PZE Limited

Safety Management System Manual

PZE Gas Project Safety Management Plan		HSE-PLN-001		Rev: 1
Description	**Originator**	**Reviewed**	**Approved**	**Date**
Revision 1	D Evans	G Proctor	A. Teimoori	8/11/21
Revision 2	D Harris	G Proctor	Daniel Chen	22/07/2022

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DOCUMENT CONTROL/APPROVALS

Document Reviews

This Safety Management Plan (SMP) has been developed by PZE (Surat) Pty Ltd (PZE) for PZE Qld Operations and is a controlled document. The document covers exploration appraisal and production of hydrocarbons within Queensland:

PZE: Name: Daniel Chen

Position: Director (Executive Safety Manager)

Document Approval

This SMS is issued for PZE Plant and Production operations within Queensland and has been reviewed and approved by PZE management.

Document Review

Should any recipient (user) become aware of any changes or corrections that are required, please copy this page and/or relevant page(s) to be changed, note the corrections and deliver them to:

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Revision Control

Version identification is managed in accordance with the Revision Control table on the cover of this SMP.

- For un-issued versions, use A, B, C etc. (i.e. use next sequential letter);
- For original issued version use 0, 1, 2 etc. (use next sequential number).

Record of Revisions				
Rev	**Section Number(s)**	**Page Numbers**	**Date of Latest Revision**	**Approved By**
1	All sections review	All	08-11-2021	
2	All Sections	All	22/07/2022	

To determine if a page has been updated, find the page number in the above Revision Record and check if the latest revision number listed is the same as the revision number listed on the page footer. If they match, the page is fully updated.

The Technical Lead and JV Representative is responsible for controlling and ensuring any revision of this SMP. This Document shall be revised in the following circumstances:

- Significant change in operations;
- Request by a regulator, the PZE Board or a JV Partner;
- As a result of a significant incident;
- After no more than 5 years after implementation.

Document Owner:	MD and CEO
Document Review Date:	July 2024

Glossary

Acronym	Description
ALOR	Acceptable Level of Risk formally ALARP
AIR	Action Item Register
APPEA	Australian Petroleum Production and Exploration Association
ASAP	As Soon As Practicable/Possible
CEO	Chief Executive Officer
CMP	Crisis Management Plan
Contractor	Any company, legal commercial entity or self-employed person conducting significant works on a SA controlled site, (for the purposes of this document), Contractor refers to both Principal Contractors and Operators as defined in the Queensland WHS and Petroleum and Gas legislation
COO	Chief Operating Officer
PZE Workers	Workers, consultants and contractors (other than Contractors undertaking significant works) engaged to perform work by PZE Limited
EMP	Environmental Management Plan
ERP	Emergency Response Plan
ERT	Emergency Response Team (Field)
ESD	Emergency Shutdown Device
ESM	Executive Safety Manager – PZE Director
FSA	Formal Safety Assessment
H_2S	Hydrogen Sulphide
HAZID	A qualitative risk assessment where each area of an operation is considered against a checklist of hazards and the potential risk presented by the hazard is considered and all possible means of either eliminating the hazard or controlling the risk and noted on a HAZID worksheet
HAZOP	A Hazard Operability study, which identifies hazards and issues that prevent efficient operation
HSE	Health, Safety and Environment
HSE MS	Heath, Safety and Environment Management System
JIMP	Joint Interaction Management Plan
JSA	Job Safety Analysis or Job Hazard Analysis (JHA)
KPI	Key Performance Indicator
LTI	Lost Time Injury
MoC	Management of Change
MS	Management System
OEM	Original Equipment Manufacturer

Acronym	Description
OHS	Occupational Health and Safety
Operating Plant	Refer Petroleum and Gas (Production and Safety) Act 2004
Operator	Refer Petroleum and Gas (Production and Safety) Act 2004
OSCP	(PZE) Oil Spill Contingency Plan
P&G Act	Petroleum and Gas (Production and Safety) Act 2004
P&G Regs	Petroleum and Gas (Safety) Regulation 2018
PCBU	Person Conducting a Business or Undertaking (WHS Act)
Prescribed Incidents	See appendix 5 for definitions.
PMP	Preventative Maintenance Plan
PPE	Personal Protective Equipment
PTW	Permit to Work
Responsible Person	A person assigned by PZE to a role and who is responsible for an activity(s) being undertaken on a project, persons may have different role descriptions but regardless of individual titles/duration of a role, the responsibilities given identifies them as a Responsible Person by PZE.
RSHQ	Resources Safety and Health Queensland
s	Section (referring to legislation)
SDS	Safety Data Sheet
PZE	PZE Limited
Safety critical system/control	Crucial in preventing an event/incident or minimising the consequence of the event/incident. Absence or failure of a safety critical control/system would significantly increase the risk of the event/incident.
Shall	Indicates a mandatory course of action.
Serious Injury or Illness	See appendix 5 for definition
Should	Indicates a preferred course of action.
Significant Works	Any project/site activity conducted by a contractor that is deemed by SA as significant including drilling, workover, construction, pipeline construction
SFAIRP	So Far As Is Reasonably Practicable
SMS	Safety Management System (the system as relevant to Safety and compliance with Sect 675 of the P&G Act)
SOP	Standard Operating Procedure
SSM	Site Safety Manager
SWL	Safe Work Load
TNA	Training Needs Analysis – a review of training structure and content to ensure it meets SA requirements, details what training is to be attended
TPC	Third Party Contractor(s)
WHS Act	Work Health and Safety Act 2011
WHS Regs	Work Health and Safety Regulation 2011

Acronym	Description
WLL	Working Load Limit

INTRODUCTION

The PZE Gas Project (PZEGP) covers a 698 km² area in the Surat Basin across the Roma shelf, located approximately 40 km southeast of Roma town and 450 km east of Brisbane. The project area has conventional gas discoveries with extensive production history dating back to first drilling in 1965. PZEGP assets are located only 8 km north of the Kincora Gas Plant with existing flow lines tying in the Avondale field (PL28W) and Deepwater 1 (PL69).

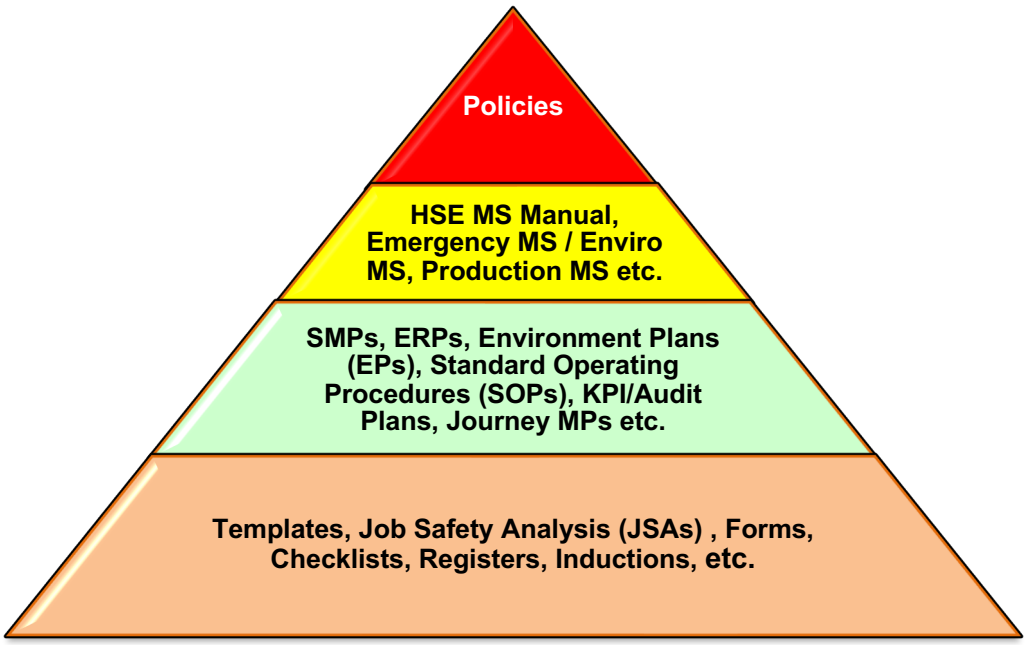
1.1 SMP Overview

This PZE Gas Project (PZEGP) SMS has been prepared to detail the onsite safety management system (SMS) and to demonstrate compliance with the Queensland Petroleum and Gas (Production and Safety) Act 2004 (P&G Act) and Regulations 2018 (P&G Regs). This SMS uses a reference tool that assists in demonstrating compliance of the SMS with section 675 of the P&G Act, addressing the elements identified in the SafeOp for P&G Self Audit Tool for Compliance with Legislative Requirements as issued by the Resources Safety and Health Queensland (RSHQ).

