

JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

ENVIRONMENT, HEALTH & SAFETY – EMERGENCY RESPONSE

RESPONDING TO SHARPS

TASK	HAZARDS	CONTROLS
1. Proceed to the site and assess the situation. Determine the perimeter that contains the sharps, the amount of sharps to be picked up, and the other hazards that may impede response. If possible, determine the hazardous substance(s) contaminating the sharps, or present nearby.	Injury from the sharps.	Assess the situation away from the perimeter of the abandoned materials; ask someone knowledgeable if possible.
	Injury from other physical hazards at the assessment location.	When assessing the situation, stay clear from other physical hazards in the area.
	Exposure to hazardous substances including biohazard and radioactive materials that may have contaminated the sharps.	Avoid getting in contact with the sharps or items close to the sharps including the container if sharps are contained; stay clear from any contaminated surfaces near the sharps. If necessary to take samples, grab samples by using tongs, or use long probes to determine contamination.

		<p>Exposure to the public if sharps are located in an area accessible.</p>	<p>Keep the public away by installing sturdy and stable barriers.</p> <p>String tape with "No Entry Allowed" warning printed on it around the perimeter of the abandoned material.</p> <p>Post warning signs around the taped area informing the public that the area is hazardous to human and animal health.</p>
	<p>2. Select and don the appropriate PPE.</p>	<p>Inadequate protection from selected PPE.</p>	<p>Determine the PPE appropriate for the situation with other responders and with people knowledgeable of the situation; double check with an expert.</p>
		<p>Using a defective PPE.</p>	<p>Before donning the selected PPE examine the material thoroughly to ensure that it is free from any defects such as holes, tears, and unsealed seams.</p>
		<p>Fall and strain when donning the body or foot PPE.</p>	<p>Don PPE for body or foot while seated.</p> <p>If seating is not possible, don the PPE with the aid of a "buddy."</p>
		<p>Physical injury from physical hazards present at the donning site.</p>	<p>Don PPE at a location with enough space to allow non-restrained movement and free from physical hazards.</p>
	<p>3. While wearing PPE, approach the area where the sharps are located to further assess the contamination, the amount of sharps to be picked up and packaged and the extent of contamination.</p>	<p>Exposure to contaminants present, because PPE is inadequate.</p>	<p>Make sure that the PPE selected has adequate protection; always double check with an expert before donning the PPE.</p> <p>Modify or upgrade PPE if found inadequate. When changing PPE, depart contaminated area and change PPE at a clean location free from contaminants and physical hazards.</p>

		Injury due to contact with the sharps or injection hazards.	Avoid contact with the injection hazards while sampling and performing the other monitoring activities.
		Destruction (puncturing or tearing) of the PPE due to exposure to sharps and awkward positions while suited.	Avoid contact with the injection hazards and other sharps present at the site and avoid awkward positions when suited up.
4. If surface contamination is present, determine its extent.		Exposure to the contaminants.	Wear PPE with adequate protection and stay clear from sharps and injection hazards to avoid destruction of the PPE.
		Inadequate lighting impeding search and identification of contaminated surfaces.	Ensure enough light is provided to the spill area to locate and identify contaminated surfaces.
5. Pick up as much sharps and injection hazards from the surface as possible.		Exposure to the contaminant.	Wear PPE with adequate protection and free from defects; avoid physical contact with the sharps while they are being picked up or transferred to an appropriate container. Avoid touching bare skin when working in the contaminated area.
		Physical injury due to contact with the sharps.	Avoid contact with the sharps while picking them. If sharps are contained but container is not appropriate, transfer sharps to an appropriate sharps container Use appropriate tool to pick up sharps.
		Injury due to contact with other physical hazards at the site.	Stay clear of other physical hazards while picking up the sharps. If possible, move physical hazards away from the contaminated area or deactivate them.
		Physical injury due to inappropriate use of tool.	Use tool properly and, if training is needed, obtain training first before using tool.

