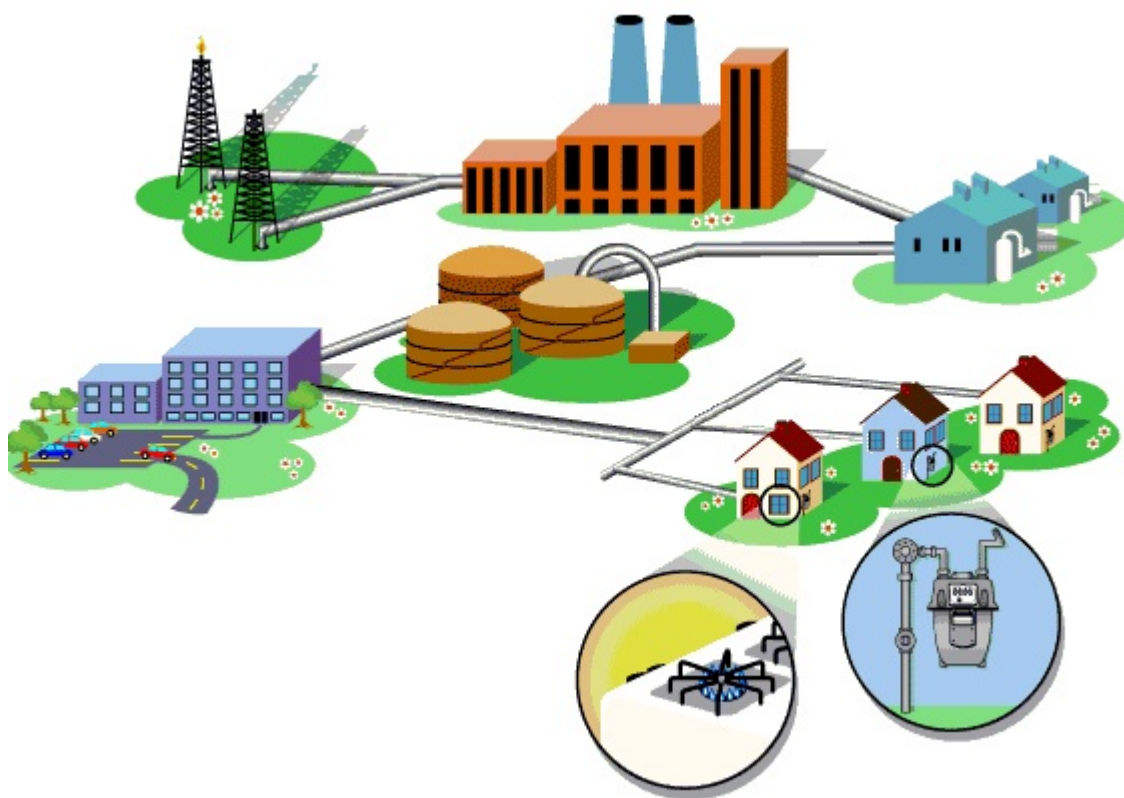




## Georgian Oil & Gas Corporation

### Executive Phase

# Risk Management Procedure



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## 1. PURPOSE

The primary purpose of this document is to define and detail the process for the successful implementation of risk management in NSGPR Project. It is intended to give Contractor Management a methodological approach to the risk management.

The objective of the process is to ensure we focus our efforts to identify and manage key risk issues as they occur during the various stages of work execution.

The process ensures we follow a well-proven road map and that we approach risk in a systematic formalized way.

This procedure is written and issued in accordance with GOGC Safety Management System Framework and Protocol.

The responsibility for amendment of this procedure rests with the Head of the GOGC Health & Safety Department. All requests for modification should be made to the GOGC Management.

Risk Management is a process of well defined steps which, when taken in sequence, support better decision making by contributing to a greater insight into risks and their potential impact. It is as much about identifying opportunities as avoiding losses. Adopting effective risk management techniques can help to improve safety, quality and business performance on the NSGPR Project.

The risk process described herein is based on a systematic approach to identification, analyzing, evaluating, treating and monitoring risk.

## 2. SCOPE

The scope of this process is considered to apply to all qualitative risk assessments conducted throughout the Contractor activities, and includes all locations and Contractor's scope of work, applicable to Contractor operations.

