OpsAuditHub opsaudithub.com	DOC ID: **SAF-0394**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.146 (Permit-Required Confined Spaces) & OSHA 29 CFR 1910.272 (Grain Handling Facilities)**	AUDIT FREQUENCY: **Prior to Each Entry / Per Shift**

Grain Silo Bin Confined Space Entry Permit Inspection Checklist

Operational Scope: This checklist establishes the mandatory verification protocol for grain silo and bin entry to mitigate atmospheric hazards, engulfment risks, and mechanical entrapment. Compliance with this inspection is strictly required prior to issuing any permit for confined space entry.

MANDATORY PPE:	Full-Body Harness with D-Ring (ANSI Z359.1), Retractable Lifeline / Retrieval Winch System, NIOSH-Approved N95 Respirator or PAPR (Dust/Methane Protection), Hard Hat with Chin Strap (ANSI Z89.1), Steel-Toe Safety Boots (ASTM F2413), intrinsically safe portable lighting / headlamp
PREREQUISITES:	Verify all electrical and pneumatic equipment feeding the silo is locked out and tagged out (LOTO). | Confirm trained standby attendant is stationed continuously outside the permit space. | Ensure calibrated multi-gas detector has undergone fresh-air bump testing prior to atmospheric testing.

ATMOSPHERIC TESTING & VENTILATION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Oxygen Concentration Level**	Atmosphere must register strictly between 19.5% and 23.5% oxygen prior to entry.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**Flammable Gases and Vapors**	Lower Flammable Limit (LFL) must measure less than 10% on a calibrated gas monitor.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Toxic Contaminants (Carbon Monoxide / Hydrogen Sulfide)**	Carbon monoxide must be <25 ppm and hydrogen sulfide <10 ppm; continuous monitoring active.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
4	**Mechanical Ventilation Purge**	Forced-air ventilation blowers operating continuously and exhausting air away from entry point.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

ENGULFMENT HAZARD & STRUCTURAL INTEGRITY CONTROL

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
5	**Bridged Grain & Vertical Wall Accumulation**	No personnel allowed to enter if bridged grain or vertical sidewall overhangs ('caves') are present above working level.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Sweep Auger and Discharge Gate LOTO**	All sweep augers, fill conveyors, and gravity discharge gates physically locked out, chained, and blanked.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
7	**Fall Protection & Retrieval Rigging**	Tripod and mechanical winch securely anchored directly above hatch, inspected for fraying or structural defects.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

COMMUNICATION & EMERGENCY PREPAREDNESS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
8	**Attendant Stationed & Equipped**	Designated attendant present at entry point at all times, equipped with two-way radio and emergency rescue alarm.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
9	**Rescue Services Notification & Equipment**	External rescue team verified on standby or local emergency response agency notified of permit entry taking place.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
10	**Confined Space Entry Permit Display**	Signed entry permit clearly posted at the work site entrance outlining valid entry times and authorized entrants.	**Standard**	**[ ] 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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