[GW01] v.1.0.0 - GW Use hand tools

Task Description:	Prerequisites: • Inspect	Hazard ID: • Non	Hazards & Environments	Engineering Controls: None
Work on non-hazardous items and equipment using common hand tools.	tools before use. Tag and remove	e	Aspects: • Flying debris from tool use may	Administrative Controls: Use and maintain tools only as intended by the manufacturer.
Boundary Conditions, this task does not include: Use of hand tools on hazardous materials: asbestos, lead, beryllium, radioactive materials, explosive, silica. Use of battery powered and plug-in tools. Use of hand tools for: wall/ceiling/flo or penetrations, building construction, maintenance or repair, or work on contaminated or hazardous items and equipment. Use of nonmanufacturer provided handle extensions or "cheater bars." Use of hand tools for > 4 hrs in any one work period.	damage d tools from service. First-Aid & Emergency Information: None		result in eye or face injury. Incorrect use of hand tools can cause cuts, bruises, muscle strains and puncture injuries. Repetitiv e or prolonge d use of hand tools can cause ergonomi c injuries.	Take stretch breaks at least every 30 minutes when tasks require that an awkward posture be maintained, that excessive force (pulling, pushing, lifting, kneeling) be applied, or when using hand tools continuously for greater than 2 hours duration. HOLD POINT: If potential ergonomic injury symptoms/discomf ort is sensed; pause work, notify your Supervisor and follow direction given. PPE Controls: Wear safety glasses with side shields when using hand tools. BMP] Wear leather or cutresistant gloves when handling tools or materials that have pinch points or sharp edges. Environmental / Waste Controls: None
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: None				Training Controls: • [WC GENERAL WORKER] - WC General Worker
				Pre-Approval Actions: None
Task Notes: This is used to document assumptions made during analysis or other technical details. N/A				Post-Approval Actions: None Ongoing Actions: None
				Pre-Job Talking Points: Use the right tool for the job and keep in good working order. Remove damaged tools from service.

	 This task does not allow work on hazardous materials (lead, asbestos, silica, radioactive materials, beryllium). Keep a solid stance, and be ready if the part breaks or slips. Do not put your hands in the "line of fire" of sharp cutting edges. Do not use tool-handle extensions (cheater bars) unless specifically designed and engineered for the tool, or approved by the immediate supervisor. Take stretch breaks at least every 30 minutes when maintaining an awkward posture or kneeling, using force (pushing, pulling, lifting), or using hand tools for more than 2 hours at a time.
	RI Reminders: None

[GW02] v.1.0.0 - GW Use sharps

Task Description: Handle non-contaminated sharps. Examples include knives, box cutters, tools with sharp edges, jagged cut edges, broken glass. Boundary Conditions, this task does not include: Use of sharps with	Prerequisites: Ensure cutting blades are properly installed prior to use. Ensure cutting	Hazard ID: • None	Hazards & Environments Aspects: • Sharps present a cutting or puncture hazard.	Engineering Controls: None Administrative Controls: Pick the safest tool that will accomplish the work. [BMP] Use re-sheathable or retractable scalpels and self-retracting blade knives (e.g. Klever Kutter). When using cutting tools, keep edges sharp. Dull edges are
blood or biological materials (Use Handle Sharps - Biological task). Use of sharps in a chemical / materials science laboratory (Use Handle Sharps -	have sharp edges and blades are properly installed prior to			more likely to slip. • Keep the non-cutting hand and body out of the line of cut. o [BMP] Cut away from the body. • Install blade covers and recap sharps when not in use.
 Chemical task). Handling optical fibers (Use Prepare Optical Fibers task). Using electronics and electronics fabrication tools, e.g. connector pin insertion/extraction 	use. Sharpen or dispose tools with dull cutting edges. First-Aid & Emergency			PPE Controls: Wear safety glasses with side shields. Wear leather or cut-resistant gloves when handling materials with sharp or jagged edges, and when using cutting tools (unless there is a risk of gloves being caught in rotating machinery).
tools, wire strippers, insulation cutters, etc. (Use Fabricate and Assemble Electronic Components task).	Information: • None			Dispose of non-contaminated broken glassware in facility glass waste container, if available. Place broken glass in cardboard or other rigid container, tape closed, and dispose of in outdoor dumpster. Do not put broken glass in
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: None				office/kitchen/restroom garbage Dispose sharps in a hard-walled container, or wrap blade/sharp edge with tape. Place the hard-walled container in the municipal trash when full.
Task Notes: This is used to document assumptions made during analysis or other technical details. N/A				Training Controls: • [WC GENERAL WORKER] - WC General Worker
				Pre-Approval Actions: None Post-Approval Actions: None
				Ongoing Actions:

