

Resources Safety and Health Performance Accountability Framework 2018-19 Self-Assessment Report

December 2019



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Summary

Resources Safety and Health Performance Accountability Framework

The Resources Safety and Health (RSH) Performance Accountability Framework (the framework) was established in 2017 to assess our performance when interacting with industry stakeholders while carrying out our regulatory functions.

The framework and self-assessment reporting is modelled on the established Commonwealth Regulator Performance Framework which comprises six outcome-based key performance indicators to communicate the expectations of regulator performance.

RSH Performance Accountability Framework self-assessment

The first annual self-assessment of RSH inspectorates' performance against the framework key performance indicators was released on the department's website in December 2018.

The 2018-19 RSH Performance Accountability Framework Self-Assessment Report and all future reports will focus primarily on significant initiatives and significant continuous improvement initiatives. The report does not represent all the activities undertaken in the reporting year.

Stakeholder survey

The first stakeholder survey on RSH's performance was conducted in August 2018 to gauge industry perception of how we were performing as regulators.

The industry stakeholder survey is a biennial event so will be repeated in 2020.

Summary of assessment

The 2018-19 self-assessment is based on evidence collected from RSH inspectorates and business units. The assessment reporting includes a representative sample of significant initiatives and continuous improvement initiatives undertaken throughout the reporting year. Individual initiatives are reported against the most appropriate KPI, although the activities performed within the initiative may be relevant to other KPIs.

The 2018-19 self-assessment reporting demonstrates that there was:

- a high level of consultation, engagement and communication with regulated industries, as well as collaboration and engagement with international and domestic regulatory, scientific and academic institutions as demonstrated in KPI 1, KPI 2 and KPI 6;
- satisfactory evidence to demonstrate that our compliance and monitoring approaches are streamlined and coordinated where appropriate, that we take a proportionate approach to compliance and enforcement actions and that our overall practices and systems are founded on a risk-based regulatory approach and are reviewed regularly as demonstrated in KPI 3, KPI 4 and KPI 5.

Table of contents

Summary	i
<i>Resources Safety and Health Performance Accountability Framework</i>	<i>i</i>
<i>RSH Performance Accountability Framework self-assessment</i>	<i>i</i>
<i>Stakeholder survey</i>	<i>i</i>
<i>Summary of assessment</i>	<i>i</i>
Introduction	1
<i>Resources Safety and Health</i>	<i>1</i>
RSH Performance Accountability Framework self-assessment	2
<i>Methodology</i>	<i>2</i>
<i>About the framework</i>	<i>2</i>
Key performance indicator 1	3
<i>RSH does not unnecessarily impede the operation of regulated entities</i>	<i>3</i>
<i>Significant initiatives and continuous improvement reporting</i>	<i>5</i>
Key performance indicator 2	7
<i>RSH communicates with regulated industries in a clear, targeted and effective manner</i>	<i>7</i>
Key performance indicator 3	9
<i>Compliance actions undertaken by RSH are proportionate to the regulatory risk being managed</i>	<i>9</i>
Key performance indicator 4	12
<i>RSH compliance and monitoring approaches are streamlined and coordinated</i>	<i>12</i>
Key performance indicator 5	15
<i>RSH is open and transparent in its dealings with regulated entities</i>	<i>15</i>
Key performance indicator 6	16
<i>RSH actively contributes to the continuous improvement of regulatory frameworks</i>	<i>16</i>

Introduction

The 2018-19 RSH Performance Accountability Framework Self-Assessment Report and all future reports will focus primarily on significant initiatives and significant continuous improvement initiatives. The report does not represent all the activities undertaken in the reporting year.

Resources Safety and Health

The RSH Mines (Coal, Mineral Mines and Quarries), Explosives and Petroleum and Gas Inspectorates within the Department of Natural Resources, Mines and Energy (the department) are responsible for administering Queensland's resources safety and health framework. This framework comprises four acts and corresponding regulations, as set out below:

- *Coal Mining Safety and Health Act 1999* and the Coal Mining Safety and Health Regulation 2017
- *Mining and Quarrying Safety and Health Act 1999* and the Mining and Quarrying Safety and Health Regulation 2017
- *Explosives Act 1999* and the Explosives Regulation 2017
- *Petroleum and Gas (Production and Safety) Act 2004* and the Petroleum and Gas (Safety) Regulation 2018.

