

<b>Appalachian National Scenic Trail</b>		<b>1. WORK PROJECT/ACTIVITY</b> <b>Waste Facility (Privy) Management</b>	<b>2. LOCATION</b> <b>Parkwide</b>	Includes work performed on lands of National Park Service, USDA Forest Service, and various states' park and lands
<b>JOB HAZARD ANALYSIS (JHA)</b> References-FSH 6709.11 and -12 <b>OSHA</b> <b>(Instructions on Reverse)</b>		<b>3. NAME(S) OF ANALYST(S)</b> Keith Stegall	<b>4. Work Supervisor</b> <b>Various</b>	<b>5. DATE PREPARED</b> <b>9/02/2020</b>
Required Standards and General Notes:	Maintenance may include digging tasks as well as emptying or processing bins of fresh and biodegraded human waste. Biodegraded waste (moldering type of privy) requires minimal PPE. Unprocessed human waste ("batch bin", "hot composting") requires full coverage of exposed skin and clothing with impermeable coverall, gloves, and waterproof boots. Face/Eye protection required. Refer to other related JHA's.			
Available Personal Protective Equipment	Hand sanitizer; disinfectant (solution/wipes). Sturdy cut-resistant boots; Impermeable gloves (rubber, vinyl, neoprene, nitrile, etc.); Eye and face protection. Highly liquid waste may require impermeable/rubber boots, overalls, or a work apron.			
Tools and Equipment	Waste Management Labeled Tools/Equipment: shovel, rake, broom, pitchfork, wash jug, and plastic bucket; Dry bark powder or charcoal for tool cleaning			
Required Training	ATC Backcountry Sanitation Manual, Bloodborne Pathogen Training (BBP); Operational Leadership Training (TrailSafe Training);			
<b>7. TASKS/PROCEDURES</b>		<b>8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE</b>	<b>9. ABATEMENT ACTIONS OR PROCEDURES</b> Engineering Controls * Substitution * Administrative Controls * PPE	
Pre-Operation		Lack of Knowledge/Training	<ul style="list-style-type: none"> <li>All volunteer/staff performing maintenance activities in or around privies shall obtain and maintain a bloodborne pathogen training certification prior to performing work – re-certification is an annual requirement.</li> <li>All volunteers/staff performing maintenance activities in or around privies must be trained by a competent person prior to performing work.</li> <li>When applicable, refer to all tool/equipment manuals and Safety Data Sheets (SDS) for proper application, operation, rating, and care.</li> <li>All volunteers/staff performing maintenance activities in or around privies must read and understand the relevant sections of the ATC Backcountry Sanitation Manual.</li> </ul>	
		Defective and/ or Unlabeled Tools and/or Equipment	<ul style="list-style-type: none"> <li>Ensure all tools are in proper working condition.</li> <li>If a tool is found to be defective, remove the tool from inventory and mark it as broken.</li> <li>Label all tools used exclusively for waste management as such.</li> </ul>	
		Improper Risk Assessment	<ul style="list-style-type: none"> <li>Occupational Exposure means: <i>Reasonably anticipated skin, eye, nose, or mouth contact with blood or other potentially infectious materials that may result from the performance of a person's duties.</i></li> <li>Other Potentially Infectious Materials means: <i>The following human body fluids: urine, feces, vomit , or any other body fluids. This includes items that may have been exposed to or contaminated by these materials.</i></li> <li>Use Operational Leadership process to determine if site location are of high-risk in nature:</li> </ul>	

		<ul style="list-style-type: none"> <li>○ Examples of high-risk sites may include: sites adjacent to high density urban areas, known drug use areas, homeless encampments, park boundary, high visitation sites, areas of unmanaged human waste, etc.</li> <li>○ Examples of low-risk sites may include: backcountry areas, low visitation areas, rural areas, etc.</li> </ul>
<p>Waste Management:</p> <ul style="list-style-type: none"> <li>● Knocking down the cone, sanitizing the head</li> <li>● Switching/Rotating bins</li> <li>● Picking up waste adjacent to facilities</li> <li>● Removing and transporting “finished” compost from moldering privies.</li> </ul>	<p>Biological Contamination</p>	<ul style="list-style-type: none"> <li>● Required PPE: Long pants, disposable impermeable gloves and footwear, and eye protection.</li> <li>● Recommended PPE: Face protection.</li> <li>● Avoid loose-fitting clothing and unrestrained hair that could brush into contaminated areas. If possible, try to use only clothes that are used for composting tasks.</li> <li>● Plan sequence of work to limit contamination of tools and surfaces.</li> <li>● During bug season, avoid swatting or scratching with soiled hands.</li> <li>● Consider all the components of the privy system potentially contaminated.</li> <li>● Once you have begun to interact with your waste management system, avoid adjusting your clothing, resting your hands on your hips or in pockets, folding your arms, etc. Keep your hands off your body, and touch nothing but tools and equipment related to the waste management tasks.</li> <li>● When working with batch bin waste that poses “splash” potential, use a contractor bag, elbow-length impermeable gloves, eye protection, coverall, or work apron to cover your clothing. It is recommended to use face protection with a plastic face shield or goggles to prevent exposure to pathogens. Wear appropriate impervious footwear.</li> <li>● Keep your mouth closed when mixing and/or dumping sewage.</li> <li>● Keep tool handles away from the sides of the toilet and/or containers. Use dry bark powder, charcoal, or duff for cleaning tools after use.</li> <li>● If you cut or nick yourself while handling contaminated tools or surfaces, stop and wash well with soap and water, and follow with a minimum 60% alcohol-based hand sanitizer. Bandage before finishing the job. Do not risk infection.</li> <li>● Mark all tools/equipment “FOR COMPOSTING USE ONLY” with paint or other permanent marker. Use only tools marked for this purpose. If possible, lock tools away from visitors.</li> <li>● Never touch finished compost with unprotected hands, no matter how “done” it appears.</li> <li>● Moisten material with water if particles can become airborne.</li> <li>● Place non-compostable trash picked from bin into an impermeable trash bag. Trash may be disposed of in a regular trash stream. Be cautious of sharp objects that may penetrate gloves.</li> </ul>

