2 ConocoPhillips Health, Safety and Environmental Management System

Section 2 summary

Purpose:

This section describes the management system that ConocoPhillips will use to incorporate the commitments made for the project into its daily business and operations.

Section at a glance:

ConocoPhillips will manage the project in the same way the company approaches all its capital projects throughout the world. This ensures consistency of approach and application of the company's principles for protection of the environment, health and safety, as well as our commitments to environmentally sustainable development.

Our Health, Safety and Environmental Management System (HSEMS) provides the operating framework within which tools such as standards, procedures and policies are used to manage impacts and risks. The HSEMS also provides the framework for delivering the commitments, referred to as environmental performance outcomes, that are made in **Section 7** of this document.

Throughout all stages of a project the HSEMS identifies the processes, methods and work practices that will be used to achieve the stated outcomes and operate safely, reliably and efficiently. The HSEMS includes company policies, procedures, standards, practices, guidelines, training and operator manuals and templates.

The system involves continuous review and improvement in the way managers and employees interact, train, communicate, evaluate, plan and carry out every aspect of their jobs. Above all else, the system is continually focused on managing impact and risk to ensure the safety of employees, the community and the environment.

2 ConocoPhillips Health, Safety and Environmental Management System

2.1 Overview

At ConocoPhillips, a Health, Safety and Environmental Management System (HSEMS) provides a systematic process to identify, assess, and manage health, safety and environmental risks from and to business operations. The routine application of a HSEMS provides ongoing identification, prioritisation and control of these risks.

In support of the HSEMS, ConocoPhillips has a Sustainable Development Risk Management Practice that promotes the realisation of economic, social and environmental benefits through the project life. Refer to **Section 2.4** for further detail.

For capital projects, such as this project, ConocoPhillips also implements a Capital Project Management System (CPMS) which supports the HSEMS and provides a framework for the successful execution and management of a project. The CPMS is discussed in detail in **Section 2.5**.

2.2 ConocoPhillips HSEMS Standard

The ConocoPhillips HSEMS Standard guides the implementation of the HSEMS within individual business units across ConocoPhillips global operations. It has four distinct phases and 15 interrelated elements, as shown in **Figure 2-1**, with each phase of the process building on the previous phases.

- PLAN: hazards, risks, and regulatory requirements are identified in these elements. These elements also identify the risk mitigation requirements that will be built-out in the DO phase and provide for the establishment of strategic plans, goals and objectives
- DO: describes the specific implementation tools needed to manage the risks and requirements identified in the PLAN phase
- ASSESS: describes detailed monitoring and auditing to ensure that risks and requirements are being identified, assessed, and managed
- ADJUST: provides for modification of the HSEMS and its implementation in order to adjust for strengths, gaps and opportunities for improvement identified in the ASSESS phase.

The HSEMS Standard defines the framework and requirements for each element within the HSEMS, to ensure that HSE issues are managed in a consistent manner across ConocoPhillips, and establishes a risk-based, risk-appropriate, targeted improvement process.

The 15 elements of the HSEMS and their implementation are discussed in detail in **Section 2.2.1** to **Section 2.2.15**.

