

Task Hazard Analysis

JOB/TASK Torch Cutting Metal

DATE 5/20/13

Work Area PG&E Kern Power Plant Demolition

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

Major Steps of Task:	Recognized/Unanticipated Hazards:	Safe Plan:	Tools Required to do the job safely:
Preparation of area & materials for torch cutting.	Combustibles (i.e. wood, paper, debris, flammable liquids, brush, residual flammable liquids in pipes or vessels, UST/AST verified gas free)	Burn permit must be secured prior to torch cutting operations. Area must be cleared of combustibles (i.e. brush, paper, wood, flammable liquids, etc.). Fire extinguisher inspected for compliance and in place for torch cutting operations. Vessels and Pipes inspected, monitored for LEL/UEL, residual liquids removed.	-Safety briefing prior to activities. -Burn/Torch cutting permit in place -Fire Watch assigned -Crew briefed on hazards of lead -SM 022 Lead -Attachment H Lead compliance Plan
Sizing steel with oxy/propane torches	Hot, molten steel; Fumes from burning; Exposure to lead from torch fumes and chipped paint, and; Heavy steel capable of pinching and crushing. Heat stress.	Barricade work areas, post lead hazard, use buddy system, leave a way out, where appropriate PPE for cutting metal painted with lead paint. Monitor employee exposure to lead fumes. Wash hands before eating or smoking. Review symptoms for heat stress.	Hard hat, full face respirator with North P-100 HEPA filters, fire Proof disposable coveralls, leather gloves, leather over-the-ankle boots. Half face respirator with North P-100 HEPA filters for steel coated with lead based paint.
Storage of Oxy/Propane tanks	Broken valves, high pressure release, fire or explosion	Secure all bottles from falling. Store Oxygen and propane upright a minimum distance of 20 feet from each other. Remove all regulators from bottles and replace with storage caps when bottles are not in use. Label empty bottles.	Rope or chain for securing bottles. Do not use wire. Wrenches for attaching or removing regulators.
Break areas and disposal of Lead Contaminated PPE	Cross contamination.	No eating, drinking or smoking in areas where torch operations are taking place. Remove all PPE and place disposable items in a sealable and secure container. Reusable PPE should be stored on the jobsite, not in personal vehicle. Respirators will be kept in sealable bags when not in use. Clean respirators daily with alcohol wipe and wash once a week in a soap solution.	Sealable container, waste labels, hand and face washing station, clean area for eating, drinking, smoking.

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

Fall protection required when working 4 feet above ground.