out/Try Out? <input type="checkbox"/> Reviewed electrical safety procedures	<input type="checkbox"/> Permit required <input checked="" type="checkbox"/> Confirm that equipment is de-energized <input type="checkbox"/> Additional info below
<input type="checkbox"/> Boom Proximity	<input checked="" type="checkbox"/> Excavations	<input type="checkbox"/> Permits <input type="checkbox"/> Inspected prior to entering <input type="checkbox"/> Barricades provided <input type="checkbox"/> Access/egress provided	<input checked="" type="checkbox"/> Proper sloping/shoring <input type="checkbox"/> Protection from accumulated water
<input type="checkbox"/> Concrete Structure Penetration	<input checked="" type="checkbox"/> Fire Hazard	<input checked="" type="checkbox"/> Permit <input checked="" type="checkbox"/> Fire Extinguishers <input type="checkbox"/> Unnecessary flammable material removed	<input checked="" type="checkbox"/> Fire watch <input checked="" type="checkbox"/> Adjacent area protected <input type="checkbox"/> Additional info below
<input type="checkbox"/> Soil Excavation	<input checked="" type="checkbox"/> Vehicular Traffic or Heavy Equipment	<input checked="" type="checkbox"/> Traffic Barricades <input checked="" type="checkbox"/> Cones <input checked="" type="checkbox"/> Signs <input checked="" type="checkbox"/> Communication with equipment operator	<input type="checkbox"/> Flagmen <input type="checkbox"/> Lane closure <input type="checkbox"/> Additional information below
<input type="checkbox"/> Pneumatic Test	<input checked="" type="checkbox"/> Noise > 85 dB	Hearing protection is required: <input checked="" type="checkbox"/> Ear plugs <input type="checkbox"/> Ear muffs	<input type="checkbox"/> Both <input type="checkbox"/> Additional info below
<input checked="" type="checkbox"/> Hot Work	<input checked="" type="checkbox"/> Hand & Power Tools:	<input checked="" type="checkbox"/> Inspect general condition <input type="checkbox"/> GFCI in use <input checked="" type="checkbox"/> Reviewed safety requirements in operators manual(s)	<input checked="" type="checkbox"/> Identified PEP required for each tool <input checked="" type="checkbox"/> Guarding OK <input type="checkbox"/> Additional info below
<input type="checkbox"/> Scaffolding Erection Plan	<input checked="" type="checkbox"/> Hand Hazards	<input type="checkbox"/> List sharp tools, material, equipment <input checked="" type="checkbox"/> PPE gloves, etc. <input type="checkbox"/> Protected sharp edges as necessary	<input type="checkbox"/> Additional info below
<input type="checkbox"/> Steel Erection/Decking/Flooring/ Grating Checklist	<input checked="" type="checkbox"/> Manual Lifting	<input checked="" type="checkbox"/> Reviewed proper lifting tech. <input type="checkbox"/> Hand protection required <input type="checkbox"/> Back support belts	<input checked="" type="checkbox"/> Identified material requiring lifting equipment <input type="checkbox"/> Additional information below
<input type="checkbox"/> Request for Shutdown	<input checked="" type="checkbox"/> Ladders	<input checked="" type="checkbox"/> Inspect general condition before use <input checked="" type="checkbox"/> Ladder tied off <input checked="" type="checkbox"/> Proper angle and placement	<input checked="" type="checkbox"/> Ladder inspected within last quarter <input checked="" type="checkbox"/> Reviewed ladder safety
<input type="checkbox"/> Electrically Hazardous Work	<input type="checkbox"/> Scaffolds	<input type="checkbox"/> Inspect general condition before use <input type="checkbox"/> Toe boards used <input type="checkbox"/> Footings adequate	<input type="checkbox"/> Tags in place <input type="checkbox"/> Properly secured <input type="checkbox"/> Materials properly stored on scaffold
<input type="checkbox"/> Radiation Work Permit for Visitors	<input checked="" type="checkbox"/> Slips, Trips, Falls	<input checked="" type="checkbox"/> Inspect for trip hazards <input type="checkbox"/> Hazards marked <input type="checkbox"/> Extension cords properly secured <input type="checkbox"/> Work zone free of debris	<input checked="" type="checkbox"/> Tools & material properly stored <input type="checkbox"/> Additional information below
