Hall A Safety Walkthrough (SAF110):

Purpose

Familiarize users with safety hazards and protection systems in the counting house and Hall A proper.

Prerequisites

JLab General Safety Training (SAF100)
Rad Worker I Training or equivalent training (have a dosimeter badge)
ODH Training (SAF103)

The "Buddy Rule"

The following "buddy rule" shall be standard practice for workers in Hall A.
The "Buddy Rule":
If it is normal daytime working hours and the Hall is in "Restricted Access" ,i.e. there is reasonable expectation that there are other people in the Hall, and the work coordinator or his/her assigned deputy has been informed of what you're doing and he/she has approved, then the rule is satisfied.
Otherwise, no one may work in the Hall alone. You must have a second person (buddy) with you to work in the Hall.

Procedure

Note: In order to work in Hall A or the Hall A Counting House one must have completed this exercise. Entering the Hall to do this exercise is of course allowed. Accompaniment by an experienced escort is also allowed. (Hint: When doing the "in the Hall" part of the walkthrough find Ed Folts, the work coordinator, first and thereby guarantee that you've satisfied the "Buddy Rule")

Attached are two maps, one of the counting house the other of the personnel access tunnel and Hall A itself. To perform the walkthrough in each area take the map and the list of safety/protection systems and devices that go with each and mark down on the map, using the codes provided, the locations of all the safety systems on the lists. (**n.b. One person per form**). Along with a code each listed item is accompanied by a number, in square brackets, which tells you the approximate number of occurrences you should expect. Don't be alarmed if you find too many or too few, conditions can change in the Hall making some things hard to find and revealing others that weren't apparent when the original count was made, as long as you come close it's OK. We want you to be aware of the safety systems and their locations. Memorization is not required.
While identifying the protection systems you should keep in mind possible emergency situations and make note of sources of hazards. Below are lists of the types of hazards and protection systems you should be keeping in mind.
Return completed forms to John LeRose (CC-A117, suite 4, MS 12H3)

Counting House:

Hazards:

- Electronics (fire/electrocution)
- Papers/trash (fire/tripping)
- Cabling (fire, tripping)
- cooking equipment (fire/electrocution)
- Radiation

Protection systems:

- Fire Extinguishers
- Means of egress (evacuation plan)
- Fire alarm boxes

- Fire alarms
- Power Kill switches, circuit breaker panels (make note of the protective equipment requirements for dealing with circuit breakers)
- Radiation Monitors
- Telephones
- Emergency lighting
- Signs (Exit, Not an Exit, etc.)
- Master Alarm Panel
- First Aid Kit

The Counting House is also a window to the Hall:

- TV cameras
- Fire Alarm
- Emergency shutoff buttons (magnets, accelerator, flammable gas)
- PSS status box

Hall A and Personnel Access Tunnel:

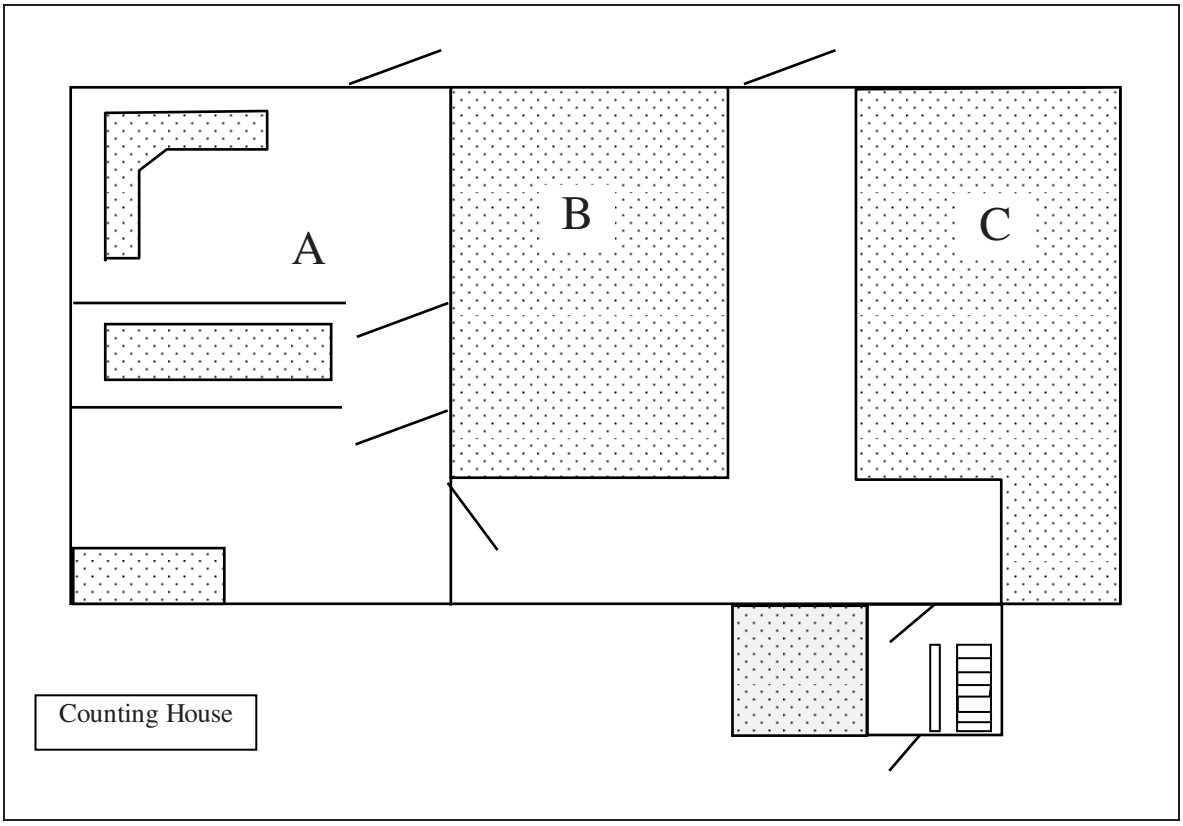
Hazards:

