EQUITABLE ORIGIN

EO100™ Technical Supplement

EO100.3: Natural Gas Transmission & Storage

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EO100™ Standard Technical Supplement

Effective Date

The Technical Supplement for Natural Gas Transmission & Storage is effective XXXX, 2022.

Applicability

Operators seeking certification for purely the transmission & storage segments of the natural gas value chain are assessed against the EO100™ Technical Supplement for Natural Gas Transmission & Storage and the overarching EO100™ Standard for Responsible Energy Development. For operations that also contain production, gathering, boosting and/or processing EO100™ Technical Supplement for Onshore Natural Gas and Light Oil Production and EO100™ Technical Supplement for Natural Gas Gathering/Boosting and Processing, respectively will be applied.

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The official language of the EO100™ Standard is English. Equitable Origin has made every effort to ensure consistency in translation; however, in the case of inconsistency between versions, reference shall default to the official language version.

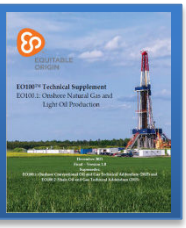
FOREWARD

The mission of Equitable Origin (EO) is to partner with business, communities, and government to support transparent, sustainable, and equitable development of energy through an independent, stakeholder-negotiated, market-driven certification system that distinguishes and rewards operators for outstanding social, environmental and safety performance. This Technical Supplement: Onshore Natural Gas Transmission & Storage covers the transmission & storage natural gas value chain sector. This Technical Supplement applies to Operators with operations within the natural gas transmission & storage segments of the natural gas value chain. The overarching EO100™ Standard for Responsible Energy Development applies to all Operators seeking certification and one or more additional technical supplements are applied in addition. Currently we have the following standard and technical supplements:

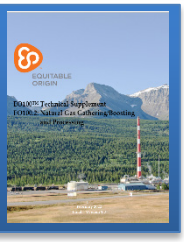
EO100™ Standard for Responsible Energy Development

+

EO100.1 Onshore Natural Gas and Light Oil Production



EO100.2 Natural Gas Gathering/Boosting and Processing



EO100.3 Natural Gas Transmission and Storage

The Technical Supplements to the EO100™ Standard for Responsible Energy Development serve to add specific Performance Targets under the following five Principles of the Standard for oil and gas operators seeking EO100™ certification:

- Principle 1: Corporate Governance, Transparency & Business Ethics
- Principle 2: Human Rights, Social Impacts & Community Development
- Principle 3: Indigenous Peoples' Rights
- Principle 4: Fair Labor & Working Conditions
- Principle 5: Climate Change, Biodiversity & Environment

The Performance Targets in the document reflect the expectations of multiple stakeholders regarding management and mitigation of social and environmental impacts associated with operators of natural gas pipeline and storage infrastructure.

Table of Contents

Page

FOREWARD ..... **I**
TABLE OF CONTENTS ..... **III**
LIST OF TABLES ..... **IV**
GLOSSARY ..... **V**
1.0 SCOPE **1**
1.1 Natural Gas Value Chain Segment Covered 1
1.2 Certifiable Unit Definition 1
2.0 SUMMARY OF EO100™ PRINCIPLES AND OBJECTIVES **1**
3.0 PRINCIPLE 1: CORPORATE GOVERNANCE, TRANSPARENCY & BUSINESS ETHICS **1**
3.1 Objective 1.5 Contractors 1
3.2 Objective 1.6: Transparency and Disclosure 1
4.0 PRINCIPLE 2: HUMAN RIGHTS, SOCIAL IMPACTS & COMMUNITY DEVELOPMENT **4**
4.1 Objective 2.2: Fair, Inclusive Engagement & Good Faith Consultation 4
4.2 Objective 2.7: Community Health & Safety 4
4.3 Objective 2.8: Sustainable Community Investment 7
4.4 Objective 2.10: Grievance Mechanism 7
5.0 PRINCIPLE 3: INDIGENOUS PEOPLES' RIGHTS **8**
5.1 Objective 3.1: Free, Prior & Informed Consent (FPIC) 8
6.0 PRINCIPLE 4: FAIR LABOR & WORKING CONDITIONS **8**
6.1 Objective 4.9: Occupational Health and Safety 8
6.2 Objective 4.10: Emergency Preparedness & Response Planning 11
7.0 PRINCIPLE 5: CLIMATE CHANGE, BIODIVERSITY, & ENVIRONMENT **11**
7.1 Objective 5.2: Emergency Preparedness and Response Planning 11
7.2 Objective 5.5: Remediation of Environmental Liabilities 14
7.3 Objective 5.7: Greenhouse Gas Emissions 16
7.4 Objective 5.10: Air 20
7.5 Objective 5.11: Water 23
7.6 Objective 5.12: Land 26
7.7 Objective 5.14: Landscape and Ambient Impacts 28
7.8 Objective 5.15: Chemical Management 30
8.0 NORMATIVE AND SUPPORTING REFERENCES **33**

List of Tables

Page

Table 1: Summary of EO100™ Principles and Objectives 1
Table 2: Objective 1.5 Performance Targets 1
Table 3: Objective 1.6 Performance Targets 2
Table 4: Objective 2.2 Performance Targets 4
Table 5: Objective 2.7 Performance Targets 5
Table 6: Objective 2.8 Performance Targets 7
Table 7: Objective 2.10 Performance Targets 7
Table 8: Objective 3.1 Performance Targets 8
Table 9: Objective 4.9 Performance Targets 9
Table 10: Objective 4.10 Performance Targets 11
Table 11: Objective 5.2 Performance Targets 12
Table 12: Objective 5.5 Performance Targets 15
Table 13: Objective 5.7 Performance Targets 17
Table 14: Objective 5.10 Performance Targets 21
Table 15: Objective 5.11 Performance Targets 24
Table 16: Objective 5.12 Performance Targets 27
Table 17: Objective 5.14 Performance Targets 29
Table 18: Objective 5.15 Performance Targets 31

GLOSSARY

A/F Ratio Controller – Air to Fuel Ratio Controller used for precise engine control to minimize methane slip emissions and work together with precise catalytic control of emissions in rich-burn engines or control precise A/F ratio in lean-burn or ultra lean burn engines to minimize NO_x emissions.