	• None
	Pre-Job Talking Points: Pick the safest tool to accomplish the cutting. Ensure blades are properly installed prior to use. Don't apply too much pressure when cutting, especially when blades are new. Wear leather or cut resistant gloves for sharp-edged material handling. Do not wear loose gloves, clothing, jewelry, or lanyards that can become caught in rotating power tools. Minimize handling of sharps; use dustpan and broom for broken glass. Don't put broken glass in office garbage.
	RI Reminders: None

[GW03] v.1.0.0 - GW Use ladders and step stools

i ask Description:	-			
Task Description: Use portable A- frame ladders and step stools to perform work at heights where feet are < 6 feet from the ground. Boundary Conditions, this task does not include: Use of extension ladders, fixed ladders or A-frame ladders where feet are > 6 feet from the ground. Use of ladders in conditions that require Fall Protection. Use of ladders to access an unguarded elevated	Prerequisites: Obtain an ANSI/OSHA Type 1 or better ladder (e.g., Type 1A) capable of supporting the weight of the user and tools, and of the appropriate height for the area to be accessed and/or the task to be performed. Inspect ladders prior to use, and tag/remove damaged ladders from service. First-Aid & Emergency Information: None	Falling Objects Ladder	Hazards & Environments Aspects: • Falls from ladders or step tools, even at relatively low heights, can result in severe injury and death. • Objects falling from heights can injure nearby personnel and damage equipment.	Engineering Controls: None Administrative Controls: Secure work area surrounding the ladder location by using barricade tape or equivalent when working: in doorways, in doorways, in walkways, and where the possibility of dropped objects falling into occupied areas exists. Setup the ladder in accordance with manufacturer's instructions. Use proper ladder climbing technique. Maintain centerline position (belt buckle between side rails) while reaching to perform work. PPE Controls: Wear shoes or boots with slipresistant soles and a distinguishable heel. Environmental / Waste Controls: None Training Controls: [WC GENERAL WORKER] - WC General Worker
work platform. Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this				Pre-Approval Actions: Obtain ANSI/OSHA Type 1 or better ladder capable of supporting the weight of the user and tools, and of the appropriate height for the area to be accessed and/or the task to be performed.
work: None Task Notes: This is used to document assumptions made				Post-Approval Actions:
assumptions made during analysis or other technical details. N/A				Pre-Job Talking Points: • Ensure ladders are in good condition, constructed of suitable material, and of the proper heigh and type for the work intended. Remove any ladder from service that is defective or unsuitable for use.

RI Reminders:		Use barricades or equivalent (e.g. locking a door) when:
● None		

[GW04] v.1.0.0 - GW Incidental lifting

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Task Description: Lift ~30 lbs on an incidental/occasional basis (~several times/week) using safe manual technique, hand carts or dollies. Examples include a box of office paper, vacuum pump, box of 4 chemical bottles, waste carboy, etc	Prerequisites:	Hazard ID: • None	Hazards & Environments Aspects: Improper lifting poses hazards such as being struck by a load, losing control of a load, physically overexerting oneself, and injury due to	None Administrative Controls: Use cart, shelf, or other stand to reduce total distance of lift for multiple, repetitive lifts. Size up the load and your route prior to lifting. Never attempt to lift a load heavier than your comfort level. Use proper lifting techniques. Use a cart, shelf, or other stand to reduce total distance of lift for multiple, repetitive lifts. Use
Boundary Conditions, this task does not include: • Work activities where lifting is frequent / routine (e.g., laborers, craft workers, RHWM workers, supply & distribution			repetitive use of the same muscles or body parts. Severe strains and sprains can result from overexertion.	mechanical devices (e.g. hand truck, cart, pallet jack) to carry loads whenever possible. PPE Controls: • [BMP] Wear leather gloves or other work gloves for sharp edges or difficult to hold loads. Environmental / Waste Controls: • None Training Controls: • [WC GENERAL WORKER] - WC General Worker
workers). Lifts over ~30 lbs. Use of powered lifts, pallet jacks, cranes or hoists. Carrying loads while ascending				Pre-Approval Actions:
or descending ladders, unless using backpack or tool belt.	_			Pre-Job Talking Points: Size up the load and make a preliminary lift to ensure it is within your capacity. If the load is beyond your capability, get help or use a mechanical lifting device. Think through the lift before beginning.
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: None				Pre-Inspect the item to be lifted and the route over which the load is to be carried. The route should be free of obstruction or spills that could cause tripping or slipping. Pre-plan, communicate, and coordinate team lifts. Inspect the load for sharp edges, slivers,
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Task Notes: This is used to document assumptions made during analysis or other technical details. N/A			and wet or greasy spots. Consider the distance over which the load is to be carried. Remove obstructions and/or clean spills that could cause tripping or slipping. If a number of objects need to be lifted to the same height, use a cart, shelf or other stand to reduce the total distance of each lift. Separate loads into smaller lighter loads and make several trips. Follow proper lifting techniques: Lift with large muscles of the legs, not the back. Keep the back straight. Keep the knees approximately shoulderwidth apart. Grasp load firmly and hold loads close to the body without extending arms away from the body. Avoid twisting and turning when carrying a load. Push rather than pull, slide rather than lift. Promptly report any discomfort to your Supervisor. Do not lift if you are experiencing discomfort in your back, neck, arms or legs.
	-		RI Reminders: • None

