PURPOSE

This procedure establishes guidelines and requirements for the oversight and management of contractors and construction activities performed on MDU Utilities Group (MDUG) gas facilities to ensure laws, policies, and procedures concerning pipeline safety are followed.

REFERENCES

External References:
49 CFR §192.305 Inspection: General.

Internal References:
OPS 7 – Hiring a Contractor
OPS 205 – Engineering Project Process
OPS 601 – Pressuring Monitoring During Shutdowns and Maintenance

Forms:
Form 23125 – Construction Project Risk Review
Form 23126 – Construction Project Oversight

TRAINING AND QUALIFICATION

Training is required for MDUG personnel who have oversight of internal and contractor personnel who perform construction activities on behalf of the Company. Initial and subsequent training shall be conducted by the Company managers, supervisors, or others responsible for overseeing construction activities.

RECORD RETENTION

Record	Retention Period	Storage Location

DEFINITIONS

Refer to OPS 3 Master Glossary

Construction Management – Managing construction activities performed by MDUG employees and contractors including, scheduling, coordinating, adherence to Company policies, procedures, and design specifications, As-Built review, and project close out.

SCOPE

This procedure applies to MDUG personnel and contractors who perform and manage gas construction activities. This procedure does not apply to inspections performed by MDUG Quality Control (QC).

PROCEDURE

1. GENERAL
    - 1.1. The department managing the construction activity.(e.g., Construction Services, Field Operations, System Integrity, etc.) is responsible for construction management.
    - 1.2. When contracted inspection is required, the department managing the construction activity is responsible for ensuring the contracted inspector adheres to the requirements of this procedure.
    - 1.3. For the purpose of this procedure:
        - 1.3.1. Individual can be defined as, but is not limited to, Field Operations Coordinator (FOC), District Operations Coordinator (DOC), Contracted Inspector, Construction Services Supervisor and/or Manager, Project Manager, whichever is applicable.

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1.3.2. Company individuals can be defined as, but are not limited to, FOC, DOC, Construction Services Supervisor, and/or Manager, whichever is applicable.
1.3.3. Project initiator can be defined as, but is not limited to, Energy Services Representative (ESR), FOC, DOC, Project Manager, whichever is applicable.
1.3.4. MDUG Management can be defined as, but is not limited to, the Director, Manager, or Supervisor, of the department managing the construction activity (e.g., Construction Services, Field Operations, System Integrity, etc.) whichever is applicable.

2. CONSTRUCTION MANAGEMENT
2.1. The department responsible for overseeing construction work shall ensure MDUG employees, and contractors, have access to and adhere to company policies, procedures, work plans, and design specifications.
2.2. The department responsible for the work to be completed shall issue work orders to MDUG employees and contractors.
2.2.1. This should include scheduling of work and/or approving contractor's work schedule.
2.3. The individual responsible for overseeing the assigned construction work shall verify Operator Qualifications (OQ) for personnel performing Covered Tasks. These verifications shall be conducted on a frequency-based site visit requirements of this procedure.
2.3.1. OQ verification is not necessary when Locusview requires OQ validation to complete work order documentation and if the duration of work is less than two (2) days.
2.4. The Company individual overseeing the construction work is responsible for communicating, and coordinating, with applicable personnel, the approval of time and equipment (T&E) and/or Change Orders (e.g., design changes).
2.5. The Company individual responsible for overseeing the construction work is responsible for reviewing Locusview and/or paper as-builts for accuracy including measurements, materials including traceable, verifiable, and complete documents pertinent to the project.
2.5.1. Company individuals assigned to review Locusview and/or paper As-Builts shall have practical and technical knowledge of the construction activity documented on the work orders being reviewed.
2.6. The Company individual responsible for initial invoice review, and approval, shall ensure the invoice matches the work performed.
2.7. The Company individual responsible for overseeing the assigned construction work is responsible for the coordinating of resources during construction (e.g., NDT, other contractors, and departments, etc.), as needed.

