OpsAuditHub opsauditihub.com	DOC ID: **SAF-0312**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.119 / API Standard 537 / ISO 45001**	AUDIT FREQUENCY: **Daily Pre-Shift**

Flare Stack Operational Safety Audit Daily Log Sheet

Operational Scope: This log sheet establishes the mandatory daily operational safety audit for industrial flare stack systems to mitigate ignition failure and toxic gas release risks. It enforces rigorous compliance tracking for upstream and downstream oil and gas infrastructure.

MANDATORY PPE:	Flame-Resistant Clothing (FRC NFPA 2112), Hard Hat with Chin Strap (ANSI Z89.1), Steel-Toe Safety Boots (ASTM F2413), Impact-Resistant Safety Glasses (ANSI Z87.1), H2S / Multi-Gas Personal Monitor, Heat-Resistant Leather Gloves
PREREQUISITES:	Verify wind direction and speed via meteorological monitoring station prior to approach. | Review control room SCADA logs for unacknowledged flare system alarms or pressure anomalies. | Ensure continuous multi-gas personal monitor is bump-tested and calibrated.

IGNITION SYSTEMS & PILOT MONITORING

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Pilot Burner Flame Status**	Verify via thermocouple telemetry and optical/IR scanner that all active pilots are maintaining stable combustion.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**High-Energy Electronic / Gas Ignition System**	Test backup ignition panel response and verify spark generator voltage output matches manufacturer specifications.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Pilot Fuel Gas Supply Pressure**	Check pressure gauges on the pilot fuel header; readings must remain within the specified operational range (e.g., 30-50 psig).	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

STRUCTURAL INTEGRITY & MECHANICAL ASSEMBLIES

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
4	**Flare Stack Guy Wires & Anchor Points**	Inspect structural guy wires for tension loss, fraying, corrosion, and ensure concrete anchor blocks show no shifting or cracking.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
5	**Stack Tip Assembly**	Inspect via high-magnification optics for thermal warping, scale buildup, or metal fatigue on the flare tip rim.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Purge Gas Flow Rate & Molecular Seal**	Verify continuous nitrogen or natural gas purge flow rate on flow meter to prevent atmospheric air ingress into the stack.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

KNOCKOUT DRUM & ENVIRONMENTAL CONTROLS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
7	**Flare Knockout Drum Liquid Level**	Check level transmitters to ensure liquid accumulation does not exceed 40% capacity, preventing liquid carryover to the flare tip.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
8	**Smoke/Opacity Suppression Steam System**	Inspect steam injection control valves, regulators, and piping manifolds for leaks, excessive vibration, or steam trap failures.	**Standard**	**[ ] PASS [ ] FAIL [ ] N/A**
9	**Emergency Shutdown (ESD) Isolation Valves**	Confirm remote actuation capability and physical position indicator alignment for automated gas supply isolation valves.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

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

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