[GW05] v.1.0.0 - GW Animals / insects in the workplace

Task Description:	Prerequisites: • None	Hazard ID: • None	Hazards & Environments Aspects:	Engineering Controls: None
Work safely in areas where incidental contact with snakes, spiders, scorpions and stinging insects may occur.	First-Aid & Emergency Information: None		 Snakes, ticks, spiders, scorpions and wasps are common in infrequently- visited areas, such as cold- 	Administrative Controls: Open exterior doors and allow closed areas to air out for a few minutes prior to entering. Maintain awareness of locations where you place your hands and feet.
Boundary Conditions, this task does not include: Cleanup of animal waste. Pest infestation remediation. Disturbing wild animal habitats. Handling wild animals.			and-dark buildings, crawl spaces or mezzanines, transportainers, or remote facilities and storage areas at the Main Site and Site 300.	HOLD POINT: If you encounter erratic animal behavior or animal habitats of concern; move to a safe location, notify the LLNL Wildlife Biologist and follow direction provided. HOLD POINT: If you encounter bee/wasp hives, avoid contact, notify Pest Management and follow direction provided. PPE Controls: Wear long pants and shirt while in areas where the potential for animal / insect encounters are
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: • None				 likely. Wear leather gloves when handling brush, wood piles or other debris, or crawling under buildings. [BMP] Shake out boots and gloves that have been left outside.
				Environmental / Waste Controls: None
Task Notes: This is used to document assumptions made during analysis or other technical details. N/A				Training Controls: • [WC GENERAL WORKER] - WC General Worker
				Pre-Approval Actions: None
				Post-Approval Actions: None
				Ongoing Actions: None
				Pre-Job Talking Points: • Be especially alert for snakes, scorpions and spiders under transportainers and in crawl spaces or other rarely-accessed areas.

		your fingers under debris you are moving. Avoid contact with wasp or bee hives.	
		RI Reminders: • None	

[GW06] v.1.0.0 - GW Incidental presence in areas with rodent or bird droppings.

Task Description:	Prerequisites: None	Hazard ID: • None	Hazards & Environments Aspects:	Engineering Controls: None
Inspect, deliver items, and perform walkthroughs in areas that contain rodent or bird droppings.	First-Aid & Emergency Information: • None		Rodent and/or bird droppings may contain infectious organisms that can cause illness. Rodent droppings may contain hantavirus,	Administrative Controls: • Maintain awareness of rodent/bird dropping locations and take care to prevent disruption while walking nearby. • HOLD POINT: If
Boundary Conditions, this task does not include: Movement or activity that will disturb rodent or bird droppings or may create an airborne hazard. Cleaning up or handling of animal waste materials.			while bird/bat droppings may contain fungi that cause cryptococcosis and histoplasmosis. Exposure is possible when droppings are stirred into the air and breathed in.	you encounter rodent/bird dropping areas that need to be cleaned up in order to perform your task; pause work, notify the assigned IH and await further direction. PPE Controls: None Environmental / Waste Controls: None Training Controls: [WC GENERAL WORKER] -
Related PATs: The following hazards were not analyzed in				WC General Worker Pre-Approval Actions:
this task, but may be commonly encountered when performing this work: None				None Post-Approval Actions: None
Task Notes: This is used to document assumptions made during analysis or				Ongoing Actions: None
other technical details. N/A				Pre-Job Talking Points: Be especially alert for bird or rodent droppings in cold and dark facilities or rarely-accessed facilities. Rodent droppings are commonly encountered at Site 300 facilities. Do not stir droppings up in the air, such as walking directly through or sweeping rodent/bird dropping areas.
				RI Reminders:

		•	None

[GW07] v.1.0.0 - GW Perform walkthroughs and inspections - Construction areas

ask Description:	Prerequisites: Obtain permission	Hazard ID: • None	Hazards & Environments Aspects:	Engineering Controls: None
Access construction areas for valkthroughs and inspections. ncludes work areas with vehicle nazards (parking lots, accessing utilities in/near roadways).	permission from the RI or other work supervisor prior to entry. • Read the signs and		A variety of hazards may be present at construction sites,	Administrative Controls: Obey all postings and do not cross barricades without being authorized.
Soundary Conditions, this task loes not include: Hands-on work in construction areas. Entry into areas where respiratory protection or encapsulating PPE is required. Entry into the following posted areas: Biological (BSL-1, 2, or 3 labs) Radiation Areas, Contamination Areas, High Radiation Areas, High Radiation Areas, High Contamination Areas, Airborne Radioactivity Areas. Regulated Be Work Areas. Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: None	postings at the entry to the area, and follow all requirements. Sign the SPA if posted at the entry. First-Aid & Emergency Information: None		including heavy equipment with limited visibility, overhead hazards from cranes and work on higher levels, slip, trip and fall hazards from obstacles and uneven footing, and flying debris from too • Powered tool use and heavy equipment can generate noise greater than 85 dB, which can damage hearing. • Unguarded utilities may be present. Contact	 Pay attention to your surroundings. Do not distract fellow workers. When the work area is exposed to vehicle traffic, install barricades or cones to divert traffic. PPE Controls: Wear a hard hat, safety shoes or boots, and safety glasses with side shields when in construction areas or areas exposed to overhead hazards. Wear a high-visibility vest if there is a potential exposure to vehicular traffic or heavy equipment. Wear other PPE as specified by the SPA and any postings at the entry to the area. Environmental / Waste Controls:
Fask Notes: This is used to document assumptions made during analysis or other technical details. N/A			with electrical or other energy sources can result in serious	None Training Controls: [WC GENERAL WORKER] - WC General Worker
			injury or death. Workers may be in close proximity to moving traffic. Injury can occur when moving motor	Pre-Approval Actions:

	strike or run over workers.	Pre-Job Talking Points: Be alert for hazards, and use all your senses; LOOK for moving vehicles and where you are walking. LISTEN to instructions and vehicle sounds. Read, understand, and sign the Safe Plan of Action (Pre-Job Brief) prior to entering a construction area. If you observe an unsafe condition, do not hesitate to STOP the work.	
		RI Reminders: • None	

[GW08] v.1.0.0 - GW Perform walkthroughs and inspections - Hazardous materials areas

Task Description:	Prerequisites: • Obtain	Hazard ID: • None	Hazards & Environments	Engineering Controls: None
Access work areas where the potential for incidental exposure to chemical or industrial hazards exists. Examples include aboratories, shops, chemical or gas storage areas, and mechanical equipment rooms. Boundary Conditions, this task does not include: Entry into the following posted areas:	permission from the FPOC or RRP prior to entry. First-Aid & Emergency Information: None		Aspects: • A variety of hazards may be present in a laboratory, such as pressure systems, flammable, corrosive, and/or toxic chemicals, high temperatures,	Administrative Controls: • Maintain awareness of the hazards in the area through the Health Hazard Communication (HHC) sign, any additional postings, container labels, and SDSs for specific chemicals. • Do not eat, drink, or
 Radiation Areas, Contamination Areas, High Radiation Areas, High Contamination Areas, Airborne Radioactivity Areas. Regulated Be Work Areas. Construction areas. Biological (BSL-1, 2, 3) laboratories. 			temperatures, cryogens, and equipment with electrical and mechanical hazards. Contact with these hazards may cause injury or	apply cosmetics and minimize touching your face while in the hazardous area or when handling hazardous materials. • Minimize contact with surfaces, do not touch benches or equipment, and do not reach into fume hoods or chemical storage areas. • [BMP] Wash hands with soap and water upon final exit from the area.
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: None				As specified by the RRP, an HHC sign, or other postings. Environmental / Waste Controls:
Task Notes: This is used to document assumptions made during analysis or other technical details. N/A				None Training Controls: [WC GENERAL WORKER] - WC General Worker
				Pre-Approval Actions: None
				Post-Approval Actions: None
				Ongoing Actions: None
				Pre-Job Talking Points:

		and other access control measures. Make sure you understand what hazards are present in a work area prior to entering. • Minimize routes of exposure: inhalation, ingestion (can be hand-to-mouth), adsorption, and injection. • Identify the location of the nearest eyewash or emergency shower prior to entering a hazardous material work area.
		• None