Bioaccumulating Properties - referring to chemicals that because of their persistence and ability to bioaccumulate, once exposure levels are sufficient to cause adverse effects in humans, domestic animals, or wildlife, their impacts are not easily reversed.

Biodegradability – referring to the use of chemicals that naturally biodegrade and are not harmful to the soil or water.

BOE – Barrel of oil equivalent. Using conversion factors based upon energy content and density of different production streams. Natural gas, natural gas liquids, condensate and oil can be added and converted to an equivalent oil volume.

Certifiable Unit – The scope of the assessment area including all facilities located within the predetermined geographical area agreed upon by the operator and EO. Facilities include storage field wells, compressor stations, pipeline segments between compressor stations, tank batteries, water treatment/storage facilities, and both active and inactive operations.

Certified Unit - Subsequent to the Certifiable Unit achieving EO100™ certification it is called the Certified Unit. Sometimes used interchangeably with Site.

CO – Carbon monoxide

EPZs - Emergency Planning Zones. Zones identified to facilitate a pre-planned strategy for protective actions during a defined emergency.

ERPs - Emergency Response Plans. Safety plans to be invoked in the case of an emergency.

ESG – Environmental, Social and Governance

Exceedances – referring in this document to instances of ambient air quality objectives or standards being exceeded.

Extremely High Baseline Water Stress – Categorized as extremely high (>80%) by the WRI Water Risk Atlas. Baseline Water Stress is calculated as the ratio of total water withdrawals to available renewable surface and groundwater supplies.

Facility – A facility is any well, well pad, pipeline, compressor station, meter stations, tank battery, above ground valve sites, storage facility, water storage or treatment facility. Several facilities will be included in a Certifiable or Certified Unit. Note that EO's definition of facility means a specific plant site location and does not line up with a US EPA facility definition which is generally at the basin level.

Flaring – The combustion of gas from a flare stack.

FPIC – Free, Prior and Informed Consent

GHG - Greenhouse Gas emissions including but not exclusive to CO_2, CH_4, N_2O

Greenhouse Gas Intensity – Amount of greenhouse gases per volume throughput either stored or transported.

HAPs – Hazardous Air Pollutants

H_2S – Hydrogen Sulphide

High Baseline Water Stress – Categorized as high (40-80%) by the WRI Water Risk Atlas. Baseline Water Stress is calculated as the ratio of total water withdrawals to available renewable surface and groundwater supplies.

LDAR – Leak Detection and Repair

mcf – Thousand cubic feet

mmcf – Million cubic feet

NO_x – Nitrogen Oxides

NSCR – Non-selective Catalytic Reduction

Paris Agreement – Referring to the UN Paris Climate Agreement.

Reclamation – The process of bringing a project area back to how it originally looked before development took place on the land.

Remediation - The process of cleaning up any contaminated sites.

SCR – Selective Catalytic Reduction

SDS – Safety Data Sheet

SO_x – Sulphur Oxides

TIER 4 Engine Controls – Refers to US EPA TIER 4 on road engine regulations. Depending upon model year and engine power ratings, the emission limits for heavy duty on road vehicles to be met are at minimum NMHC < 0.14 g/bhp-hr, NO_x < 0.2g/bhp-hr and $PM_{2.5}$ < 0.01 g/bhp-hr after 2007 model year.

Top-Down Survey - Aerial-based measurements and correlated estimates of total methane emissions from the Certifiable Unit using airborne observations.

Toxicity – referring to the use of chemicals that pose risk to humans and animals when exposed to.

TRIR – Total Recordable Incident Rate

VOCs – Volatile Organic Compounds

VRU – Vapor Recovery Unit

ZRF – Zero Routine Flaring

1.0 SCOPE

1.1 Natural Gas Value Chain Segment Covered

This Technical Supplement applies to natural gas transmission & storage segments of the natural gas value chain.

Operators are expected to implement the EO100™ Standard in full and reference this Technical Supplement to ensure that, for the following environmental, social and governance (ESG) Performance Targets, Certifiable Units meet the intent of the Performance Targets' applicability to natural gas operations. For clarity, Operators seeking certification of natural gas transmission and storage operations are subject to the requirements of both the overarching EO100™ Standard for Responsible Energy Development and this Technical Supplement.

1.2 Certifiable Unit Definition

Facilities eligible for certification include a pipeline entity, individual pipeline, storage field wells including the storage field pipelines & stations, compressor stations, pipeline segments between compressor stations. The other equipment that would be part of the Certifiable Unit (CU) are tank batteries, water treatment/storage facilities, and both active and inactive operations associated with the CU.