In administering the legislation we are responsible for:

- engagement and education on the regulatory framework
- monitoring, facilitating and enforcing compliance with the legislation through action including inspections, audits, investigations and prosecution
- collecting, analysing, assessing and publishing information and industry data
- explosives licensing
- gas licensing.

Our objective is to protect the safety and health of resource industry workers and the Queensland community at large, by ensuring that:

- the risk of injury or illness resulting from regulated/authorised activities is at an acceptable level
- obligation-holders receive the support, guidance, and information necessary to discharge their safety and health obligations
- industry, workers and the broader community have confidence in Queensland's resources safety and health framework.

We achieve our regulatory objectives through compliance action that is systems-focused and proportionate to the risk and/or circumstances.

The RSH Compliance Policy can be found on the department's policy register at http://www.dnrm.qld.gov.au/?a=109113:policy_registry/rsh-compliance-policy.pdf

RSH Performance Accountability Framework self-assessment

The first annual self-assessment of RSH inspectorates' performance against the framework key performance indicators (KPIs) was released on the department's website in December 2018.

The 2018-19 RSH Performance Accountability Framework Self-Assessment Report and all future reports will focus primarily on significant initiatives and continuous improvement initiatives.

Additional performance information on the Mines Inspectorate can be found in the Queensland Mines and Quarries Safety Performance and Health Report and the Commissioner for Mine Safety and Health Annual Performance Report.

The 2018-19 RSH Performance Accountability Framework Self-Assessment Report meets the reporting requirements of the Queensland Government's Regulator Performance Framework.

Methodology

RSH gathered evidence from the department's website, internal records and existing data collections to examine our performance against the six KPIs and performance measures.

About the framework

The framework was established in 2017 to assess our performance when interacting with industry stakeholders while carrying out our regulatory functions. It is intended to evaluate how we perform as a regulator and our level of engagement with stakeholders.

The six outcome-based KPIs that make up the framework and self-assessment reporting are:

KPI 1: RSH does not unnecessarily impede the operation of regulated entities;

KPI 2: Communication with regulated entities is clear, targeted and effective;

KPI 3: Compliance actions undertaken by RSH are proportionate to the regulatory risk being managed;

KPI 4: Compliance and monitoring approaches are streamlined and coordinated;

KPI 5: RSH is open and transparent in its dealings with regulated entities;

KPI 6: RSH actively contributes to the continuous improvement of regulatory frameworks.

The 2017-18 RSH Performance Accountability Framework Self-Assessment Report identified that there was a need to refine the framework's performance measures to remove duplication and further customise to align more with our regulatory environments. This review was undertaken in 2018-19 and the revised framework was published on the department's website in July 2019.

Key performance indicator 1

RSH does not unnecessarily impede the operation of regulated entities

Performance measures

- 1.1 RSH inspectorates demonstrate an understanding of the operating environment of the regulated entities through efficient consultative mechanisms.
- 1.2 RSH inspectorates minimise potential for unintended negative impacts of regulatory activities on regulated entities.
- 1.3 RSH inspectorates implement continuous improvement strategies to improve safety and health outcomes for the regulated industries.

RSH's participation in regular consultation and engagement forums with stakeholders not only provides us with the opportunity to share our expectations and approach to administering the regulatory framework, but just as importantly, helps us improve our understanding of the industries we regulate.

These consultative and information sharing activities provide valuable opportunities to share our experiences and gain insights into new developments, and the issues affecting the industries we regulate. A greater understanding of current and emerging issues and developments in industry assists decision-making around the regulatory framework including compliance activities.

RSH also benefits from the learning opportunities offered through regular engagement with other related regulatory agencies and scientific and academic institutions, as well as the participation of its inspectors in technical committees such as Australian Standards and technical regulator committees.

RSH participated and engaged in a range of these activities in 2018-19 including the following sample:

- Mines Inspectorate: held eight Coal Mining Safety and Health Advisory Committee and eight Mining Safety and Health Advisory Committee meetings, Australian Mining Competency Advisory Council meetings, NSW Mechanical Inspectors and Electrical Inspectors meetings, WA mining inspectors meetings, industry stakeholder meetings (e.g. industry safety and health representatives, senior site executives (SSEs), ventilation officers, etc.) and engagement with the Yowah Opal Mining Community, Queensland Sapphire Miners Association and Winton Boulder Opal Association on the development of the small miner's handbook.
- Occupational Health and Hygiene Unit: conducted a number of information sessions for medical providers and retired workers and participated in industry and worker forums including the Coal Mine Workers and Health and Safety Representatives Family Day, Mackay Safety Conference, Queensland Coal Health and Hygiene Network and the Workers Compensation CWP Roadshow.
- Explosives Inspectorate: Transport Industry Liaison Group meetings, Australian Explosives Industry Safety Group meetings, Fireworks Advisory Committee meetings, mining SSE meetings, hosted the annual Queensland Explosives Forum and worked with the Tian Cheng Pyrotechnics Laboratory on the testing of fireworks.
- Petroleum and Gas Inspectorate: held three Stakeholder Engagement Committee (Upstream) meetings, three Stakeholder Engagement Committee (Downstream) meetings and three coal seam gas (CSG) drilling industry engagement meetings and engaged the Griffith University Safety Science Laboratory to conduct research into an appreciative approach to regulation.

Annual conferences of chief inspectors are another important way the Mines Inspectorate and Explosives Inspectorate regularly engage and share experiences with state and international regulators.

The Mines and Explosives Inspectorates also attended and participated in the annual Queensland Mining Industry Health and Safety Conference from 19-22 August 2018.

RSH staff presented three papers at the conference:

- Looking back to develop a pathway forward—using industry data
- A better health scheme for coal mine workers—working together and what we have learned
- Dust exposures in Queensland surface coal mines 2001–2017.

Responsiveness to complaints

RSH provides feedback on the outcome of a complaint to the complainant through email communication, correspondence or phone. Confidential complaints are an important mechanism where workers and other stakeholders can raise safety and health issues at site. Inspectors are required to investigate the matters, which can result in compliance activity being taken.

Information received on complaints throughout the year for the Explosives Inspectorate is published on the department's website in a monthly complaints and incident report. The Mines Inspectorate publishes information on complaints in the annual Queensland Mines and Quarries Safety Performance and Health Report published on the website.

Mines Inspectorate

Queensland mining safety and health legislation allows people to make confidential complaints about safety and health matters to the Mines Inspectorate. A total of 104¹ complaints were made to the inspectorate in 2018-19.

Eight complaints were still under investigation at the end of the reporting period.

Sixty-four complaints related to mineworker safety. The majority of the remainder related to mine worker health, nuisance dust, vibration and public health or safety.

Explosives Inspectorate

There were a total of 59 complaints made to the Explosives Inspectorate in 2018-19. Thirteen complaints were still under investigation at the end of the reporting period.

Fifty-seven complaints related to fireworks, of which 24 were for illegal displays. The majority of the remainder were categorised as public safety and related to nuisance noise and a lack of notification of display.

Petroleum and Gas Inspectorate

There were a total of 122 complaints made to the Petroleum and Gas Inspectorate in 2018-19. Twenty-seven complaints were still under investigation at the end of the reporting period.

One hundred and four complaints related to gas work and devices with the majority about gas fitter licensing issues and gas installations (domestic and caravans). Sixteen complaints related to operating plant LPG distribution systems and competency of workers at drilling operating plants. The remaining two complaints were about the conduct of inspectors during the performance of their official duties.

¹ Two complaints did not involve a mine or quarry.

Significant initiatives and continuous improvement reporting

Industry engagement and compliance monitoring against QGL02

RSH's response to the re-emergence of dust lung disease in the mining industry included issuing *QGL02 Guideline for Management of Respirable Crystalline Silica in Queensland Mineral Mines and Quarries* (QGL02) in August 2017. This document provides guidance to mineral mines and quarries on managing worker risk to Respirable Crystalline Silica (RCS), exposure monitoring and health surveillance.

The Mines Inspectorate's Front Line Dust Response Program commenced in 2018-19 to assess the level of implementation of QGL02 and RCS risk across the mineral mines and quarries sector. This program included inspections at hard-rock quarries, sand, gem and opal mines and operations producing sandstone, bentonite, diatomaceous earth and lime.

There has been enthusiastic engagement in the program by SSEs, operators and safety managers, demonstrating a genuine intent across the mineral mines and quarries sector to improve RCS management systems, and reduce the potential for worker exposure to silica dusts. Positive worker engagement is also evident and has resulted in the collection of information on worker understanding of RCS hazards, control measures and training and awareness levels.