The Qld P&G Act and Regs obligates operators of 'Operating Plant' to include a number of elements in the SMS to demonstrate compliance with the legislation. These are outlined in s 675 of the P&G Act (Content for the Safety Management Systems), s 386, 705C (content requirements for joint management plans) and Chapter 3 Parts 1- 4 of the Regulations. The Act and Regulations also impose other obligations in Chapter 2 of the Regulations that may be audited by the Petroleum and Gas Inspectorate of the RSHQ.

The Audit Tool provides a checklist of items that are to be addressed (where applicable) for each element of the legislation, with the intent of demonstrating compliance, with variances depending on the type and complexity of the operating plant. The audit tool assists in demonstrating compliance, identify areas requiring improvement, or identify deficiencies where corrective actions are required.

Figure 1.1: 's HSE Management System Document Hierarchy



1.2 Purpose

To demonstrate the SMS addresses all applicable elements of the Safe Op Audit Tool. PSE's Health and Safety framework consists of a Health, Safety and Environment Management System (HSE MS), which this SMS is mapped to for PZE operations. PZE's HSE MS consists of various types of documentation in a hierarchical arrangement leading with policies, procedures, specific Plans (SMP's) or Bridging Documents, through to SOPs and JSAs with templates, registers and checklists completing the fundamentals of the HSE MS structure. Figure 1.1 above illustrates the hierarchical order of the documents.

1.3 Objectives

Where contractors are engaged as the primary contractor to perform high risk work such as civil work, construction, drilling/completions or laying of pipelines, a Bridging Document will be developed to manage the interface between this SMS and the contractor's HSE MS. This SMS provides a systematic approach for:

- Implementing the SMS including allocating responsibilities and accountabilities;
- Ensuring hazards and risks are identified and controlled to acceptable levels so far as is reasonably practicable (SFAIRP);
- Implementing processes for continuous improvement;
- Planning with regards to health and safety via setting objectives and targets;
- Providing training to ensure SMS responsibilities are fulfilled;
- Reporting of Hazards, Incidents and Investigations identifying corrective actions;
- Emergency preparedness, training and response;
- Meeting all obligations and compliance requirements.

Under the provisions of the P&G Act the following requirements for Safety Management System are:

s 675 (1)(a) Description of the plant
s 675 (1)(b) Organisational safety policies
s 675 (1)(c) Organisational structure
s 675 (1)(ca) Operator
s 675 (1)(cb) SSM for each site outlined in (1)(ca)
s 675 (1)(d) Plant sites requiring safety managers
s 675 (1)(e) Formal safety assessment
s 675 (1)(f) Interaction with other operating plant
s 675 (1)(g) Skills assessment
s 675 (1)(h) Training and supervision program
s 675 (1)(i) Safety standards and standard operating procedures
s 675 (1)(j) Control systems
s 675 (1)(k) Machinery and equipment
s 675 (1)(l) Emergency equipment, preparedness and procedures
s 675 (1)(m) Communication systems
s 675 (1)(ma) Management of change
s 675 (1)(n) Implementing and reviewing SMSs
s 675 (1)(p) Key performance indicators
s 675 (1)(q) Investigation, recording and review of incidents

s 675 (1)(r) Record management

s 675 (1)(s) When *Workplace Health and Safety Act 1995* doesn't apply

s 675 (1)(t) Major hazard facilities

s 675 (1) (u) Another matter prescribed under a regulation

1.4 Scope

Reference: *Sections 674, 675 and 675(A) of P&G Act*

This SMS is applicable to, and aligned with, all aspects of PZE's operations and provides an overview of the PZE HSE MS, which is used to demonstrate compliance with the Qld P&G Legislation. The activities that apply to this SMS include but are not limited to PZE workers and contractors operating on behalf of PZE involved in:

- Production facilities;
- Earthworks including rehabilitation;
- Construction including pipe lines / facilities and commissioning of pipelines and plant;
- Facility operations;
- Water handling and treatment;
- Drilling and Workover Operations;
- Seismic Operations;
- Decommissioning of pipelines and plant.

Separate project specific SMPs / SMSs (or Bridging Documents where contractors are involved) will be developed for various stages of separate projects depending on the level of risk for the work being performed and if contractors are operating under their own HSE MS. The development of Project SMP's and Bridging Documents will be in accordance with the requirements set out in Sections 674, 675 and 675(A) of the P&G Act.

1.5 Personal Protective Equipment Requirements

The approach of PZE towards the minimum PPE requirements is a risk based commensurate with the activity being conducted rather than having blanket rules apply to all activities. The *PZE Field Induction Checklist* stipulates the requirements for wearing PPE which must comply with the relevant AS/NZ standards. Where there are low risk activities such as driving a vehicle to site and opening gates on landholder's property to visit a landholder, the minimum PPE requirement includes:

- Sun hat;
- Sun glasses (if day time);
- Enclosed footwear (boots or shoes);
- Long protective clothing (long sleeve shirt with sleeves rolled down and long pants).

When arriving on other sites such as Production or some construction sites where there are site specific controls, additional PPE requirements may include:

- Steel capped boots;
- Eye protection (safety glasses);
- Gloves;
- High visibility top or vest.

Additional site specific PPE requirements may be required on high risk sites such as drilling rigs, production plant, or overhead operations (crane) are occurring and can include:

- Hard hats;
- Day High Vis PPE.

Where sites are controlled by contractors (operating under their management system – drill rig), site specific PPE requirements for that site will be relayed during the contractors induction.

PPE shall only be used to control hazards where there are no other reasonable risk controls available. Some activities that fall under this category this include:

- Welding – apron, gloves, welding shield;
- HazMat – additional gloves, respiratory protection, face shield;
- DROPs – working near overhead equipment requires the use of hard hats;
- Noisy areas – hearing protection;
- Working at heights – Fall Arrest / Restraint Devices and systems.

Only personnel trained to perform the tasks and authorised to use and maintain the equipment shall be permitted to use such equipment and PPE to minimise the exposure to hazards.

End of Section 1

SAFETY MANAGEMENT SYSTEM ELEMENTS

2.1 Description of Relevant Plant

Reference: s675(1)(b)

Refer to Appendix 2 for specific plant details.

2.2 Organisational Safety Policies

Reference: s675 (1)(b)

PZE Policies are located in Appendix 1 and include the following:

PZE-HSE-POL-001 Health, Safety and Welfare Policy;

PZE-HSE-POL-002 Environmental Management Policy;

2.3 Organisational Structure and Safety Responsibilities

Reference: *s675(1)(c-ca)*

PZE has an organisational chart which illustrates the representative organisational structure for PZE operations, including the PZE field operations, Figure 2.1 illustrates the statutory role holders. The organisation structure and chart are located on the PZE server / document storage, which shows the reporting structure with the COO reporting to the Director (Executive Safety Manager), who reports to the Board.

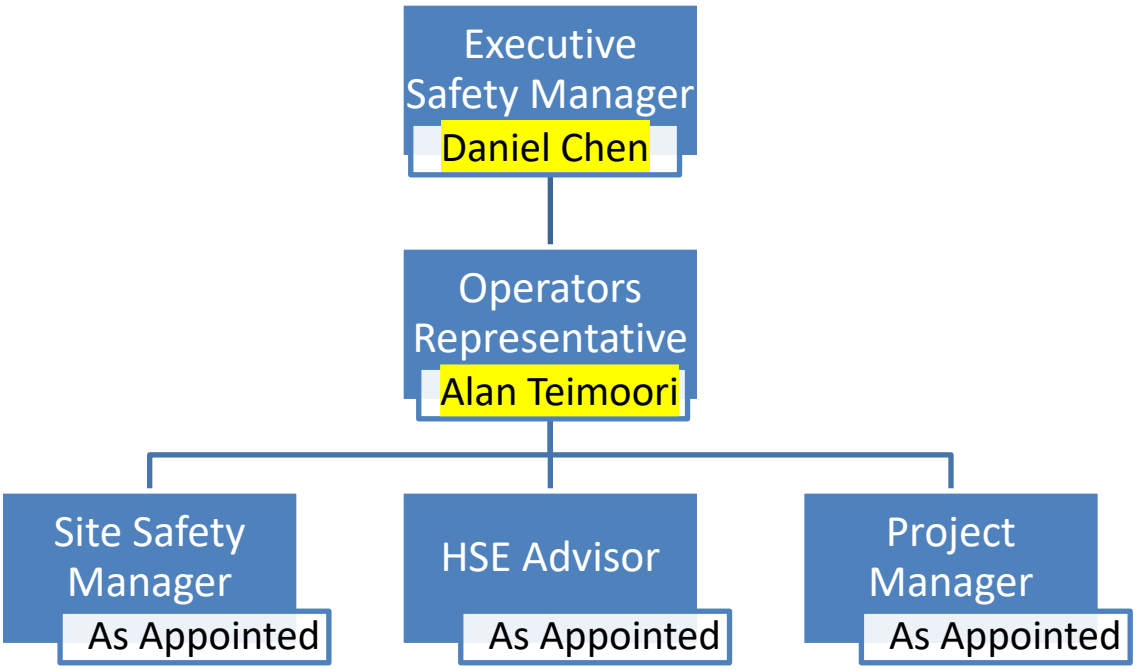
The organisation chart shows the flow down from the Leadership Team to the various departments and includes field staff and contractors. The CEO is accountable to the Board and stakeholders for ensuring the overall HSE MS and this SMS is implemented.

