## Appalachian National Scenic Trail

### 1. WORK PROJECT/ACTIVITY

**Pesticide Handling and Use**

### 2. LOCATION

**TRAIL WIDE**

Includes work performed on lands of National Park Service, and various states’ park and lands

### JOB HAZARD ANALYSIS (JHA)

References: FSH 6709.11 and -12 OSHA

(Instructions on Reverse)

### 3. NAME(S) OF ANALYST(S)

Jim Von Haden, Integrated Resources Program Manager; Keith Stegall, Facility Manager

### 4. Work Supervisor

Various

### 5. DATE PREPARED

12/1/2020

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**Required Standards and General Notes:**

Pesticide applications will only be performed by or under the supervision of certified or registered applicators licensed under the procedures of a federal or state certification system. All pesticide treatment projects need approval from land managing agency before work begins. Product labels must be strictly followed. Current safety data sheets (SDS) must be kept with product and be readily available to the applicator at all times. Pesticide use must be documented and reported according to requirements of the authorizing land manager. This JHA does not cover personal insect repellents, insecticides, or bear deterrent sprays, nor products applied to pets or livestock.

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**Required Personal Protective Equipment:**

Wear all personal protective equipment and clothing as required by the product label.

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**Tools and Equipment:**

Applicator tanks, nozzles, containers; water supply; spill kit and shovel; eyewash bottle; plastic measuring cups and funnel; first aid kit

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**Available Training**

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### 7. TASKS/PROCEDURES

#### 8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE

#### 9. ABATEMENT ACTIONS OR PROCEDURES

**Engineering Controls * Substitution * Administrative Controls * PPE**

**Pre-Operation**

- Lack of training / familiarity with chemicals and PPE

- Familiarize yourself with the Safety Data Sheet (SDS) and degrees of exposure and necessary response.
- Develop and share an emergency response plan with volunteers and staff.
- Ensure a Spill Plan is in place that contains proper phone numbers and contact persons in case of spill/contamination.

**Transportation of Pesticides**

- Exposure to chemicals/Contamination
- Pesticide could be spilled.

- Ensure containers are not damaged before loading.
- Only transport the amount of pesticide needed for the day’s use at the site.
- Always ensure that pesticides are stored in a secure location during transport.
- Transport according to state guidelines and always ensure that pesticides are stored in a secure location during transport.
- If bed liners are used, only use those that are non-porous.
- Carry herbicide containers inside catch basins or make sure they are secured to prevent tipping or jarring.
- Any previously opened pesticide containers should always be transported in secondary containment basins.
- Carry spill kit in vehicle.
| Mixing, Handling Pesticides | Exposure to chemicals | Always read and follow the product label/labeling & SDS.  
Wear PPE as specified on product label. |
| Spills or direct contact with chemicals | Mix pesticides in a well-ventilated area.  
Fill tank halfway with water, add pesticide, then finish filling tank.  
Use only recommended amounts; close container immediately after use.  
Mix chemicals in a secondary containment basin.  
Keep spill kit within easy reach. |
| Treatment with Pesticide | Exposure to chemicals | Always check equipment and fittings for leaks and calibrate with water before using pesticides.  
Wear appropriate PPE. Take extra time when walking with PPE; goggles can reduce the field of vision; watch footing; backpack sprayer can impede balance.  
Do not apply pesticides in the rain. Do not spray if temperature is over 98 degrees F, if winds are above 15 miles per hour, or if humidity is less than 20%.  
Pay attention to wind conditions and stay upwind of applicator nozzle. Do not spray under high wind conditions.  
Avoid walking through treated areas.  
Do not touch your face, or any other body part, food, or tobacco products, while wearing your chemical resistant gloves; If your skin comes in contact with the chemical solution, immediately wash the area with soap and clean water; If your eyes come in contact with the chemical solution, immediately use the eyewash bottles to rinse your eyes.  
Treat chemicals with respect – don’t get complacent; be aware of the effects of mixing chemicals. Read labels.  
When work is completed, remove and bag PPE used when mixing or applying pesticides. Wash or dispose of as instructed by manufacturer. |
| Spills or direct contact with chemicals | Ensure spill kit is available at work site.  
If a spill occurs, treat the area with an appropriate absorbent (sand, cat litter, synthetic spill kit, etc.) material.  
After containing the spilled pesticide, bag and remove the material.  
Keep a spare set of clothes at the work site in case clothing becomes contaminated.  
Spills, personal exposure, or unapproved uses of pesticides must be reported to the designated agency contact no later than 24 hours after the occurrence. |
| Public Safety | Contamination of private landowners or neighbors | • Notice signs must be clearly posted, with special care taken in areas of anticipated visitor use.  
• Check to determine any state reporting requirements for sensitive persons, if any.  
• Create buffers between treatment area and private land/residences; clearly mark buffers. |
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<td>Storage of Pesticide</td>
<td>Storage Limitations</td>
<td>• Follow product label regarding shelf life.</td>
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| | Equipment becomes contaminated | • Thoroughly clean and rinse equipment after each use prior to storage; be sure to remove coveralls before getting back into vehicle.  
• Wear PPE while cleaning equipment. |
| | Exposure to heat/sunlight | • While at the work site, keep pesticide containers in the shade to avoid pressure build-up. |
| | Security of stored pesticides | • Store pesticides in a designated, well-ventilated, cool, dry, locked location with non-porous floor; Chemical containers should be stored in secondary containment basins. Sign the storage area as having pesticides.  
• Ensure all containers are clearly labeled, especially those pesticides which have been transferred to a new container.  
• All leftover chemicals for the day must be returned to storage. |

10. OFFICIAL SIGNATURE

Kurt W Speers  
Acting APPA Chief Ranger

11. TITLE  
Kurt Speers  
Acting APPA Chief Ranger

12. DATE  
12/01/2020

Previous edition is obsolete (over)
### 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:

- Research past accidents/incidents.
- Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.
- Discuss the work project/activity with participants.
- Observe the work project/activity.
- 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:

- **Engineering Controls** (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture.
- **Substitution.** For example, switching to high flash point, non-toxic solvents.
- **Administrative Controls.** For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
- **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).
- 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.

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### 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:

- Nature of the accident or injury (avoid using victim’s name).
- Type of assistance needed, if any (ground, air, or water evacuation).
- Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- Radio frequencies.
- Contact person.
- Local hazards to ground vehicles or aviation.
- Weather conditions (wind speed & direction, visibility, temperature).
- Topography.
- Number of individuals to be transported.
- Estimated weight of individuals for air/water evacuation.

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

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### 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:

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Blocks 11 and 12: Self-explanatory.