*This template is a Microsoft Word table – use MS Word’s online “Help” feature for instructions about how to add text and format tables.*

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|  | Job Safety Analysis | | |
| Portland State University | |  |
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| Environment, Health & Safety | | |
| Consolidating Solvent | | |
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| **Task** | **Hazards** | **Controls** |
| 1. Position and open the empty drum in the hood. | Muscle strain or impact injury. | See the "Drum Moving" JSA.  See "Opening/closing drums with bung wrench" JSA. |
| 2. Attach the grounding cable to the drum. | None foreseen. |  |
| 3. Transfer the containers to be consolidated to table top. | Muscle Strain. | Lift the chemical containers carefully without bending your back. |
| Exposure to chemical spills. | Don’t drop the chemical containers. Grasp firmly at the neck or grip and support at base. |
| Foot injury. | Don't drop the chemical containers.  Wear steel-toed shoes. |
| 4. Open and measure the pH level of individual containers. | None foreseen. |  |
| 5. Perform solvent compatibility test. | Exposure to hazardous fumes or spills. | Wear appropriate respiratory and personal protective equipment. |
| Exposure to hazardous reactions while testing materials. | Test only small quantities of each material.  Observe for any signs of reaction (changes in state, color, crystalization, visable fumes, temperature, etc.). |
| 6. Pour waste chemicals into the drum. | Same hazards as Task # 3. | Same controls as Task #3. |
| Potential chemical exposure due to overflow of the drum. | Keep track of the quantities as they are dumped into the drum.  Watch the fluid level in the drum by lifting the funnel and using a flashlight to see the fluid level.  Verify the air flow in the hood and the date of flow calibration of the hood.  Make sure you are not dumping into the wrong drum, potential chemical reaction. |
| 7. Seal the drum bung. | Hand and finger injuries. | See “Bung Wrench” JSA. |
| 8. Move the drum out of the hood and into its storage area. | Muscle strains and impact injuries from losing control of the drum. | See “Moving Filled Drums” and “Palletizing Drums” JSA’s. |
| **Required Training:**  1. EPA HAZWOP Training.  2. Familiarization with solvent consolidation procedures. 3. Pour room automatic door training.  4. Respiratory fit tested. | **Required Personal Protective Equipment (PPE)**  polycoated tyvek, half or full face respirator with the appropriate cartridges, chemical and puncture resistant gloves, face shield, steel toed shoes | |
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| **Other Information:** |  | | |
| **Contributors:** | Environment, Health & Safety | | |
| **Created:** | June 2006 | | |
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