

**Document title:** POLLUTION PREVENTION MANAGEMENT PLAN

**Document number:** 1062-TGN-MNG-PLN-PJM-22-00003

**Project:** THE DEVELOPMENT OF THE ROMANIAN GAS TRANSMISSION SYSTEM ALONG BULGARIA-ROMANIA-HUNGARY-AUSTRIA ROUTE, PODISOR – GMS HORIA AND 3 NEW COMPRESSOR STATIONS (JUPA, BIBESTI AND PODISOR) (PHASE 1) (REFERENCE NUMBER IN EU LIST: 6.24.2)

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## Abbreviations

Abbreviation	Description
BRUA	Bulgarian-Romanian-Hungarian-Austrian (Natural Gas Transmission Corridor Project)
ESIA	Environmental Social Impact Assessment
ESMP	Environmental and Social Management Plan
CESMP	Construction Environmental and Social Management Plan
F-CESMP	Framework Construction Environmental and Social Management Plan
GCS	Gas Compressor Stations
HSE	Health, Safety and Environment
HSE-MS	Health, Safety and Environmental Management System
KPI	Key Performance Indicator
PMU	Project Management Unit
PR	Performance Requirement

## 1 Introduction

### 1.1 Overview

The Construction Environmental and Social Management Plans (CESMP) defines the actions and measures necessary for the overall management of environment and social impacts for both the Project beneficiary (TRANSGAZ S.A., represented by the Bulgarian-Romanian-Hungarian-Austrian Project Management Unit (BRUA PMU)) and contractors in line with the applicable law and other obligations. The CESMPs are comprised of a suite of management plans.

This document is the Project Pollution Prevention Management Plan, document no 1062-TGN-MNG-PLN-PJM-22-00003.

Project construction activities have the potential to generate a range of pollution sources that require proper planning from the outset to avoid resulting in impacts to human, biological or other environmental receptors. These include accidental emissions to air, water and soil, amongst others. The Project seeks to proactively manage such potential pollution sources and to this effect has included specific obligations regarding pollution prevention in the bidding document drawn by TRANSGAZ S.A.

This CESMP defines the actions and measures necessary for the overall management of pollution for both the Project beneficiary (TRANSGAZ S.A., represented by UMP – BRUA) and contractors in line with the applicable law and other obligations.

### 1.2 Purpose of the Pollution Prevention CESMP

The potential pollutants that could arise from the Project require careful management to avoid negative impacts on human health, and environmental factors such as groundwater, soils, surface water and ecology. This CESMP therefore:

This CESMP therefore:

- Outlines the key policies, legislation and standards relating to waste management;
- Defines roles and responsibilities;
- Outlines actions and measures necessary for the effective prevention of pollution;
- Covers both accidental and intended emissions to air, noise, water and soils;
- Details specific control measures to be implemented by Transgaz and its contractors (and subcontractors), to achieve this.
- Incorporates the requirements of the EIA findings, Supplemental Environmental Assessment, international standards, Romanian legislation, Lenders requirements and Project-specific construction permits.
- Considers Transgaz's general approach on pollution prevention procedures and methodologies.

### 1.3 Scope of the pollution prevention CESMP

This CESMP covers all construction activities and is applicable to all Transgaz staff, Contractors and Sub-contractors. Whilst this CESMP will act as a 'framework' to determine what the Contractors will be expected

to produce, Contractors are required to ensure that all the CESMP requirements are adopted within their own management plans. Further information on Roles and Responsibilities is provided in Section 5 of this CESMP.

The construction phase of the Project also includes the reinstatement of land that is temporarily occupied or affected by the works to its original state when the construction works are completed, including the locations for the construction site organizations and pipe storage yards.

