Oil Pipeline Welding & Radiography Safety Inspection Checklist

Site / Project		**Address**	
Inspector name		**Company**	
Date		**Time**	

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

Radiography (NDT) Safety

☐	Is the radiation boundary established and clearly marked with warning signs and ropes/barriers?	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Are all personnel dosimeters calibrated and within their valid calibration period? Verify calibration certificates.	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Is a calibrated and functional survey meter available at the radiography site? Verify battery level and calibration date.	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Is the two-person rule being strictly enforced during radiography operations?	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Are emergency procedures, including contact information for radiation safety officer, clearly posted at the radiography site?	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Is the radiographic source properly secured when not in use to prevent unauthorized access?	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Are NDT barricades and warning signs secured and maintained overnight to prevent unauthorized entry into the radiation area?	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Are clear communication protocols established between the radiographer and all personnel in the vicinity to ensure awareness of radiation hazards?	☐ Pass	☐ Fail	☐ N/A	Notes:
☐	Is a daily inspection of radiography equipment performed and documented to identify any defects or malfunctions?	☐ Pass	☐ Fail	☐ N/A	Notes:

Is access to the radiography area restricted to authorized personnel only?	Pass	Fail	N/A	Notes:

Trenching and Lowering-In Safety

Is adequate trench shoring or sloping in place to prevent trench collapse during lowering-in operations? (Competent person inspection documented?)	Pass	Fail	N/A	Notes:
Has a competent person inspected the trench daily for hazards, and is the inspection documented?	Pass	Fail	N/A	Notes:
Is the spoils pile located at least 2 feet (0.6 meters) from the edge of the trench?	Pass	Fail	N/A	Notes:
Are all underground utilities located and marked before excavation begins? (811 call completed?)	Pass	Fail	N/A	Notes:
Is a safe means of access and egress (ladder, ramp, stairs) provided for trenches 4 feet (1.2 meters) or more in depth?	Pass	Fail	N/A	Notes:
Is heavy equipment kept a safe distance from the trench edge to prevent collapse?	Pass	Fail	N/A	Notes:
Is lifting equipment (cranes, slings) used for lowering-in inspected and load tested per manufacturer's specifications?	Pass	Fail	N/A	Notes:
Is a qualified rigger supervising the lowering-in operation?	Pass	Fail	N/A	Notes:
Is a dedicated spotter present during lowering-in to guide the pipe and prevent collisions?	Pass	Fail	N/A	Notes:
Is an emergency rescue plan in place and communicated to all workers in case of trench collapse?	Pass	Fail	N/A	Notes:

Welding Safety

Is the welding habitat properly constructed and maintained to prevent the accumulation of flammable gases?	Pass	Fail	N/A	Notes:
Are appropriate fire extinguishers readily available and easily accessible within the welding habitat and surrounding area?	Pass	Fail	N/A	Notes:
Is a valid hot work permit issued before welding operations commence?	Pass	Fail	N/A	Notes:
Are spark arrestors installed on welding equipment to prevent sparks from igniting flammable materials?	Pass	Fail	N/A	Notes:

Have all flammable materials been removed from the welding area or adequately protected from sparks and heat?	Pass	Fail	N/A	Notes:
Is adequate ventilation provided to remove welding fumes and gases from the welding habitat?	Pass	Fail	N/A	Notes:
Is the welding equipment properly grounded to prevent electrical shock?	Pass	Fail	N/A	Notes:
Are welding electrodes stored in a dry environment to prevent moisture contamination?	Pass	Fail	N/A	Notes:
Are welders wearing appropriate PPE, including welding helmets, gloves, and flame-resistant clothing?	Pass	Fail	N/A	Notes:
Are compressed gas cylinders stored upright and secured to prevent tipping?	Pass	Fail	N/A	Notes:

Personal Protective Equipment (PPE)

Are hard hats worn by all personnel in designated areas?	Pass	Fail	N/A	Notes:
Are safety glasses or face shields worn by all personnel exposed to eye hazards?	Pass	Fail	N/A	Notes:
Are steel-toe boots worn by all personnel in areas where foot injuries are possible?	Pass	Fail	N/A	Notes:
Are high-visibility vests or clothing worn by all personnel working near moving equipment?	Pass	Fail	N/A	Notes:
Is hearing protection available and used in areas with high noise levels (above 85 dBA)?	Pass	Fail	N/A	Notes:
Is respiratory protection provided and used when welding fumes or other airborne contaminants are present?	Pass	Fail	N/A	Notes:
Are appropriate gloves worn for the task being performed (e.g., welding gloves, chemical-resistant gloves)?	Pass	Fail	N/A	Notes:
Is PPE inspected regularly for damage or defects?	Pass	Fail	N/A	Notes:
Are welders wearing flame-resistant (FR) clothing?	Pass	Fail	N/A	Notes:
Is an eyewash station readily available in areas where corrosive materials are used?	Pass	Fail	N/A	Notes:

Documentation and Training

Is a written radiation safety program in place and readily available?	Pass	Fail	N/A	Notes:
Are welders qualified and certified for the type of welding being performed?	Pass	Fail	N/A	Notes:
Are NDT personnel certified to the appropriate level (e.g., ASNT Level II) for the NDT methods being used?	Pass	Fail	N/A	Notes:
Is a hazard communication program in place, including SDSs for all hazardous materials?	Pass	Fail	N/A	Notes:
Is a confined space entry program in place if welding or radiography is performed in confined spaces?	Pass	Fail	N/A	Notes:
Is an emergency response plan in place and communicated to all workers?	Pass	Fail	N/A	Notes:
Are training records maintained for all personnel, including radiation safety, welding safety, and trenching safety?	Pass	Fail	N/A	Notes:
Have all personnel received a site-specific safety orientation?	Pass	Fail	N/A	Notes:
Are daily toolbox talks conducted to address specific hazards and safety procedures?	Pass	Fail	N/A	Notes:
Is a system in place for reporting and investigating incidents and near misses?	Pass	Fail	N/A	Notes:

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____ **Name** _____

Date _____