3. RISK REVIEW
3.1. During the project cost estimate and feasibility study, the project initiator shall assign a risk score to the project to determine the level of oversight the project shall require. This does not include unplanned emergencies.
3.1.1. Scores shall be determined based on project cost, pipe pressure, and pipeline diameter as outlined below. The three (3) scores shall be added together for a total score. For example, a project involving a 55lbs (1) two (2") inch diameter pipeline (1) with an estimated cost of $70,000 (4) would have a score of six (6).
3.1.1.1. Project Cost:
3.1.1.1.1. >$1,000,000 = Score of 10
3.1.1.1.2. $1,000,000 to $500,000 = Score 8
3.1.1.1.3. $499,999 to $100,000 = Score 5
3.1.1.1.4. $99,999 to $25,000 = Score 4
3.1.1.1.5. $24,999 to $7,500 = Score 2
3.1.1.1.6. <$7,499 = Score 0
3.1.1.2. Pipeline Pressure:
3.1.1.2.1. >750lbs = Score 10

3.1.1.2.2. 750lbs to 300lbs = Score 8
3.1.1.2.3. 300lbs to 100lbs = Score 6
3.1.1.2.4. Low Pressure (less than 2lbs) = Score 5
3.1.1.2.5. 100lbs to >60lbs = Score 4
3.1.1.2.6. <60lbs & >2lbs = Score 1

3.1.1.3. Pipeline Diameter:
3.1.1.3.1. >6" Score 10
3.1.1.3.2. 6" Score 5
3.1.1.3.3. 4" Score 3
3.1.1.3.4. 2" Score 1

3.1.2. Additional scoring may be added based on other identified potential risk factors (e.g., location, single feed system, etc.).

3.1.3. The following shall automatically be assigned the highest level of risk for all metrics:

3.1.3.1. LNG construction tasks that involve moving LNG from storage through vaporization into the pipeline system at any location. This does not include permanent LNG facilities (e.g., Nampa LNG Plant, Rexburg LNG Facility).

3.1.3.2. Construction tasks involving temporary/mobile CNG trailers when maintaining service to 25 or more customers.

3.2. Construction projects with a score above an eight (8) shall have a review of the risks and mitigating operational controls. If a risk is identified without a mitigating operational control, then an operational control shall be discussed and applied. The risk review shall be completed as part of development of the work order and work plan.

3.2.1. Engineering Project and Quality Review (EPQR) projects shall be reviewed by subject matter experts (SMEs), selected by the Project Manager, who have practical and technical knowledge to evaluate the implications of technical, design, operational, safety, environmental, quality, and/or economic aspects of the project.

3.2.2. For Field Operations construction projects with a score above an eight (8), Field Operations Management, or designee, shall create an EPQR. Refer to OPS 205 – Engineering Project Process.

3.2.2.1. The project initiator shall coordinate the selection of SMEs who have practical and technical knowledge to evaluate the implications of technical, design, operational, safety, environmental, quality, and/or economic aspects of the project.

3.2.3. If the project is determined to be low risk, project cost may be excluded from the score (e.g., SSIP projects). The department director shall approve the removal of the cost from the project score.

3.2.4. Project scoring and review shall be documented on Form 23125 – Construction Project Risk Review for projects with a score above an eight (8). The completed form shall be uploaded to the EPQR.

3.3. For Construction projects with a score of an eight (8) or below, the competent person identified at the job site shall conduct a physical walk-through of the project area to assess potential hazards and controls.

3.3.1. Prior to the commencement of work, identified risks shall be evaluated by the competent person and personnel performing the work during the Job Safety Analysis (JSA)/Tailgate Meeting/Hazard Analysis/etc.

4. CONSTRUCTION PROJECTS WITH A SCORE ABOVE AN EIGHT (8) CONDUCTED BY CONTRACT CREWS

4.1. Prior to beginning work, contractor shall provide a list of personnel (e.g., onsite supervisor(s), manager(s), etc.) responsible for overseeing the construction work. The list shall include names and contact information (e.g., phone number, email address, etc.).

4.2. Contractors hired to perform covered tasks shall submit OQs prior to beginning work. This includes subcontractors hired by the primary contractor.

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4.2.1. If an unapproved subcontractor is discovered to be performing work, stop work authority shall be utilized until OQs, insurance, and safety stats are verified.

4.3. Contractor's ISNetworld® (ISN) grade shall remain in good standing (e.g., A, B, or approved variance). Refer to OPS 7 – Hiring a Contractor.

4.3.1. The Company department managing construction activity shall enroll to receive grade change notices from ISN (e.g., My Personal Contractors List).

4.3.2. If a contractor is no longer in good standing, their ISN scorecard shall be reviewed as soon as possible to determine the reason for grade change.

4.3.2.1. MDUG management shall work with contractor management to determine potential course of action to bring the grade back to good standing.

4.3.3. Stop work authority shall be utilized if the grade change is due to insurance lapse.

4.4. Construction projects shall require a minimum of one weekly site visit and daily communication with personnel performing the work.

