

HIGH ENERGY PHYSICS DIVISION INDEPENDENT SAFETY REVIEW



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OVERVIEW

- HSE Safety Support Services
- Integrated Safety Management
- Safety Management _ HEP
- Work Planning and Control _ HEP
- Work Authorization and Execution _ HEP
- Summary

HSE Safety Support Services:



Health, Safety and Environment

- Laboratory level, centralized ESH organization
- SME and support staff
- Industrial Hygiene, Radiation Safety, Health and Wellness, and Training

Directorate Safety Managers

- Provides direction for Argonne directorate _ PSE

ESH Coordinators

- Safety coordinators are part of deployed service staff _ HSE

INTEGRATED SAFETY MANAGEMENT

Work being performed in HEP fall into three categories:

1. Skill of the trade
2. Office work
3. Task-based work

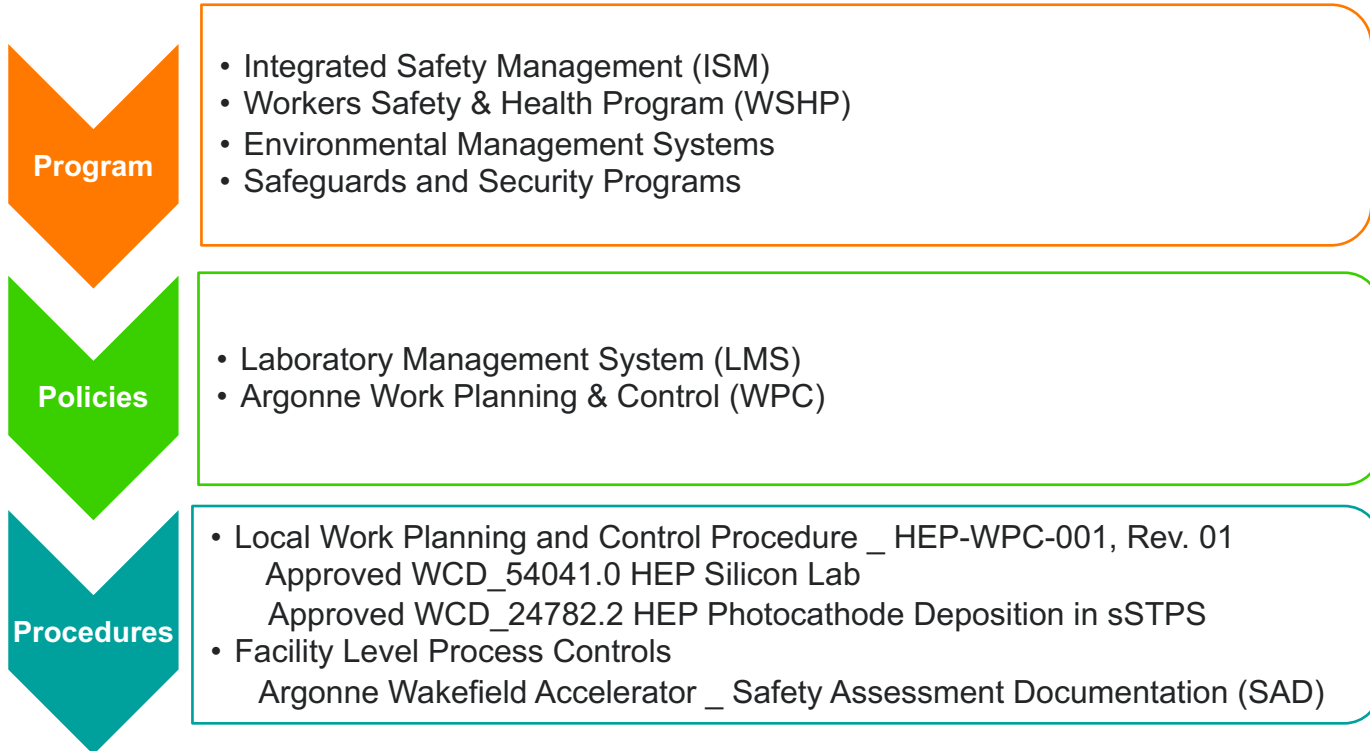
Defined by Job description and JHQ especially mechanical & electronics groups

Defined by JHQ and training

Depending on scope of the work, group leader/PI plus ES&H coordinator determine the rigor of documentation needed.