Position descriptions are developed for each position, these are contained in the respective Bridging Documents and Project Safety Management Plans where applicable. These position descriptions detail the roles, responsibilities, desired qualifications and experience required for that position. The position descriptions also include individual HSE responsibilities.

2.3.1 Specific Responsibilities

Roles and responsibilities assigned to all PZE personnel are addressed in individual position descriptions (PDs), contracts or Purchase Order Terms and Conditions, which are agreed to by the individual acknowledging awareness and understanding of their responsibilities. Applicable PZE personnel or contractors working on behalf of PZE are officially appointed to the statutory role of Site Safety Manager via a letter of appointment (see Appendix 4 – Example of SSM Appointment Letter).

Figure 2.1: Statutory Role Holders



2.3.2 Executive Safety Manager

Reference: s675(1)(c), s687, s688 and s694A

As required in s687 of the P&G Act, the Senior Managing Officer of the Corporation is the Executive Safety Manager (ESM) and within PZE the most senior position is the Director. The ESM holds certain responsibilities which includes ensuring:

An appropriately qualified person is appointed as the operator of the plant or, if operator is a company, nominate an individual as a representative of the company to give and receive information for the operator.

Operator has a SMS for the plant and each stage of the plant;

Approve the SMP before it is implemented;

Ensure system effectively manages risks associated with the Operating Plant; and

As required in s688 and s694A ESM and operator to give information notices to chief inspector stating who is operator, ESM and, if operator is a corporation, the representative of the operator.

2.3.3 Operator of the Plant

Reference: *s675(1)(ca),s674,676,677,678 and 678A*

The Operator is responsible for the appropriate resourcing and support to the Site Safety Manager (SSM) and all other staff, who are accountable for the performance and outcomes regarding HSE activity for work that is undertaken within their area of responsibility. The nominated Operator's Representative for PZE Limited is the Technical Lead and JV Representative. Outlined below are additional responsibilities of the Operator:

Ensure the SMP is prepared, in place and appropriately introduced for the activities within their line of supervision;

Ensure compliance with the SMS;

Appoint the SSM for each Plant or separate operation;

Keep risk at an acceptable level;

Keep a copy of the SMS or, if because of the nature, size or type of the operation, it is impracticable to keep the SMS with the operation - at another place where it is readily available for reference and/or inspection;

Safety management system to be revised in alignment with s678 of the P&G Act;

Resulting records to be made, stored and open for inspection as outlined in s678A of the P&G Act;

Ensure all further responsibilities outlined for Managers and Supervisors are met.

2.3.4 Site Safety Manager

Reference: *s675(1)(cb & d), s693 and s702*

The Site Safety Manager (SSM) as defined in the P&G Act is the Site Supervisor for each operating area. The responsibilities of the Site Supervisor are discussed in the individual job description, which is issued to all personnel who fill the position of Site Supervisor. Job descriptions are available via HR. The SSM's role and responsibilities are detailed in s693 of the P&G Act and are displayed on site, via an appointment letter (a copy of the appointment letter is in Appendix 4 of this SMS), which outlines the SSM's responsibilities and has signatory acceptance showing that the SSM accepts and understands the responsibilities which includes ensuring:

- Each person entering the site is given an appropriate induction that enables the person to comply with Section 702 of the P&G Act (requirement to comply with an SMS);
- Each person at the site shall perform their functions safely and comply with SOPs, ER Plan(s) and other measures necessary for the safety of the person, co-workers and the site;
- Appropriate first aid, safety and other equipment that is relevant for the likely hazards to be found at the site are:
  - available for use,
  - adequately maintained,
  - reasonably available to anyone authorized to be on the site,
- Relevant staff members are trained in first aid, emergency and other general safety procedures and equipment.

2.3.5 Managers and Supervisors

In addition to the above requirements covering workers, Managers and Supervisors have the following additional responsibilities:

- Support, implement, promote this SMS and enforce legislation, best practices, PZE Policies, standards and SOPs;
- Actively encourage participation and involvement in the implementation of this SMS;
- Provide and maintain safe plant, equipment and working environments;
- Facilitate hazard identification, risk assessment and risk management/control programs;
- Ensure there is a current Hazard Register for the Plant and that once identified, all hazards are effectively and appropriately managed;
- Consult with workforce personnel on changes to materials, equipment and SOP's where HSE considerations are a factor, utilise change management procedures to track changes;

- Ensure accidents and incidents are reported, properly recorded and investigated with appropriate corrective actions assigned and undertaken in a timely manner;
- Ensure all personnel under their control are suitably familiarised with, trained and competent to perform all tasks expected of them;
- Conduct, monitor and discuss HSE performance and HSE related issues at meetings and provide necessary feedback;
- Provide first aid and medical treatment and emergency facilities;
- Facilitate rehabilitation and return to work programs;
- Ensure site emergency management strategies comply with PZE's ER requirements;
- Manage workers, contractors and other persons under their control.

2.3.6 Worker Responsibilities

All workers have an obligation to comply with the PZE HSE policies, procedures, instructions and relevant legislation to ensure a safe workplace, which requires workers to:

- Correctly use all appropriate tools, materials, system of work and PPE;
    - Be aware of workplace risks and preventative actions;
    - Immediately report unsafe acts or conditions, equipment or practices and make suggestions for improvements;
    - Use their initiative to rectify hazards found in the workplace that are within their control without exposing themselves, others or plant to risk;
    - Follow any SOPs or instructions given regarding the health and safety to themselves or others;
    - Be responsible and accountable for compliance with the HSE MS and this site specific SMS requirements provided for their health and safety.

2.3.7 Contractors, Service Providers and Visitors

All contractors, service providers and visitors are responsible for meeting and implementing the requirements of the HSE MS and this site specific SMS, when working at PZE sites and must:

- Where applicable, successfully satisfy the PZE HSE pre-qualification requirements;
- Comply with relevant legislation, standards and codes of practice;
- Comply with the HSE MS and this plant specific SMS, as established in their contracts, management systems or Bridging documents;
- Ensure any subcontractors comply with the plant specific SMS and as a minimum the requirements of the PZE HSE MS;
- Maintain a healthy and safe workplace, safe equipment and systems of work as provided for them by PZE and their employer;
- Ensure their personnel are adequately trained and appropriately supervised;
- Immediately report any incident or hazard and complete the necessary documentation;
- Follow any instructions given regarding their or others in relation to health and safety;
- Complete appropriate inductions prior to the commencement of work;
- Be responsible for their workers and subcontractors working or visiting PZE sites.

PZE reserves the right to remove contractors, service providers and visitors who do not comply with the requirements of PZE policies, procedures or this SMS, who shall be refused any further entry for operations.

2.4 Risk Assessment

Reference: *s675(1)(e)*

PZE is committed to the identification and management of risks as an integrated approach for every aspect of operations including, but not limited to planning and decision making and the procurement of plant, products and services or changes to work practices, SOPs, procedures, managing change or operations through the use of this SMS.

The SMS is based on ISO 45001 Occupational Health and Safety– specific guidance for use and PZE achieves this through various procedures including:

PZE - HSE PRO 02 Risk Management Procedure;

PZE - HSE PRO 04 Management of Change;

Formal Risk Assessments are conducted by PZE for activities to identify and ensure appropriate controls of high-level hazards. Results from these are included on Hazard Registers for specific areas and are stored on the PZE Intranet. Examples of activities these assessments include:

Production operations;

Workover and completion activities;

Stimulation activities;

Earthworks;

Operations of facilities (PZE Operated).

PZE operates in accordance with a risk management framework, which includes a tiered approach to risk management. The framework is described in detail in PZE's *HSE PRO 02 – Hazard Identification and Risk Management*, which essentially provides for several different layers of risk management processes, as illustrated below in Figure 2.2.

Figure 2.2 Overview of PZE's HSE Risk Management Framework

The PZE risk management process involves systematic hazard identification, informed risk assessment and selection of effective control measures. The aim of the process is to eliminate hazards wherever possible and where this is not possible, to achieve and acceptable level of risk so far as is reasonably practicable.

Various tools and processes are used to carry out hazard identification and risk assessment depending on the context. The PZE Risk Matrix shall be used in most cases to assess risks related to tasks and operations conducted under this SMS (i.e. for completion of HSE risk registers, etc.).

2.4.1 Operations HSE Risk Register

PZE Production Operations Risk Register shall be developed, maintained and reviewed on an annual basis via a risk review workshop. The Register shall be made available to all personnel and on site as part of the site documentation. Where hazards are assessed as having an unacceptable level of risk, additional controls shall be investigated, identified, implemented and monitored.