[GW09] v.1.0.0 - GW Handle closed containers of hazardous materials

Task Description:	Prerequisites:	Hazard ID:	Hazards &	Engineering Controls:
Handle closed containers of hazardous materials.	 Obtain permission from the FPOC or RRP prior 	• None	Environments Aspects: • Broken or leaking containers	None Administrative Controls: Maintain awareness of the hazards of the materials
Boundary Conditions, this task does not include: • Handling the following materials: • radioactive, • biological, • explosive, • or • Beryllium • Handling open or leaking chemical containers. • Handling unknown materials.	to entering areas where hazardous materials are used or stored. First-Aid & Emergency Information: None		can lead to contact with or inhalation of hazardous materials and may cause skin injuries, poisoning or cancer. If a pressurized container fails, explosion,	through the Health Hazard Communication (HHC) sign, any additional postings, container labels, and SDSs for specific chemicals. Inspect containers prior to handling. Do not open containers. Do not handle open or leaking chemical containers or samples. If a container
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when performing this work: None			fire and struck-by object injuries may occur.	shows evidence of leaking: move to a safe distance from the container, notify others in the room, contact the RRP
Task Notes: This is used to document assumptions made during analysis or other technical details. N/A				or FPOC, and await further direction. Minimize contact with laboratory surfaces, do not touch benches or equipment, and do not reach into fume hoods or chemical storage areas. Do not eat, drink, or apply cosmetics and minimize touching your face while in the hazardous area or when handling hazardous materials. IBMP] Wash hands with soap and water when finished. PPE Controls: As specified by the RRP, an HHC sign, or other postings. Environmental / Waste Controls: None Training Controls: IWC GENERAL WORKER] - WC General Worker

Pre-Approval Actions: None Post-Approval Actions: None Ongoing Actions:
None
Pre-Job Talking Points: At the General Worker level, you cannot open chemical containers or work around leaking containers. Make sure you understand what hazards are present in a work area. Minimize routes of exposure: inhalation, ingestion (can be hand-tomouth), adsorption, and injection. Identify the location of the nearest eyewash or emergency shower prior to entering a hazardous material work area.
RI Reminders: • None

[GW10] v.1.0.0 - GW Perform incidental work outdoors

Task Description:	Prerequisites: None	Hazard ID: • None	Hazards & Environments	Engineering Controls: None
Perform light-duty work outdoors at any time of the year. Examples include inspections, walk-throughs, walking, carrying light items, and light climbing.	First-Aid & Emergency Information: None	• None	Aspects: • Working outdoors presents the risk of heat-related illnesses (heat	 None Administrative Controls: Drink water to stay hydrated. Rest in shaded, cool areas. [BMP] Set up outdoor work areas with shade and/or fans. [BMP] Set up a buddy system to enable workers to check each
Boundary Conditions, this task does not include: Work durations >1 hr. Use of encapsulating PPE (Tyvek coveralls, respiratory protection).			stress / cramps / exhaustion / stroke) and sun exposure may cause sunburn.	other for signs of heat-related illness. PPE Controls: • [BMP] Wear sunscreen, a hat and/or light-colored long sleeve clothing when working outdoors. Environmental / Waste Controls: • None Training Controls:
Related PATs: The following hazards were not analyzed in this task, but may be commonly encountered when				[WC GENERAL WORKER] - WC General Worker
performing this work: None				Pre-Approval Actions: None Post-Approval Actions:
Task Notes: This is used to document assumptions made during analysis or other technical details. N/A				NoneOngoing Actions:None
				Pre-Job Talking Points: Respect your physical limitations. If you feel unwell due to the heat, stop what you are doing, and rest in a cool, shaded area, and drink cool water. Avoid consumption of alcohol, caffeinated and high sugar content beverages prior to / when working in hot areas or outdoors. Plan your work around the daily weather forecast. On hot days, perform work in the morning. Ensure drinks are available near the work location. Drink at least 8 ounces of water every 20 minutes. Take frequent rest breaks in cool areas with shade. Set up shade for work in the open.
				RI Reminders:

		None