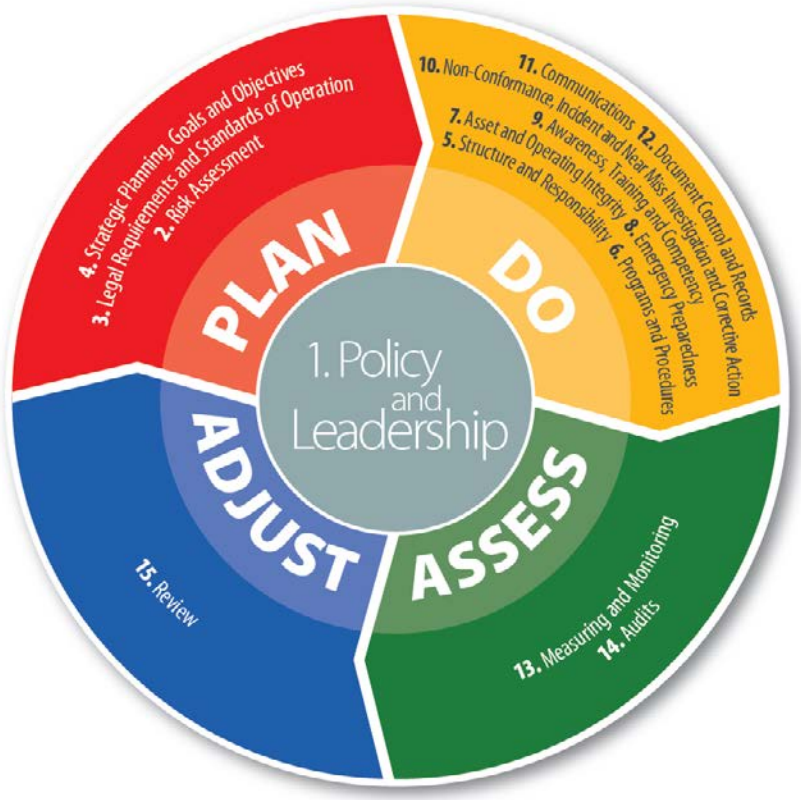

Figure 2-1: Overview of ConocoPhillips HSEMS

2.2.1 Element 1: Policy and leadership

This element defines expectations for the HSE Policy and leadership requirements for supporting a strong HSE culture, ensuring compliance with HSE requirements and driving HSE excellence.

ConocoPhillips HSE Policy, as shown in **Figure 2-2**, establishes the expectations, principles of operation and desired outcomes for the Company. The HSE Policy is supported by a Sustainable Development Position Statement, as shown in **Figure 2-3**.

2.2.2 Element 2: Risk assessment

This element defines HSE risk management requirements, inclusive of sustainable development considerations. ConocoPhillips seeks to maintain the health and safety of its employees and contractors, and minimise environmental impact and risk through the active and progressive elimination of hazards and the reduction of risk to a level that is ALARP.

The core steps of HSE and sustainable development risk management include:

- define the context, including risk acceptability criteria and the task/activity
- identify the hazards to determine risk scenarios
- analyse the risk using either quantitative or qualitative assessments
- evaluate the risk using the ConocoPhillips Risk Matrix
- manage and reduce risk to ALARP (eliminate, substitute, engineering and administrative controls)
- continuously monitor and review the risk
- communicate identified risks via risk registers and consultation with personnel.

The environmental risk management framework is embedded within the HSEMS and the core steps described above applied to the assessment and management of environmental impacts and risks. A full summary of the environmental risk management approach undertaken for this OPP is provided in **Section 6**.

Further description of how ConocoPhillips incorporates sustainable development into risk management is provided in **Section 2.4**.

ConocoPhillips

HEALTH, SAFETY AND ENVIRONMENT POLICY

Our Commitment

ConocoPhillips is committed to protecting the health and safety of everybody who plays a part in our operations, lives in the communities in which we operate or uses our products. Wherever we operate, we will conduct our business with respect and care for both the local and global environment and systematically manage risks to drive sustainable business growth. We will not be satisfied until we succeed in eliminating all injuries, occupational illnesses, unsafe practices and incidents of environmental harm from our activities.

Our Plan

To meet our commitment, ConocoPhillips will:

- Demonstrate visible and active leadership that engages employees and services providers and manage health, safety and environmental (HSE) performance as a line responsibility with clear authorities and accountabilities.
- Ensure that all employees and contractors understand that working safely is a condition of employment, and that they are each responsible for their own safety and the safety of those around them.
- Maintain "stop work" policies that establish the responsibility and authority for all employees and contractors to stop work they believe to be unsafe.
- Manage all projects, products and processes through their life cycles in a way that protects safety and health and minimizes impacts on the environment.
- Provide employees with the capabilities, knowledge and resources necessary to instill personal ownership and motivation to achieve HSE excellence.
- Provide relevant safety and health information to contractors and require them to provide proper training for the safe, environmentally sound performance of their work.
- Measure, audit and publicly report HSE performance and maintain open dialogue with stakeholder groups and with communities where we operate.
- Comply with applicable regulations and laws.
- Work with both governments and stakeholders where we operate to develop regulations and standards that improve the safety and health of people and the environment.
- Maintain a secure work environment to protect ourselves, our contractors and the Company's assets from risks of injury, property loss or damage resulting from hostile acts.
- Communicate our commitment to this policy to our subsidiaries, affiliates, contractors and governments worldwide and seek their support.

Our Expectations

Through implementation of this policy, ConocoPhillips seeks to earn the public's trust and to be recognized as the leader in HSE performance.

Ryan Lance
Chairman and Chief Executive Officer
ConocoPhillips

Figure 2-2: ConocoPhillips HSE Policy

ConocoPhillips

SUSTAINABLE DEVELOPMENT POSITION

Sustainable Development is about conducting our business to promote economic growth, a healthy environment and vibrant communities, now and into the future. We believe that this approach will enable us to deliver long-term value and satisfaction to our shareholders and our stakeholders.

Sustainable Development is fully aligned with our vision, to be the E&P company of choice for all stakeholders by pioneering a new standard of excellence, and our SPIRIT Values.

OUR FOCUS

To deliver on our commitments, we will prioritize issues, establish plans for action with clear goals and monitor our performance. In addition, we will develop the following company-wide competencies to successfully promote sustainable development:

- Integration — Clearly and completely integrate economic, social and environmental considerations into strategic planning, decision-making and operating processes.
- Stakeholder Engagement — Engage our stakeholders to understand their diverse and evolving expectations and incorporate that understanding into our strategies.
- Life-Cycle Management — Manage the full life-cycle impacts of our operations, assets, and products.
- Knowledge Management — Share our successes and failures to learn from our experiences.
- Innovation — Create a culture that brings new, innovative thinking to the challenges of our evolving business environment.

OUR EXPECTATIONS

Through delivering on our commitments to sustainable development, we will be the best company to have as a supplier, investment, employer, partner and neighbor.

Figure 2-3: ConocoPhillips Sustainable Development Position

Operational safety

The identification and understanding of hazards that exist in ConocoPhillips operated or leased facilities, including those related to design, construction, installation, commissioning, operations and decommissioning of facilities (i.e. life-cycle assessment), are fundamental prerequisites to managing those hazards. Throughout a project, there are systematic safety studies done by multi-discipline teams in order to reduce any identified risk levels to ALARP. This is particularly important in the design phase as there is the opportunity to 'design out' or eliminate hazards through the application of the hierarchy of controls, to make the facilities inherently safer.

Risk assessments undertaken throughout the project life shall consider planned, unplanned and emergency operating conditions. When the assessment process is complete, relevant personnel shall be informed of the risks identified and the control measures necessary to eliminate, reduce or control the risks to ALARP. The assessment output shall be documented in appropriate risk registers and resulting action plans. Mitigation measures shall be assigned to responsible parties and target close-out dates established. These shall be subject to periodic review and update as required throughout the project life-cycle. All actions resulting from these studies shall be closed out with adequate supporting documentation prior to implementation of the related works.

2.2.3 Element 3: Legal requirements and standards of operation

This element establishes requirements for maintaining a process to monitor changing laws/regulations and site activities, and assigning responsibilities to help assure compliance with legal requirements (e.g. laws, regulations, permits or project approvals and commitments made in permit applications) and standards of operation (e.g. relevant ConocoPhillips and industry standards and/or design codes) applicable to the operational jurisdiction.

All aspects of the project operations (including project design, installation, pre-commissioning, commissioning, operation and decommissioning) will be compliant with relevant International, Commonwealth, State and Territory requirements, codes and standards of operation.