	6. Collect tiny sharp pieces.	Exposure to the contaminants.	<p>Wear appropriate PPE free from defects; change into new PPE if damaged.</p> <p>Avoid touching bare skin while working in the contaminated area.</p>
		Physical injury due to contact with sharps, injection hazards and/or other physical hazards at the site.	<p>Don't touch the collection of tiny pieces of sharps with bare or gloved hand. Handle only with an appropriate tool.</p> <p>Pick up the collection with a soft broom and dustpan.</p> <p>Contain the tiny sharps in an appropriate sharps container. Contain the contaminated dustpan and broom in a waste container after use.</p>
	7. If necessary, apply appropriate neutralizer or absorbent to remove contaminants on surfaces where sharps were located.	Exposure to the contaminants.	<p>Wear PPE with adequate protection and free from defects; change into new PPE if damaged.</p> <p>Add sufficient neutralizer or absorbent to minimize or eliminate exposure to contaminants.</p>
		Physical injury due to contact with sharps, injection hazards and/or other physical hazards still present at the site.	<p>While applying neutralizer or absorbent, stay clear of the sharps or injection hazards and other physical hazards at the site.</p> <p>Apply the neutralizer or absorbent on the spill area; do not "work it in."</p> <p>When collecting the used neutralizer, use a shovel, or a soft broom and dustpan.</p>
	8. Collect used neutralizer or absorbent in a non-reactive	Exposure to the contaminant.	Follow 6a-2, 7a-1 and 7a-2.

	<p>container provided with a secure lid or cover.</p>	<p>Physical injury due to physical hazards at the contaminated site.</p>	<p>If possible, remove physical hazards from contaminated site to avoid injury.</p> <p>If there is heat or electrical sources at the contaminated site, de-energize these hazards before starting site cleanup.</p> <p>Perform Task 8 with care, avoiding haste to minimize the possibility of falling, tripping, or slipping.</p>
	<p>9. Final cleanup of contaminated site.</p>	<p>Discovery of un-neutralized or unabsorbed contaminant(s) and/or sharps.</p>	<p>If the contaminant(s) is present, repeat Task 7; if sharps are also present, repeat Task 8. For each of these tasks, be aware of the corresponding hazards listed above and follow the necessary controls.</p> <p>Proper PPE remains on and replaced at a clean, non-contaminated location if damaged. If respirator use is required, change cartridges upon saturation at a clean, non-contaminated location.</p>
	<p>10. Collect waste containers, label them, secure covers, and bring them to a secure location, driving them if necessary.</p>	<p>Physical injury due to pinches while securing covers.</p>	<p>Secure lids or covers carefully, paying attention that hands and fingers are not caught in the process.</p>
		<p>Physical injury due to twisting and awkward positioning while labeling, lifting, and moving containers.</p>	<p>Avoid assuming awkward positions when handling containers, follow proper techniques in moving and lifting heavy objects and containers.</p> <p>When moving heavy and bulky containers, use appropriate equipment and, if necessary, summon a buddy to assist.</p>
		<p>Slip and fall while handling containers of wastes.</p>	<p>Be sure footing is secure while moving bulky and heavy containers.</p>
	<p>11. Transportation of wastes.</p>	<p>Inadequate controls.</p>	<p>Refer to JSA for transportation of hazardous materials or wastes.</p>

Other Information: Contributors: Created: JSA Library Number:	Required Training: <ol style="list-style-type: none"> 1. Proper use of monitoring equipment. 2. Proper technique in using full or half-face respirator or SCBA. 3. Proper technique in moving bulky and heavy containers and in the use of tools necessary for the job. 	Required Personal Protective Equipment (PPE) <ol style="list-style-type: none"> 1. Chemically resistant protective clothing, booties and gloves. 2. Safety goggles or safety glasses; use face shield if deemed necessary. 3. Steel-toed shoes at a minimum if handling heavy containers; wear boots or waders with steel toes if sharps are located on a wet surface or in a body of water. 4. Hard hat with or without rim if necessary. 5. SCBA if necessary.
	Environment, Health and Safety June 2005 EHS-ER-09 For more information about this JSA, contact the <i>Office of Environment, Health and Safety</i> at UC Berkeley, 317 University Hall #1150, Berkeley, CA 94720-1150 (510) 642-3073 • http://www.ehs.berkeley.edu	