4.5. Site visits should be scheduled to occur when tasks that are identified as critical or high risk will be performed. Examples of these tasks include, but are not limited to, the following:

4.5.1. Transmission pipeline construction work where covered tasks are being performed.

4.5.2. Pipeline cleaning or pigging of four (4") inches and larger steel pipelines.

4.5.3. Purging of mains near buildings, overhead power lines, and other potential sources of ignition.

4.5.4. Pressure testing of high-pressure mains and services lines greater than four (4") inches.

4.5.5. High consequence (e.g., critical lines, high priority lines) excavations affecting transmission and high-pressure pipelines four (4") inches and larger.

4.5.6. Critical bores across other critical infrastructure such as transmission pipelines, underground electric transmission, interstate fiberoptic facilities, major interstates, railways, rivers, lakes, and/or other large bodies of water.

4.5.6.1. Non-company owned transmissions pipelines, electric, and communication utilities typically notify excavators of critical facilities that require mark and monitor.

4.5.7. Tie-ins that require a by-pass and/or system monitoring per the requirements of OPS 601 – Pressuring Monitoring During Shutdowns and Maintenance.

4.5.8. LNG transfer operations at temporary/mobile LNG sites.

4.6. Crews shall notify the project inspector (e.g., contracted inspector, supervisor, FOC, etc.) prior to conducting activities outlined in Section 4.2., when clarification is needed on safety (SF) or operations (OPS) procedures or work order details (e.g., running lines, traffic control details, etc.).

4.6.1. If the activities are scheduled to take place during a weekend or holiday, prior notification shall be given during business hours.

4.7. Site visits and communications shall be documented on Form 23126 – Construction Project Oversight.

4.7.1. The Policy and Procedure (P&P) Department shall provide a monthly report to applicable Directors.

4.7.2. Director, or designee, shall review the report to ensure crew conformance with Company procedures, and to ensure site visits are meeting the requirements of this procedure.

4.7.2.1. The report shall be reviewed as soon as possible.

4.7.2.2. If site visits do not meet the requirements of this procedure, MDUG Management shall determine potential course of action.

4.7.2.3. Non-conformities identified and not addressed during the site visit that could affect system operations or safety shall be addressed immediately. Notification of the non-conformity shall be provided to MDUG Operations Compliance and the Safey Management System (SMS) departments.

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4.8. Stop work authority shall be utilized if unsafe work practices, performance concerns, and/or qualification concerns are identified.
- 4.8.1. MDUG Management shall be notified when stop work authority is utilized.
- 4.8.2. MDUG Management shall work with contractor management to correct safety and performance concerns.
  - 4.8.2.1. Contractor management shall conduct internal investigation for safety and performance concerns.
  - 4.8.2.2. Personnel in question shall be removed from the jobsite until concerns are investigated and addressed.
    - 4.8.2.2.1. Personnel in question cannot return to MDUG jobsites until approved by MDUG Management.

5. ALL OTHER CONSTRUCTION PROJECTS CONDUCTED BY COMPANY AND/OR CONTRACT CREWS

5.1. Prior to beginning work, contractor shall provide a list of personnel (e.g., onsite supervisor(s), manager(s), etc.) responsible for overseeing the construction work. The list shall include names and contact information (e.g., phone number, email address, etc.).

5.2. Contractors hired to perform covered tasks shall submit OQs prior to beginning work. This includes subcontractors hired by the primary contractor.
- 5.2.1. If an unapproved subcontractor is discovered to be performing work, stop work authority shall be utilized until OQs, insurance, and safety stats are verified.

5.3. Contractor's ISN grade shall remain in good standing (e.g., A, B, or approved variance). Refer to OPS 7 – Hiring a Contractor.
- 5.3.1. The Company department managing construction activity shall enroll to receive grade change notices from ISN (e.g., My Personal Contractors List).
- 5.3.2. If a contractor is no longer in good standing, their ISN scorecard shall be reviewed as soon as possible to determine the reason for grade change.
  - 5.3.2.1. MDUG management shall work with contractor management to determine potential course of action to bring the grade back to good standing.
- 5.3.3. Stop work authority shall be utilized if the grade change is due to insurance lapse.

5.4. Site visits shall be conducted for construction tasks based on the results of the project risk review.
- 5.4.1. Construction projects with a score above an eight (8) shall require a minimum of one (1) weekly site visit and daily communication with personnel performing the work.
- 5.4.2. For construction projects with a score of eight (8) or below, employees assigned to oversee company and/or contract crews shall visit a minimum of two (2) job sites per week. Site visits should be rotated amongst crews.

