U.S. Department of Agriculture Forest Service **JOB HAZARD ANALYSIS *(JHA)*** References-FSH 6709.11 and -12 *(Instructions on Reverse)*	**1. WORK PROJECT/ACTIVITY** Working with Paints, Stains, and Solvents	**2. LOCATION** George Washington and Jefferson National Forests	**3. UNIT** All Units of the George Washington and Jefferson National Forests
JOB HAZARD ANALYSIS (JHA)	**4. NAME(S) OF ANALYST(S)** Jessica Robinson, Matthew Helt	**5. JOB TITLE** Engineering Program and Recreation Program	**6. DATE PREPARED** 14 June 2021

Standards and General Notes:	Review SDS for specific products. Use non-solvent based products with low VOCs when possible
Personal Protective Equipment:	Shoes, closed toe, clip on toe protectors as needed when moving/transporting cans. Hand Protection (Gloves/solvent-resistant gloves) when applying. Protective Clothing (coveralls, long sleeves, pants), Eye Protection Dust Mask when preparing surfaces.
Tools and Equipment:	First aid kit, paint brush or roller, roller pan, paint bucket, clean up rags, drop cloth, supplies, barricades/barriers, signage, disposal, fire extinguisher in vehicle or facility
Available Training:	

7. TASKS/PROCEDURES	**8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE**	**9. ABATEMENT ACTIONS OR PROCEDURES** **Engineering Controls * Substitution * Administrative Controls * PPE**
Storing paint, stain, or solvent	Inhalation injury due to inappropriate storage	● Paint, stain, or solvent should be stored in original containers with accurate/visible labels. ● Follow SDS or label for instructions on storage. ● Properly store and tag toxic materials. ● Store flammable and/or combustible materials in well ventilated areas or fire-resistant cabinets designed for that purpose. ● Water-based (latex or acrylic) products do not need special storage.
Transporting paint, stain, solvents	Hazards due to load moving, shifting, and spills	● Make sure container lid is secure before transporting. ● Keep container upright and secure items in rear of vehicle. ● Carry a fire extinguisher and SDS sheets in transport vehicle.
	Injury due to strains, loading, unloading, moving, stacking	● Use correct handling and lifting techniques/methods. ● Adequately plan delivery, location, and work area to ensure use of roadways, footpaths, deliver to close proximity to work area. ● Stack neatly and safely. ● Barricade and identify/sign work area. ● Ensure vehicle parking and work areas are on flat even surface. ● Be mindful of overhead hazards.
Establish Work Area	Injury due to slips, trips, falls, unauthorized public access	● Identify all points of access to work area, place barricades and signage to secure designated work area. ● Be sure there is adequate visibility and warning before approaching work area. ● Regularly check area, signage and barricades to be sure area is secured.

		● Ensure a safe passage to and from area and emergency exits in the event of an emergency.
	Injury due to electrocution	● Do a pre-work risk assessment for any electrical hazards. Where you identify electrical hazards, a qualified electrical contractor should be engaged to eliminate or control the risks. ● Be aware of any electrical cables/electrical wiring particularly older wiring, and electrical fittings – which can cause fire and shock. ● Keep in constant contact with someone.
Surface Preparation	Injury due to exposure to lead paint	● If the painting surface was constructed prior to 1978 you should assume it contains lead. ● If you are unsure of the age of the structure, contact your supervisor and perform an EPA certified/approved lead paint test. ● If the painting surface is showing signs of flaking and/or peeling paint, do not attempt to scrape or remove paint. Contact your supervisor to schedule a certified contractor to remediate the lead from the surface.
	Injury due flakes in eyes, cuts, splinters	● Wear impact-rated eye protection. ● Use correct PPE (dust makes, protective clothing, gloves). ● Review surface preparation method (sanding, power washing, cutting, scrapping) and ensure compliance with appropriate safety practices and procedures for particular method and equipment (follow additional JHA guidance). ● Isolate work area, set up containment area if required, use drop sheets to protect the ground surface.
	Injury due to inhalation of dust, fumes	● Ensure proper ventilation by fan or other means. ● Check the SDS for ventilation requirements. ● Do not perform work or activities that requires a respirator. Contact your supervisor.
Handling/Applying paint, stain, solvents	Injury due to skin contact	● Wear appropriate PPE (coveralls, long sleeve shirt, solvent-resistant gloves if appropriate).
	Injury due to ingestion	● Wash hands after use, especially before eating or smoking. ● Do not eat or smoke while handling paint, stain, or solvents.
	Injury due to inhalation	● Painting / staining should not be performed inside or in a confined space. ● Ensure proper ventilation by fan or other means. ● Check the SDS for ventilation requirements. ● Do not perform work or activities that requires a respirator. Contact your supervisor.
	Injury due to spillage	● Place paint, stain, solvent container in upright, stable position. ● Communicate with others when using paint, stain, solvent. ● Let others know where the container is to avoid spill. ● Isolate work area, and use drop sheets to protect the ground surface in and around facilities.

	Injury to eyes	● Wear splash-rated eye protection at all times
	Injury due to strain	● Use equipment where appropriate for adequate reach and application.
Cleaning paint brush/tools after use	Injury due to skin contact	● Wear solvent-resistant gloves. ● Avoid splashing cleaning fluid while washing tools. ● Wear appropriate PPE (protective clothing, gloves, long sleeve shirt and pants).
	Injury due to ingestion	● Wash hands after use, especially before eating or smoking.
	Injury due to inhalation	● Avoid breathing in solvents, keep container away from face. ● Wash tools only in well-ventilated area. ● Check the SDS for ventilation and clean up requirements.
	Injury to eyes	● Wear splash-rated eye protection. ● Avoid splashing while washing tools.
Cleaning up spilled paint, stain, solvent	Hazard from ingestion or inhalation	● Refer to SDS for spill and cleanup procedures. ● Wear solvent-resistant gloves. ● Avoid breathing vapor. ● Avoid skin contact. ● Contain and absorb with sand or vermiculite (or appropriate skill kit absorbent material).
	Improper cleanup and storage	● Empty trash containers regularly. ● Discard rags, paper and other items soaked with flammable materials (such as oil, gas, or solvents) in approved metal containers. ● Label flammable and combustible materials clearly and store in separate place, away from heat and ignition sources. ● Use only approved safety containers for flammable and combustible liquids.
	Injury to eyes	● Wear splash-rated eye protection. ● Avoid splashing while washing tools.
	Injury due to ignition	● Avoid use near sources of ignition. ● Keep tri-class fire extinguisher near worksite
Environmental Contamination	Injury due to improper disposal procedures	● Dispose of unused product and/or cleaning solutions in approved manner. Refer to the SDS for proper disposal procedures. ● Protect adjacent soil and water bodies from contamination by using drop cloths or other containment products. ● Dispose of materials according to product labeling.
10. OFFICIAL SIGNATURE JOBY TIMM Digitally signed by JOBY TIMM Date: 2021.06.14 17:38:40 -04'00'	**11. TITLE** Forest Supervisor	**12. DATE** 6/14/2021

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