The environmental legislation and other environmental management requirements relevant to the project are discussed in detail in **Section 3**.

2.2.4 Element 4: Strategic planning, goals and objectives

This element establishes the requirements for HSE planning and goal setting.

In the context of this OPP, the environmental performance outcomes, detailed in **Section 7**, represent the environmental goals or objectives for the project.

2.2.5 Element 5: Structure and responsibility

This element establishes requirements to define and manage roles, responsibilities, accountabilities, employee engagement, and interrelationships.

ConocoPhillips maintains a structured organisation to manage all potential impacts and risks of Company activities as relevant to HSE aspects, including:

- documenting roles, responsibilities and accountabilities as they relate to the HSEMS
- defining an effective method of communication to ensure understanding of roles, responsibilities, and accountabilities
- providing the resources and structure essential for implementation, operation, and maintenance of the HSEMS.

2.2.6 Element 6: Programs and procedures

This element establishes requirements to develop and implement programs and documented procedures to ensure compliance with legal requirements and standards of operation, and to manage HSE risks. These programs, processes and procedures are made available to relevant employees and contractors and are reviewed at an appropriate BU level in accordance with a defined review schedule. Programs and procedures are central to implementation of the HSEMS.

Programs are implemented to manage and communicate permanent and temporary changes associated with project impacts and risks. Any change shall be formally assessed, managed, implemented, documented, approved and closed out in accordance with the project procedure.

2.2.7 Element 7: Asset and operating integrity

This element establishes standards for development, implementation and maintenance of ConocoPhillips Asset and Operating Integrity (A&OI) programs to:

- properly manage risks associated with operations, equipment failure or uncontrolled loss of primary containment
- establish a clear understanding of operated assets, failure mechanisms and their consequences/ associated risks.

The A&OI philosophy is communicated and fully integrated through the implementation of various A&OI programs, processes and procedures that define and manage the integrity of ConocoPhillips operated/ leased assets and operations across the project life-cycle. These programs and procedures include:

- procurement and pre-construction HSE assessment (e.g. design considerations)
- identifying and documenting major accident hazards, safety critical elements and technical performance requirements
- design and engineering documentation, which covers design and construction, decommissioning and abandonment, procurements and third party services, quality assurance/quality control verification and inspection, testing, and maintenance programs
- commissioning and pre-start up reviews
- structural integrity systems
- hazard identification and risk analyses
- operating and maintenance procedures and programs
- management of change procedures.

The A&OI programs are reviewed and updated by technically competent personnel to manage the risks associated with the asset life-cycle. This process involves application of appropriate controls and A&OI integrity management performance measures, and engagement of ConocoPhillips personnel/contractors through communication of the aims and goals established for the management of technical integrity.

2.2.8 Element 8: Emergency preparedness

This element defines the Crisis Management and Emergency Response (CM&ER) planning and preparedness requirements for assets operated by ConocoPhillips and the Crisis Management support functions provided and coordinated from ConocoPhillips Headquarters.

Each site is covered by facility and project specific CM&ER processes and systems to appropriately address identified risks and applicable legal requirements. These risks are identified via appropriate systematic review and analysis processes, as outlined in **Section 2.2.2**.

A Crisis Management Plan (CMP) is maintained that provides the structure and procedures whereby resources and support can be rapidly assembled and allocated to supplement actions taken at the emergency site. Crisis and emergency response is managed by a hierarchy of teams within the Company and includes a Crisis Management Team (and support team) and Incident Management Assist Team. The CMP is supplemented by sub-ordinate Incident Management Plans (IMPs) and activity-specific OPEPs.

Further details on emergency response and preparedness are provided in **Section 7.2.2**.

2.2.9 Element 9: Awareness, training and competency

This element establishes the requirement that all employees, contractors, and visitors have the necessary awareness, training, and competency to perform their activities consistent with Company HSE Policy, standards, and procedures.

