The Lab Manager usually reviews the SOP with the SDS documents for the chemicals in the associated chemical process.

There should be a Prior-Approval Request Form and the Chemical Manufacturer’s SDS submitted together by the Faculty/PI/Research Team. <https://www.asu.edu/ehs/forms/new-hazardous-chemical.pdf>

Things to review:

1. Accuracy of Information copied from SDS sections to the Form.
2. Confirm Safety Hazard Communication is accurate and complete (sometimes use another vendors SDS with updated information for comparison to known matching CAS#).
3. Confirm appropriate PPE is available in the Lab (check glove types/thicknesses from SDS and relay info to the Research Team in a summary review format).
4. Confirm Engineering Controls are called out and exist as functionally tested in the Lab space, (i.e., use this chemical only in the Solvent Fume Hood).  Safety checks for the Fume Hood should be noted in the SOP.
5. Confirm if Eyewash / Safety Shower is required to work with the chemical/process.  If so, the SOP should call out this info, plus specify the Frequency of Safety Checks of the Safety Equipment, complete with info of what to do if it is not functional or available.
6. Ensure the Emergency Escalation Procedures match current procedures with accurate information (Contacts/Phone Numbers).
7. Give guidance on storage of chemicals back to appropriate storage location (capped and closed, and appropriately contained and labeled secondary containers).
8. Give guidance on Hazardous Waste Management for waste and unused/unwanted Hazardous materials.  This can also specify guidance on Accumulated Waste containers, properly contained and labeled, and frequency of Haz Waste Request for pick-up.
9. Physically enter the Lab to check the Lab has the proper / appropriate / fully functional Safety Equipment, Spill Kits, First Aid Kits, Engineering Controls, and PPE. This can count as a Lab Safety Self-Inspection. With a quick form update, this will allow us to focus on Lab Safety and address any observed Safety issues / concerns identified.

There are some Standard Operating Procedures (SOP) Templates that ASU EHS provides: [Chemical safety | Arizona State University (asu.edu)](https://cfo.asu.edu/chemicals#sop-templates-) . The SOP Templates need updated as you perform the review.  Much of the First Aid information is dated and needs to be brought to latest CPR and Emergency Escalation Steps. FSE DO Infrastructure and Safety Team has created and reworked some Particularly Hazardous Chemical (PHS) SOPs that provide a good starting point and capture the Safety requirements needed for the SOP. Please refer to our website first when checking for an SOP, as we did a lot of work to update and review these for accuracy. We are in the process of adding more content to the website (and have more SOPs). Please ask and we can assist with any that may not be listed here, (i.e., HF has a packet and just needs added to the website).

[SOP Templates – Engineering Office of Health and Safety (asu.edu)](https://safe.engineering.asu.edu/resources/soptemplates)

After the Lab Manager review, then it is sent to our FSE DO Infrastructure and Safety Team (Amanda + Rita) for review/sign off.  Once approved, please forward the approved copy to us.

On occasion of crunched staff schedules, we may request you to forward the SOP to ASU EHS for their review/approval. Please send Chemical Approval Forms to our FSE DO Team first and follow the recommendations from this team.

The approved SOP is then printed and reviewed by all (Lab Manager, FSE DO IaST, ASU EHS, Research Team). The Research Team is required to review the SOP again with signatures and dates collected for Each Lab Personnel.  The signed copy should be kept with Lab Documentation.   (We can scan the document to a .pdf format.) Adobe Acrobat (for .pdf files) allows on-line signing, as well. If the SOP is a frequently used item in the lab, a hardcopy should be made available in the Lab for quick reference. Plastic sleeves are available to protect the hardcopy sheets.