#### **1.4 Document Management**

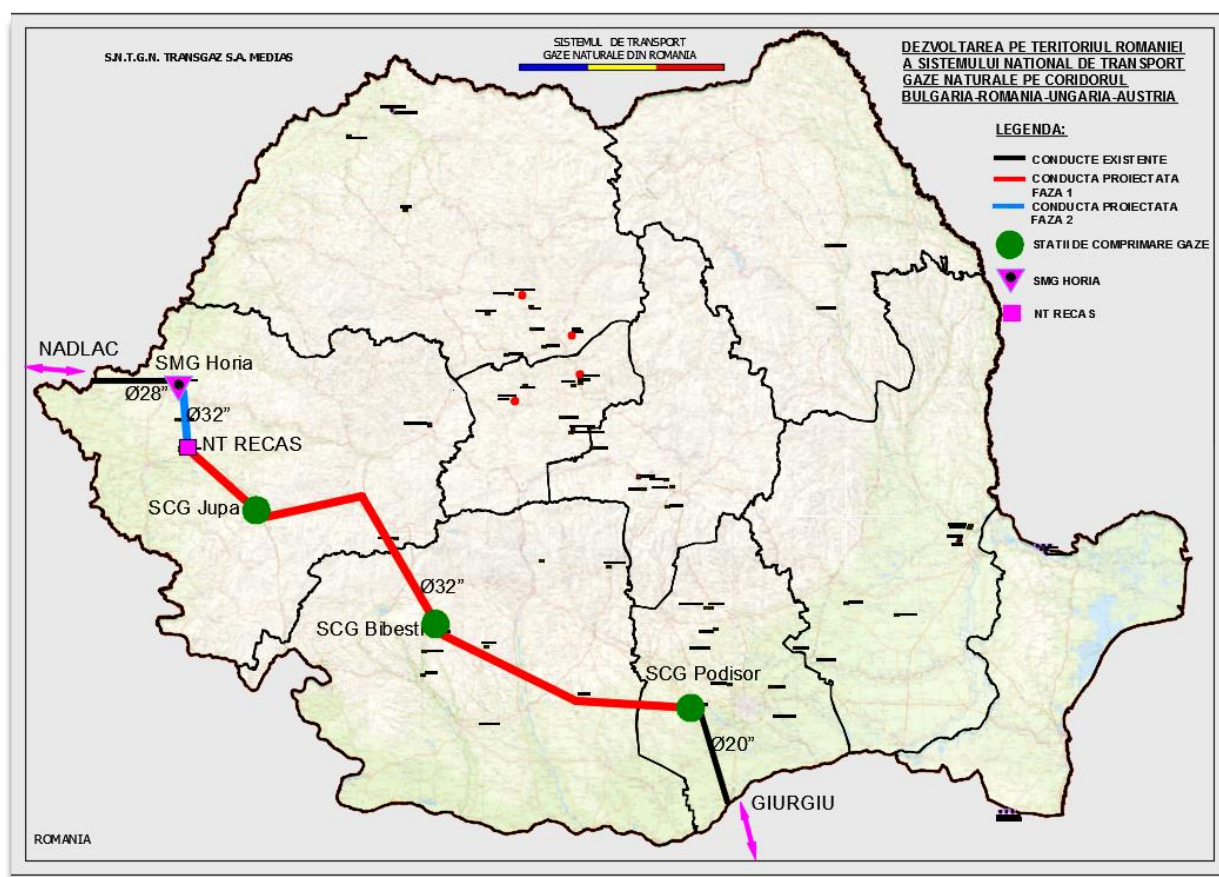
Document will be managed and controlled by the Document Control and Archiving Compartment within BRUA PMU. The methods for document management and improvement during the construction phase will be described in the Document Guide to be developed by BRUA PMU.

## 2 The BRUA Project

### 2.1 Project Overview

SNTGN Transgaz SA Medias ("Transgaz", "the Company" or "the Beneficiary"), the licensed operator of the Romanian National Gas Transmission System, is developing a 529km natural gas pipeline between Podisor in southern Romania and Horia in the west of the country (the "Project"). The pipeline, which for much of the route will be buried and will upgrade or run alongside existing pipelines, represents the Romanian section of the Bulgaria-Romania-Hungary-Austria Natural Gas Transmission Corridor. In addition to the pipeline itself, the Project will also require construction of three new Gas Compressor Stations (GCS) at Podisor, Bibesti and Jupa, as well as a range of supporting infrastructure including block valve stations, construction camps, pipe storage areas, watercourses and infrastructure crossings and access roads.

Figure 2.1 BRUA Route



Whilst the majority of the route is on land currently used for farming, it does pass through a number of specifically sensitive areas, including seven Natura 2000 Sites, and the nationally important Dinosaurs Geo-Park. It also passes close to a number of sites of archaeological value including the ancient city of Tibiscum near Jupa. In some of these areas, as well as near major roads and railways and for the eight major rivers, this will require the use of horizontal directional drilling. In other mountainous areas, special "hammering techniques" may also be applied.

## 2.2 Environmental and Social Commitments

The Project is subject to various environmental and social requirements that are managed by the Company through the implementation of its Health, Safety and Environmental Management System (HSE-MS)<sup>1</sup>. This HSE-MS includes a Project specific Framework Construction Environmental and Social Management Plan (F-CESMP) as well as associated topic/activity specific CESMPs. Operational phase Environmental and Social Management Plans (ESMP) will be developed at a later stage prior to BRUA operation. The overall approach to integration of the above documents is described in Section 4.2 of the F-CESMP document itself.

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<sup>1</sup> Integrated Management Manual Quality-Environment-Occupational Health and Safety, code MSMI-CMSSO Ed. 03/Rev.



### 3 Key Policies, Legislation and Standards

#### 3.1 Overview

The Project is subject to a range of policies, legal & regulatory requirements and other applicable standards of relevance to this CESMP. Where two or more of the identified standards are inconsistent or contradictory, unless otherwise justified, the Project will adopt the more stringent.

#### 3.2 Company Policies

Transgaz's *HSE policy* (as outlined in the Integrated Management Manual Quality-Environment-Occupational Health and Safety, code MSMI-CMSSO Ed. 03/Rev.) and *Corporate Social Responsibility policy* apply to all activities carried out by, or on behalf of, the Company as part of this Project. Details of these policies are provided in the F-CESMP Document (Section 7.3).

#### 3.3 National Legislation and Permits

All contractors are also required to comply with all relevant national regulatory requirements. Whilst contractors are required to verify the latest regulatory requirements themselves an indicative list of Romanian national legislation is provided in Appendix 3 to this CESMP. Contractors must also ensure that relevant requirements of the various construction-related permits for the Project issued by national (and local) regulators are addressed. Key permits are summarised in Section 3.2 of the F-CESMP.

