

**ROCKY MOUNTAIN NATIONAL PARK
JOB HAZARD ANALYSIS (JHA)**

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1. WORK PROJECT OR ACTIVITY: Old Forest Inn Privy Dig Project		2. DATE:	<input checked="" type="checkbox"/> NEW <input type="checkbox"/> REVISED
3. LOCATION OF JOB: Rocky Mountain National Park	4. DIVISION: Visitor Protection	5. BRANCH: Ranger Division	
6. NAME OF EMPLOYEE(S) INVOLVED IN ANALYSIS: Reggie Hughes	7. SUPERVISOR:	8. DIVISION CHIEF:	
9. REQUIRED PERSONAL PROTECTIVE EQUIPMENT: Eye Protection, mask, full body cover-alls, gloves, boot covers			
10. REQUIRED TOOLS AND EQUIPMENT: Shovels, garbage bags, webbing, pack animal			
11. APPLICABLE STANDARDS: N/A			
12. TRAINING REQUIREMENTS: N/A			
13. SEQUENCE OF JOB STEPS	14. POTENTIAL HAZARD	15. HAZARD CONTROL	
-Hiking up the trail	-Carrying tools	-Make sure tools are properly secured on backpacks, and/or sharp ends pointed away to reduce injury	
-Pushing over privy shelter	-Shelter falling on top of someone	-Position enough people to catch the shelter and bring it down slowly. -If the shelter does fall, make sure escape routes are clear and accessible. -Clear the resting area of the shelter of anything that would not allow it to lay flat.	
-Lifting basket out of ground	-Back injury	-Ensure all personnel lifting have a secure hold on the webbing and use proper lifting form using legs to lift, not the back.	
	-Spillage of waste on personnel	-Wear all PPE -Tip basket slowly on its side	
-Shoveling waste out of basket	-Visitor contact	-Keep all visitors at a safe distance and let them know they are near hazardous materials.	

JOB HAZARD ANALYSIS (JHA) CONTINUATION SHEET

1. WORK PROJECT OR ACTIVITY: Old Forest Inn Privy Dig Project		
13. SEQUENCE OF JOB STEPS	14. POTENTIAL HAZARD	15. HAZARD CONTROL
-Shoveling waste out of basket (cont.)	-Spillage of waste on personnel	-Wear all PPE -Shovel into bags slow enough as not to fling waste on bag holder.
-Storage of waste in bags	-Tears in the bag	-Reduce exposure of bags to sharp objects and other items which may puncture the plastic. -Use as many layers of garbage bags as necessary. -Ensure each bag in the final “package” is individually tied for leakage protection.
	-Waste falling through the bottom of bag	-Do not fill bag so full, that it will not hold the contents.
-Bringing pack animal up trail	-Visitor contact	-Ask visitors to step off trail until the animal has passed through.
-Loading bags on pack animal	-Bag puncture	-Clear pannier of sharp objects before loading.
	-Back injury	-Have at least two people load a pannier using proper loading technique.
	-Unbalanced load on animal	-Make sure panniers are equal in weight.
	-Load falling off pack animal	-Use the correct method of tying down the load, as required by barn staff.
-Clean-up of tools/PPE	-“Dirty” shovels	-Place shovels in plastic or garbage bags, blade first and ensure that the bag is secure around the shovel handle.
	-Stains on PPE	-Once loaded on pack animal, remove PPE and place in separate garbage bag and mark biohazard. Carry out with other bags.
-Place privy shelter back into place	-Shelter falling on top of someone	-Position enough people to catch the shelter and bring down slowly. -If shelter does fall, make sure escape routes are clear and accessible.