- Electronics (fire/electrocution)
- Papers/trash (fire/tripping)
- Cabling (fire)
- Overhead equipment (Head banging)
- Tripping hazards
- Radiation Hazards (Beam on, contaminated/radioactive areas)
- Loud Noise Sources (Thin vacuum windows)
- Welding (fire, eye damage)
- Cryogens (ODH, and freezing hazard)
- Magnets and power supplies (electrocution, high fields, high current in leads, Cryogens)
- Flammable gases (fire, ODH)

Protection/Emergency systems:

- Telephones
- Fire Extinguishers
- Signs and postings (radiation areas, hearing protection required, Exit, etc.)
- Radiation Monitors
- First Aid Kit and Emergency Defibrillator
- PSS system (Hall Status Display, Key interlocks, gates/doors, emergency exit buttons, Run Safe Boxes)
- Hearing protection
- Means of egress (evacuation plan)
- Fire alarm pull boxes
- Power shutoff switches and circuit breaker panels (make note of the protective equipment requirements for dealing with circuit breakers)
- Warning Beacons (Red: Magnets on, Yellow: spectrometer motion, Blue: ODH, Magenta: beam on)
- Emergency lights
- Cabinets for storing flammable materials
- Sprinklers, Fire suppression system in shielding hut
- Railings on stairs and elevated platforms
- Lockout Tagout Station

Name:	Date:	Signature:



Counting House Walkthrough

Instructions: Walk through the counting house (Hall A portion and common hallways and stairwell, one flight down from ground level will do) and on the above map note the locations of each of the following. (Code is shown in parenthesis ( ), number of occurrences in square brackets [ ]) Hand in the completed form to John LeRose, or the designated walkthrough overseer, for certification (*One person per form*).

Exit sign (ES) [4]

evacuation plan (EP) [1]

Fire extinguisher (FX) [2]

Power Kill Switches (PK) [2 each for computers and AC]

Telephone (T) [7]

Fire Alarm Pull Box (PB) [3]

Emergency off buttons (magnets and accelerator) (EO) [1 set]

Personnel Safety System Status Box (PSS) [1]

gas alarm panel (GP) [1]

Hall Fire Alarm (HFA) [1]

TV monitors. (TV) [1-large, ~10 small]

Circuit breaker panel (BP) [2]

{make note of the protective equipment requirements for dealing with circuit breakers}

Radiation Monitors (RM) [4]

Emergency lights (EL) [2]

No Exit sign (NES) [2]

Fire Alarm Bell (FAB) [1]

First Aid Kit (FA) [1]

Master Alarm Panel (MAP) [1]

sprinklers (SP) [many, note general locations]