#### 3.4 International Standards and commitments

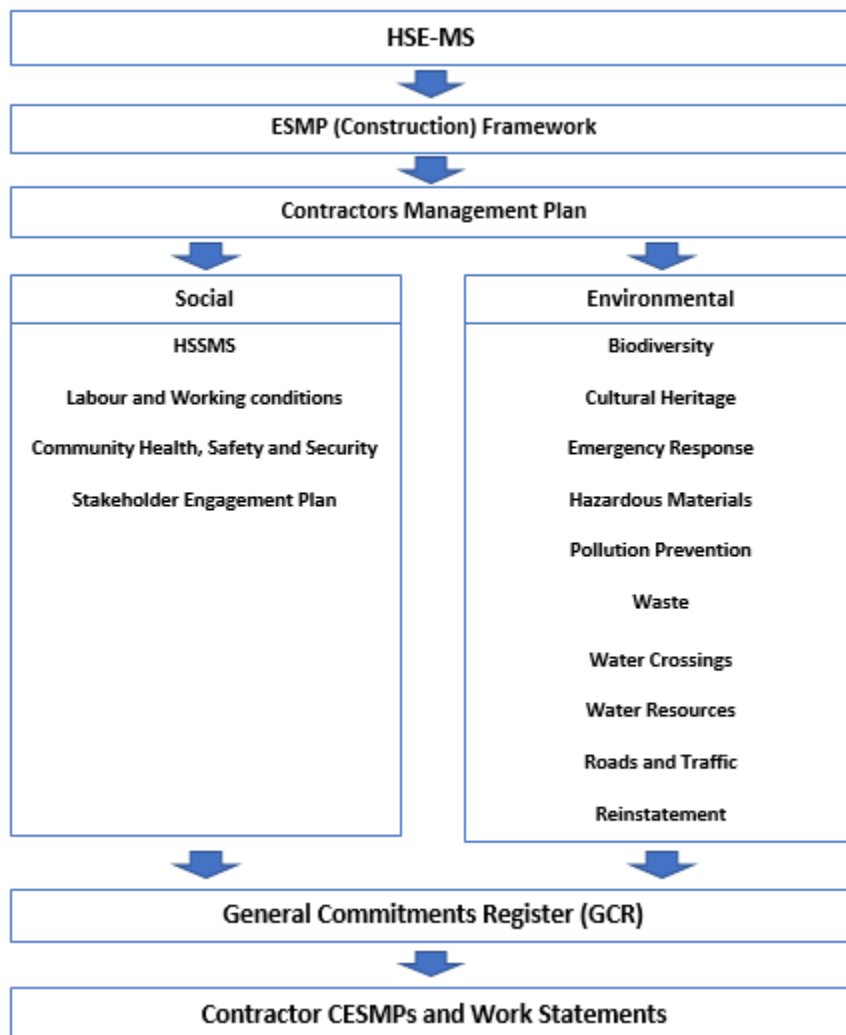
A range of international standards and commitments are applicable to this CESMP as described in the F-CESMP Document (Section 3.3). These include the European Bank of Reconstruction and Development Environmental and Social Performance Requirements (PRs), with [PR1](#) and [PR3](#) being especially relevant to this document. All contractors are required to comply with all such requirements as they apply to their activities. At European level, the Directive for Integrated Pollution Control reformed by Directive Industrial Emissions and the Integrated Product Policy have a significant contribution to preventing pollution.

## 4 Linkages to Other Elements of Transgaz HSE-MS

### 4.1 Overview

This CESMPs forms part of the Project HSE-MS as described in the F-CESMP (Section 4.2). Where relevant, the CESMP should be read in conjunction with other HSE-MS elements including the ESMP source documentation, control documentation and the key HSE-MS documentation. These are described further in Section 4.1 of the F-CESMP and illustrated in Figure 4.1 below:

Figure 4.1 HSE-MS Linkages



### 4.2 Linkages to Other CESMPs

A listing of the CESMPs and their document numbers is presented in Section 4.2 of the F-CESMP Document (Section 4.2). The other CESMPs considered to be of particular relevance to the Pollution Prevention CESMP are as follows:

*Table 4.2 Other CESMPs considered to be of particular relevance to the Pollution Prevention CESMP*

Plan Name	Document Reference
Road and Traffic Management Plan	1062-TGN-MNG-PLN-PJM-22-00012
Waste Management Plan	1062-TGN-MNG-PLN-PJM-22-00005
Hazardous Materials Management Plan	1062-TGN-MNG-PLN-PJM-22-00004
Water Resources Management Plan	1062-TGN-MNG-PLN-PJM-22-00007
Contractor Management Plan	1062-TGN-MNG-PLN-PJM-22-00002
Emergency Response Management Plan	1062-TGN-MNG-PLN-PJM-22-00015
Water Crossing Management Plan	1062-TGN-MNG-PLN-PJM-22-00008

## 5 Key Roles and Responsibilities

### 5.1 Overview

An integrated approach to pollution prevention involves a range of stakeholders, including the Company, the Contractors (and subcontractors), local authorities, regulatory agencies and the general public. Such a system therefore requires robust processes regarding information dissemination, training, and designation of responsibility, management actions, monitoring, control, and remedial actions.

Generic roles and responsibilities for the Company and Contractors are detailed below. An initial split of activities between key stakeholders is shown in Table 5.1 below with further information on specific responsibilities for CESMP actions outlined in Appendices 1 and 2 to this CESMP.

