OpsAuditHub opsaudithub.com	DOC ID: **SAF-0356**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.1200 (Hazard Communication) & NFPA 45 (Standard on Fire Protection for Laboratories Using Chemicals)**	AUDIT FREQUENCY: **Semi-Annual Audit**

School Science Lab Chemical Inventory Audit Sop Template

Operational Scope: This Standard Operating Procedure establishes the mandatory protocol for conducting semi-annual chemical inventory audits across all educational science laboratories. The objective is to mitigate chemical exposure risks, eliminate expired or degraded reagents, and ensure absolute compliance with OSHA and NFPA hazardous material safety standards.

MANDATORY PPE:	Chemical Splash Goggles (ANSI Z87.1), Nitrile or Neoprene Chemical-Resistant Gloves, Lab Coat (Flame-Resistant Cotton or Synthetic Blend), Full-Length Pants and Closed-Toe Leather Shoes, Emergency Respirator / N95 Dust Mask (As Needed)
PREREQUISITES:	Verify functionality of the laboratory emergency eye-wash station and safety shower prior to audit entry. | Ensure current Safety Data Sheet (SDS) binders or digital SDS portal are fully accessible to the audit team. | Confirm presence of an ABC fire extinguisher and spill neutralization kit within the active audit zone.

STORAGE CONDITIONS & CONTAINER INTEGRITY

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Chemical Container Labeling**	All primary and secondary chemical containers must feature legible GHS-compliant labels including product identifiers, hazard pictograms, and signal words without fading or peeling.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**Container Sealing & Cap Integrity**	All reagent bottles and flasks must be tightly sealed with unbroken caps, showing no signs of crystallization around threads, bulging, or stress cracking.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Peroxide-Forming Chemical Monitoring**	Peroxide-forming chemicals (e.g., ether, tetrahydrofuran) must be clearly date-received and date-opened, and tested for peroxide levels within expiration windows.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
4	**Flammables Cabinet Operation**	Flammable storage cabinets must be NFPA/OSHA compliant, self-closing mechanisms must operate smoothly, and vents must be capped or correctly plumbed.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

SEGREGATION & INVENTORY RECONCILIATION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
5	**Incompatible Chemical Segregation**	Acids must be physically separated from bases, and oxidizers must be isolated from flammables and reducing agents using dedicated secondary containment trays.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Master Inventory Log Cross-Check**	Physical stock on shelves must match the quantities, locations, and entries recorded in the OpsAuditHub centralized chemical inventory master sheet.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
7	**Expired & Degraded Reagent Identification**	Identify and segregate all expired chemicals, unknown compounds, or heavily degraded materials for immediate hazardous waste disposal pickup.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
8	**Shelving Stability & Seismic Restraints**	All chemical shelving units must be securely anchored to walls or structural frames, equipped with anti-roll lips or seismic restraining cords.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

EMERGENCY READINESS & SPILL CONTROL

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
9	**Chemical Spill Kit Completeness**	Spill kits must be fully stocked with appropriate neutralizing agents (acid/base), absorbent pads, disposal bags, and instruction placards.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
10	**Fume Hood Clearance & Certification**	Chemical fume hoods must display current annual certification tags and remain free of chemical storage clutter to ensure proper face-velocity airflow.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

Certified Science Lab Safety Inspector / Auditor Signature: _____	**Date / Time:** _____	**Badge / Cert #:** _____
School Science Department Chair / Operations Manager Sign-off: _____	**Review Date:** _____	**Audit Status:** [ ] Approved [ ] Rectify

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