The actions required to implement these controls, shall be tracked to close out on the *HSE-PRO 02 – F01 - Action Item Register*.

2.4.2 Project/Facility Risk Assessment

Sub projects (e.g. drilling) will be the subject of specific risk management activities (e.g. Campaign Risk Assessment and drill well on paper workshops (DWOP) to ensure identification, assessment and appropriate management of risks. Facilities will be the subject of design risk assessment upon completion of design work and prior to construction.

2.4.3 Hazard and Operability Studies (HAZOPs)

Hazard and Operability Studies (HAZOPs) may be used by PZE from time to time to identify hazards and issues which may prevent efficient and safe operations of its plant and process facilities.

HAZOPs will be facilitated by qualified and experienced personnel to ensure the process is conducted in such a way that all hazards are identified and documented.

2.4.4 Hazard Identification and Reporting

Hazard identification is a crucial step in day-to-day risk management and shall be used as a process of continual identification and management of hazards in the workplace and shall be carried out by all personnel and contractors. Where possible, a hazard is to be addressed when it is found, (i.e. immediately moving a hose blocking an access path), if the hazard is more complex, personnel must isolate the hazard if possible and contact their Supervisor.

The hazard shall be discussed, and appropriate controls agreed with the Supervisor. If the hazard cannot be removed immediately, steps shall be taken to make the work area safe and the relevant Manager informed. Identified hazards that cannot be fixed immediately shall be recorded and forwarded to the HSE Advisor for inclusion in the Action Item Register (AIR – Risk Register).

2.4.5 Job Safety Analysis (JSA)

A JSA is an activity level risk assessment completed using the *PZE-HSE-PRO 02 – F01*. The JSA process involves breaking a task down into a series of key steps and then identifying the potential hazards involved with each step. The JSA process also includes the assessment and evaluation of initial and residual risk levels for each identified hazard. Controls are identified and evaluated to determine their suitability in reducing the level of risk to an acceptable level. Supervisors shall ensure JSAs are developed for any task that:

- Has no SOP, which comprehensively identifies and controls the hazards of the task;
- Presents a change to the normal operating environment which may introduce a new hazard or non-routine work;
- Deviates from an SOP or requires the removal or inhibition of a protective device;
- Involves a chemical which is hazardous to health;
- Requires the use of explosive/radioactive materials;
- Requires a Permit to Work (PTW); and
- When another procedure requires one to be completed.

As part of the JSA process, individuals are assigned actions, and the Supervisor responsible for the task must be satisfied that the key hazards involved with the task have been identified, that suitable controls have been selected and are able to be implemented and that risks will be reduced to as low as reasonably practicable, before authorising the task to commence.

2.5 Interaction with other Operating Plant or Contractors

Reference: *s675(1)(f)*

The requirement for the management of third party contractor (TPC) personnel are covered in the *PZE-HSE-PRO-01 Contractor Management Procedure*, the individual contract and the site requirements for specific work sites. Onsite activities involving multiple contractors will be managed through the interface of the various TPC's and PZE's SMS's. Specific work scopes will be supported by the development of a HSE Bridging Document that defines the interactions between the Principal Contract and SP.

Where the TPC will be operating under their own MS, an SMS Bridging Document will be developed to outline the interface between the TPC's and PZE's MS's with a mapping tool explaining the interaction of the plant SSM's and contractors equipment. Compliance with this requirement is demonstrated via various means including an audit of the SMS Bridging Document to ensure the goals of PZE's overall HSE MS are consistent. TPC's are involved with the risk assessments and hazard identification process.

2.5.1 Contractor HSE Bridging Document

The overall aim of the Contractor HSE Bridging Document is to ensure that HSE responsibilities, legislative obligations and associated processes are clearly defined, documented and understood. The HSE Bridging Document also identifies and clarifies any discrepancies between the contractor's SMS, PZE's HSEMS or this SMS.

PZE will require a HSE Bridging Document for all Level 1 Contractors, where there is a handover of possession of a site. The responsibility for ensuring a HSE Bridging Document is developed rests with the PZE Operators Representative. The PZE HSE Bridging Document Template, or comparable document, shall be used to complete the bridging document. The Contractor HSE Bridging Document will cover as a minimum:

- HSE and Drug/Alcohol policies;
- Safety Management System compliance requirements;
- Responsibility for inductions;
- Site risk management protocols;
- Responsibilities of key individuals (e,g, OCR, drilling contractor, project manager);
- Site Safety Manager and Control of site requirements;
- Simultaneous and/or concurrent operations;
- Fatigue management;
- Incident reporting and investigation;
- Emergency response and management;
- Sub-contractor management.

The HSE Bridging Document will also identify any specific risks that may arise as a result of the proposed or likely interactions and is to detail how the risks will be controlled and who will be responsible. There is joint involvement between PZE, the main contractor and/or third parties where operations overlap in assessing and controlling risk or in developing any procedures or SOPs. This process is facilitated by the PZE Project Supervisor and is led by the relevant contractor managing the work. Requirements for reporting and investigation of incidents are clarified within the HSE Bridging Document and are also detailed within this SMS.

2.6 Skills Assessment

Reference: *s675(1)(g)*

PZE is committed to ensuring personnel and TPCs are appropriately trained, certified/licensed and are able to demonstrate competence in the work that they are employed to do. PZE has completed a training needs analysis (TNA) for position descriptions, which are available upon request from HSE support.

When new activities in the field commence, JSAs will be developed for each task and referenced back to a TNA for specific learning requirements and skills required. These activities will be monitored and assessed by an appropriately experienced and qualified person to ensure competence is demonstrated. Where TPCs are being utilized to perform work, checks are made against National Training Framework and training matrix / certifications to ensure the contractors are competent to carry out the required work. Contractors appointed by PZE to work on their behalf shall be selected and deemed competent for the scope of work to be conducted.

2.7 Training and Supervision Program

Reference: *s675(1)(h)*

PZE has a layered approach to the training and supervision of workers and contractors and has an Induction package for all workers operating under the overall PZE HSE MS and this SMS.

TPCs will have their Training and Competence Procedure and Training Matrix reviewed as part of the Level 1 Contractors Prequalification Process. Contractors' training and supervision are managed via the contractor's management procedure, and PZE supervisors ensure this aligns with industry competency standards.

When appointed, field workers have various competencies to complete prior to being deemed competent to operate without supervision, including familiarisation with the equipment via a JSA, SOP or other work instruction, supervision during operation, assessment and sign off.

2.8 Safety Standards and Operating Procedures

Reference: *s675(1)(i)*

Safety Standards and Standard Operating Procedures (SOPs) are located in the HSE MS and on the PZE Intranet. The SOPs are used to instruct the workforce on the company's requirements for safe operations and legislative compliance. The company's safety standards or expectations are outlined in PZE Policies. Operations conducted by PZE or TPCs are subject to assessments prior to operation to identify and possible hazards and ensure the correct control measures are implemented. These are in accordance with the *PZE-HSE-PRO-002 Risk Management* Procedure (JSA), once the JSAs cannot be modified any further they are converted into SOPs.

PZE has SOPs for plant and facilities which are available on the PZE Internet and will continue to be developed as the projects progress. The safety standards applicable to the maintenance of plant and equipment are kept in the individual operating unit locations and maintenance history is controlled in accordance with the original manufacturer's recommendations, AS/NZ standards, APIs and various codes of practice. Service and repair histories will be maintained by the site supervisors. TPCs approved by PZE to operate under their own MSs shall manage and carry out their activities through the use of their own company's SOPs and processes, while remaining compliant with PZE's HSE requirements via an SMS Bridging Document.

2.9 Control Systems

Reference: *s675(1)(j)*

The control systems that are available for the use of personnel, for the shutdown and control of equipment safety critical systems are maintained in accordance with original manufacturers recommendations and records are kept by the site supervisor. All safety critical equipment are fitted with insitu, and or remote, emergency shutdown devices and personnel are trained in the use and activation of these devices.

Calibration maintenance and testing of control and safety critical equipment is carried out in accordance with the manufacturer's recommendations and the relevant Australia Standards.

2.10 Machinery and Equipment

Reference: *s675(1)(k)*

All plant equipment purchased and used by PZE will meet industry standards and be operated and maintained in accordance with the manufactures recommendations. Maintenance inspection and testing procedures are used to document field level maintenance and inspection requirement for the individual plant. All identified deficiencies are transferred to the Action Item Register (AIR) for the facility for tracking until closed.

2.11 Emergency Equipment, Preparedness and Procedures

Reference: *s675(1)(l)*

PZE has a detailed Emergency Response Plan *(PZE-ER-PLN-001),* which has been tested for infield ER responses and describes the ER processes for PZE workers and contractors and has several scenarios included in the Plan. The ERP also includes the responsibilities for the Site Emergency Response Team (ERT), and an overview of the high-level structure, which includes the Emergency Management Plan (EMP), the Emergency Management Team (EMT) and the PZE Decision Making Authority (DMA), which is the PZE Board.