Table 5.1 Initial Split of Activities

Activities	Beneficiary	Contractors	External providers
Planning	x	x	
Dissemination of information	x	x	
Management of pollution	x	x	x
Spill response & treatment		x	x
Professional training	x	x	x
Surveillance and control	x	x	
Monitoring and audit	x	x	
Corrective actions	x	x	
Management of cooperation	x	x	

The operational cooperation procedures in the construction site will be set in the Statement of Works that will be Appendix to the Commercial Contract to be signed between the Beneficiary and the Contractor. The Contact Point Unit for each construction site, as defined in the Contractor Management Plan, is the structure responsible for the implementation and monitoring of the provisions in the Statement of Works.

### 5.2 Company Roles & Responsibilities

Transgaz HSE management roles and responsibilities during Project construction are detailed in the BRUA PMU "Regulation of organization and functioning". Further information is also provided in other documents listed in the F-CESMP document.

With regards to this CESMP, Transgaz S.A. is responsible for key management activities including:

- Development of bidding conditions regarding pollution management;
- Professional training of its representative on site;
- Surveillance and control;
- Sanctioning;
- Management cooperation in case of medium incident; and
- Management of pollution from its own operations.

Specifically, within the Company the following roles and responsibilities will apply:

Table 5.2 Company Roles and Responsibilities

Role	Responsibilities
Director general SNTGN TRANSGAZ SA	<ul style="list-style-type: none"> <li>- Approves the Pollution Prevention CESMP</li> </ul>
HSSE Coordinator:	<ul style="list-style-type: none"> <li>- Ensures the compliance of the Project with the requirements set out in this Plan.</li> <li>- Has the general responsibility for the implementation of this Pollution Prevention Management Plan, including by the main contractors</li> <li>- Develops, monitors and revises this plan according to changes in the legislation or other requirements emerging</li> <li>- Ensures the necessary training for BRUA PMU staff on pollution prevention is delivered.</li> <li>- Centralizes the information regarding pollution prevention management by the Contractors,</li> <li>- Provides necessary support to the Contractors to enable them to comply with the Pollution Prevention Plan</li> <li>- Ensures this Pollution Prevention Plan is available to all BRUA PMU staff and Contractor staff.</li> <li>- Performs regular audits of the main Contractors' performance against the requirements of this Plan.</li> <li>- Reports all risks, non-compliances with this Plan and incidents</li> <li>- Prepares an annual environmental report that includes details on the measures to be applied for pollution prevention, including the results of the quarterly monitoring results for air, water and noise.</li> </ul>
Environmental responsible on site of Transgaz from PMU BRUA	Will verify the implementation of contractors' obligations, including regular audits of: <ul style="list-style-type: none"> <li>- visual inspections of soil and water in the work area;</li> <li>- Whether Contractors have appropriate Intervention Plans in case of accidents;</li> <li>- Monitoring of noise emissions</li> </ul>

### 5.3 Contractor Roles & Responsibilities

Overarching Contractor HSSE requirements are defined in the relevant articles of their contracts and associated mandatory Annexes. Each contractor must also implement all relevant requirements of the CESMPs, including this Pollution Prevention CESMP. Contractors are also responsible for ensuring that any subcontracted work also meets these requirements. In addition, within the project, responsibility for pollution prevention lies with the Contractors according to the principle "polluter pays".

Specifically, within the Contractors' Organization, the following roles and responsibilities will apply:

Table 5.3 Contractor Roles and Responsibilities

Role	Responsibilities
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<ul style="list-style-type: none"> <li>- Manager responsible for environmental matters</li> </ul>	<ul style="list-style-type: none"> <li>- Makes sure all activities are performed according to the requirements within this Pollution Prevention CESMP</li> <li>- Develops their own pollution prevention plans according to the principles herein and to the principles within the Environmental Agreement</li> <li>- Assures notification of local communities on the start of activities (see Appendix 3)</li> <li>- Assures the necessary staff training on pollution prevention</li> <li>- Monitors noise, air and water according to the provisions in the Environmental Agreement through accredited laboratories and sends copies of the assessment bulletins to the beneficiary</li> <li>- Makes regular inspections at work sites to make sure all activities are undertaken according to the pollution prevention plans</li> <li>- Prepares annual and quarterly environmental reports that will include details on the implementation of the pollution prevention measures and sends it to the beneficiary</li> <li>- Reports on all risks, non-conformities and incidents</li> <li>- Takes the necessary measures to remedy non-conformities</li> <li>- Within the project the responsibility for pollution prevention rests with the Contractors, according to the principle "polluter pays"</li> </ul>
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Contractors will therefore be required to present to the Beneficiary, represented in the project by BRUA PMU in accordance with the requirements, their proposed approaches to:

- Prevention and management of pollution on site.  
Spill recovery and emergency response to an event
- Any other conditions outlined in this CESMP or its appendices.

In addition contractors will present the Beneficiary with details of:

- A nominated representative on pollution prevention; (see Appendix 1)
- Records of any pollution incidents (air, noise, water, soils)

Further specific responsibilities of both the operator and the contractors/sub-contractors are outlined in the Appendices to this CESMP.

## 6 Management, Mitigation, Monitoring and Verification

### 6.1 Management Actions

A range of management actions (and other mitigation measures) are required to be implemented in respect of pollution prevention. The specific management actions and measures required of Transgaz staff and its Contractors (and sub-contractors) are described in Appendix 1 to this CESMP.

### 6.2 General Monitoring Activities

Monitoring provisions for this Pollution Prevention CESMP have been developed through the process outlined in Table 6.1.

