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

Petroleum Storage Tank Leak Inspection Sop Template

Operational Scope: This standard operating procedure establishes mandatory protocols for inspecting aboveground and underground petroleum storage tanks to detect early signs of structural degradation and leaks. The objective is to mitigate environmental spill risks and ensure full compliance with federal and state oil pollution prevention mandates.

MANDATORY PPE:	Hard Hat (ANSI Z89.1), Chemical-Resistant Steel-Toe Boots (ASTM F2413), Flame-Resistant Clothing (NFPA 2112), Chemical Splash Goggles (ANSI Z87.1), Nitrile or Neoprene Gloves, Portable Multi-Gas Detector
PREREQUISITES:	Verify tank level telemetry and ensure secondary containment area is free of standing chemical hazards. | Obtain valid hot work/cold work permits and conduct pre-job safety briefing with site operations team. | Calibrate and test multi-gas detector for LEL, O2, H2S, and CO prior to entry.

EXTERNAL SHELL, FOUNDATION, AND SECONDARY CONTAINMENT

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Tank Shell Integrity**	Inspect exterior walls for buckling, severe corrosion, weeping rivets, or evidence of product seepage.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**Foundation and Ringwall**	Check concrete or asphalt foundation for major cracking, spalling, or undermining caused by soil erosion.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Secondary Containment Dike**	Verify containment berms are free of structural breaches, liners are intact, and stormwater drain valves are locked in the closed position.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

PIPING, VALVES, AND LEAK DETECTION SYSTEMS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
4	**Valves and Flanged Connections**	Inspect all inlet, outlet, drain, and recirculation valves for active dripping, packing gland leaks, or bolt corrosion.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
5	**Emergency Venting and Pressure-Vacuum (P/V) Valves**	Ensure P/V vents are unblocked, free of ice or debris, and operating within manufacturer pressure thresholds.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Automated Leak Detection / Interstitial Monitoring**	Confirm electronic monitoring sensors are powered, calibrated, and registering zero alarm states for interstitial spaces.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

ACCESS SAFETY, GROUNDING, AND ANCILLARY EQUIPMENT

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
7	**Static Grounding Systems**	Test grounding cables and bonding straps for secure mechanical attachment, continuity, and freedom from fraying.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
8	**Stairways, Walkways, and Handrails**	Inspect exterior ladders, spiral staircases, and roof platforms for loose fasteners, structural rust, or slip hazards.	**Standard**	**[ ] PASS [ ] FAIL [ ] N/A**
9	**Overfill Prevention Alarms**	Trigger manual functional test of high-level alarms and automatic shut-off systems to verify audible and visual alerts.	**Critical (Immediate Out of Service)**	**[ ] 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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