		<ul style="list-style-type: none"> <li>• Dispose of composted material at least 200ft from water and camping areas, or as directed by the land managing agency or waste management authority.</li> <li>• Do not eat, drink, or smoke while exposed to unprocessed waste.</li> <li>• Ensure there is a labeled (Composting Only) wash jug on site at the facility. Wash jugs should never leave the site. Reference Backcountry Sanitation Manual, Section 4.3.</li> <li>• If you come in contact with raw sewage, wipe it off with dry bark powder or charcoal, then rinse with soap and water and sanitizer agent.</li> <li>• After handling anything potentially contaminated or after performing any mixing, turning, or knocking down of the cone, always wash hands well with soap and water, followed by hand sanitizer.</li> </ul>
	Back / Muscle Strain	<ul style="list-style-type: none"> <li>• Be aware of body positioning.</li> <li>• Lift with knees, not the back.</li> <li>• Take frequent breaks to avoid overexertion.</li> <li>• Work as part of a team, if available.</li> <li>• Finish it another day.</li> </ul>
	Eye Injuries	<ul style="list-style-type: none"> <li>• Eye protection must fully cover the front and sides wrapping glasses, goggles, etc.</li> <li>• Ensure eye protection provides enough visibility by keeping them clean.</li> <li>• Discard and replace eye protection when scratched or vision becomes impaired.</li> <li>• Do not adjust or remove eye protection with contaminated hands/gloves.</li> </ul>
<p>Internal and External Building Maintenance / Repairs</p> <ul style="list-style-type: none"> <li>• Cleaning / Wiping Surfaces</li> <li>• Sweeping / Mopping Floors</li> <li>• Structural Maintenance and Repairs</li> <li>• Resupplying materials</li> </ul>	Biological Contamination	<ul style="list-style-type: none"> <li>• PPE Required: rubber, latex, or vinyl gloves, eye protection.</li> <li>• Plan sequence of work to limit contamination of tools and surfaces.</li> <li>• Prior to beginning internal work, ventilate the building by opening doors/windows for 30 minutes.</li> <li>• Only wet-cleaning methods should be used to minimize the chance of aerosolization of viruses. Dampen surfaces with a mixture of bleach and water (1/3 cup of household bleach to one gallon of water) and allow it to sit for ten minutes prior to sweeping.</li> <li>• Never vacuum or sweep areas with rodent droppings without dampening area beforehand.</li> <li>• Never clean areas where there is unusually high presence of rodent infestation. Stop work and consult the land manager for guidance on next steps.</li> <li>• Follow the precautions above for working around contaminated surfaces.</li> <li>• When working at waste facilities with tools not labeled specifically for composting tasks, sanitize tools when work is complete.</li> </ul>

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Importing Waste Management Materials (wood shavings / chips).	Back / Muscle Injury	<ul style="list-style-type: none"> <li>● Carry load in a balanced manner.</li> <li>● Consider terrain, distance, and environmental conditions when planning for how much to carry.</li> <li>● Take breaks when needed. Split the load with others.</li> <li>● When appropriate, get help moving/lifting objects as needed.</li> <li>● Adhere to JHA for Performing Work Activities in the Field</li> </ul>
Remove / Contain / Dispose of PPE	Biological Contamination	<ul style="list-style-type: none"> <li>● Remove washable/reusable gowns and over clothing, dispose in a dedicated container or laundry basket.</li> <li>● Remove gloves by use of a safety method: One glove removed inside out and held by the opposite hand and turning the remaining glove inside out and disposed of in trash.</li> <li>● Remove and clean safety glasses and spray shields.</li> <li>● PPE trash may be disposed of in regular trash streams.</li> </ul>
10. OFFICIAL SIGNATURE  <i>Kurt Speers</i>	11. TITLE <b>Kurt Speers Acting Chief Ranger - CDSO</b>	12. DATE <b>09/08/20</b>

Previous edition is obsolete

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**JHA Instructions (References-FSH 6709.11 and .12)**

The JHA shall identify the location of the work project or activity, the name of employee(s) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer 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, and 6: Self-explanatory.

**Block 7:** 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 8:** Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:

- a. Research past accidents/incidents.
- b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.
- c. Discuss the work project/activity with participants.
- d. Observe the work project/activity.
- e. A combination of the above.

**Block 9:** Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method:

- a. Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture.
- b. Substitution. For example, switching to high flash point, non-toxic solvents.
- c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
- d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, and portable water pumps).
- e. A combination of the above.

**Block 10:** The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.

Blocks 11 and 12: Self-explanatory.

**Emergency Evacuation Instructions (Reference FSH 6709.11)**

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

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation).
- c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequencies.
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & 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 Acknowledgment**

We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

SIGNATURE      DATE

SIGNATURE      DATE

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