Table 6.1 Approaches to Monitoring

Objective	Approach
<b>1: Risk Based</b>	Monitoring programmes to address material issues base on the use of the 'source-pathway-receptor' approach in the ESIA. These are commensurate with: <ul style="list-style-type: none"> <li>• The scale and nature of the activity;</li> <li>• The assessed potential level of impact (and uncertainty thereof); and</li> <li>• The sensitivity of the local environment within the activity area of influence.</li> </ul>
<b>2: Compliance Based</b>	Addition monitoring programmes to meet specific regulatory needs.

Following this approach, the proposed monitoring plans should meet both Transgaz's requirement to understand and manage the Project's potential impacts for each construction activity/ location and any specific requirements of the Romanian authorities. The specific monitoring requirements for this Pollution Prevention CESMP are presented in Appendix 2.

The relevant Romanian legislation and standards that identify the limits/thresholds for pollution prevention (air emissions, water quality and noise limits) are provided in Appendix 3.

The permanent representatives on sites of TRANSGAZ from BRUA PMU will check the accomplish of contractors' obligations. This will include:

- Periodic testing of soil and water in the work area;
- Periodic checking of the Contractors' Intervention Plans in case of medium incidents; and
- Annually audit.

If the monitoring results reflect any non-conformity with the requirements of the Management Plan, such lack of conformity will be assessed, corrective actions will be taken, and such corrective actions will mandatorily be implemented in the shortest time possible.

### 6.3 Management System Verification Monitoring

Management system verification monitoring requirements, as detailed in Section 6.3 of the F-CESMP, are divided into three levels as shown in Table 6.2 below.

Table 6.2 Auditing Management System

Tier	Objective	Responsible	Description
<b>Tier 1:</b>	Transgaz management system audits.	Transgaz	These audits are aimed at assessing the Transgaz HSSE management system elements and assessing their continued suitability throughout the project life cycle.
<b>Tier 2:</b>	Transgaz CESMP audits.	Transgaz	These audits are undertaken by the Transgaz BRUA team to confirm compliance by the Company and its contractors with the CESMPs.
<b>Tier 3:</b>	Contractor self audits.	Contractor	These audits are to be undertaken by contractors to confirm compliance by themselves and their sub-contractors with the

			CESMPs and their own HSE management systems. The managing contractors shall ensure that audit reports are provided to Transgaz
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In addition to the above, there are also expected to be regulatory audits and lender compliance monitoring visits. The nature and structure of these will be confirmed with regulators and lenders.

#### 6.4 Key Performance Indicators

Both the General Monitoring and the Management System Verification Processes require robust Key Performance Indicators (KPI) to be developed. These are quantitative or qualitative measurements used to gauge performance over time and can be used to assess the effectiveness of control measures. The KPIs considered relevant to this Pollution Prevention CESMP are shown in Table 6.3 below.



Table 6.3 Key Performance Indicators

ID	KPI	Target	Monitoring Measure	Associated mitigation controls
KPI-PP001	Number of non-compliance with the requirements of this CESMP.	Zero non-conformances	See verification column of Appendix 1	All measures identified in Appendix 1
KPI-PP002	Number of non-compliance with project standards identified during monitoring	Zero non-conformances	See Appendix 2	N/A
KPI-PP003	Number of noise monitoring reports	Observe monitoring periodicity for noise	See Appendix 2	N/A
KPI-PP004	Number of non-conformities to noise admissible limit	Observance of admissible limits through the Environmental Agreement	See Appendix 2	N/A
KPI-PP005	Number of air monitoring reports	Observance of noise monitoring periodicity	See Appendix 2	N/A
KPI-PP006	Number of non-conformities to air admissible limit	Observance of admissible limits through the Environmental Agreement	See Appendix 2	N/A
KPI-PP007	Number of water monitoring reports and monitored indicators	Observance of water monitoring periodicity and of monitoring indicators required for emissions into water	See Appendix 2	N/A
KPI-PP008	Number of non-conformities to water admissible limit	Observance of admissible limits through the Environmental Agreement	See Appendix 2	N/A
KPI-PP009	Number of non-compliances closed due to corrective actions being taken within the defined timeframe (set on a case by case basis)	100% of all non-conformities remedied within the defined timeframe	N/A	All actions identified in Appendix 1
KPI-PP010	% of all staff who have received relevant and adequate training	100% compliance with training requirements.	??	N/A
KPI-PP011	Number of reports of near misses reviewed for root cause and a corrective action identified and shared across all spreads within 48 hours to prevent future occurrence	100% of near miss reports reviewed and shared	N/A	N/A

The specific auditing requirements for the verification of each management and mitigation controls measure described within this Pollution Prevention CESMP are identified in Appendix 1 and Appendix 2. This includes identification of the relevant audit tier level (1 to 3) to be undertaken.

## 6.5 Training

Training needs for all TRANSGAZ and Contractor staff shall be identified at the outset, before construction works commence, and a training plan developed.