Examples are:

- Storage field including the injection/withdrawal wells, observation/monitoring wells, pipelines, compressor stations, meter stations and ancillary equipment.
- Point of receiving customer's natural gas from the producing and gathering system to the point of delivering natural gas to the customer's consuming or liquefaction location and the pipelines, compressor stations, storage fields, and other equipment along the pipeline from the point of receipt to the point of delivery.
- Pipeline from beginning to end and all facilities critical to the operation of the pipeline.
- Entity's total pipeline system when the facilities in the system are able to be effectively assessed for certification.

2.0 SUMMARY OF EO100™ PRINCIPLES AND OBJECTIVES

Table 1 summarizes the 5 Principles covered in the Standard and the Objectives under each Principle. This Technical Supplement does not add Performance Targets under every Objective covered in the Standard but only those that have specific requirements for natural gas transmission and storage

operations. Those Objectives with additional Performance Targets covered in this Technical Supplement are highlighted in darker orange in Table 1.

Table 1: Summary of EO100™ Principles and Objectives

Principle 1: Corporate Governance, Transparency & Ethics	Principle 2: Human Rights, Social Impacts & Community Development	Principle 3: Indigenous Peoples' Rights	Principle 4: Fair Labor & Working Conditions	Principle 5: Climate Change, Biodiversity & Environment
1.1 Legal Compliance	2.1 Human Rights	3.1 Free, Prior & Informed Consent (FPIC)	4.1 Labor & Working Conditions	5.1 Environmental Management & Mitigation
1.2 Financial Disclosure	2.2 Fair, Inclusive Engagement & Good Faith Consultation	3.2 Engagement & Participation	4.2 Child Labor	5.2 Emergency Preparedness & Response Planning
1.3 Bribery, Corruption, Money Laundering & Financing of Terrorism	2.3 Human Rights & Security Personnel	3.3 Cultural Impacts	4.3 Forced Labor	5.3 Energy Efficiency
1.4 Management Systems	2.4 Land Rights	3.4 Use of Traditional Natural Resources	4.4 Freedom of Association & Collective Bargaining	5.4 Waste Production & Management
1.5 Contractors	2.5 Resettlement	3.5 Culture-Based Intelligence & Traditional Knowledge	4.5 Equal Opportunities & Treatment	5.5 Remediation of Environmental Liabilities
1.6 Transparency & Disclosure	2.6 Uncontrolled Settlements	3.6 Voluntary Isolation	4.6 Working Hours & Leave	5.6 Closure & Restoration
	2.7 Community Health & Safety		4.7 Remuneration	5.7 Greenhouse Gas Emissions
	2.8 Sustainable Community Investment		4.8 Workplace Grievances	5.8 Ozone Depletion
	2.9 Cultural Heritage		4.9 Occupational Health & Safety	5.9 Biodiversity & Ecology
	2.10 Grievance Mechanism		4.10 Workplace Emergency Preparedness & Response Planning	5.10 Air
				5.11 Water
				5.12 Land
				5.13 Land Restoration
				5.14 Visual & Ambient Impacts
				5.15 Chemical Management

3.0 PRINCIPLE 1: CORPORATE GOVERNANCE, TRANSPARENCY & BUSINESS ETHICS

3.1 Objective 1.5 Contractors

Operator ensures that contractors, subcontractors, and suppliers working on and around the project site comply with all legal standards and uphold ethical, social, and environmental standards in line with the requirements of the EO100™ Standard. Protests are more common for pipelines than any other segment within the natural gas value chain. It was therefore deemed appropriate to add additional requirements for contractors to be aware and act appropriately as these situations arise to protect both their safety and the safety of the protestors. Operator ensures that contractors, subcontractors, and suppliers that could be impacted by protests are trained to respond appropriately.

Table 2: Objective 1.5 Performance Targets

Performance Target Level		
1	**2**	**3**
103.1.5.1 Where operations and/or construction activities may encounter protestors at company offices, facilities and construction projects, the Operator verifies that contractors, subcontractors, and suppliers have trained their personnel to protect their health and safety and the safety and integrity of the protestors.	103.1.5.2 Operator conducts joint drills to verify employees and contractors respond appropriately to protests.	103.1.5.3 Operator works with industry groups to provide training for stakeholders to appropriately respond to protests.

3.2 Objective 1.6: Transparency and Disclosure

The goals of Objective 1.6 are to ensure that the Operator provides stakeholders with free and reasonable access to information about the Operator's social and environmental policies, activities, and performance. This section includes performance targets related to a company's corporate GHG policies and ensuring that those align with the UN Paris Climate Agreement. Table 3 lists the additional Performance Targets under this Objective.

Table 3: Objective 1.6 Performance Targets

Performance Target Level		
1	**2**	**3**
-	103.1.6.4: Operator provides affected communities with up-to-date information regarding ongoing uncertainties and risks of oil and gas operations, including quantitative documentation of uncertainties when appropriate and practicable (e.g., quantified probabilities of risks to water or other resources, and characterization of resulting consequences).	-
103.1.6.1: Operator discloses the amount of fines issued and the number of sanctions ("Notices of Violation") for violation of environmental and safety laws and regulations.	-	-
103.1.6.2: Operator shall disclose its climate lobbying position and report on how its goals and direct lobbying activities are in line with the Paris Agreement.	103.1.6.5: The Operator discloses all trade association memberships and has a policy commitment to ensure that their lobbying activities are in line with the Paris agreement.	103.1.6.7: Operator publishes a review of lobbying activities and positions of the trade associations in which they are a member to ensure they lobby in accordance with the Paris Agreement. If the review of the trade association's lobbying activities shows misalignment with

Performance Target Level		
1	**2**	**3**
		the goals of the Paris Agreement, the operator reports on the actions it has taken in response, including leaving the association.
103.1.6.3: Operator sets corporate GHG intensity reduction targets (short, medium, and long term) in line with requirements under the Task Force on Climate-Related Financial Disclosures (TCFD) with plans to align with requirements to meet the Paris Agreement which includes a strategy towards net-zero emissions by 2050 or sooner.	103.1.6.6: Operator shows progress towards meeting the targets set under PT1 and that they are on a trajectory to meet or exceed their corporate commitments.	103.1.6.8: Operator has achieved net zero in its corporate operations.