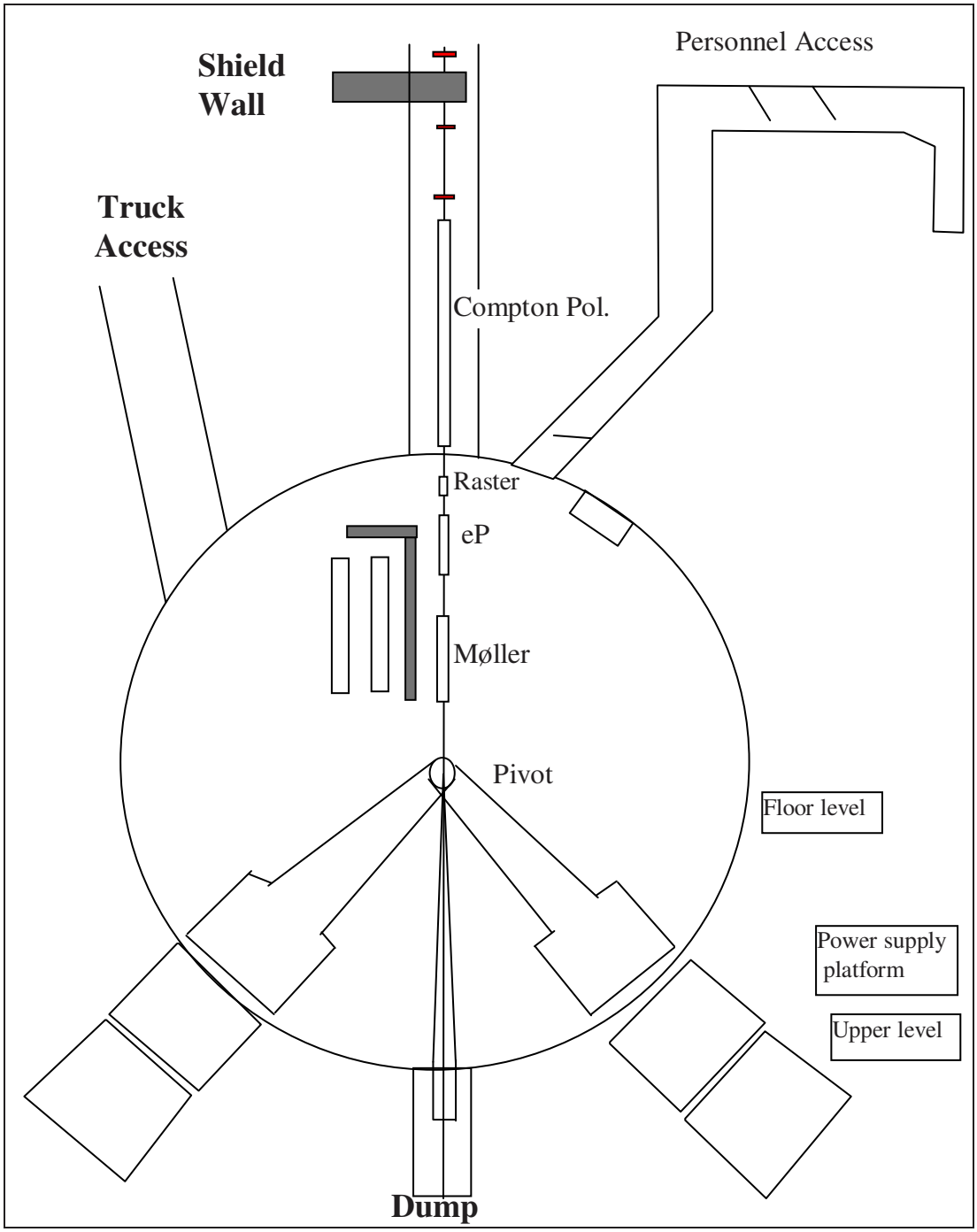
TLD badge rack (TLD) [1]

Smoke Removal Button (SM) [1]

Name:	Date:	Signature:

Hall A and Access Tunnel Safety Walkthrough

Instructions: Walk through the Hall A personnel access tunnel, starting at the stairs, and Hall A, including the spectrometers and note on the map below the locations of the items listed on the following page. Hand in the completed sheet for certification (*One person per form*).



List of Walkthrough items to be identified in the Hall A Personnel Access Tunnel and Hall A

Abbreviations are in parenthesis ( ), approximate number of occurrences in square brackets [ ]

The safety warden/work coordinator, Ed Folts, or his appointed deputy (☺) [1]

Introduce yourself and ask him for the secret word. Then write the secret word in the bottom left-hand corner of the map. Failure to do this invalidates the walkthrough.

Fire Alarm Pull Box (PB) [3]
Radiation Monitors (RM) [2]
Fire Extinguisher (FX) [7]
Exit Sign (ES) [4]
Emergency Lighting (EL) [many, just note general locations]
Access Control Doors (ACD) [2] READ THE SIGNS WHILE YOU'RE THERE!
Fire Doors (FD) [3]
Telephones (T) [13]
Warning signs (WS) [many & variable] READ THEM!
Signs/notices on door (S/N) [variable] READ THEM!
Barriers and roped off areas (B) [variable]
Personnel Safety System status display (PSS) [1]
Key interlocks for PSS (PK) [1 set]
TV camera (TVC) [3]
Emergency Exit Button (EXB) [2]
Run Safe Box (RS) [11]
ODH monitor (ODH) [4]
Bulletin Board (BB) [1]
Evacuation Plan (EP) [1]
First Aid Kit (FA) [1]
Emergency Defibrillator (ED) [1]
Circuit breaker panel (BP) [6, several side by side = 1]

{make note of the protective equipment requirements for dealing with circuit breakers}

Chemical storage cabinets (CS) [1]
Radioactive Material Storage Cabinet and shelves (RS) [2]
Warning beacons:

red for magnet power on (RB) [many, note magnet locations]
yellow for spectrometer motion (YB) [4]
blue for ODH (BB) [7]
magnenta (MB) [2] (hint: one is outside at the top of the truck ramp)

Sprinklers (S) [many, just note general locations]
Magnet Power switches (MPS) [8]
Big Box power supply (powers BigBite or other magnets) with cut-off switch alongside (BBPS)[1]
Fire Alarm for Shielding Hut (FH) [2]
Detector Stack Electric Power Shutoff (DSSO) [2]