## 7 Appendices

### 7.1 Appendix 1: Mitigation Measures & Management Actions

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP01	General pollution prevention	All	The equipment shall be brought to the site in perfect state of operation, the technical revisions and oil exchange being already made	Contractor	Internal audit program
PP02	General pollution prevention	All	All plant, vehicles and equipment to be maintained to manufacturers standards and maintained in accordance with the provisions of the Government Decision no. 332/2007. This includes regular inspections of plant and equipment to prevent leakage/emissions and technical periodical checks of emissions (carbon monoxide and exhaust gases). A plan for this to be created including processes to remedy potential defects.	Contractor	Internal audit program
PP03	General air emissions control	All	All installations to be well maintained with appropriate valves, fittings and flanges.	Contractor	Internal audit program; Periodic inspections
PP04	General air emissions control	All	Idling of vehicles or equipment to be restricted to minimize emissions.	Contractor	Internal audit program
PP05	General air emissions control	All	Use and maintain effective filters in vehicle cabs to keep air free of dusts and fumes	Contractor	Internal audit program, Visual inspections
PP06	General air emissions control	All	The vehicles transporting materials issuing fine particles in the air shall be covered with tarpaulin	Contractor	Periodic inspections
PP07	General air emissions control	All areas, but especially areas with large mammals	All powdery/dusty materials to be stored in enclosed containers or covered to avoid wind dispersal. Dust producing activities to be reduced during strong winds or to be controlled by dust suppression techniques e.g. water sprinkling, use speed controls, all-weather surfaces	Contractor	Periodic inspections

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP08	General air emissions control	-Residential area	An Air quality monitoring program shall be implemented, especially close to the residential areas that determined the impact significance to be "high", in the surroundings of the GCS and site organizations areas	Transgaz/Contractor	Analysis reports
PP09	General noise control	All	All plant and machinery to be fitted with appropriate noise baffles / silencers to keep noise emissions within normal operating/regulatory limits.	Contractor	Internal audit program, Visual inspections
PP10	General noise control	All	Provision of noise barriers for static equipment where appropriate especially when noisy work (eg. hammering) is being conducted.	Contractor	Internal audit program, Periodic inspections
PP11	General noise control	All	Generators and water pumps required for 24-hour operation will be super-silenced or screened/located as appropriate to reduce noise; Crane spindles, pulley wheels, telescopic sections and moving parts of working platforms will be adequately lubricated in order to prevent undue screeching and squealing; and, where possible mains electricity will be used rather than generators.	Contractor	Internal audit program, Periodic inspections
PP12	General noise control	All	Personnel will be instructed on best practice measures to reduce noise and vibration as part of their site induction training; Shouting and raised voices will be kept to a minimum e.g. in cases where warnings of danger must be given. Use of audio radios in the open environment will be prohibited except where two-way radios are required for reasons of safety and communication; Control of noise introduced into site induction to ensure that all operators on site, including contractors, are working in such a way to minimize noise;	Contractor	Internal audit program, Periodic inspections
PP13	General noise control	All	Compliance monitoring of noise to ensure limits are being met.	Contractor	Analysis reports

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP14	General noise control	All	<p>All materials will be handled, stored and used in a manner that minimizes noise, this include the preclusion of dropping material which would be placed in all instances;</p> <p>Routes and programming for the transportation associated with the works will be carefully considered in order to minimize the overall noise impact generated by these movements and will conform to the operational hours of the works</p> <p>Provision of temporary acoustic barriers (or other means) for use when operations are exposed or are identified as problem activities;</p> <p>Appropriate complaint procedure to ensure complaints are logged, investigated and resolved; and,</p> <p>Control of noise introduced into site induction to ensure that all operators on site, including contractors, are working in such a way to minimize noise.</p>	Contractor	Internal audit program, Periodic inspections
PP15	General noise control	Site establishment platform wash water	<p>Piling and ground stabilization would be suitably controlled on site if necessary (However, due to the large separation distances to the nearest receptors this is not considered an issue);</p> <p>Isolation of pumps and generators when positioned in close proximity to sensitive receptors to prevent direct vibration transfer;</p> <p>Selection of appropriate equipment for the task required;</p> <p>Appropriate training with regard to plant operational techniques so as to minimize vibration generation;</p> <p>Appropriate complaint procedure to ensure complaints are logged, investigated and resolved.</p>	Contractor	Internal audit program, Periodic inspections
PP16	General spill prevention	All	<p>Standard industry refueling protocols should be followed. Vehicles maintenance to be undertaken on a purposely provided drip tray.</p> <p>Secondary spill containment to be provided wherever refueling or storage occurs. All materials to be properly contained for decanting with fill areas to contain any spillage during transfer.</p>	Contractor	Internal audit programme, Periodic inspections

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP17	General spill prevention	All	The exchange of oils shall be done in specialized workshops	Contractor	Internal audit programme, Periodic inspections
PP18	General spill prevention	All	Spill kits should be continually available and all site assemblies will be equipped with specific materials necessary for the intervention in case of accidents (hydrocarbon leaking), so that any possibility for extension of pollution may be avoided	Contractor	Internal audit program, Periodic inspections
PP19	General Spill prevention	All	The measures required for the prevention of soil pollution with drilling fluid shall be taken	Contractor	Internal audit program, Periodic inspections
PP20	General Spill prevention	All	Perform simulations regarding emergency situations in case that an accidental pollution is caused, having impact on the water resources	Transgaz/Contractor	Internal audit program
PP21	General Spill prevention	All	Fuel handling, especially bulk storage, will take place in secure bounded areas. Similar conditions will apply to lubricant oils, chemicals and liquid wastes. Should a spill occur, polluted soils will be cleaned up or removed for appropriate disposal. All wastes will be handled, stored and disposed of as per local regulations. Diesel and other potentially polluting liquids will be stored in appropriate containers, fitted with secondary containment. Fuel equipment shall be supplied by oil pump, and tanks with automatic alarms and shut off systems to be installed in all refueling areas. All areas to be checked prior to delivery to prevent overfill and spillage.	Contractor	Periodic inspections
PP22	General Water resource protection	Activities of record keeping, correspondence, supervision and site inspector.	All working areas to have appropriate ecological toilets to be emptied by authorized operators	Contractor	Periodic inspections