It is planned to maintain the established risk process throughout the life of the specific task with risk coordination continuing to be provided by the Contractor Management and his support teams.

The Contractor Core Management Team has ultimate responsibility for ensuring the process continues until successful completion of the activity.

## 3. INTRODUCTION

Risk Management is a process consisting of well defined steps (process) which, when taken in sequence, support better decision making by contributing to a greater insight into risks, their potential impact and possible related mitigation of these risks. It is as much about identifying opportunities as it is about avoiding losses. Adopting effective risk management techniques can help to improve safety, quality and business performance of Contractor.

The risk process described here is based on a systematic approach to identification, analyzing, evaluating, treating and monitoring risk.

Contractor Health & Safety regulations place a duty on employers to ensure that Contractor employees are not put at risk. This implies then, that the management must identify and evaluate the risks associated with work activities and decide if employees are permitted to take those risks.

The general principles of risk assessment will apply to all types of activity and therefore the following procedural requirements are to be followed for each type of assessment identified.

#### **4. POLICY**

GOGC understands their general duty under the Health & Safety at Work to ensure, so far as is reasonably practicable, the health, safety and welfare of their employees and other persons who may be affected by their acts or missions.

Safety of the work execution explicitly requires the undertaking of specific types of risk assessments in order to help control risks to safety and health from specific activities.

The process of risk assessment should therefore be considered as the most important aspect of a safety management programme and is the sufficient for the company to discharge its duties.

GOGC is committed to carrying out all required risk assessments covering all of its operations and workplaces in order to identify hazards and to ensure that measures are taken to prevent harm, so far as is reasonably practicable.

#### **5. FUNCTION**

##### **The Contractor Health & Safety Department**

The Contractor Health & Safety Department is responsible for the ongoing review and development of this procedure.

Ensure a suitable number of competent persons are appointed to carry out the required risk assessments.

Ensure that a programme of risk assessment, based on the documented requirements, is developed and implemented within their area of responsibility.

Identify sufficient numbers of persons who will be trained to carry out assessments and will ensure that they are trained to a standard, which is sufficient for the task. (Basic principles training may be provided in house or by external training providers).

Carry out the assessment programmes within their respective areas, develop a programme of risk assessment, establishing records of progress, developing strategies for follow up and review of assessments, and providing Management with status reports as may be required.

##### **Contractor Safety Officer**

Ensure that the required risk assessments for each task are carried out. Provide support and assistance as required throughout the assessment process including review of completed assessments and

participation in follow-up meetings etc. Carry out the programme of assessment and the expected schedule of work completion.

Ensure that the findings of risk assessments are communicated to staff and all required control measures are introduced throughout their respective areas of responsibility.

Ensure that risk assessment records are maintained.

Undertake basic risk assessment principles training sufficient to enable them to provide support and assistance as required.

## **6. RISK ASSESSMENT REQUIREMENTS**

### **6.1 Risk**

A risk is an identified event that may occur during a task execution, which has a significant impact on the schedule, cost, quality or objectives.

It is measured in terms of:

- **Consequence**
- **Likelihood**

### **6.2 Risk Management**

A planned and systematic process of identifying, assessing, monitoring and controlling risk, which adds value to the business.

### **6.3 Risk Assessment**

Provides an inventory for action and forms the basis for implementing control measures.

### **6.4 Roles and Responsibilities**

The following roles and responsibilities will be assigned for the Contractor management of risk during project execution.

#### **Contractor Project Manager**

The Contractor Project Manager has overall responsibility for implementation of the risk management process on the NSGPR Project, his responsibilities are to ensure that:

- Project risk management procedures are implemented
- Approve actions for risk reduction
- Authorize the necessary resources for risk reduction and input to the risk analysis process
- Report on project risk status to GOGC H&S Department

- Arrange for necessary project audits of risk management process

### **Contractor Head of Safety Department**

As part of the Core Management Team is responsible for:

- Ensuring the process is implemented effectively
- Communicating the requirements
- Facilitating implementation
- Updating this procedure

He will work closely with the Contractor Project Manager to evaluate identified risks and develop appropriate risk reduction action plans; his responsibilities are to:

- Provide input for evaluation, following identification of project risks.
- Provide risk reduction action plans.
- Execute the risk reduction action plans (note the Contractor Project Manager will approve any action plans and the Head of Safety Department will monitor their implementation)
- Provide an update of the status of his assigned risks to the Contractor Project Manager.

