OpsAuditHub opsaudithub.com	DOC ID: **SAF-0248**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.305 / NFPA 70E / SAE J2402**	AUDIT FREQUENCY: **Monthly Audit**

Fleet Battery Maintenance Inspection Compliance Checklist

Operational Scope: Establishes a mandatory inspection protocol for all fleet vehicle and industrial support batteries to prevent acid spills, thermal runaways, and electrical arc flash incidents. Ensures full adherence to federal workplace safety mandates and extends operational asset lifecycle.

MANDATORY PPE:	Acid-Resistant Face Shield (ANSI Z87.1), Chemical-Resistant Neoprene Apron, Heavy-Duty Nitrile or Neoprene Gloves, Safety Glasses with Side Shields, Steel-Toe Safety Boots (ASTM F2413)
PREREQUISITES:	Verify vehicle/equipment ignition is completely off and keys are removed. | Ensure battery charging bay or maintenance area is actively ventilated. | Confirm emergency eyewash station and spill neutralization kit are within 25 feet.

VISUAL & PHYSICAL INTEGRITY INSPECTION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Battery Casing & Housing**	Inspect for cracks, bulges, warping, or physical deformation. No structural damage permitted.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
2	**Terminal Posts & Connectors**	Check for heavy sulfation, corrosion, pitting, or loose terminal clamps. Clean and tighten to manufacturer torque specs.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A
3	**Hold-Down Brackets & Tray**	Ensure battery is securely mounted in the tray with zero lateral movement to prevent vibration-induced internal damage.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A
4	**Vent Caps & Flame Arrestors**	Verify all vent caps are tight and clear of debris to prevent dangerous hydrogen gas accumulation.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A

ELECTRICAL TESTING & ELECTROLYTE ASSESSMENT

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
5	**Electrolyte Fluid Level (Flooded Batteries)**	Fluid level must be above the lead plates and below the fill well ring. Top off exclusively with distilled water if low.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A
6	**Open Circuit Voltage (OCV) Test**	Measure resting voltage using a calibrated digital multimeter. Standard 12V battery must read 12.6V or higher; recharge if below 12.4V.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A
7	**Load Test / Conductance Test**	Perform digital battery analyzer test. State of Health (SOH) and Cold Cranking Amps (CCA) must meet at least 80% of rated capacity.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
8	**Charging System Output**	Test alternator and voltage regulator output with engine running. Voltage must register between 13.5V and 14.5V under load.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A

SAFETY ACCESSORIES & ENVIRONMENTAL CONTROLS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
9	**Terminal Insulators & Covers**	Verify positive terminal protective boots are fully intact and properly seated to prevent accidental short-circuiting.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A
10	**Eyewash Station & Spill Kit Readiness**	Inspect emergency eyewash station for unobstructed access and fluid flush capability; confirm neutralizing powder is fully stocked.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A

Certified Fleet Technician / Inspector Signature: _____	**Date / Time:** _____	**Badge / Cert #:** _____
Fleet Safety Supervisor / Operations Manager Sign-off: _____	**Review Date:** _____	**Audit Status:** [ ] Approved [ ] Rectify

COMPLIANCE NOTICE: This document must be archived for a minimum of 12 months in accordance with workplace safety recordkeeping guidelines.

DIGITAL INSPECTION UPGRADE: Run this audit on mobile/tablet, attach photos & automate compliance records. **Start Free Mobile Audit →**