4.0 PRINCIPLE 2: HUMAN RIGHTS, SOCIAL IMPACTS & COMMUNITY DEVELOPMENT

4.1 Objective 2.2: Fair, Inclusive Engagement & Good Faith Consultation

The goal of this Objective is to ensure that the Operator identifies and engages honestly, frequently and collaboratively with all project-affected stakeholders through a process of fair, representative, and non-discriminatory consultation. Operator allows for meaningful input into project-related decisions, practices, and performance by those stakeholders before and during the full project cycle.

Table 4: Objective 2.2 Performance Targets

Performance Target Level		
1	**2**	**3**
103.2.2.1: Operator conducts meaningful community engagement and consultation around project risks and impacts that allows for broad participation of local communities.	-	-
103.2.2.2 Operator has a plan to respond to protests. The plan includes training employees, contractors, subcontractors, suppliers, and security personnel that may be impacted by the protests. The training will include best practices for the protection of the health & safety of all stakeholders including the protestors.	103.2.2.3 Operator will conduct and document annual drills with company, contractor and security personnel and communicate lessons learned.	103.2.2.4 Operator will maintain records of protests and actions taken to address the concerns of the protestors and minimize the chance of future protests.

4.2 Objective 2.7: Community Health & Safety

The goal of this objective is to ensure that the Operator promotes community health, including monitoring indicators of community health and by communicating risks and managing incidents quickly and efficiently to avoid or minimize the risk of community exposure to health and safety hazards and the risk of impacts on ecosystem services. Table 5 summarizes the additional Performance Targets applicable to natural gas operations.

Table 5: Objective 2.7 Performance Targets

Performance Target Level		
1	**2**	**3**
103.2.7.1: Where operations encroach into urban and suburban environments, Operator engages and consults affected communities regarding appropriate setbacks (i.e., the distance between residential, commercial, or other potentially sensitive land use areas and pipeline ROWs, compressor stations and storage well sites) or additional control measures and safeguards that could be implemented in cases where regulation does not align with stakeholder expectations or does not exist, where appropriate and practicable.	103.2.7.7: Operator uses risk-based approach to determine and consistently apply setbacks from occupied buildings such as houses, schools, churches, and commercial establishments and from potentially sensitive land use areas; and related concerns of local community stakeholders during the siting process. Within the Certifiable Unit, different areas such as compressor stations, pigging facilities, tank batteries and storage wells, may require specific setback limits or other mitigation to protect the health & safety of the public.	-
103.2.7.2: Operator works with local landowners, contractors to know the location of pipelines and process for safely working near pipelines.	-	-
103.2.7.3: Operator maintains ongoing communication with residents and communities located near storage facilities to monitor health and safety related to storage field integrity risks.	103.2.7.8: Operator takes prompt action to investigate and mitigate any storage field integrity issues that are apparent or suspected from local community concerns or health related incidents.	-

103.2.7.4: Operator gathers and uses information about community road use to avoid negatively affecting the health of local community members such as ensuring safe driving practices, minimizing use of roads during peak hours and taking special precautions near schools.	103.2.7.9: Operator adjusts activity schedules to prevent or reduce traffic congestion and maintains a record of traffic accidents involving company and contractor personnel.	103.2.7.12: During major projects, operator collaborates with local law enforcement to schedule project activities to minimize impacts to the public.
103.2.7.5: Operator evaluates road damage caused by its operations and compensates for or remediates any negative impacts.	103.2.7.10: Operator works with local personnel to improve the safe use of the roads through signage awareness measures.	103.2.7.13: Operator improves quality of local roads providing a benefit to the community.
103.2.7.6: Operator develops management plan to maintain the integrity of the pipeline and other assets to minimize impacts that may adversely impact the health & safety of the public.	103.2.7.11: Operator reviews the management plan and status of executing the plan with local stakeholders and incorporates feedback when possible.	103.2.7.14: Operator develops metrics and communicates them to the public demonstrating the integrity of the pipeline and other assets.

4.3 Objective 2.8: Sustainable Community Investment

The goal of this Objective is to ensure that the Operator supports the development of communities where operations take place through community-led initiatives that promote sustainable improvements in the quality of life of affected communities. Table 6 summarizes the additional Performance Target 2 applicable to natural gas Operators.

Table 6: Objective 2.8 Performance Targets

Performance Target Level		
1	**2**	**3**
-	103.2.8.1: Operator sets targets for, and records local job creation and taxes paid to local and state entities that benefit local communities. Operator communicates anticipated job creation numbers and reports actual job creation figures over the course of the project and those related to ongoing operations.	103.2.8.2: Operator teams with local technology schools and community colleges to develop programs to train local personnel to fill needed positions.

4.4 Objective 2.10: Grievance Mechanism

The goal of this Objective is to ensure that the Operator establishes an accessible, transparent, culturally appropriate, trustworthy, and inclusive project-level grievance mechanism for individuals and communities who may be adversely impacted by development activities.