JOB HAZARD ANALYSIS (JHA) CONTINUATION SHEET

2. WORK PROJECT OR ACTIVITY: Old Forest Inn Privy Dig Project		
13. SEQUENCE OF JOB STEPS	14. POTENTIAL HAZARD	15. HAZARD CONTROL
-Hiking loaded pack animal down trail	-Visitor contact	-Ask visitors to step off trail until the animal has passed through.
	-Unbalanced load	-Make a point to stop often enough to make sure the load has not shifted. -Check the tie-down system to make sure knots have not loosened. -Tighten pack animal's saddle as needed.
-Load panniers into vehicle	-Back injury	-Always use at least two people to load panniers into vehicle. -Use proper lifting techniques.
	-Bag puncture	-Clear area in vehicle of sharp objects that may put a hole in the bag/pannier.
	-Bags/tools sliding during transport	-Secure bags/tools so they will not shift. -Drive at a safe speed.
-Load waste bags in proper receptacle	-Bag puncture	-Carefully place bags into receptacle, not throwing them down into dumpster. -Be sure not to place bags on top of any sharp objects. -Carefully place PPE garbage in dumpster.
	-Emptying waste from dumpster	-Notify trash disposal company of weight of the biohazard to facilitate next-day service.
-Cleaning shovels/other tools used	-Splashback	-At a minimum gloves, mask, and eye protection should be used while cleaning. -Do not use high-pressure water or cleanser, to reduce splashing.
	-Area around clean-up being soiled	-Clean tools only in the permitted area near the barn (sewage dump station). -Clean and disinfect any area in contact with the tools and waste.

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3. WORK PROJECT OR ACTIVITY: Old Forest Inn Privy Dig Project		
13. SEQUENCE OF JOB STEPS	14. POTENTIAL HAZARD	15. HAZARD CONTROL
-Cleaning shovels/other tools used (cont.)	-Shovels/tools clean but not safe	-Use a strong disinfectant or bleach on the parts of the tools exposed to the waste.
-Tools back in the tool shed	-Tools used for other than Old Forest Inn Project	-Place tools in a separate spot than any others in the shed. -Mark on tools: "OFI," or "Biohazard"; "Use only for OFI."

Emergency Evacuation Instructions

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) become seriously ill or injured at the worksite.

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using the victim's name).
- b. Type of assistance needed, if any (ground, air, or water).
- c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequency(s).
- e. Contact Person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed and direction, visibility, temperature).
- h. Topography.
- i. Number of individuals to be transported.
- j. Estimated weight of individuals for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

JHA and Emergency Evacuation Procedures Acknowledgement

We, the undersigned Supervisor and employees, acknowledge participation in the development of this JHA and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents.

SUPERVISOR'S SIGNATURE		DATE:
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
DIVISION CHIEF'S SIGNATURE		DATE:

JHA Instructions

The JHA shall identify the date(s) the JHA was written, the location of the work project or activity, the Division and Branch writing the JHA, the name of the employee(s) writing the JHA, the name of the employee(s)'s supervisor approving the JHA, and the name of the Division Chief approving the JHA. The Supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

Blocks 1, 2, 3, 4, 5: Self explanatory

Block 6: Name of employee(s) writing the JHA

Block 7: Name of employee(s)'s supervisor approving the JHA

Block 8: Name of the Division Chief approving the JHA

Block 9: List all required Personal Protective Equipment (PPE) identified in Hazard Control section of the JHA.

Block 10: List all the tools and equipment required to perform the work project or activity.

Block 11: List all applicable standards associated with the completion of the work project or activity. (Example: OSHA 1910.134 Respiratory Protection)

Block 12: List specific employee training required to perform the work project or activity.

Block 13: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).

Block 14: Identify all known or suspect hazards associated with each respective task/procedure listed in block 13. For example:

- a. Research past accidents/incidents
- b. Research appropriate literature
- c. Discuss the work project/activity with participants
- d. Observe the work project/activity
- e. A combination of the above

Block 15: Identify appropriate actions to reduce or eliminate the hazards identified in block 14. Abatement measures listed below are the order of the preferred abatement method:

- a. Engineering Controls: The most desirable method of abatement. Examples: Ergonomically designed tools, equipment, and furniture
- b. Substitution: Example: Switching to high flash point, non-toxic solvents
- c. Administrative Controls: Example: Limiting exposure by reducing the work schedule
- d. Personal Protective Equipment (PPE): The least desirable method of abatement. Example: Hearing protection when working with or close to portable machines (chainsaws, rock drills, and portable water pumps)
- e. A combination of above