ConocoPhillips implements a documented training and competency system to confirm that employees/ contractors have the required training and competency to fulfil their duties in a safe, environmentally and socially responsible manner. The system addresses:

- employee selection and identification of training, competence and development needs
- contractor evaluation and management
- operator or mechanical skills training and qualification
- development and maintenance of training resources and records
- demonstration of competency.

2.2.10 Element 10: Non-conformance, incident, and near miss investigation and corrective action

Through this element, a systematic approach is implemented so that all incidents and near misses are consistently, methodically and effectively investigated as appropriate to their risk or potential severity. All incidents, including near misses, are reported, investigated in a timely manner and analysed to identify corrective actions/preventative measures to prevent recurrence and continuously improve HSE performance. Incident investigations are documented using a database to track actions and enable sharing of learnings.

Non-conformances may be identified through audits (**Section 2.2.14**), observations or incident reports. Actions to address non-conformances are developed following the same process applied to address root causes of incidents.

Key performance indicators are in place to track and report the status of actions arising from incidents and audits.

Reporting specific to OPGGS (Environment) Regulations

Subject to OPP approval, subsequent EPs covering the project activities will identify reportable and recordable incidents for the particular activities in accordance with OPGGS (E) Regulation 26, 26(A), 26(AA) and 26(B), and will outline processes for reporting as per Regulation 26(C). Environmental incidents will be reported to the appropriate government authorities when required.

2.2.11 Element 11: Communication

This element sets the requirements for the communication of information within the Company and engagement with external stakeholders.

Internal communication

Dedicated processes and procedures facilitate the effective internal communication of HSE and Sustainable Development (HSE&SD) related issues at ConocoPhillips corporate, Business Unit, project and operations levels. Examples include, but are not limited to, BU HSEMS manual and procedures; office and facility inductions; HSE intranet websites and performance metrics; programs and procedures; HSE bulletins and safety moments; hazard reporting and issue resolution procedures; and training programs and processes.

External communication

ConocoPhillips is committed to ongoing, active, transparent and collaborative consultation with stakeholders throughout the life-cycle of its projects and operations. Accordingly, processes and procedures have been developed to manage stakeholder relations via open communication, in order to understand and respond appropriately to their diverse and evolving expectations.

External communication processes define responsibility and chain of control for receiving and handling inquiries and tracking receipt, response, and status of inquiries from external parties.

Refer to **Section 8** for an overview of the consultation program relevant to this OPP.

2.2.12 Element 12: Document control and records management

This element establishes the requirements for management and control of HSEMS documents and records. Procedures are implemented to manage key documentation and to ensure that documents are accurate, current and available to appropriate personnel. Documents and records, including procedures, work instructions and other information necessary to carry out work activities, are retained in accordance with corporate and legislative requirements. Documents are also reviewed at a defined frequency and revised as necessary, with current versions made available and obsolete documents removed or identified and retained (where necessary) for legal use.

2.2.13 Element 13: Measuring and monitoring

This element defines the requirements for measuring and monitoring BU performance, providing assurance of compliance, assessing effectiveness in meeting the Company's goals and legal obligations, and identifying opportunities for improvement.

Processes are implemented for measuring and monitoring HSE performance, evaluating the achievement of HSE goals and objectives, identifying opportunities for improvement and providing assurance of compliance. Leading and lagging performance measures are developed, identified, tracked and reported to provide timely information to manage trends and impacts and to establish future goals and direction. Processes are also in place to measure and monitor project operations and activities.

2.2.14 Element 14: Audits

This element establishes requirements for audit programs that assess the adequacy and effectiveness of HSE controls. The audit program also identifies any non-conformances within the HSEMS.

ConocoPhillips implements and maintains a program for the planning/scheduling, preparation, execution, reporting and close-out of HSE audits carried out across all areas of BU operations including capital projects. The program also includes a process to analyse non-conformance to identify underlying cause(s) and/or management system failures, and provisions for periodic review.