The ERP has the appropriate triggers to ensure escalation to the PZE EMP and ultimately to the Crisis Management Plan (CMP) as determined by the EMT. PZE will conduct regular Emergency Response Drills to ensure all staff are familiar with the requirements and any identified deficiencies will be documented and entered into the AIR for tracking and close out.

2.11.1 Escalation of an Incident

Where a site has been handed over to a contractor to operate under the contractors HSE MS, and an incident occurs, or the incident has escalated to a point that PZE Management determines the contractors' response capabilities are no longer effective in controlling the incident, the PZE SSM will advise the contractor's SSM that PZE is resuming control of the site. This escalation capability is detailed in the accompanying Bridging Document for the Project, Campaign or Site. Examples where PZE may resume control of a site may include:

- Serious injury or fatality;
- Major environmental spill;
- Severe weather or bushfire event;
- Plant fire or explosion.

At the conclusion to the escalated response by PZE, subject to the incident investigation findings, the site may be handed back to the contractor in order for the scope of work to be completed.

2.12 Communications Systems

Reference: *s675(1)(m)*

2.12.1 Site Communications

There shall be at least two communication mechanisms on each PZE work site, these devices may include mobile phones, land lines, UHF radios and/or satellite phones / satellite sleeves. The PZE Plant Supervisors and SSM are supplied with reliable communication resources and contractors are also required to supply their own reliable resources to their workers. A list of relevant contact numbers will be supplied to the PZE Supervisor(s) and SSM, and where required an ERP/Bridging Document will be developed and supplied containing protocols and contacts.

In the event of emergency, the site supervisors are able to contact the relevant emergency services, but all other communications are to be forwarded to the Plant Manager. PZE ensures that communication is maintained with workers, contractors, service providers and visitors through a number of means. These are documented in the Bridging Document when developed and the activity specific site inductions.

All personnel who attend PZE controlled locations and work places, are required to complete PZE inductions. This will outline the minimum requirements that PZE, as the operator, requires of staff and contractors. Depending on the work group the individual belongs to will determine the inductions to be completed. The minimum required courses include:

- PZE Field Induction (developed for each scope of work as required);
- PZE Heat Stress (annually renewed in October each year);
- PZE Cultural Heritage, and Qld Land Access.

When attending site, all personnel (workers, contractors and visitors) are required to undertake a site specific Field induction for each location where they will be informed of key points including:

- Interaction between PZE and the SMP and HSE MS;
- Identity of the SSM for each area of the operation;
- Identity of the PZE Site Supervisor;
- Land Holder Requirements/Weed Hygiene Certification verification to be sighted,
- Site and field muster points (ERP actions);
- Safety critical controls such as Emergency Shut Down (ESDs) points;
- PZE requirement for 3rd party authority to use checklist;
- Wellsite, PZE or Contractor Permit to Work system;
- Site specific measures for Hazard identification and reporting.

All site inductions are to be documented on an Induction Register and inductees are required to sign an acknowledgement that they fully understand the induction intent and requirements. The PZE Induction Register will be maintained by the PZE Site Supervisor or delegate.

2.12.2 Daily Tool Box Meetings

A Toolbox Meeting will be held at the start of each shift or prior to the commencement of each job, led by the Supervisor or nominated person. These meetings will cover the following as a minimum:

- Scope of work for the task;
- Hazards associated with the task;
- Site specific restrictions and limitations;
- Applicable JSAs;
- Permit to Work requirements;
- Unusual risks/hazards in each day's activities shall be made clear to all workers.

Meetings shall be documented in the site diary and signed by all attendees.

2.12.3 Safety Meetings

Safety Meetings shall be conducted at least once per work hitch for all field personnel and will be recorded on the Safety Meeting Minutes Form. At the end of each shift rotation a detailed handover (written and verbal) shall be given to the incoming shift supervisor and documented on the designated Handover Form. Other safety meetings, Committee and non-scheduled meetings will be held as required and recorded in the site diary indicating the nature of the meeting. Any items remaining open will be added to the site AIR and followed until closed out.

2.13 Management of Change

Reference: *s675(1)(ma)*

PZE-HSE-PRO-04 Management of Change (MoC) procedure details the process which includes risk assessment, review and authorisation of safety critical modification to equipment, process, procedures or documentation. MoC, also includes any significant change(s) or modification(s) to safety critical equipment or to routine operating activities that are critical to the management of safety and prevention of any potential major hazard. MoC is to be applied where there is a possible impact that may cause any effect upon people, processes, systems, the environment, equipment and/or third parties, triggers include:

- Modification to plant and equipment;
- Legislative/statutory requirements;

- Planned activities where a risk assessment identified the change affects the risk ranking or nominated safeguard;
- Safeguards, control measures or performance standards;
- Software, controlled drawings, plans, designs, documentation;
- Operations and maintenance SOPs;
- Organisational structure and/or individual roles and responsibilities;
- Emergency Plans, processes or procedures.

MOC requests are submitted on *PZE-HSE-PRO 04 F01 MOC Change request form*

2.14 Implementing, Monitoring and Reviewing SMP

Reference: *s675(1)(n)*

The scope and role of this SMS is introduced to all personnel during the induction process. Monitoring will be carried out via various methods including internal and external auditing as required in the relevant Bridging Document for the scope of work and PZE-HSE-PRO-03 Audit and Inspection Procedure. Any identified deficiencies will be recorded on the AIR and tracked until closed out.

2.15 Key Performance Indicators

Reference: *s675(1)(p)*

PZE monitors a number of Key Performance Indicators (KPI's) during Projects to ensure continual improvement in the health and safety programs. These KPI's are listed in the Project specific Bridging Document. A monthly report addressing the following topics will be communicated to the PZE COO:

2.15.1 Lag Indicators

- Number of first aid incidents and/or medically treatment injuries;
- Number of restrictive duties incidents;
- Number of lost time injuries and days lost (greater than 1 shift/day);
- Occupational illness cases;
- Number of High Potential Incidents;
- Number of days and hours worked;
- Number of personnel on site;
- Notifiable Incidents (health, safety or environmental).

2.15.2 Leading Indicators

- Number of near misses reported;
- Number of HSE meetings held;
- Number of Hazard Cards submitted;
- Number of risk reviews held;
- Number of HSE inspections conducted.

2.16 Investigation, Recording and Review of incidents

Reference: *s675(1)(q)*

PZE requires that all incidents are reported and fully investigated in accordance with their specific level of potential risk. Where a site has been handed to a contractor, the contractors Incident Investigation Procedure will detail the requirements for workers and contractors in dealing with investigations and reports. The PZE OCR, SSM or HSE Advisor will overview the investigation process to ensure compliance with the investigation process. All corrective actions are entered on the AIR and tracked until closed out. Table 1 identifies the timeframe for reporting of incidents to supervisors and managers.

Table 1: Incident Reporting Schedule

EVENT (i.e. illness, near miss, accident, incident)	**LEVEL 1** High	**LEVEL 2** Moderate	**LEVEL 3** Low
Verbal notification	Immediate to PZE Site Supervisor	Immediate to PZE Site Supervisor	Within 2 hours to PZE Site Supervisor
Reporting time for notification (Incident Notification)	Within 2 hours to respective Manager	Within 4 hours to respective Manager	Within 4 hours to respective Manager
Detailed Investigation Report	As agreed between PZE and Contractor Management		

Incidents may be required to be reported to more than one regulatory body, a summary of the main reporting bodies on a Petroleum/Gas Lease or Plant/Facility are listed below.

NOTE: The RSHQ requests that both the PZE and contractors report the incident to them when they occur under the provisions of the P&G Act. The person responsible for reporting incidents to the RSHQ will normally be the COO. Where contractors are involved in the incident, their nominated person will be responsible to report the incident to the regulator.

2.16.1 Resources Safety anf Health Queensland

The Primary Government Agency responsible for emergency assistance and liaison with PZE and to have an obligation to report any incidents, injuries, deaths or emergency situations is the Resources Safety and Health Queensland – RSHQ.

The Petroleum and Gas Division of RSHQ is the primary contact in the event of an emergency occurrence during exploration and production operations. The Department is responsible for the administration of the Petroleum and Gas (Production and Safety) Act 2004, Regulations and emergency reporting obligations.

Contact details for the RSHQ Petroleum and Gas Division are in Appendix 6. There are separate protocols for reporting Prescribed Incidents and Serious Incidents or Illnesses under the Petroleum & Gas (Safety) Regulations 2018 (Appendix 5).

NOTE: It is possible for an incident to be both a safety incident and an environmental incident, in which case reporting and notification is required under both the EA to DES, and the Petroleum and Gas (Production and Safety) Act 2004 to the Safety Inspectorate.

2.16.2 Reporting Requirements

RSHQ must be informed of any incident involving well site, production facility/plant, rig or environment in a PZE Permit Area which:

- Has caused, or had the potential to cause, injury or death to any PZE, Contractor or Service Company personnel or to a member of the Public;
- Has caused or had the potential to cause damage to property;
- Has caused or had the potential to cause damage to the environment.