Table 7: Objective 2.10 Performance Targets

Performance Target Level		
1	**2**	**3**
103.2.10.1: Operator identifies community impact concerns and responds to them. Concerns are discussed and appropriate responses are prepared, budgeted, implemented, and monitored. Operator maintains statistics on local community concerns and reports them to senior management and back to the local community.	-	-

5.0 PRINCIPLE 3: INDIGENOUS PEOPLES' RIGHTS

5.1 Objective 3.1: Free, Prior & Informed Consent (FPIC)

The goal of this Objective is to ensure that the Operator obtains FPIC of the affected communities of Indigenous Peoples when the project activities may affect the rights of Indigenous Peoples as established in the United Nations Declaration on the Rights of Indigenous Peoples and ILO Convention 169 on Indigenous and Tribal Peoples, and in the constitution of the country of operation.

Table 8: Objective 3.1 Performance Targets

Performance Target Level		
1	**2**	**3**
103.3.1.1: Operator obtains Free, Prior and Informed Consent (FPIC) for the construction of new facilities for the disposal or long-term storage of hazardous materials on the lands or territories traditionally occupied or otherwise used or acquired by Indigenous Peoples. The Operator shall consult with Indigenous Peoples prior to making a decision to use existing facilities in such a location. If the facilities in question are not accepted or approved by the Indigenous Peoples, the Operator will find alternative facilities.	103.3.1.2: Operator commits to not dispose of hazardous material on Indigenous Peoples' land or territories. The only exceptions would be disposal of produced water into permitted disposal wells and the use of existing disposal or stage sites that have been accepted and approved by the Indigenous Peoples.	103.3.1.3: Operator proactively evaluates for historic impacts to land and territories and mitigates the impacts when found. Such as historic burn pits and waste disposal sites.

6.0 PRINCIPLE 4: FAIR LABOR & WORKING CONDITIONS

6.1 Objective 4.9: Occupational Health and Safety

The goals of Objective 4.9 are to ensure that the Operator respects the right to health by providing safe and healthy working conditions for directly and indirectly employed workers. Table 9 summarizes the additional Performance Targets applicable to natural gas operations.

Table 9: Objective 4.9 Performance Targets

Performance Target Level		
1	**2**	**3**
103.4.9.1: Operator conducts due diligence when hiring contractors regarding health & safety training and certifications required for the assigned task(s); ensures contractor conformance with operator's health & safety policies and evaluates health & safety performance of contractors. Contractors must meet any applicable training and safety levels required of operator's employees.	103.4.9.6: Operator regularly monitors worker health, especially where employees are exposed to hazardous chemicals, naturally occurring radioactive materials and/or hydrocarbons. Worker health monitoring includes but is not limited to: Upper respiratory, neurological, gastrointestinal, and dermatological symptoms associated with hydrocarbon, PCBs, asbestos, mercury, and other hazardous chemical exposures.	103.4.9.11: Operator maintains records any chronic illnesses developed by their employees or contractors such as cancers that could have been caused by exposure to carcinogens. Operator has this information reviewed annually by health impact specialist if any potential worker exposure has occurred.
103.4.9.2: Operator minimizes risk of traffic accidents by ensuring all employees and contractors receive comprehensive worker training on driving safety, including driving heavy vehicles in residential or commercial areas.	103.4.9.7: Operator maintains record of vehicle incidents, investigates the incidents, and communicates lessons learned to employees and contractors.	103.4.9.12: Vehicle incident investigations identify corrective actions and the corrective actions are tracked to completion.
103.4.9.3: Operator ensures chemical labeling, training, Personal Protective Equipment (PPE), secondary containment and monitoring procedures are in place to safely manage the handling, storage, and disposal of chemicals.	103.4.9.8: Operator documents and investigates incidents related to handling of products and takes corrective action to mitigate the risk of future incidents.	-

Performance Target Level		
1	**2**	**3**
103.4.9.4: Operator conducts hazard risk assessments, including explosion risks, and develops risk management plans to mitigate incidents. Examples of exposure risk include, but are not limited to asbestos, PCBs, benzene, and H_2S.	103.4.9.9: Any airborne or waterborne health impacts identified above regulatory, or industry action levels should trigger additional impact evaluations for nearby populations in potentially affected communities.	-
103.4.9.5: Operator provides a discussion of management systems used to integrate a culture of safety in all operations within the Certifiable Unit including training provided to employees and contractors and frequency of safety inspections.	103.4.9.10: Operator discloses (1) Total recordable incident rate (TRIR) including number of fatalities occurring within the Certifiable Unit for the past 1 year, 2 years, and 3 years preceding the assessment. Incident rate includes any recordable incident that occurs including incidents involving contractors or short service employees. Statistics and learnings are shared within the corporation to other business units.	103.4.9.13: Operator provides a discussion of learnings from incidents or near misses over the course of the 3 years preceding the assessment. The discussion is shared among trade associations, peer operations or publicly disclosed and best practices show evolution with time.

6.2 Objective 4.10: Emergency Preparedness & Response Planning

The goal of this Objective is to ensure that the Operator has the capacity to respond to operational emergencies and incidents in a manner which prioritizes worker health and safety.

Table 10: Objective 4.10 Performance Targets

Performance Target Level		
1	**2**	**3**
103.4.10.1: Operator provides proper training for onsite workers in case any exposure to hazardous materials and provides the needed emergency response equipment. Operator ensures emergency protective equipment is accessible and available for immediate use.	103.4.10.2: Operator shall conduct and document drills annually, including the use of the emergency response equipment to verify it is used correctly and in good condition.	103.4.10.3: Operator works with industry and agencies to evaluate incidents and develop standards and best practices to drive the incidents to zero.