2.2.15 Element 15: Review

This element establishes requirements to review the content and functionality of the HSEMS to ensure there is a functioning and systematic process in place so that HSE&SD risks are identified and managed in order to achieve the Company and BU HSE&SD goals and objectives.

With participation from the most senior leadership positions, the BUs implement a documented annual HSE and A&OI Review Process for the review of the BU HSEMS. The reviews are conducted by defined groups, teams, or committees (including HSE Steering Committees), with results reported to, and reviewed by, BU management.

The review process takes into account applicable HSEMS data and outputs and considers:

- results of internal audits and evaluations of compliance with legal and other requirements
- communications from external interested parties, including complaints
- the environmental performance of the organisation
- the extent to which objectives and targets have been met in light of changing circumstances and commitment to continuous improvement
- status of corrective and preventive actions from investigations and audits
- follow-up actions from previous management reviews
- significant issues from risk assessments
- incidents
- recommendations for improvement.

The outcomes and decisions made in these reviews are distributed to relevant management and planning teams. This ensures that the 'adjust' phase of the HSEMS process may feed into the 'plan' phase, closing the loop on the 'PLAN, DO, ASSESS and ADJUST' cycle of continuous improvement (**Figure 2-1**).

2.3 Relationship of the HSEMS to the OPP

The HSEMS provides the framework that ConocoPhillips follows to systematically identify, assess and manage HSE aspects. In the context of this OPP, the HSEMS provides a framework to identify, assess and manage environmental impacts and risks. The OPP is intended to be built around the framework of the ConocoPhillips HSEMS to ensure environmental performance outcomes (EPOs) are reflective of core HSEMS processes and integrated into Company activities and operations.

Within the HSEMS framework, the OPP is designed to:

- define and assess all environmental impacts and risks associated with the nature and scale of the project
- define EPOs
- provide a road map to the relevant HSEMS documentation to demonstrate application of the HSEMS to manage environmental impacts and risks to an acceptable level
- provide early strategic assessment to inform decision-making in the formative engineering stages of the project definition to achieve acceptable environmental outcomes
- identify key, high level mitigation measures for the project to be delivered through the HSEMS and subsequent activity-specific EPs.

2.4 Sustainable development (environmental and social aspects)

As part of implementing its approach to sustainable development, ConocoPhillips commits to clearly and completely integrating economic, social and environmental considerations into project development and decision-making. Sustainable development processes are developed in compliance with the ConocoPhillips Sustainable Development Risk Management Practice and the ConocoPhillips HSE and Social Issues Due Diligence Standard to assess:

- transparency and accountability by measuring and reporting
- operating to the highest safety standard
- minimising the environmental impact of ConocoPhillips' operations
- positively impacting communities wherever ConocoPhillips operates
- investing in the well-being and development of the ConocoPhillips workforce
- energy and material efficiency of ConocoPhillips operations
- practicing and upholding the highest ethical standards
- ensuring the long-term financial viability of the Company.

The ConocoPhillips Sustainable Development Scorecard is a tool that can be used to summarise the potential project risks and mitigation actions related to climate change, stakeholder engagement, water and biodiversity.

2.5 Capital projects

The ConocoPhillips CPMS, together with the HSEMS, provides a suite of standards, practices, guidelines and templates that offer a flexible framework for developing and executing capital projects. The CPMS and HSEMS facilitate this through the timely and appropriate use of proven industry standards and tools, including establishment of overall requirements for project development and management.

The CPMS defines the minimum requirements for assessing environmental and social risks in the management of capital projects and includes requirements to conduct environmental risk assessments and topic-specific risk assessments for climate change, water and biodiversity, as well as the social performance plan requirements.

The HSE&SD goals and objectives for capital projects, and the associated work plans for accomplishing these, are developed in accordance with the CPMS, HSEMS and the ConocoPhillips Sustainable Development Risk Management Practice, which provides a consistent approach to identify and reduce social and environmental risks. Together these enable the successful management of HSE&SD (including the environmental approvals process) throughout the life-cycle of the project.

This page has been left intentionally blank.