OpsAuditHub opsauditihub.com	DOC ID: **SAF-0410**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **NFPA 70 (National Electrical Code) & OSHA 29 CFR 1910.333**	AUDIT FREQUENCY: **Monthly Audit**

Farm Irrigation Pump Electrical Inspection Safety Audit Checklist

Operational Scope: This audit covers all electrical service panels, wiring, control boxes, and grounding systems associated with agricultural irrigation pumps. The objective is to mitigate severe shock, electrocution, and fire hazards by enforcing strict NFPA and OSHA compliance standards across all farm operating units.

MANDATORY PPE:	Electrical Safety Glasses (ANSI Z87.1), Dielectric Rubber Insulating Gloves with Leather Protectors, Arc Flash Face Shield and Balaclava, ASTM-Rated Electrical Hazard (EH) Steel-Toe Boots, High-Visibility Safety Vest
PREREQUISITES:	Verify proper Lockout/Tagout (LOTO) protocols are understood and ready to be executed if physical enclosure work is required. | Ensure weather conditions are dry and non-hazardous prior to opening any exterior electrical enclosures. | Inspect all test instruments and voltage detectors for current calibration and physical integrity.

SECTION 1: MAIN DISCONNECT & ENCLOSURE INTEGRITY

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Outdoor Panel Enclosure**	Enclosure is rated NEMA 3R or higher, securely latched, and free of rust, pest entry points, or external moisture intrusion.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**Padlock and LOTO Hasp**	Disconnect box features a functioning padlock mechanism and lockout hasp to prevent unauthorized activation during servicing.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Arc Flash and Warning Signage**	High voltage warning labels and NFPA compliant arc flash hazard decals are clearly visible and legible on the outer door.	**Standard**	**[ ] PASS [ ] FAIL [ ] N/A**

SECTION 2: WIRING, CONDUITS & GROUNDING SYSTEM

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
4	**Conduit and Fittings**	All exterior conduit runs (rigid metal or PVC) are securely anchored, free of cracking, and equipped with weather-tight fittings.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
5	**Equipment Grounding Conductor**	Ground wire is securely bonded to the service panel, motor frame, and driven ground rod with zero signs of corrosion or looseness.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Power Supply Cabling**	Flexible cables or service drops show no signs of fraying, insulation cracking, pinching, or exposure of inner copper conductors.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

SECTION 3: CONTROLS, MOTOR PROTECTION & INTERLOCKS

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
7	**Motor Starter and Overload Relays**	Thermal overload relays match motor nameplate full-load amps (FLA) and show no evidence of overheating, discoloration, or burning smells.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
8	**Emergency Stop / Safety Shutoff**	Push-button or pull-cord emergency stop functions correctly and immediately halts pump operation when engaged.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
9	**Pressure and Flow Interlocks**	Dry-run protection switches and pressure relief interlocks operate reliably to prevent catastrophic pump cavitation and electrical overload.	**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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