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP23	General Water resource protection	Domestic waste from construction camps, pipe deposits and work fronts	Domestic wastewater to be separated from hazardous, oily water discharges at all sites	Contractor	Periodic inspections
PP24	General Water resource protection	From activities concerning: - Maintenance of equipment,- Building demolition- Pipelining	Contractors will develop and implement an appropriate plan to prevent accidental water pollution based on the BRUA commitments requirements.	Contractor	Internal audit program
PP25	General Water resource protection	Support activities to the shore, packaging, casings, various carpentry works.	Standard pollution control measures will be implemented i.e. to prevent silt contamination by keeping water out of the works area using appropriate isolation techniques, such as coffer dams and by-pass channels.	Contractor	Periodic inspections
PP26	General Water resource protection	Pipe trench excavation, foundations, building access roads, land systematization.	Sewage treatment plant at GCS will be carefully maintained strictly respecting the timing of maintenance and emptying	TRANSGAZ	Wastewater plant maintenance manual
PP27	General Water resource protection	Pipe cleaning	Demarcation and offsets for camp and storage locations and field activities of at least 50 m from watercourses where possible.	Contractor	Periodic inspections
PP28	General Water resource protection	Pipeline preparation	Monitoring the meteorological bulletins meant to take the equipment outside the areas which could be flooded, in case of high waters	Contractor	Internal audit programme, Periodic inspections

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP29	General Water resource protection	All	Implement measures against sedimentation. Use of settling ponds, silt fences and screens to prevent sediment transport	Contractor	Periodic inspections
PP30	General Water resource protection	All	Wastewater should be prevented from entering surface water bodies without prior assessment and treatment if necessary	Contractor	Periodic inspections
PP31	General Water resource protection	Watercourse	The placing of concrete in, or near to, any watercourse must be controlled to minimize the risk of pollution	Contractor	Periodic inspections
PP32	General Water resource protection	Site organizations	The adequate collection and treatment of all the used waters which will result from the site organizations so that no impact is caused on the waters	Contractor	Periodic inspections
PP33	General Water resource protection	All	Ensure contaminated water from dewatering or cement washing operations is treated prior to discharge, depending on the nature of the contaminants	Contractor	Periodic inspections
PP34	General Water resource protection	Access ways	Accomplish polders of small dimensions having a sediment exclusion role, respectively for stilling the leaking force of pluvial waters, to be accomplished along the access ways at distances of approximately 30- 50m. The development of polders shall be accomplished on surfaces of up to 10m <sup>2</sup> and at a maximum depth of 30cm, being provided with diffuse leaking areas, in steps oriented upstream, in order to avoid the occurrence of erosive phenomena, at distances of 2-3m to the access ways, being used as accumulation areas (aggregation) of the species of amphibians and not only, outside the areas having a potential for negative impact (access ways).	Contractor	Periodic inspections
PP35	Traffic	All	Vehicle tyres should be cleaned at the exit from the working areas, in case of use of public roads	Contractor	Periodic inspections

Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP36	General principles	Works site	Works sites will be subject to legally binding documents that will ensure the transfer of ownership. Based on these documents, environmental responsibilities are specifically defined to be transferred to the entrepreneurs and subsequently to the beneficiary, following the responsibilities for each stage to be clearly defined and assumed.	Contractor/TRANSGAZ	
PP37	General principles	All	Works organizations will be established by accurate legal documents that will determine the distinct responsibilities of entrepreneurs, assumed compensation, but also the breach to restore them to the initial state. Based on these documents, environmental liabilities will be clearly defined in the protocols of pre-defining environmental tasks undertaken. Thus, the principles underlying the specific legislation in force (especially the principle: the polluter pays), the contractor will undertake to remedy any fault of its negative effects.	Contractor/TRANSGAZ	
PP38	General principles	All	The workforce will be provided with environmental awareness training.	Contractor	Training records
PP39	Traffic	On-site Traffic Management	Dust emissions due to road travel shall be minimized by regulating vehicle speed and watering roads (where required).	Contractor	Periodic inspections
PP40	Traffic	On-site Traffic Management	Prepare necessary reports, inspection logs and incident records.	Contractor	Records
PP41	General pollution prevention	All	Vehicles will be maintained in accordance with manufacturer guidelines and Romanian licensing requirements and periodic verification inspections will be undertaken.	Transgaz/Contractor	Internal audit programme
PP42	General principles	All	Reducing exposure times for people working near noisy machinery	Contractor	Internal audit programme



