

## JOB HAZARD ANALYSIS (JHA): Ice Age National Scenic Trail

### Herbicide Handling: IATR-10

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Approved By: Eric Gabriel, Superintendent

**Required Personal Protective Equipment (PPE):** Eye protection; long-sleeve shirt; long pants; closed-toe impermeable shoes; chemical-resistant, waterproof gloves

Sequence of Job Steps	Potential Hazards/ Injury Sources	Safe Action or Procedure
General Herbicide Use:		Qualifications: Employees shall be certified commercial pesticide applicators or under the supervision of one. The herbicide label shall always be read in full prior to use
Herbicide Storage	Leaking/Exposure	1) Herbicide shall only be stored in plastic, impermeable containers made for chemical storage. 2) All appropriate PPE shall be worn when handling herbicide containers. 3) Any spillage shall be wiped up with a chemical absorbent wipe.
	Herbicide Misidentification	1) Herbicide concentrates shall be labeled and dated. Herbicide mixes must be labeled with contents, concentration, and mix date.
	Chemical Fire	1) Herbicide must be stored in locked, fireproof storage containment.
Herbicide Mixing	Mixing Inappropriate Chemicals	1) Only mix using appropriately labeled and identifiable concentrates.
		2) Thoroughly read the label to ensure synergy of chemicals in mixture and their adjuvants.

	Spillage of product or release into environment. Primary hazard involves herbicide concentrate.	<p>1) Choose a mixing site away from riparian areas and at least 8 ft. from well, which is located near the generator on site..</p> <p>2) Fill tank with half dilutant prior to adding herbicide concentrate.</p> <p>3) Always mix in secondary containment such as a spill tray.</p> <p>4) Use mixing tools, like funnels and measuring cups, to ensure proper herbicide concentration and minimize risk of spillage during pouring.</p> <p>5) All herbicide containment should be closed/sealed immediately after use.</p>
	Exposure to Herbicide During Mixing	<p>1) All appropriate PPE should be worn during mixing.</p> <p>2) Avoid mixing above waist-height to minimize risk of oral, eye, or facial exposure.</p> <p>3) Position yourself upwind while handling products.</p> <p>4) Triple rinse all mixing tools after mixing has been completed.</p>
Herbicide Application	Exposure to Herbicide During Application	<p>1) Wear all personal protective equipment. It is recommended to bring PPE in case of contamination.</p>
		<p>2) Avoid spraying above waist, directly into the wind, in winds above 15 mph, downslope, in temperatures over 98 F, in humidity lower than 20%, or during temperature inversions.</p> <p>3) Avoid touching non-herbicide items with contaminated gloves or clothing.</p> <p>4) Wash hands with soap and water prior to eating, drinking, smoking, using the bathroom, or touching other non-herbicide items.</p>

		<p>5) Wash herbicide gloves with soap and water prior to removal.</p> <p>6) Carry all herbicide applicators upright, including backpack sprayers, spray bottles, etc.</p>
	Tripping/Falling	<p>1) Walk slowly and watch footing, as PPE can reduce field of vision and backpack sprayers can decrease balance/navigation.</p>
Clean Up	Contamination or Exposure	<p>1) Use up or store all herbicide mix in appropriate storage containment. Herbicide should never be stored overnight in backpack sprayers.</p> <p>2) Wear all PPE during triple rinsing.</p> <p>3) Triple rinse all empty, used equipment.</p> <p>4) Wash all contaminated clothing separate from other laundry in hot, soapy water, then line-dry.</p>
		<p>5) Change clothing and shower as soon as possible after spraying.</p>
Herbicide Transport	Spillage/Contamination During Transport	<p>1) Transport all herbicide in secondary containment in case of leaking/spillage.</p> <p>2) Transport herbicide and equipment in truck bed or trailer. Never transport herbicide in a closed cab.</p> <p>3) Ensure containment is secure to minimize jostling and sliding during transport.</p>

Public Safety	Contamination or Exposure	<p>1) Notice signs must be placed in application areas with anticipated visitor use.</p> <p>2) Obey the suggested REI (Return Entry Interval) within the pesticide label.</p>
Emergency Evacuation Events	Contamination/Exposure of Staff	<p>1) Ensure permanent and/or portable eyewash facilities are available at mixing and spraying locations.</p> <p>2) Prior to application, consult with SDS and label to be informed on potential first aid steps in case of exposure.</p> <p>3) Have copies of all SDS and pesticide labels on hand in case of emergency.</p> <p>4) Contact physician immediately with nature of exposure, product name, EPA registration number or active ingredients, and first aid information from label.</p>
At Any Time	Spillage	<p>1) Wear all necessary PPE.</p> <p>2) Control the spill: prevent further release.</p> <p>3) Contain the spill: contain material by constructing a dam or using absorbent litter.</p> <p>4) Clean up: large spills may require consultation using the emergency hotline: 1-800-943-0003</p> <p>5) Report spills that impact or threaten the environment, human health, excess reportable quantities, or create a safety hazard.</p>