**It is not the intent of this procedure to provide a complete listing of the type or categories of items that require the application of risk management; rather this is left to the responsible persons. An overall task risk matrix should be developed that shall be updated on a regular (monthly) basis.**

Contractor Safety Department is expected to call and lead regular meetings where progress versus the current active risk tracking register is monitored and updated. New risks are identified, debated, scored, risk estimated and added to the active register as appropriate at each meeting.

## **7. RISK MANAGEMENT PROCESS**

The Contractor Project Manager will initiate a series of briefing sessions with the HS Department in order to familiarize the teams with the methods and process intended to be followed. Kick-off meetings will be held with the Department to ensure that they are familiar and comfortable with the process prior to commencement of the initial kick off risk meeting.

It is recommended that representatives from as many of the other task discipline teams as possible, and involve a member from each of the support groups in the risk sessions.

Contractor HS Department is responsible for the timely upkeep of their respective Risk Registers and status of actions held in the Action Tracking System, which shall be updated on a monthly basis.

Risk Management will be reviewed once in three months, as part of the Management Review meeting chaired by the Contractor Project Manager.

When risk assessments are completed, Safety Officers will ensure that follow-up meetings take place. Follow-up meetings should address the findings of the assessments and should be used to agree the control measures required to prevent harm. Each assessment is to be signed off by the line manager as having been through this review process.

The selection of appropriate control measures must be based upon the standard of safety required for the degree of risk perceived. Risks are to be controlled to a level of safety, which is considered “reasonably practicable”

Specific action plans are to be developed and agreed based on the findings of the assessment and of the follow-up meetings. Safety Officers will ensure that a process exists for the routine follow-up of each action plan.

## **DETAILED DESCRIPTION OF THE PROCESS**

The process adopted on the AGT Pipelines Project can be described as having seven (7) discrete stages. These are as follows:

- 7.1 Understanding;
- 7.2 Risk Analysis;
- 7.3 Action Planning;
- 7.4 Handling the Risk
- 7.5 Control of Risks;
- 7.6 Close Out of Risks; and
- 7.7 Lessons Learned.

### **7.1 Understanding**

Prior to commencing the initial review meeting a Contractor team member pack shall be issued to all risk team members. This pack contains the following information:

- Risk Management Procedure
- Definitions (risk)
- Risk List (Typical Examples)
- Risk Level (estimator)
- Risk Register

These materials are provided to act as preparation materials to provide a high level overview of risk management in general and our task risk process in particular.

At the initial kick off meeting, the Head of Contractor HS Department clarifies the scope of application and the Contractor Project Manager provides an explanation of the process.

All attendees are requested to confirm their understanding of both the scope and the process prior to commencement of the formal risk process.

## 7.2 Risk Analysis

Risk analysis includes a quantified evaluation of the probability and the impact of the risks, using a more or less arbitrary scale, but one, which makes it possible to sort these risks per level, the risk level being determined by multiplying the probability by the impact.

The analysis is carried out as follows:

Each identified risk is analyzed and assigned an overall level, from the following table after analyzing the event probability and the qualitative importance of the impact.

	<b>PROBABILITY</b>		
<b>IMPACT</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<i>High</i>	M	H	H
<i>Medium</i>	L	M	H
<i>Low</i>	L	L	M

Once the risks are summarized and clarified, they shall be scored. Scoring shall be on the basis of probability, impact and manageability which when calculated will provide an overall High, Medium or Low assessment of the risk with risk estimation based upon a matrix.

The derived risk level estimation value is now prefixed (after group discussions and agreement) by a Manageability influence level notation as follows:

### **“H”: High (3)**

Indicates that the risk is perceived to be one which the project management can exert a high level of influence.

### **“M”: Medium (2)**

Indicates that the issue is perceived to be one which the project management team can exert a medium level of influence.

### **“L”: Low (1)**

Indicates that the issue is perceived to be one which the project management team can exert a low level of influence.