5.5. Site visits should be scheduled to occur when tasks that are identified as critical or high risk will be performed. Examples of these tasks include but are not limited to the following:
- 5.5.1. Transmission pipeline construction work where covered tasks are being performed.
- 5.5.2. Pipeline cleaning or pigging of four (4") inches and larger steel pipelines.
- 5.5.3. Purging of mains near buildings, overhead power lines, and other potential sources of ignition.
- 5.5.4. Pressure testing of high-pressure mains and services lines greater than four (4") inches.
- 5.5.5. High consequence (e.g., critical lines, high priority lines) excavations affecting transmission and high-pressure pipelines four (4") inches and larger.
- 5.5.6. Critical bores across other critical infrastructure such as transmission pipelines, underground electric transmission, interstate fiberoptic facilities, major interstates, railways, rivers, lakes, and/or other large bodies of water.
  - 5.5.6.1. Non-company owned transmissions pipelines, electric, and communication utilities typically notify excavators of critical facilities that require mark and monitor.

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5.5.7. Tie-ins that require a by-pass and/or system monitoring per the requirements of OPS 601 – Pressuring Monitoring During Shutdowns and Maintenance.
5.5.8. LNG transfer operations at temporary/mobile LNG sites.

5.6. Company and contractor crews shall notify the project inspector (e.g., contracted inspector, supervisor, FOC, etc.) prior to conducting activities outlined in Section 4.2., when clarification is needed on SF or OPS procedures or work order details (e.g., running lines, traffic control details, etc.).
5.6.1. If the activities are scheduled to take place during a weekend or holiday, prior notification shall be given during business hours.

5.7. Site visits and communications shall be documented on Form 23126 – Construction Project Oversight.
5.7.1. The P&P Department shall provide a monthly report to applicable Directors.
5.7.2. Director, or designee, shall review the report to ensure crew conformance with Company procedures and to ensure site visits are meeting the requirements of this procedure.
5.7.2.1. The report shall be reviewed as soon as possible.
5.7.2.2. If site visits do not meet the requirements of this procedure, MDUG Management shall determine potential course of action.
5.7.2.3. Non-conformities identified and not addressed during the site visit that could affect system operations or safety shall be addressed immediately. Notification of the non-conformity shall be provided to MDUG Operations Compliance and the SMS departments.

5.8. Stop work authority shall be utilized if unsafe work practices, performance concerns, and/or qualification concerns are identified.
5.8.1. MDUG Management shall be notified when stop work authority is utilized.
5.8.2. MDUG Management shall work with contractor management to correct safety and performance concerns.
5.8.2.1. Contractor management shall conduct internal investigation for safety and performance concerns.
5.8.2.2. Personnel in question shall be removed from the jobsite until concerns are investigated and addressed.
5.8.2.2.1. Personnel in question cannot return to MDUG jobsites until approved by MDUG Management.

6. CONTRACTOR EVALUATION

6.1. The department managing construction activity shall complete a contractor evaluation in ISN at the end of each individually bid project. For varied work contracts (e.g., distribution contracts) with a duration of one (1) year or more, an evaluation shall be completed annually.
6.1.1. Contractor evaluations should include the following criteria.
6.1.1.1. General:
6.1.1.1.1. Contractor employee name(s) and contact information.
6.1.1.1.2. Project name/details.
6.1.1.1.3. Scope of work.
6.1.1.1.4. Date of pre-job meeting.
6.1.1.2. Safety:
6.1.1.2.1. Injuries or lost time accidents during project and details.
6.1.1.3. Quality of work:
6.1.1.3.1. At fault excavation damages and details.
6.1.1.3.2. As-Built submission accuracy and timeliness with specific details.
6.1.1.4. Operator qualifications and adherence to company procedures.
6.1.1.5. Overall performance:

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6.1.1.5.1. Accuracy of documentation and within specifications of MDUG procedures.
6.1.1.5.2. Adherence to project deadline(s).

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ADMINISTRATION

The Vice President Distribution Engineering, Operations Services, & Compliance of the MDU Utilities Group is responsible for establishing this policy. Administration of this policy is the responsibility of the Director, Compliance, Process Improvement, & Procurement.

Reviewed: _____
Director, Compliance, Process Improvement, & Procurement

Date: _____

Approved: _____
Vice President Distribution Engineering, Operations Services, & Compliance

Date: _____

REVISIONS

Major Revision Summary	MOC	Date
Initial procedure.	OPSMOC-1843	

Minor Revision Summary	MOC	Date

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