7.0 PRINCIPLE 5: CLIMATE CHANGE, BIODIVERSITY, & ENVIRONMENT

7.1 Objective 5.2: Emergency Preparedness and Response Planning

The goals Objective 5.2 are to ensure that the Operator prepares for, communicates, and demonstrates its capacity to respond to environmental, safety and storage field incidents, releases, and emergencies. There is a particular focus on ensuring that the company promotes a culture of safety and environmental protection by learning from incidents and improving practices as a result of any incident.

Table 11: Objective 5.2 Performance Targets

Performance Target Level		
1	**2**	**3**
103.5.2.1: Operator has developed/adopted and implemented engineering specifications, construction practices, operational procedures, contingency plans, appropriate equipment, and permanent control points to minimize the risk of spills and evaluates the contingency plans at least annually. Operator has procedures in place for responding to injuries, spills, releases pipeline and storage field incidents, including local experts and specialists that are technically qualified to respond to emergencies in a timely manner. For storage field operators the plan will cover staffing for long term incidents.	103.5.2.5: Operator conducts and documents emergency response drills at least annually involving employees, appropriate contractors, and local emergency response personnel.	103.5.2.8: Operator communicates lessons learned from the annual drills to employees, contractors and emergency response personnel and documents corrective actions.
103.5.2.2: Operator shall disclose the volume and number of hydrocarbon spills over a threshold of 1 barrel (IPIECA spill guidance) and all chemical spills to soil and water annually to the environment outside of primary and secondary containment.	-	-
103.5.2.3: Operator demonstrates that root causes and contributing factors to injuries, spills and pipeline incidents have been thoroughly investigated.	103.5.2.6: Corrective measures have been adopted and learnings from incidents have been incorporated into operational protocols for preventing future incidents.	103.5.2.9: Incident investigation reports as well as corrective action plans are publicly available.
103.5.2.4: Operator ensures that public access to a facility where flaring and pipeline blowdowns occur is restricted. Operator	103.5.2.7: Operator establishes targets to reduce flaring and pipeline	-

Performance Target Level		
1	**2**	**3**
develops Emergency Response Plans (ERPs) and predetermines Emergency Planning Zones (EPZs) wherein any residents, businesses or schools located within the EPZs are alerted during planned and unplanned pipeline blowdown events or other flaring events.	blowdown events, communicates the targets to stakeholders and provides reports on the progress toward achieving the targets.	

7.2 Objective 5.5: Remediation of Environmental Liabilities

The goals of Objective 5.5 are to ensure adequate treatment of facilities at end of life as well as ensuring that sell-off of aging inventory is not a common practice by ensuring that the purchaser has adequate funds to close, remediate and reclaim sites.

Table 12: Objective 5.5 Performance Targets

Performance Target Level		
1	**2**	**3**
103.5.5.1: Within Certifiable Unit, operator discloses a list of active assets with decommissioning plans, facilities and sites that have been decommissioned, and those facilities in the process of being decommissioned.	-	-
103.5.5.2: Operator discloses total amount of financial provisions made by the organization for decommissioning and closure, as well as post-decommissioning and closure monitoring and aftercare for their assets.	103.5.5.4: Operator conducts a risk-based analysis of liabilities to prioritize closure and remediation. Factors that should be considered are age, presence of H_2S, and proximity: livestock, known wildlife habitats, communities, residences, ground, and surface water.	103.5.5.6: Operator reviews decommissioning plans and the status of ongoing decommission work with landowners and other stakeholders.
103.5.5.3: Before divesting assets, Operator conducts a due diligence process in which they confirm that the buyer has adequate financial means to close, abandon and reclaim facilities and wells when they reach end of life.	103.5.5.5: Operator works with buyer to escrow funds to fund closure, abandonment, and restoration of the property.	-

7.3 Objective 5.7: Greenhouse Gas Emissions

The goals of objective 5.7 are to incentivize better practice for reduction in methane and overall greenhouse gas emissions in the natural gas sector. Table 13 contains several Performance Targets aimed at reducing venting and flaring emissions as well as quantifying methane intensity and GHG intensity and showing improvement over time.

Table 13: Objective 5.7 Performance Targets

Performance Target Level		
1	**2**	**3**
-	103.5.7.7: Operator estimates and quantifies scope 3 emissions upstream of operations, using GHG Protocol or another industry accepted protocol, for the Certifiable Unit including: (a) emissions associated with upstream oil and natural gas exploration and production, and (b) emissions during processing of the product to meet customer quality commitments.	103.5.7.13: Operator estimates and quantifies scope 3 emissions, using GHG Protocol or another industry accepted protocol, downstream of their supply chain including refining into end use fuels such as hydrogen, CNG, LNG (including pathways to end use) and combustion of natural gas. Note: estimates of downstream emissions using emission factors is permissible.
103.5.7.1: Operator reports methane intensity at the Certifiable Unit following the NGSI intensity calculation methodology for the transmission and storage segment.	103.5.7.8: Operator demonstrates annual reductions in methane intensity in the transmission and storage segment. Operator shows initiative to reduce methane emissions by implementing a suite of control measures.	103.5.7.14: Operator quantifies and reports methane emissions at level 5 under OGMP 2.0 or equivalent program such as Project Veritas or MiQ grade A.
103.5.7.2: Operator employs best management practices to control methane emissions at all facilities within the Certifiable Unit and documents	103.5.7.9: Operator employs good design/operating practices to new facilities or modifications to existing facilities	103.5.7.15: Operator employs best design practices to new facilities or modifications to

