

Steward Observatory Site Safety Inspection



Date: July 16, 2006

To: Jeff Kingsley
Russ Warner

From: Dale Webb and Karen Kenagy

Re: Steward Observatory Safety Inspection
May 25, 2006

SUMMARY-SAFETY INSPECTION OF STEWARD OBSERVATORY

On May 25, 2006, a safety inspection of the Steward Observatory Cherry Avenue offices, annexes to the North and South, and the original telescope was conducted by Karen Kenagy, Dale Webb, and Russ Warner. We are pleased to report that the 1st floor chemistry lab and the main machine shop, which are usually problem areas in this kind of inspection, were both in very good condition and safety was well attended to. There were several very crowded hallways as shown below, and many areas had “stuff” stored on shelves within 18 inches of the ceiling and that is a “no/no” in a building with fire sprinklers. We also were amazed at the large number of “Laser in Use signs” on various doorways. In most of those rooms there was no evidence of existent lasers so a push needs to be made to remove laser signs from doors to rooms that do not have lasers. In this way, people will respect the signs to mean what they say.

We also saw various chemicals in use in many rooms, labs, etc and yet we were unable to see any MSDS books out in an obvious space. One lab was very well organized and actually had an impressive new listing of chemicals stored in it's cabinets, with the listing on the cabinet door.... Kudos to the LBTO project!!!! All of the organizations must make an effort to obtain MSDS files on the chemicals within their labs and keep them available so if someone gets hurt, they will know what to do.

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We were most concerned by the presence of an attempt at a clean room which was built inside of room 263 where the clean room was constructed of 2x4 's and Plexiglas and the result was that the fire sprinkler system was rendered useless until a fire is raging. There were chemicals everywhere including acids and flammable stuff sitting on tables and benches. There was no obvious separate or reasonable air purifying system for employees working within the Plexiglas room and thus no fresh air for them. The aisles in the room were so crowded that two persons could not pass easily. Again, there were no MSDS folders in sight, and no lists of chemicals. Also, there were buckets of stuff that appeared to be chemicals, but with no labels at all.

We did not inspect every office, but there were several offices that were in need of a good clean up. In a few offices, there were stacks of papers that must not have been looked at or moved in many years. The Fire Marshall would have a conniption!!!

Our last two stops were the old telescope and the new business offices. Aside from a blocked basement exit and a basement full of junk, the telescope looked pretty good for its age. One extension cord was strung over a hall and door along with computer cables and this should be corrected. The new business office was just being moved into. The only safety concern on their part was the dirt walkway between buildings and an effort is started to get a concrete walkway installed.

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Room #	Corrective Action	Abatement Date
N101	Inadequate ventilation system/fume hood.	
	Keep boxes 18" from ceiling	
N134	Corridor is crowded with flammable boxes.	
N109	Chemicals improperly stored on floor and empty chemical bottles.	
	Very crowded conditions/poor housekeeping. Boxes are perched on shelving units precariously.	
	Helium cylinder must be tied off.	
	Remove cardboard boxes that are within 18 inches of ceiling.	
	White powder substance around blue acid cabinet on floor. Unknown inhalation / corrosive hazard.	
	Provide monthly inspection of fire extinguisher – last checked 1995. Fire extinguisher is very small in size.	
	No obvious light switch into the room.	
	Major electrical panel behind KERN CNC machine blocked.	
	Main shut off switch blocked.	
	South wall – safety switch blocked for air table.	
	Main control panel from 277/480 3 phase shut off safety switch blocked by	

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	table.	
	Electrical cables taped to floor and other electrical cables laying loose on floor.	
105B	Replace emergency light	
	Safety switch in office area blocked by desk.	
	Use OSHA air nozzles.	
Lab 163	Overall housekeeping/clutter on floor.	
	Remove extension cords draped over door.	
	Remove stainless steel (Tube Service) that is draped light fixtures.	
	Wires hanging down from walls.	
168	Overall housekeeping/very cluttered.	
	Remove "Laser Radiation" sign if no laser is in use.	
	Install fire extinguisher.	
174	Cryogenics Lab	
	Access to electrical power panels blocked.	
	Remove large dented container from up on cabinet.	
261	Overall housekeeping (boxes and clutter on floor).	
263	Flammable cabinet blocking door access.	
	Remove HeNe Laser sign on door – no laser in room.	

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	Power Panel LP2-1 blocked by equipment.	
	Overall Housekeeping – needs major clean up.	
	Inspect eye wash unit – last inspected 6 years ago.	
	Remove extension cords from floor.	
	No fire extinguisher.	
	Provide proper storage of acids and flammable chemicals. Currently stacked on floor and benches next to one another.	
	Remove plastic from ceiling as it blocks fire sprinklers.	
	Provide correct ventilation/fume hood for work performed in this room.	
281	Poor housekeeping/extreme clutter.	
	Need to chain up four nitrogen cylinders.	
	Remove hanging wooden storage racks due to bolts protruding.	
265	Chain up cylinder that is currently stored in corner near door.	
	Two electrical main shut offs blocked by tables.	
206	Blocked electrical panels.	
353A	OK	
353B	Housekeeping – some clutter on floor.	
353C	Mount fire extinguisher.	

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353D	OK	
353F	OK	
353E	Acetone and alcohol should be stored in flammable cabinet.	
	Brake machine/counterweight sticks out into walk pathway.	
	Delta drill press should be mounted to floor.	
367	Housekeeping – needs general cleanup.	
N408A	Main electrical panel blocked.	
N408B	OK	
N409	Flammables and (MEK) need to be stored in chemical cabinets.	
	Housekeeping – general clutter.	
N431	Main electrical shut off blocked.	
	Housekeeping – very crowded 12' wide path.	
	CH2, 100% 30 H chemical containers stacked in corner.	
N435	East Hallway – remove furniture that is blocking the hallway.	
N443	Blocked fire extinguisher.	
	Blocked electrical panels.	
	Housekeeping – boxes stacked on cabinets and clutter on floor.	
N455	OK	

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457	Is laser still in use? Remove Laser signs if "No".	
469	Bolt bench grinder to table.	
	Very crowded conditions.	
471	Replace emergency safety lights.	
487	Mount fire extinguishers.	
	Provide safety/Inspect 2-ton crane.	
	Chain up gas cylinders.	
	Electrical panel LP4-2 is blocked.	
	Replace emergency safety light.	
	No MSDS available.	
	Room signed for Lasers.	
491	OK	
553	OK	
583	Remove/Investigate mold on chilled water pipes.	

Please return this form when completed to Karen Kenagy