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EO100™ Standard Technical Addendum

EO100.1: Onshore Conventional Oil and Gas Operations

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FOREWORD

The mission of Equitable Origin (EO) is to protect people and the environment by ensuring that energy development is conducted under the highest social and environmental standards. Equitable Origin is an independent, stakeholder-negotiated, market-driven certification system that distinguishes and rewards operators for outstanding social, environmental and safety performance.

In 2012, Equitable Origin published the EO100™ Standard for onshore conventional oil and gas exploration and production. In 2015, the Equitable Origin Board determined that the EO100™ Standard broadly applies to other types of energy development projects but that additional Technical Addenda would be needed to be developed to ensure adequate coverage of specific social and environmental impacts associated with various types of energy development. In order to implement the expansion of the scope of application of the EO100™ Standard to energy development projects, the Board approved the annexing of the Provisions and Performance Targets specific to onshore oil and gas exploration and production into a separate Technical Addendum.

This Technical Addendum to the EO100™ Standard serves to clarify specific Performance Targets under the following sections of the Standard for onshore conventional oil and gas operators seeking EO100™ certification:

- Principle 1: Corporate Governance, Accountability & Business Ethics
- Principle 2: Human Rights, Social Impact & Community Development
- Principle 3: Fair Labor and Working Conditions
- Principle 4: Indigenous Peoples' Rights
- Principle 5: Climate Change, Biodiversity & Environment
- Principle 6: Project Life Cycle Management

The standards below reflect the expectations of operators regarding management and mitigation of social and environmental impacts associated with development of onshore oil and gas resources.

REFERENCES

- EO100™ Standard 2012 (A)
- EO100™ Standard Guidance
- EOP-101 Standard Development and Governance
- EOP-102 EO100™ Scope & Eligibility
- EOP-103 EO Policy on Association
- EOP-203 EO Certification System Comments, Complaints and Appeals

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SCOPE

This Technical Addendum applies specifically to onshore conventional oil and gas development sites.

Operators are expected to implement the EO100™ Standard in full and reference this Technical Addendum to ensure that, for the following social and environmental performance targets, sites meet the intent of the targets' applicability to conventional oil and gas operations.

This Technical Addendum also applies to approved auditors carrying out EO100™ certification audits as it includes audit indicators to clarify data points to be gathered and reviewed during audits of onshore conventional oil and gas exploration and production sites.

As per EOP-103 Scope & Eligibility policy, the guidelines apply to the Unit of Certifiable Development (UCD) or aggregated UCDs (see below).

UNIT OF CERTIFIABLE DEVELOPMENT

Unit of Certifiable Development (UCD): (1) A well pad and all gathering pipelines, tanks and transfer equipment leading up to the point at which physical custody is transferred (e.g., Lease Automatic Custody Transfer or LACT Unit) and (2) all equipment (e.g., storage tanks, pipelines), facilities (e.g., production batteries) and services (e.g., workshops, accommodation camps, offices, warehouses, pipe yards, roads) that support part (1) of this definition whether or not the equipment, services or facilities are shared and regardless of their geographic location. Well pads that are essentially contiguous (e.g., separated by a roadway) must be treated as a single unit.

Allowable UCD Aggregations: multiple UCDs run by a single owner/operator, which share a single management system; are geographically proximate, interconnected, and within the same block; and which have a similar set of stakeholders. The number and type of aggregated UCDs must not inhibit effective adoption of or certification to EO100™.

EO CREDIT CONVERSION

The EO100™ Certification Score is converted into EO Credits for oil and gas production sites as follows: *EO Credit Generation Rate = EO100™ Certification Score * Barrel of Oil Equivalent (BOE)*¹

For example, a site that receives an EO100™ Certification Score of 100% of applicable PT1s (with no partial conformances) will be given the rights to 33 EO Credits for every 100 barrels of oil (or barrels of oil equivalent for natural gas) produced.

For additional details on how the EO100™ Certification Score is calculated, refer to EOC-202f EO100™ Scoring Procedure available on the EO website: www.equitableorigin.org

¹ See Definitions.

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PERFORMANCE TARGETS

The following Performance Targets should be used by operators to ensure conformance with the EO100™ Standard Provisions referenced in the left-hand column. The Performance Targets elaborate on the EO100™ Provision referenced and should be read in conjunction with the associated Performance Targets in the EO100™ Standard.