Performance Target Level		
1	**2**	**3**
efforts in a methane management plan. These best management practices include: training employees and implementing a leak detection and repair program at all facilities; training operators to look for leaks and report the leaks to management; repair leaks at the earliest practicable timeframe according to leak management plan and implement best management practices: Controlled blowdowns (refer to AGA 2020), ensuring proper tank handling, ensuring proper flare/combustion device operation and proper compressor maintenance. Operator installs or retrofits low-bleed or no-bleed pneumatic devices at all facilities within the Certifiable Unit.	including: (a) installation of low-emitting compressor seals or route to a control device, (b) non-venting pipeline blowdowns (c) enhanced flare/combustion device functionality systems to ensure highest efficiency, (d) new facilities built with no-bleed pneumatic devices.	existing facilities including: (a) use of no-bleed pneumatic controllers, (b) vapour recovery systems installed on compressors, turbines and tanks to capture leaks and unit venting emissions, (c) installing vapour capture on well casings, (d) employing electric drive compressors where low emission power is available (e) including advanced detection technologies such as continuous monitoring or top-down surveys.
103.5.7.3: Operator has policies and procedures in place to eliminate routine and non-routine natural gas venting. During unit and station shut-downs, or storage well completions, operator either captures gas, or re-routes to flare, incinerator or other combustion device instead of venting.	-	-

Performance Target Level		
1	**2**	**3**
103.5.7.4: Operator employs semi-annual LDAR at minimum at all facilities and well pads within the Certifiable Unit.	103.5.7.10: Operator employs quarterly LDAR surveys, at minimum, at all facilities and well pads within the Certifiable Unit.	103.5.7.16: Operator employs quarterly LDAR surveys and annual top-down surveys at all facilities and storage well pads within the Certifiable Unit.
103.5.7.5: Operator ensures flares/combustion devices are operating properly by use of monitoring devices to ensure proper ignition and notification if flare/combustion device goes out (i.e., Unlit flares are unacceptable).	103.5.7.11: Operator progressively reduces routine flaring intensity on a throughput basis at its ongoing operations and provides evidence of year over year reduction in flaring intensity.	103.5.7.17: Certifiable Unit achieves zero routine flaring (ZRF).
103.5.7.6: Operator reports GHG emission intensity of the Certifiable Unit according to the EO Carbon Intensity Quantification Methodology which includes both Scope 1 and Scope 2 emissions.	103.5.7.12: Operator shows annual improvement in GHG emission intensity of the Certifiable Unit.	103.5.7.18: Operator achieves near zero GHG emissions intensity of the Certifiable Unit.

7.4 Objective 5.10: Air

The goals of Objective 5.10 are to ensure that the Operator's activities improve or do not negatively affect the air quality in affected airsheds and that best available technology is used to control air pollutant emissions from combustion and fugitive sources.

Table 14: Objective 5.10 Performance Targets

Performance Target Level		
1	**2**	**3**
103.5.10.1: Operator uses best management practices to control dust. Dust suppression techniques such as enclosures and covers, spraying, irrigation, stabilization, and revegetation of cleared land. Project roads should be sealed as far as practicable to minimize dust from vehicles and equipment.	-	-
103.5.10.2: Operator reports releases of air pollutants: NOx, SOx, CO, H_2S, VOCs, and $PM_{2.5}$ from emission sources and ensures compliance with applicable permits and regulatory requirements regarding air pollutant emissions.	103.5.10.4: Operator employs best management practices to minimize air pollutant emissions. Where diesel engines are in service, use the lowest sulfur content fuel available in the area and employ TIER 3 or 4 emission controls for NO_x and $PM_{2.5}$. Sulfur oxides are controlled by using the best available sulfur recovery technologies, natural gas engines and boilers/heaters employ emission controls for NO_x.	103.5.10.6: Operator employs best available emissions controls technology to minimize air pollutant emissions. Natural gas engines, turbines and boilers employ best available emission controls for NO_x (Combustion system retrofits, Low NOx emissions systems, SCR, NSCR) and methane slip (A/F ratio controllers, vapour recovery systems).
103.5.10.3: Operator considers effects of the operations on ambient air quality by doing any of the following: a. belonging to a	103.5.10.5: Operator regularly monitors ambient air quality in the vicinity of operations through either site level	103.5.10.7: Operator summarizes and discloses incidents of exceeding ambient air quality objectives or standards set by

Performance Target Level		
1	**2**	**3**
monitoring network, b. random sampling of ambient air quality within the site, c. passive monitoring of ambient air quality within the site, d. performing an impact assessment to determine minimal or negligible effects expected on the ambient air quality, or e. show evidence of ambient air quality not materially affected at nearby monitoring stations over a year's time frame. Operator discloses which methods were used (from a, b, c, d, e above).	continuous air quality monitoring or through participation in the local airshed monitoring network.	regulatory bodies. Operator investigates the root cause of the exceedances, takes corrective action to minimize repeat events and publicly reports the events and corrective actions. Operator works with local stakeholders including other operators, agencies, landowners, and non-governmental organizations to establish best practices to enhance ambient air quality and minimize exceedances.

7.5 Objective 5.11: Water

The goals of Objective 5.11 are to ensure that the Operator's activities improve or do not negatively affect the quality and quantity of groundwater or surface water in affected terrestrial and marine areas. Discharges to water meet or exceed international standards and have no negative impacts on human health, ecosystem health and the use of water to meet social, cultural, economic, and environmental needs.