Ref.	Topic	Location	Requirement	Responsibility	Verification Process
PP43	General	All	For the pre-construction stage when work sites will be in place for each sector there will be a protocol that will establish as accurately as possible the environmental load, based on standardized forms (standard-forms), with aerial photographs or photographic images taken from the ground, which will act as control elements. For each site during the growing season (May-September the ecological structure and functions of the site will be accurately determined.	TRANSGAZ	Records
PP44	General principles	All	Comply with all mitigation measures included in the Environmental Agreement	Contractor	Internal audit program
PP45	General principles	All	Investigate all incidents and identify any necessary corrective actions	Contractor	Internal audit program Records
PP46	General	All	Noise and vibration from plant and machinery will be controlled by ensuring that: 1) Engine compartments are closed when equipment is in use 2) Resonance of body panels and cover plates is reduced by the addition of suitable dampening materials 3) Any "rattling noise" is addressed by the tightening of loose parts or the addition of resilient materials if appropriate; 4) Siting of semi-static equipment will be orientated as far as is reasonably practicable from noise-sensitive receptors with localised screening if deemed necessary.	Contractor	Internal audit program
PP47	Water resource protection	Water Courses	All pumps, motors and combustion engines to be operated with drip trays underneath and set back from watercourses (minimum of 20m).	Contractor	Periodic inspections

## 7.2 Appendix 2: Monitoring Requirements

Table 7.1

ID	Activity	Description	Parameters	Location	Standards
PP 002	General (project lifecycle)	Monitoring of compliance with project standards	Number of non-compliance with project standards identified during monitoring	All	Project standards
PP 003	General Noise control	Noise monitoring	Number of elaborated reports/number of reports required through the Environmental Agreement	According to the noise monitoring program to be elaborated	Observance of monitoring periodicity according to the Environmental Agreement
PP 004	General Noise control	Assessment of conformity against admissible limits	Number of non-conformities found to noise admissible limits	N/A	Observance of admissible limits according to the Environmental Agreement
PP 005	General Air Emissions control	Air quality monitoring	Number of elaborated reports/number of reports required through the Environmental Agreement	According to the air monitoring program to be elaborated	Observance of monitoring periodicity according to the Environmental Agreement

ID	Activity	Description	Parameters	Location	Standards
PP 006	General Air Emissions control	Assessment of conformity against admissible limits	Number of non-conformities found to air admissible limits	N/A	Observance of monitoring periodicity according to the Environmental Agreement
PP 007	General Water Control	Wastewater quality monitoring	Number of elaborated reports/number of reports required through the Environmental Agreement. Number of monitored indicators/number of indicators required through the Environmental Agreement	According to the water monitoring program to be elaborated	Observance of monitoring periodicity according to the Environmental Agreement
PP 008	General Water Emissions control	Assessment of conformity against admissible limits	Number of non-conformities found to water admissible limits	N/A	Observance of admissible limits according to the Environmental Agreement

### 7.3 Appendix 3: Relevant legislation (Pollution Prevention Management Plan)

The indicative list of Romanian national legislation	Correspondence with EU Directives/Regulations
GEO no. 195/2005 on environment protection approved by Law no. 265 / 29.06.2006, as further amended and supplemented.	
Law no. 104/2011 on quality of environmental air as further amended and supplemented.	Transposes in the national legislation the provisions of Directive 2008/50/CE of the European Parliament and Council of May 21 <sup>st</sup> , 2008 quality of environmental air and cleaner air for Europe and the provisions of Directive 2004/107/CE of the European Parliament and Council of December 15 <sup>th</sup> , 2004 on arsenic, cadmium, mercury, aromatic hydrocarbon polycyclic aromatic hydrocarbons in ambient air.
Ministry Order no. 462/1993 on the approval of the technical conditions for atmospheric protection and of the methodological norms on the determination of emissions and atmosphere pollutants caused by stationary sources.	
STAS 12574/1987 on the quality condition of air in protected areas.	
Water Law no. 107/1996, as further amended and supplemented.	Transposes Directive 2000/60/CE of the European Parliament and Council of October 23 <sup>rd</sup> , 2000 on the setting of a community policy framework on water, as published in the Official Journal of European Community (JOCE) series L no. 327 of December 22 <sup>nd</sup> , 2000 and Directive 2007/60/CE of the European Parliament and Council of October 23 <sup>rd</sup> , 2007 on the assessment and management of flood risks, published in the Official Journal of European Community (JOUE) series L no. 288 of November 6 <sup>th</sup> , 2007.
GD no. 188/2002 on the approval of some norms regarding the conditions for discharge of wastewaters in in aquatic environment, as further amended and supplemented.	Transposes Council Directive no. 91/271/CEE on treatment of urban wastewaters, modified by Commission Directive no. 98/15/CE on some requirements set in Annex to Council Directive no. 91/271/CEE and in the Regulation of European Parliament and Council no. 1882/2003/CE on harmonization of Council Directive no. 199/468/CE of the provisions regarding the committees assisting the European Commission in their exercising of competences to execute the deeds under the procedure mentioned at art. 251 in CE Treaty, published in the Official Journal of European Communities (JOCE) no. L 284/2003.
Ministry Order no. 756/1997 on the approval of the Regulation regarding the assessment of environment protection.	
SR 10009:2017 Acoustics. Admissible noise levels in ambient environment.	

### 7.4 Appendix 4: Community Notification (template)

During ....., will execute construction works in the area of natural gas mains .....

We inform you that between the hours ....., we will perform works by producing noise machinery, dust and vibration.

Please do not throw in the works perimeter waste (paper, glass, household waste, etc.) because they can pollute the soil and create obstacles.

MANAGEMENT S.C. .... SRL