PZE manage a complaints and incident register to record the details of all incidents and complaints by external stakeholders, and the outcomes of subsequent investigations. Outcomes and actions must be communicated to the complainant within 14 days of the investigation and corrective actions will be included on the PZE Campaign Action Item Register (AIR). The AIR will track items until they are closed.

Incidents that occur away from the drilling rig, facility or lease may be required to be reported to the WHS Queensland depending on the severity and location of the incident (e.g. serious traffic accident during work time on a road away from the lease where the worker received injuries). Where the complaint has been passed to PZE from DEHP, the administering authority must also be notified of the outcomes and actions taken. Appendix 1 details the reporting protocols for:

Petroleum and Gas Division of RSHQ (as required by the provisions of the Petroleum and Gas (Safety) Regulation 2018);

Work Health and Safety Act 2011;

Department of Environment and Science (DES).

2.16.3 Department of Environment and Science

The Department of Environment and Science (DES) is notified by the COO on being made aware of any incidents or non-conformities which contravene the EA conditions trigger notification thresholds or where environmental harm has been caused or may be threatened.

The COO will notify DES's Pollution Hotline (1300 130 372) and any affected landholder, occupier or their nominated representative as soon as practicable, but within 24 hours, after becoming aware of:

- Any release of contaminants not in accordance with the conditions of an EA
- Any other non-compliance with any condition of an EA; and
- Any event where serious or material environmental harm is caused or threatened.

The following spills of contaminants (including but not limited to hydrocarbon, CSG water or mixtures of both) will be reported to the administering authority:

Unauthorised releases of volumes of contaminants, in any mixture, to land greater than:

a. 200 L of hydrocarbons; or
b. 200 L of stimulation additives; or
c. 500 L of stimulation fluids; or
d. 1 000 L of brine; or
e. 5 000 L of untreated coal seam gas water; or vi. 5 000 L of raw sewage; or
f. 10 000 L of treated sewage effluent.

All third-party contractors are responsible for reporting all such incidents to PZE so as to ensure reporting to DES within the time limits set out in the EAs and in accordance with the RSHQ Code of Practice for leak management, detection and reporting for petroleum operating plant;

Leaks identified during commissioning or bringing equipment back into service are not classified as reportable leaks. If the leak is too large or not safe to measure it will be assumed that the leak is above the reportable threshold level for reporting.

2.17 Records Management

Reference: *s675(1)(r)*

Appointed TPC Document Control Procedure will details the requirements regarding the control of documents and details the storage and accessibility of these records along with roles and responsibilities, document numbering and revisions during the Project.

The Project Bridging Document details the requirements for the documentation to be obtained and stored by PZE. All documents are available on the PZE Intranet with the most recent version available, older versions are archived and removed from circulation by the document control team.

2.17.1 Identification of Documents

Documents that are specific to specific functions or departments within PZE will be identified by the following abbreviations that identify the department within PZE who are the owners of the document, the document identifyers are;

- Health and Safety (HSE PRO)
- Environmental (Enviro Pro)
- Emergency Response (ER PRO)
- Production Operations (OPS PRO)

2.17.2 Document Numbering

The document identifier also contains the name of the document, which makes document identification easier while the formal numbering of all documents and forms is intended to meet the requirements of AS/NZS ISO 9001:2016:

- **Draft Issued for Review Versions (IFR):** For documents issued for review or 'Draft' version documents, A, B, C etc. will be utilized as the version identification and control;
- **Final Issued for Use Versions (IFU):** For original or approved 'Issued for Use' version documents, 0, 1, 2, 3 etc. will be utilized as the version identification and control, each time the document is amended and approved for use.
- **Release Date:** the day, month and year of release of the document
- **Page Number:** the page and number of pages in the document

2.18 Work Health and Safety Act 2011

Reference: *s675(1)(s)*

The workplace occupational health and safety hazards and controls for PZE operations are managed in accordance with the PZE HSE MS and this SMS. The MS/SMS is compliant with the various legislations and PZE will ensure all activities carried out are in accordance with industry best practice and legislative requirements.

2.19 Major Hazard Facilities

Reference: *s675(1)(t)*

PZE does not currently operate plant that is classified a Major Hazard Facility.

2.20 Other Matters Prescribed under Regulation

Reference: *s675(1)(u)*

For drilling operations refer to Chapter 2 Parts 1 and 2 P&G Regulations

For petroleum wells, bores and holes refer to Chapter 2 Part 2 , Division 2 P&G Regulations

Reference: *Element 21*

A copy of the SMS and PZE HSE MS are available at work sites to ensure all workers and contractors have access to the latest information to enable them to carry out work in a safe and efficient manner. Operating plant is subject to a separate risk assessment and a hazard register is maintained. Plant is designed to operate in a safe manner in line with the API requirements and Australian Standards.

2.21 Impacts of Stimulation Activities

Reference: *s65(1)(a) (Reg)*

PZE does not currently operate any plant or facilities that have operational mining operations nearby. Each phase of operations (drilling, completions, production and decommissioning) are subject to separate risk assessments prior to commencing the activities. These assessments include third party contractors who provide specialist services and equipment. Where PZE identifies that operations may be near a future coal mining operation, a Joint Interaction Management Plan would be developed by the mining operator in consultation with PZE. Included in this would be a distance to be used as a buffer between the mining activities and PZE operations.

2.22 Additional Risks Operating Near Coal Mining

Reference: *s65(1)(b) Reg*

No current coal mining occurring near PZE operations. There is however, an overlapping of mining leases on the PZE ATPs. Prior to commencing activities, PZE has corresponded with the involved companies with the proposed scope of work to ensure there is no conflict between the companies.

When there is the possibility of having mining activities on or near PZE operations, a Joint Interaction Management Plan will be developed to identify hazards and control measures to put in place to ensure the risk is minimised and adequately controlled to an acceptable level. The below diagrams indicate the areas where there are overlapping areas of the mining and petroleum leases.

2.23 Risk Assessment and Mitigation in Coal Mining

Reference: *s684 & s685* No current coal mining is occurring in, or nea,r PZE operations. Where proposed coal mining operations are identified near PZE operated facilities, a separate Joint Interaction Management Plan and risk assessment would occur with PZE and the operator of the coal mine.

2.24 Joint Interaction Management Plan

Reference: *s705A-C*

As addressed above, a Joint Interaction Management Plan (JIMP) would be developed if it were identified that coal mining operations were planned to commence nearby PZE operations. The development of the JIMP would be aligned with sections 705A, B and C of the Petroleum and Gas (Production and Safety) Act 2004 and include risk assessment and identification of agreed triggers and monitoring requirements.

COMPLIANCE MANAGEMENT

PZE has established a Legislative Compliance Register to identify and manage its regulatory requirements, obligations and commitments. The register consists of major legislation requirements, codes of practice, and other key areas that have been identified. These include:

Petroleum & Gas (Production & Safety) Act 2004;

Petroleum & Gas (Safety) Regulation 2018;

Queensland Work Health & Safety Act 2011;

Queensland Work Health & Safety Regulation 2011;

Queensland Electricity Act 2002;

Dangerous Goods Safety Management Act 2001;

Dangerous Goods Safety Management Regulation 2001;

Environmental Protection Act 1994;

Environmental Protection Regulation 2019.

Health and Safety Policy

PZE Limited is committed to providing and maintaining a safe and healthy working environment by introducing the highest possible safety standards, and keeping staff & contractors as free from injury and illness as is reasonably possible.

The Company will achieve this by:

- Employing competent people, appropriately trained and equipped for their specific tasks;
- Seeking continuous improvement in its occupational health and safety performance;
- Instilling in every employee and every contractor the belief that unsafe working is totally unacceptable, and that employees and contractors are accountable for their area of responsibility;
- Complying with all applicable laws, regulations and standards and where adequate laws do not exist, adopting and applying standards that reflect the Company's commitment to health and safety;
- Managing risk by implementing management systems to identify, assess, monitor and control hazards and by reviewing performance;
- Communicating openly with employees, government and the community on occupational health and safety issues; and
- Ensuring that PZE Limited employees, contractors and visitors are informed of and understand their obligations under this policy.

Daniel Chen

Executive Safety Manager **2 August 2022**

Environmental Policy

PZE Limited is committed to maintaining a high standard of environmental care in conducting its business.

The Company will achieve this by:

- Seeking continuous improvement in its environmental performance;
- Complying with all applicable laws, regulations and standards and where adequate laws do not exist, adopting and applying standards that reflect the Company's commitment to the environment;
- Integrate environmental factors into planning and operational decisions and processes.
- Ensuring that it has management systems to identify, control and monitor environmental risks arising from its operations;
- Communicating openly with government and the community on environmental issues;
- Consultation and communication with employees and contractors on environmental issues and
- Promote environmental awareness among Company personnel and contractors to increase understanding of environmental matters.