EO100™ STANDARD REFERENCE	PERFORMANCE TARGET LEVEL	PERFORMANCE TARGETS (PTs)
Principle 1: Corporate Governance, Accountability & Business Ethics		
1.3 Fiduciary Compliance & Disclosure	PT1	Operator formally supports Extractive Industries Transparency Initiative (EITI) implementation. Operator publicly discloses what it pays for resources extraction rights on the project and proof of payment of all legally required fees, royalties and taxes in accordance with EITI.
Principle 2: HUMAN RIGHTS, SOCIAL IMPACT & COMMUNITY DEVELOPMENT		
2.7 Human Rights and Security Personnel	PT2	Operator has been accepted as a Corporate Participant in the Voluntary Principles on Security and Human Rights, is actively seeking membership, or can demonstrate credible implementation.
	PT3	Operator actively contributes to the promotion of the Voluntary Principles on Security and Human Rights and participates in national-level activities related to the Voluntary Principles where they exist.
Principle 5: CLIMATE CHANGE, BIODIVERSITY & ENVIRONMENT		
5.3 Climate Change	PT3	The inventory of GHG emissions includes an estimate of GHGs generated by the refining and end use of fuels and other products produced from the certified project.
5.6 Water	PT1	Operator does not use surface water for enhanced oil recovery operations, unless approved by the relevant government permitting authority.
	PT2	Operator publicly discloses the composition of produced water.

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	PT3	Operator publicly discloses all components of compounds used downhole during well drilling, completion, and production.
5.7 Air	PT1	Operator shall implement a program for reductions in flaring (accounting for changes in production). The trend in the volume flared in the three year period preceding the audit has been at least a 5% average annual reduction (measured on a per-BOE basis). No gas is vented to the atmosphere except in emergency cases. The calculation of the average annual reduction should not include gas vented during emergencies. Operator ensures that local communities cannot access areas where flaring occurs. Local communities are educated on the risks of entering these areas.
	PT2	The trend in the volume flared in the three year period preceding the audit has been at least a 10% average annual reduction (measured on a per-BOE basis).
	PT3	The trend in the volume flared in the three year period preceding the audit has been at least a 20% average annual reduction (measured on a per-BOE basis).
5.11 Waste Production & Management	PT1	Operator develops and implements a waste management plan to address the production, storage and disposal of produced water, drilling waste, other wastes specific to oil and gas exploration and production and general waste.
5.12 Emergency Preparedness	PT1	Spill Prevention: 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 reports any spills promptly to regulating authorities, and takes appropriate actions to identify and address the factors contributing to the spill.

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	PT2	<p>In the year preceding the audit, Operator has had no more than one spill to land or water that was reportable, based on national standards.</p> <p>The spill volume, if any, is not higher than the maximum potential spill volume technically defined in the Contingency Plan or a related document.</p> <p>Operator demonstrates that root causes and contributing factors have been thoroughly investigated and corrective measures have been adopted immediately. Investigation reports as well as corrective action plans are publicly available.</p>
	PT3	<p>In the three years preceding the audit, Operator has had no spills to land or water that were reportable, based on national standards, US federal laws or EU directives (whichever is most stringent for the specific material of interest).</p>
5.14 Reporting & Disclosure²	PT1	<p>If Operator uses hydraulic fluids during well completion or to stimulate production, Operator publicly discloses all components of those fluids.</p>
Principle 6: PROJECT LIFE CYCLE MANAGEMENT		
6.2 Recognized Management Systems		<p>Recognized systems include the American Petroleum Institute (API), Model Environmental, Health and Safety (EHS) System.</p>

² Previously, 5.15.

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DEFINITIONS:

Barrel of oil equivalent (BOE)	Many oilfields produce “associated” natural gas and natural gas condensate, i.e. the gas is associated with oil production. Other fields produce “nonassociated” gas and condensate (i.e. the hydrocarbons do not include crude oil). For purposes of EO certificates, natural gas and natural gas condensate are converted to barrels of oil equivalent (BOE), which the American Petroleum Institute defines as: BOE units are based on the approximate energy released by burning one barrel (42 U.S. gallons or 158.9873 liters) of crude oil, equal to 5.8×10^6 BTUs (British Thermal Units). This value is necessarily approximate as various grades of oil have slightly different heating values. One BOE is approximately equivalent to 5,800 cubic feet of natural gas or 58 CCF. The United States Geological Survey (USGS) lists a typical conversion of 6,000 cubic feet (170 cubic meters) of typical natural gas per BOE.
Exploration [for oil and/or gas]	Reconnaissance, seismic exploration, exploratory drilling, and appraisal drilling.
Flaring	The elimination, by burning, of waste gas which is otherwise not feasible to use or transport; flaring may also be used to burn non-waste gas to prevent over-pressurization of gas processing equipment and in emergency situations.
Well pad	The surface area, usually cleared, leveled and developed, used for drilling one or more wells from which oil and/or gas is produced.

NORMATIVE AND SUPPORTING REFERENCES:

- IPIECA Oil Spill Preparedness and Response Report Series Summary (2008)
- IPIECA Guide to Tiered Preparedness and Response (2007)
- IPIECA’s series of Good Practice Guidelines for the Oil and Gas Industry
- American Petroleum Institute (API) Model Environmental, Health and Safety (EHS) System
- IPIECA and OGP: A Guide to Developing Biodiversity Action Plans for the Oil and Gas Sector (2005)
- IPIECA: Oil and Natural Gas Industry Guidelines for Greenhouse Gas Reduction Projects, March (2007)
- Integrating Biodiversity Conservation into Oil and Gas Development, Energy and Biodiversity Initiative (2003)
- US Bureau of Land Management: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, 4th Ed. Revised (2007)