Table 15: Objective 5.11 Performance Targets

Performance Target Level		
1	**2**	**3**
103.5.11.1: Operator respects water rights and water use rights of local and Indigenous communities, both formal and informal, that are affected by the site's water use. In countries where water rights are commoditized, fair compensation is made to appropriate parties for acquisition of the necessary water.	-	-
103.5.11.2: Operator assesses and documents freshwater use by measuring water use from all sources: aquifer, river, basin, catchment. Operator assesses and reports methods to recycle and reduce overall water use.	103.5.11.8: Operator develops local source water protection plans that include addressing regional water risks, engaging with key stakeholders, and supporting projects that improve watersheds and aquifers.	-
103.5.11.3: Operator manages impacts related to storm water and extreme flow events.	103.5.11.9: Operator monitors surface water withdrawals tied to seasonal flows to ensure flow rates are not significantly impacted considering cumulative impacts and are in line with local regulations and with sustainability of local community access and use where regulations do not exist.	-

Performance Target Level		
1	**2**	**3**
103.5.11.4: At storage facilities, Operator ensures the integrity of the casing to reduce the risk of leakage of hydrocarbons into a shallow aquifer due to imperfect sealing of the cement column around the casing.	-	-
103.5.11.5: At storage facilities, Operator employs annular pressure monitoring and annular pressure management program to ensure well-bore integrity over time.	-	-
103.5.11.6: Operator conducts baseline and post-completion sampling of individual drinking/agricultural water wells and surface water within a minimum radius of 2,500 ft or regulatory limit, whichever is greater, prior to drilling and following completion of gas storage wells.	-	-
103.5.11.7: Operator installs and annually inspects groundwater monitoring wells near storage facilities to monitor any potential impacts on groundwater aquifers. Results of the inspections are documented.	103.5.11.10: Operator conducts quarterly monitoring of groundwater monitoring wells near storage facilities to monitor any potential impacts on groundwater aquifers. Results of the inspections are documented.	103.5.11.11: Operator conducts monthly monitoring of groundwater monitoring wells near storage facilities to monitor any potential impacts on groundwater aquifers. Results are documented and reported to local stakeholders.

7.6 Objective 5.12: Land

The goals of Objective 5.12 are to ensure that the Operator minimizes deforestation or the clearance of land in line with the Mitigation Hierarchy.

Table 16: Objective 5.12 Performance Targets

Performance Target Level		
1	**2**	**3**
-	103.5.12.2: Where practical, operator co-locates infrastructure (e.g., roads and pipelines in the same right of way) to minimize surface disturbance.	-
103.5.12.1: Operator evaluates and reports potential risks and impacts to wildlife migratory corridors and habitat for species native to the site area when locating infrastructure.	103.5.12.3: After construction is complete, the operator restores the land and vegetation in accordance with approved project restoration plan.	-

7.7 Objective 5.14: Landscape and Ambient Impacts

The goals of Objective 5.14 are to ensure that the Operator takes into account effects of operations with regards to odors, noise, vibration, heat and visual impacts. Due to the large-scale compressor engines that are used for compression on transmission pipelines and maintenance events such as blowdowns, noise and vibration can be impactful for local residents. Therefore, additional requirements have been added to this technical supplement for assessing noise impacts and mitigation measures.

Table 17: Objective 5.14 Performance Targets

Performance Target Level		
1	**2**	**3**
103.5.14.1: Operator designs and operates the system to minimize and mitigate high levels of noise exposure to the public.	103.5.14.2: Operator implements best practices to eliminate sources and actions that could create high levels of noise exposure to the public. When mitigation is not possible for short term high noise levels, the operator will notify the public of pending work that will involve high levels of noise.	103.5.14.3: Operator tracks and reports each event involving high levels of noise impacting the public. Metrics are established and tracked to reduce the events to zero.

7.8 Objective 5.15: Chemical Management

The goals of Objective 5.15 are to ensure that the Operator publicly reports on chemicals used and evaluates chemicals used and chooses greener alternatives.

Table 18: Objective 5.15 Performance Targets

Performance Target Level		
1	**2**	**3**
103.5.15.1: Operator develops screening tools to analyze the risks associated with each chemical and hazardous product used and requires increasing levels of management approval for higher toxicity/dangerous chemicals and products. Examples include asbestos containing material, cleaning solvents and sulfuric acid.	-	-
103.5.15.2: Operator publicly reports progress in reducing volumes of toxic chemicals used, as well as substitution of less-toxic chemicals used in its operations. Operator includes all chemicals such as corrosion inhibitors, acids, solvents and lubricants in the progress report and reduction plans.	103.5.15.5: Operator evaluates safer and eco-friendly alternatives to hazardous chemicals (corrosion inhibitors, acids and cleaning solvents) used and demonstrates use of safer and eco-friendly alternatives by public disclosure.	-
103.5.15.3: Where trade secret protection is asserted, such assertions are made public and substantiated by a public body, where possible and in accordance with national, state, or other applicable law. Operator discloses whether chemical disclosure includes exemptions for confidential business information. Operator discloses the % of chemicals that public disclosure of is reported.	-	-

Performance Target Level		
1	**2**	**3**
103.5.15.4: Operator mitigates the risk of spills through secure storage of chemicals on site in fully contained in stable, weather-proof storage containers. Should have secondary containment through use of double walled containers or separate secondary containment.	-	-

8.0 NORMATIVE AND SUPPORTING REFERENCES

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