Daniel Chen

Executive Safety Manager **2 August 2022**

APPENDIX 2: OPERATING PLANT DESCRIPTION

Reference: *675(1)(A)*

PZE Gas Project Plant Description - information relating to the PZE development area is shown in Table 1, this plant description table summarises the operating plant and authorised activities applicable to this SMP, while other sections provide further plant and process details.

Table 1 - Plant Description

Operator	
Facility Name	
Street Address	
Personnel Level	

Associated Tenures (To the extent described in the operating plant description and authorised activities following)	

Plant Details		
General Description		
Operating Plant included in this Plan (This includes commissioning, operating, maintenance and modification and decommissioning of several operating plant that is listed and construction work which is a stage of operating plant in accordance with the provisions of the P&G Act.) **** Refer to Appendix K for APZ maps***	Gas processing plants within the asset protection zones (APZs*)	•
	Wells and gas and water gathering networks within the APZs	•
	Produced water handling facilities	•
	Power generation	•
Authorised Activities Included in this Plan	Related authorised activities	•

Location Maps/Site Location - a high level tenure map of the PZE processing facilities and the water treatment facility is shown in Appendix 3 shows a high level view of these plants. More detailed plant layouts are listed in Table 2 with references to the drawings.

Table 2 - Plant layout

Description	Document Number

Table 3 – Gas Process Flow Diagrams

Description	Document Number

Well Sites - Well sites in the PZE development area consist of the following:

Gas Gathering Network -

Water Treatment and Condensate Process Overview -

Table 4 - Water Process Flow Diagrams

Description	Document Number

Plant History - the PZE development area has extended over the years to introduce additional processing facilities, wells and gathering networks as summarised in Table 6.

Table 6 – PZE Development Area

Year	PZE Development Area

APPENDIX 3: LOCATION MAPS

Figure 1: Operating Plant Location Map

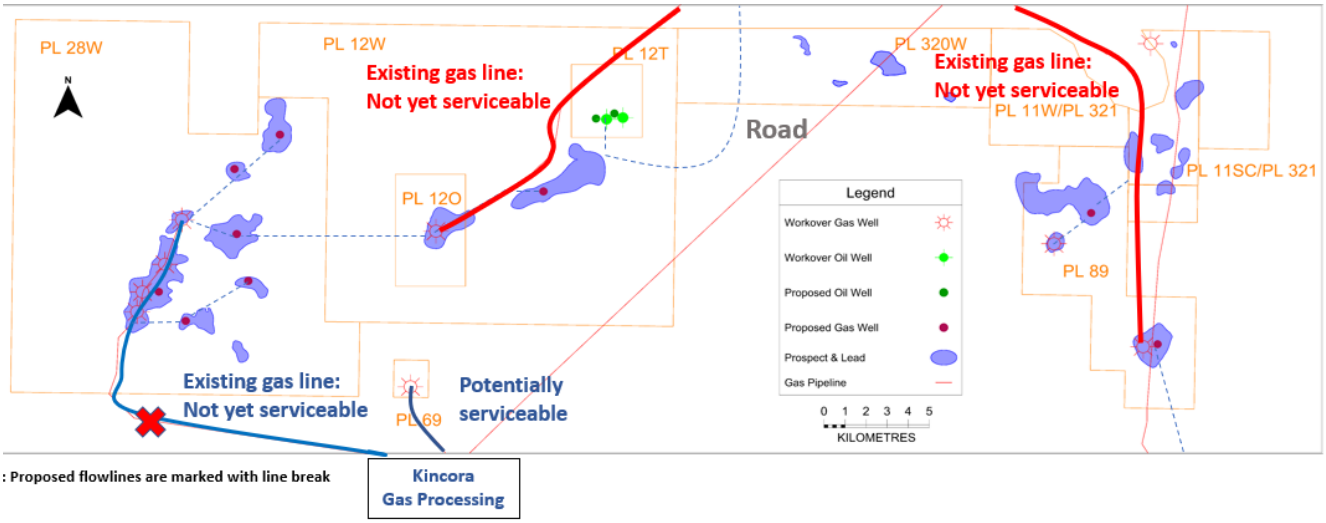
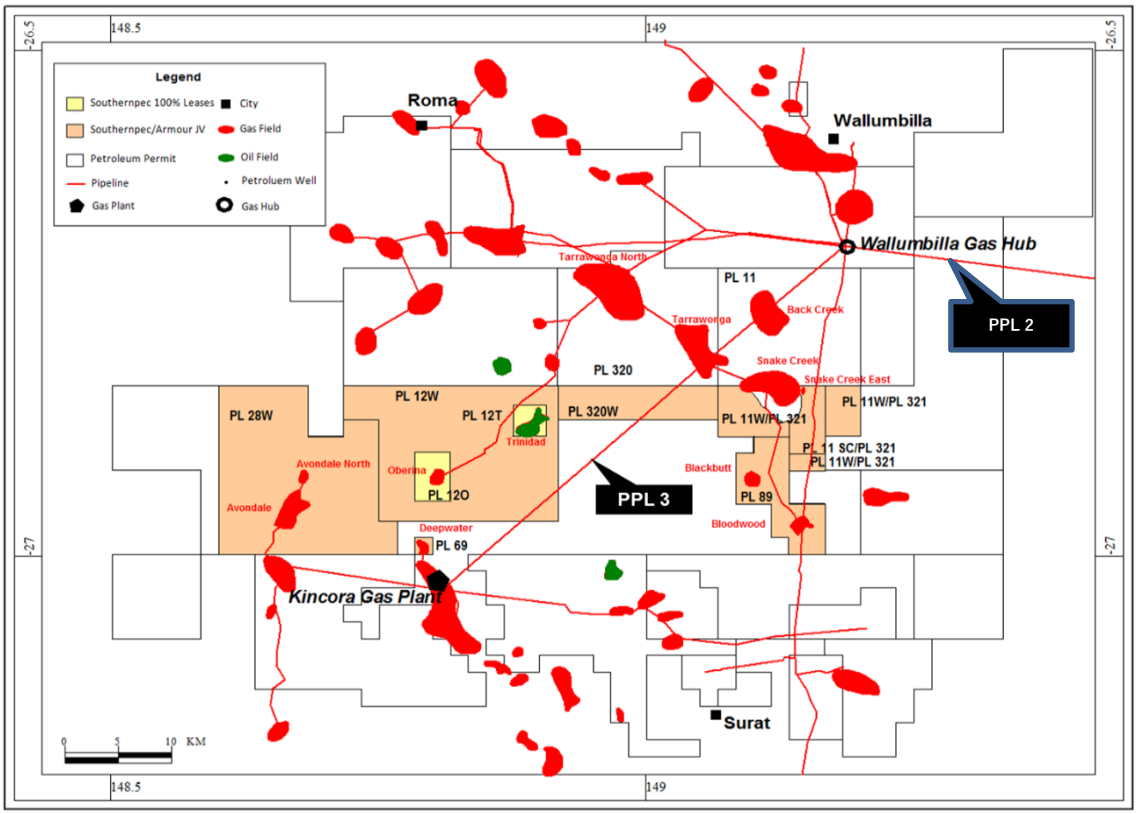


Figure 2: Operational Location Map



APPENDIX 4: APPOINTMENT LETTER – SITE SAFETY MANAGER

PZE LIMITED LETTER OF APPOINTMENT SITE SAFETY MANAGER
QLD PETROLEUM & GAS (PRODUCTION & SAFETY) ACT 2004

Appointment

In accordance with section 676 (1) (c) of the QLD Petroleum and Gas (Production and Safety) Act 2004 (QLD Act 2004), the following person is appointed to the specified position:

Name:

Specified Position: Site Safety Manager

PZE LIMITED Safety Management Plan –

The SMP outlines the PZE specific responsibilities and obligations for persons appointed to this position and they must be understood and complied with in conjunction with the QLD 2004 Act.

Acceptance of Position

I accept the above position, and acknowledge and fully understand the following:

a. The obligations of the position as detailed on page two of this appointment letter.
b. The additional duties and responsibilities of the position as detailed in the PZE SMP.

Signature: _____ **Date:** _____

The above appointee has been issued with a copy of the PZE SMP and has access to the QLD *Petroleum and Gas (Production and Safety) Act 2004* and been provided with a briefing of his/her responsibilities.

Name: Daniel Chen **Signature:** _____

LETTER OF APPOINTMENT

Operator's Obligations

As detailed in Part 2, Division 2 of the QLD Act 2004, the obligations of the ***Operator*** are:

a. Ensure the chief inspector is given notice before a plant is commissioned or decommissioned *(Section 694A(3)).*

b. For each stage of the plant, prior to beginning a stage of the plant, make a SMP that complies with section 675 or 675A, *(Section 674).*

c. Ensure the content of the SMP complies with this section *(Section 675 & 675A)*.

d. Ensure publication & display of the SMP and that those with an obligation under the SMP are told of their obligations *(Section 676).*

e. Ensure compliance with the SMP *(Section 677).*

f. Revise the SMP when:
   - There are changes or proposed changes to the plant that could result in an increase in overall or specific risk levels; or
   - changes in safety standards, legislation etc; or
   - when an event at the plant dictates the SMP needs updating *(Section 678).*

The obligations of the ***Operator*** listed in the legislation are extensive; therefore the **Operator** must have a thorough knowledge and understanding of the QLD Act 2004 and the SMS.

