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	STANDARD: **EPA 40 CFR Part 112 (SPCC) & API Standard 653**	AUDIT FREQUENCY: **Monthly Audit**

Petroleum Storage Tank Leak Inspection Compliance Checklist

Operational Scope: This checklist outlines mandatory inspection protocols for aboveground and underground petroleum storage tanks to detect early signs of structural degradation or product loss. The primary objective is to mitigate catastrophic spill hazards, ensure environmental containment integrity, and maintain strict adherence to federal and industry safety mandates.

MANDATORY PPE:	Hard Hat (ANSI Z89.1), Steel-Toe Boots (ASTM F2413), Flame-Resistant Clothing (FRC per NFPA 2112), Chemical-Resistant Nitrile Gloves, Safety Glasses with Side Shields (ANSI Z87.1), Half-Mask Organic Vapor Respirator (as needed)
PREREQUISITES:	Verify secondary containment drain valves are securely closed and padlocked. | Review previous inspection logs and outstanding corrective action work orders. | Ensure portable combustible gas indicator (CGI) is calibrated and operational.

FOUNDATION, SHELL, AND STRUCTURAL INTEGRITY

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Tank Shell Exterior**	Inspect exterior walls for visible bulging, buckling, extensive corrosion, pitting, or weeping product stains. Surface must be free of active leaks.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**Foundation and Ringwall**	Check concrete or asphalt foundation for major cracking, spalling, shifting, or signs of erosion underneath the tank base that could compromise structural support.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Secondary Containment Diking**	Inspect earthen or concrete containment walls for structural breaches. Ensure containment area is free of excessive vegetation, debris, and standing oily water.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

PIPING, VALVES, AND ANCILLARY EQUIPMENT

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
4	**Valves and Flanges**	Inspect all inlet, outlet, drain, and recirculation flanges and valve packings for dampness, active dripping, or petroleum sheen. Bolts must be torqued and uncorroded.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
5	**Pressure-Vacuum Vent Valves**	Verify vent caps are unblocked, screens are intact, and mechanical internal pallets move freely to prevent over-pressurization or vacuum collapse.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Flexible Connectors and Hoses**	Examine flexible hoses and expansion joints for kinking, blistering, cracking, or slippage at coupling joints.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

LEAK DETECTION AND MONITORING SYSTEMS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
7	**Interstitial Monitoring Ports**	Check double-walled tank interstitial spaces or dry sumps for the presence of liquid hydrocarbon accumulation using an electronic sensor or probe.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
8	**Overfill Prevention Equipment**	Test high-level alarms and automatic shut-off devices to ensure functional electrical continuity and proper mechanical actuation prior to transfer operations.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
9	**Grounding and Bonding Systems**	Inspect grounding cables, shunts, and static grounding rods for secure mechanical connections and absence of severe corrosion or wire breakage.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

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

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