Lab Walkthrough Instructions and Examples

Spring 2016
DATES

• **March 17**: emails go out to all LSOs
• **March 17 – April 20**: perform walkthroughs and upload forms
• **April 27**: last day walkthrough forms can be uploaded to appropriate folder
Walkthrough Purpose

The JST walkthroughs are an educational opportunity for LSOs to show them different laboratory environments and the concomitant safety hazards and measures, and such walkthroughs do not in themselves carry any regulatory authority. The discussion with peer LSOs is a key component of the walkthrough process and should be a collaborative opportunity to practice risk analysis skills and discuss alternative group safety cultures. Different doesn't mean wrong.

Please keep your comments constructive and suggestions reasonable.

The Department Safety Committee and or DEHS Anna Sitek (englo131@umn.edu) encourage you to contact them for clarification of any safety requirements, have concerns about a research group's practices and if you ever feel unsafe in ANY University laboratory.
Lab Walkthroughs

General System:
- New groups of LSO’s from 3-4 PIs
  - Some groups have multiple LSOs per PI
  - PIs were grouped by similar hazards, and LSOs
- Evaluate all 3-4 labs in one session
- If you have more than one LSO in your group, choose one LSO to act as the official auditor. Other LSOs may come along for instructional purposes, but scheduling should not be based on when the “extra” LSOs can attend.
- When evaluating your lab you function as LSO
  - Give explanations, answer auditor questions etc.
  - Print out report from the most recent audit as a reference
- Others evaluate the lab
- Move to next lab and do the same
A group consisting of LSOs from the Woodward, Curie, Pauling, & Schrödinger labs.
Hazard Categories

• P-chem/lasers
• Organic synthesis
• Inorganic synthesis
• Polymers
• Chemical biology
• Large-scale reactions
On Audit Day

• Group moves through the lab together
• Fill out one form for each lab as a group
  – Note: PIs will read your feedback without further editing. Please be respectful and stick to the task at hand
• Submit the form (ONE) submission for each principal investigator
• Do NOT submit the form for your own PI; another auditor must submit the form (this eliminates conflicts of interest)
On Audit Day

• Must take 1 “emulate” (example of aspect which should be emulated) AND 1 “improvement” (example of area which needs some work) photo for each lab

• It is still a good idea to take more pictures than that

• These photos will be used in the event of a tie to decide the winner of the departmental safest lab award
## Audit Submission Form

<table>
<thead>
<tr>
<th>Safety Item</th>
<th>Score</th>
<th>Possible Scores</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researchers wearing correct PPE</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>No food or drink in lab</td>
<td></td>
<td>(1 or 5)</td>
<td></td>
</tr>
<tr>
<td>Aisles and hallways clear of chemicals and clutter</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Electronics near possible leakage sources raised off floor</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Hood sashes low</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Proper lab signage (emergency contacts, PPE requirements)</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Samples and chemicals in secondary containment where appropriate</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Samples and chemicals segregated by hazard</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Samples and chemicals labeled (name, date, hazards)</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Items are organized, secured, and stored to minimize risk and are easily accessible</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Waste labeled and capped</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>Waste less than 90 days old</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
<tr>
<td>SOPs available to group (Do researchers know location?)</td>
<td></td>
<td>(1,2,3,4,5)</td>
<td></td>
</tr>
</tbody>
</table>

By popular demand, this category has changed.
Examples

• See extensive examples and explanations of different numbers in the categories on the later pages of the walkthrough form.

• The following slides have general guidelines for numbers and some pictorial examples.
Exemplary: 5”

- **Exemplary** – This level of housekeeping and safety is exceptional (beyond expected) and should be used as an example for other labs. These are examples of not just adherence to minimum safety requirements, but striving for ‘best practices.’ **Use this rating sparingly.**
“Excellent/Above average: 4”

- **Excellent/Above Average (4)** - Safety issues are all addressed. The safety is better than in peer labs or good given the limitations of the space and number of type of hazards in the lab.
“Average/Acceptable: 3”

- **Acceptable** – Most safety issues are being addressed adequately, although there is still room for improvement. **This category could include some minor safety concerns.** Issues could be improved quickly. **Use this number for any category that does not apply to a lab.**
“Below Average: 2”

- **Below average** – Several safety concerns are not addressed. The safety is not at the same level as in other peer labs or should be better given the limitations of the space and the number and type of hazards in the lab.
“Needs attention: 1-2”

- **Needs Attention**— The housekeeping or safety practices in this area are not acceptable and should be addressed promptly. **Significant neglect of the standards** listed in the checklist or which make you as a visitor feel uncomfortable should go in this category.
Incentive System Changes

• With the numerical system, the scores will be tallied for each lab. The lab with the highest score will be awarded the departmental safest lab award.

• For a tie, the Analysis and Compliance Committee will review the pictures and forms (names will be removed to decrease bias among the voters) and vote on the most-deserving lab.
What to Do If You’re Away During the Audit

• Find a substitute (NOT another LSO in your group)
• Email jst with the name of the substitute