Site Safety Manager's Obligations

As detailed in section 693 of the QLD Act 2004, the obligations of a Site Safety Manager are:

a. each person who enters the site is given an appropriate induction that enables the person to comply with the safety procedures and other obligations under the safety management system for the plant to the extent that those procedures and obligations apply to them; and

b. each person at the site complies with standard operating procedures, emergency response procedures and other measures necessary for the safety of the site and the person; and

c. each person working at the site performs their functions safely and follows standard operating procedures for the plant; and

d. necessary first aid, safety and other like equipment that is appropriate for the likely hazards of the site is:
   - available for use; and
   - adequately maintained; and
   - reasonably available to anyone authorised to be on the site; and

e. relevant staff are trained in first aid, emergency and other general safety procedures.

APPENDIX 5: REGULATORY REPORTING DEFINITIONS

REFERENCES:

Extracts from Part 4 Division 3 P&G Act - Control and management of risk at operating plant

699 General obligation to keep risk to acceptable level

(1) This section applies to a person on whom—

(a) an obligation is imposed under this Act for an operating plant; or

(b) an obligation is imposed under the safety management system for an operating plant.

(2) To the extent of the person's obligation mentioned in subsection (1), the person must take all reasonable steps to ensure no person or property is exposed to a level of risk in relation to the operating plant that is more than an acceptable level.

699A Operator's obligation for particular adjacent or overlapping authorities

The operator of an operating plant must not carry out an activity at the plant if the activity creates an unacceptable level of risk to—

(a) a person or operating plant at adjacent or overlapping coal mining operations under the Coal Mining Safety and Health Act; or

(b) a person carrying out authorised activities or for an operating plant used to carry out authorised activities under an adjacent or overlapping petroleum tenure, geothermal tenure, 1923 Act petroleum tenure or GHG tenure.

700 What is an *acceptable level* of risk

(1) For a risk to a person or property to be at an ***acceptable level***, the activities must be carried out so that the level of risk for the activities—

(a) is within acceptable safety limits, having regard to each relevant safety requirement; and

(b) is as low as is reasonably practicable.

(2) To decide whether the level of risk is within acceptable safety limits and as low as reasonably practicable, regard must be made to—

(a) the likelihood of injury or illness to a person, or of property damage, from the risk; and

(b) the probable severity of the injury, illness or damage; and

(c) whether or not the risk is avoidable by reasonable means.

701 When acceptable level of risk is achieved

An acceptable level of risk to a person or property, from activities at an operating plant is achieved if management and operating systems are in effect that—

(a) identify, analyse and assess risk; and

(b) remove, minimise or modify unacceptable or avoidable risks; and

(c) monitor levels of risk; and

(d) investigate and analyse the cause of actual, or high potential, incidents at the plant to prevent or reduce their recurrence; and

(e) review the effectiveness of implemented risk control measures, and take appropriate corrective and preventative action; and

(f) comply with any relevant regulation

Extracts from Part 3 P&G Reg Preliminary matters prescribed for the Act (incidents).

7 Meaning of serious injury or illness

A ***serious injury or illness*** of a person is an injury or illness that requires the person to have-

(a) Immediate treatment as an inpatient in a hospital; or

(b) Immediate treatment for any of the following-

(i) the amputation of any part of the person's body;

(ii) a serious head injury;

(iii) a serious eye injury;

(iv) a serious burn;

(v) the separation of the person's skin from underlying tissue (for example degloving or scalping);

(vi) a spinal injury;

(vii) the loss of a bodily function;

(viii) a serious laceration; or

(c) treatment by a doctor within 48 hours of exposure to a substance.

8 Meaning of dangerous incident

A ***dangerous incident*** is an incident that puts a person's health or safety at serious risk because the person is immediately, or may immediately be, exposed to any of the following-

(a) an uncontrolled gas leak;

(b) an uncontrolled escape, spill or leak of another substance;

(c) an uncontrolled implosion, explosion or fire;

(d) an uncontrolled release of pressure;

(e) electric shock;

(f) the fall or release from a height of a substance, plant or other thing;

(g) the collapse, overturning, failure or malfunction of, or damage to, plant;

(h) the collapse or partial collapse of a structure;

(i) the collapse or failure of an excavation or of any shoring supporting an excavation;

(j) the inrush of water, mud or gas in workings;

(k) an uncontrolled movement of plant or another thing.

9 Meaning of *critical loss* of fuel gas supply

A ***critical loss*** of fuel gas supply is a loss of fuel gas supply to consumers if the loss causes a significant disruption to the community, including, for example—

(a) a loss of fuel gas supply to 50 or more residences or

places of business; or

(b) a loss of fuel gas supply to a hospital, power station or major event.

10 Prescribed incidents – Act, s 706

(1) For section 706 of the Act, each of the following types of incident is a prescribed incident-

(a) the death of a person;

(b) the serious injury or illness of a person;

(c) a dangerous incident;

(d) an incident at an operating plant that is a fuel gas network that-

(i) causes a critical loss of fuel gas supply; or

(ii) involves serious property damage if the damage could result in a critical loss of fuel gas supply.

(2) A prescribed incident must be reported to the chief inspector-

(a) by telephone immediately; and

(b) electronically within 2 business days after the incident.

(3) For subsection (2)(a), a prescribed incident is reported by telephone if the person reporting the incident –

(a) phones the telephone number notified on a Queensland Government website for the purpose; and

(b) provides the following information –

(i) the time and date of the incident;

(ii) the location of the incident;

(iii) a description of the incident;

(iv) the persons name, contact details and position;

(v) information about the incident the chief inspector asks for and the person knows.

(4) For subsection (2)(b), a prescribed incident is reported electronically if the person reporting the incident uses the online system made available on a Queensland Government website for the purpose.

24 hour contact for the P&G RSHQ is 1300 910 933

Definitions from the Queensland Work Health and Safety Act 2011:

Part 3 Incident Notification

35 What is a notifiable incident

In this Act, *notifiable incident* means-

(a) the death of a person; or
(b) a serious injury or illness of a person; or
(c) a dangerous incident.

36 What is a *serious injury or illness*

In this part, *serious injury or illness* of a person means an injury or illness requiring the person to have-

(a) immediate treatment as an in-patient in hospital; or
(b) immediate treatment for –
  i. the amputation of any part of his or her body; or
  ii. a serious head injury; or
  iii. a serious eye injury; or
  iv. a serious burn; or
  v. the separation of his or her skin from an underlying tissue (for example, degloving or scalping)- or
  vi. a spinal injury
  vii. the loss of a bodily function; or
  viii. serios lacerations; or

(C) Medical treatment within 48 hours of exposure to a substance;

And includes any other injury or illness prescribed under a regulation but does not include an illness or injury of a prescribed kind.

37 What is a *dangerous incident*

In this part, a *dangerous incident* means an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to-

(a) an uncontrolled escape, spillage or leakage of a substance; or
(b) an uncontrolled implosion, explosion or fire; or
(c) an uncontrolled escape of gas or steam; or
(d) an uncontrolled escape of a pressurised substance; or
(e) electric shock; or
(f) the fall or release from height of any plant, substance or thing; or
(g) the collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use under a regulation; or
(h) the collapse or partial collapse of a structure; or
(i) the collapse or failure of an excavation or of any shoring supporting an excavation; or
(j) the inrush of water, mud or gas in workings, in an underground excavation or tunnel; or
(k) the interruption of the main system of ventilation in an underground excavation or tunnel; or
(l) any other event prescribed under a regulation;

but does not include an incident of a prescribed kind.

38 Duty to notify of notifiable incidents

(1) A person who conducts a business or undertaking must ensure that the regulator is notified immediately after becoming aware that a notifiable incident arising out of the conduct of the business or undertaking has occurred.

(2) The notice must be given as required under this section and by the fastest possible means.

(3) The notice must be given –

(a) by telephone; or

(b) in writing.

24 hour contact for Work Safe Qld is 1300 362 128

APPENDIX 6: SMP CONTACT DIRECTORY

24/7 Contact details for the RSHQ Petroleum and Gas Division are:

Petroleum and Gas Inspectorate Hotline	1300 910 933
Email	gassafe@rshq.qld.gov.au

Further searches can be made on line by logging onto www.business.qld.gov.au/industries/mining-energy-water/resources/safetyhealth/petroleum-gas/regulation/notifying

RSHQ Southern Region:	(07) 3330 4241
Email:	PGSouthern@rshq.qld.gov.au

Work safe Qld	1300 362 128