Categories 1 and 3 both need authorization before work begins ..

Work Activities Performed in Accordance:



To address fundamental questions about the universe

- The HEP division performs many different kinds of work in the areas of theoretical, experimental particle physics, as well as accelerator development, detector R&D, particle astrophysics, and cosmology..
 - ATLAS ..install of TileCal ..physics analysis ..theory and advance computing for the LHC
 - Developing State of the art Electronics
 - Muon-g-2 Magnet and Magnetic Field Studies
 - Dark Energy Exploration
 - Argonne Wakefield Accelerator, AWA
 - Mechanical Design and Fabrication Support

WORK PLANNING AND CONTROL

Argonne's Work Planning and Control (WPC)

- a systematic method to identify hazards and control risks
- initiated at the earliest stages of the work proposal
- remains in effect throughout all subsequent phases of the work
- provides electronic notification and approval of the Work Control

Document (WCD).

WPC

- ❑ WPC establishes the requirements for Work Control Documents (WCDs) for work activities



documenting and conducting work safely

- Line Management, Supervisor, and Group Leader involvement:

1) Discuss work activity with the ES&H Coordinator and develop the Work Control Document, WCD

- Understand the scope of work
- Hazard analysis
 - SME when work exceeds thresholds/limits
- Determine Controls
 - Operations permit (RWP)
 - Personnel and or equipment motoring
 - SME involvement as needed

2) Work control documentation is submitted online by the person in charge

3) HEP Division Director has final approval for all division work activities

4) Line personnel/workers read the work control document and agree to understanding the hazards

- Perform work within the controls
- Provide feedback for continuous improvement

WORK AUTHORIZATION AND EXECUTION

- Ensures compliance with Argonne's safety policies and procedures through work planning
- Identifies line management responsibilities for approval, work authorization and oversight
- Ensures completion of employee training, periodic review, and project scope of work
- Ensures communication of lessons learned and feedback

SUMMARY

- Deployed safety coordinator
 - Coordinate HEP and HSE Laboratory resources
 - Participate in the design review process
 - Perform monthly facility and operations inspection
 - Required as part of the review team and work control documentation approval
- ESH walkdown of work spaces with the Division Director
- WPC ensures consistency and compliance
- Work Authorization performed by line management to ensure safe project management and work execution

BACK UP SLIDE

INCIDENT AND ACCIDENT HISTORY

<p>06/05/2015 As employee was drilling a hole in small aluminum box, the box spun with the drill head, resulting in employee cutting thumb.</p>	<p>10/03/2014 Employee lifted a small package after it was delivered, the employee felt a sharp pain in the lower abdomen. The package was determined to weigh over 30 pounds. After 24 hours, the employee was still feeling pain and submitted a safety concern regarding this event.</p>	<p>08/28/2014 Employee reported to HEW with burns on the hand after receiving electrical shock from a 600V power source. Employee experienced continuous muscle contraction (tetanic), but the heart did not. Employee was transported to the hospital as a precaution.</p>	<p>01/15/2014 An employee was walking to the office from the parking lot and slipped on icy pavement, landing on the arm. Employee went to Medical due to a lump on the wrist. X-rays determined that employee has a wrist fracture</p>
<p>07/24/2013 Employee was preparing to use a box cutter when employee poked the blade into the finger. First aid treatment was provided in Medical.</p>	<p>11/05/2012 911 called to Building 366 hi-Bay for a mineral oil leak of approximately 20-25 gallons. Leak did not occur in a controlled area. Oil dry, pads and booms were used to absorb and contain the leak. Oil did not enter floor drains or sewers.</p>	<p>10/11/2011 Employee received corneal abrasion eye injury while replacing cord on a piece of equipment under repair. Employee picked up new cord from a box and one end of cord, which consisted of 3 stripped wires, caught on box and whipped up into eye. Employee went to Medical and received treatment.</p>	<p>06/29/2011 Employee reported to Medical for removal of foreign body from his eye. Employee was machining aluminum in Building 366 when he felt a piece of metal enter his eye. He was wearing safety goggles but the piece flew over the top of the glasses. Employee returned to duty with no restrictions after being examined by Medical.</p>