Required PPE	<input checked="" type="checkbox"/> Pinch Points	List potential pinch points: Tractor and objects <input checked="" type="checkbox"/> Working near operating equipment <input checked="" type="checkbox"/> Hand/Body positioning	<input type="checkbox"/> Additional information below
<input checked="" type="checkbox"/> Hard Hat	<input checked="" type="checkbox"/> Working w/Chemicals	<input checked="" type="checkbox"/> The task creates potential for direct contact with hazardous chemicals. <input checked="" type="checkbox"/> Reviewed MSDS hazards and precautions <input checked="" type="checkbox"/> Have identified proper PPE (respirators, clothing, gloves, etc.)	<input type="checkbox"/> Have proper containers and labels
<input checked="" type="checkbox"/> Ear Plugs/Ear Muffs	<input checked="" type="checkbox"/> Heat Stress Potential	<input checked="" type="checkbox"/> Heat stress monitoring (>85° F; 29.4° C) <input checked="" type="checkbox"/> Liquids available <input checked="" type="checkbox"/> Sun Screen <input checked="" type="checkbox"/> Reviewed Heat Stress symptoms	<input checked="" type="checkbox"/> Cool down periods <input type="checkbox"/> Additional info below
Eye Protection	<input type="checkbox"/> Cold Stress Potential	<input type="checkbox"/> Proper clothing (i.e., gloves, coat, coveralls) <input type="checkbox"/> Reviewed Cold Stress symptoms <input type="checkbox"/> Warm up periods	<input type="checkbox"/> Wind chill (<32° F; 0° C) <input type="checkbox"/> Additional information below
<input checked="" type="checkbox"/> Safety Glasses	<input checked="" type="checkbox"/> Environmental	<input type="checkbox"/> Air emissions <input type="checkbox"/> Water discharge <input type="checkbox"/> Pollution prevention	<input checked="" type="checkbox"/> Hazardous wastes <input type="checkbox"/> Other wastes <input type="checkbox"/> Waste minimization
<input type="checkbox"/> Face Shield	<input checked="" type="checkbox"/> Natural or Site Hazards	<input type="checkbox"/> Weather <input checked="" type="checkbox"/> Terrain <input checked="" type="checkbox"/> Animals/reptiles/insects hazards	<input checked="" type="checkbox"/> Adjacent operations or processes <input checked="" type="checkbox"/> Biological hazards
<input type="checkbox"/> Chemical Goggles	<input checked="" type="checkbox"/> Overhead Work	<input checked="" type="checkbox"/> Caution barricade tape required <input checked="" type="checkbox"/> Rigid railing required <input checked="" type="checkbox"/> Covers over opening	<input checked="" type="checkbox"/> Danger barricade tape required <input checked="" type="checkbox"/> Warning signs required
<input type="checkbox"/> Welding Hood	Additional Information		
Hand Protection			
<input checked="" type="checkbox"/> Cut Resistant Gloves			
<input type="checkbox"/> Welders Gloves			
<input type="checkbox"/> Nitrile Gloves			
<input type="checkbox"/> Surgical Gloves			
<input type="checkbox"/> Rubber Gloves			
<input type="checkbox"/> Electrical Insulated Gloves			
<input type="checkbox"/> Arm Sleeves			
Foot Protection			
<input checked="" type="checkbox"/> Safety Toe Boots			
<input type="checkbox"/> Rubber Boots			
<input type="checkbox"/> Rubber Boot Covers			
<input type="checkbox"/> Dielectric Footwear			
Respiratory Protection			
<input checked="" type="checkbox"/> Dust Mask (NIOSH)			
<input type="checkbox"/> Air Purifying Respirator			
<input type="checkbox"/> Supplied Air Respirator			
<input type="checkbox"/> SCBA			
<input type="checkbox"/> Emergency Escape Respirator			
Special Clothing			
<input type="checkbox"/> Tyvek®			
<input type="checkbox"/> Poly Coated Tyvek®			
<input type="checkbox"/> NOMEX®			
<input type="checkbox"/> Rain Suit			
Fall Protection			
<input checked="" type="checkbox"/> Harness			
<input type="checkbox"/> Double Lanyard Required			
<input checked="" type="checkbox"/> Anchorage Point Available			