Scores will be given to each risk element and calculated to give the overall risk ranking, e.g.:

Probability x Impact x Manageability = Overall Score = Overall Risk Ranking

Expressed as High, Medium or Low risk. The High, Medium and Low assignment will be on the basis of scores calculated and falling into a numeric range as follows:

**9-27    HIGH**

4-8     MEDIUM

1-3     LOW

An example of risk scoring and ranking is provided below:

Medium	2	Medium	2	4	Medium	Medium	2	8	Medium
Medium	2	High	3	6	High	Low	1	6	Medium
High	3	High	3	9	High	Medium	2	18	High
Medium	2	High	3	6	High	Medium	2	12	High
Low	1	Low	1	1	Low	Medium	2	2	Low
Low	1	Low	1	1	Low	High	3	3	Low
High	3	High	3	9	High	Medium	2	18	High
Low	1	High	3	3	Medium	Low	1	3	Low
Medium	2	Medium	2	4	Medium	Medium	2	8	Medium

### 7.3 Action Planning

As a minimum requirement, the risks estimated at H9 or higher are listed and detailed on the active risk tracking register. This register details the following information:

- Risk Identification Number
- Date logged
- Risk Event Description
- Consequence
- Risk Score
- Action Description (what?)
- Action By and When (who & when?)
- Close out details
- This register is utilized as the primary working document at subsequent meetings whereby risks are added, adjusted and closed out.

### 7.4 Handling the Risk

Safety Officers will ensure that the findings of all risk assessments are communicated to appropriate staff. To include the nature of the identified hazards, the likely risks posed and the required control measures to prevent harm.

Employees must ensure that, where risks are not seen to be adequately controlled, they are brought to the attention of the Safety Officers, who will ensure that either a risk assessment is carried out or the existing one is reviewed.

Contractor Safety Department must consider the task risks, starting with the most serious, and decide upon the measures to be taken to avoid them, or to diminish the impact.

There are number of ways of handling the risk, for example:

- Do not accept it if the risk level (probability x impact) makes it unacceptable (this attitude is only possible when negotiating extra works).
- Take preventive measures (modify the design, acquire equipment or carry out additional work etc.), but it will always have a residual risk.

The above level H9 risks must be systematically controlled through the implementation of preventive measures.

A summary table must be issued and periodically updated.

### **7.5 Control of Risks**

Controlling risks is not only a question of implementing the provisions set forth above, but of reevaluating the risks over time.

A risk, noted L at the beginning of the task could be re-evaluated to M or H level in the course of the task and vice versa.

The active risk tracking register is used to monitor changes in the seriousness of identified and selected risks during the project. This register should be issued for the target meeting and updated either periodically or when the risk level has changed.

The expectation is that we are able to continually improve/move all the risk downwards, and towards the right bottom quadrant noted as “Safety” as we take appropriate action to reduce and minimize risk.

### **7.6 Close out of Risks**

As and when risks are resolved and closed out, and thereby require no further action, they will be indicated as such in the active risk register and action tracking system. They will, however, remain in the system to provide a historical record of the issues successfully closed out or deleted during the task life cycle.

### **7.7 Lessons Learned**

It is expected that a full record of our risk efforts on the task will be documented and maintained to a standard that permits others within to learn from our experiences, both successes and failures.

It is anticipated that a formal close out review of risk management performance will be conducted, reported and issued prior to the task close out.

## **8. DISTRIBUTION**

### **8.1 Distribution**

Following risk meetings, standardized risk form is updated and issued to all team members (including non attendees) and as a minimum, those with actions noted against their names, other interested parties are copied as considered appropriate by the Contractor Project Manager. The following form is updated as appropriate:

It is the policy to issue the output of each meeting within 2 days, with the target of issue within 1 day. It is considered important to issue the updated materials at the earliest opportunity to maintain process impetus.

### **8.2 Notice Boards**

Copies of all the high level risk summary matrices and supporting information should be posted at each task office location.

## **9. CONTRACTORS**

Once the major Contractors are selected and contracts have been placed, Contractor Management should develop the task related risk assessments, submit them to GOGC Management and after receiving their consent implement the procedures. In case of comments from GOGC Contractor should consider them and include them in their documents.