Small mines and quarries Site Senior Executive online awareness program

In 2018-19 the Mining Safety and Health Advisory Committee introduced safety and health competencies for SSEs appointed to a Queensland surface mine or quarry, other than a gem or opal mine, employing five or fewer workers. The *Mining and Quarrying Safety and Health Act 1999* allows for the Mining Safety and Health Advisory Committee to establish safety and health competencies required to perform the duties of a person under this Act.

This means that SSEs appointed after 1 July 2018 must acquire these competencies prior to 1 July 2020 and an SSE appointed after 1 July 2020 must have obtained the competencies prior to appointment.

The Mines Inspectorate engaged with industry through seminars held in Rockhampton, Townsville and Brisbane to inform them of the changes and what it means for their operation. The inspectorate has also been getting the message across at various industry meetings.

Mine Dust Lung Disease research

As part of the department's ongoing commitment to better understand mine dust lung disease, the Wesley Dust Disease Research Centre (WDDRC) was engaged to research confirmed cases of disease in Queensland. The research was co-funded by the Australian Coal Association Research Program (ACARP).

The purpose of the research was to help better understand the spectrum of diagnoses, the severity of disease and any trends in occupational history. The research makes an important contribution to health surveillance - a key recommendation from the independent review by Monash University and the Coal Workers' Pneumoconiosis Select Committee.

It also allows key trends to be identified and monitored with the information used to further inform government and industry reviews of preventative measures and systems for early detection and reducing the risk of Queensland workers developing mine dust lung disease.

Significant improvements have now been made to the Coal Mine Workers' Health Scheme to ensure disease is detected early, with current case data reported on the department's website. Employers must arrange and pay for health assessments of current and prospective workers, and the department offers free respiratory health checks for retired and former miners.

For RSH, a key learning from the WDDRC research is that the regulatory changes and reforms in the areas of dust control and monitoring and medical screening are on the right track.

The final report was emailed to relevant stakeholders on 6 June 2019.

Respirable dust and silica monitoring in the coal seam gas industry

In 2018-19 the Petroleum and Gas Inspectorate conducted a proactive worker health project in collaboration with the Safety in Mines, Testing and Research Station (Simtars). Hydraulic stimulation contractors and CSG operators were engaged to initiate respirable dust and RCS monitoring at work sites in the Surat Basin. On each site workers were fitted with sampling devices that monitored their personal respirable dust and RCS exposure. Qualitative surveys were concurrently undertaken of worker behaviours and activities.

Subsequent to the monitoring project report, findings and recommendations were communicated to operators at stakeholder engagement meetings.

The Petroleum and Gas Inspectorate also met with contractors to outline 2019-20 regulatory actions including a second round of dust monitoring and site inspections to assess the effectiveness controls. The inspectorate also requested that contractors review their existing safety management systems to reduce silica dust exposures to as low as reasonably practicable.

A safety alert was released on the department's website in July 2019 highlighting findings as well as actions to be undertaken by operators and the Petroleum and Gas Inspectorate.

Consultation on resources medical advisory committee

The Coal Mine Dust Lung Disease Collaborative Group consisting of occupational, respiratory and radiological health specialists voluntarily formed in 2016 following the re-identification of coal workers' pneumoconiosis (CWP). The group made valuable contributions in implementing the Monash Review recommendations, including a Clinical Pathways Guideline for follow-up investigations and referrals of abnormal screening results.

In December 2018 the department released a consultation paper proposing a model for the group. As a result of stakeholder consultation, it was proposed the group be named the Resources Medical Advisory Committee to clearly identify its purpose and governance. A range of stakeholder feedback was received including from the government, medical, union and coal industry sectors.

Overall, submissions were supportive of the model proposed and feedback indicated support for a committee comprising a small group of suitably experienced medical experts, able to operate efficiently and flexibly and bring in specialist expertise as needed. The department considered all submissions in drafting the Terms of Reference released on 11 June 2019 for public consultation.

Key performance indicator 2

RSH communicates with regulated industries in a clear, targeted and effective manner

Performance measures

- 2.1 RSH inspectorates provide guidance and information that is up to date, clear, accessible and concise through appropriate mediums to the targeted audience.
- 2.2 RSH inspectorate decisions are provided in a timely manner and clearly articulate expectations and the reasons for the decision.
- 2.3 RSH inspectorate advice is consistent and supports predictable outcomes.

RSH inspectorates notify industry stakeholders of serious incidents through safety and health alerts and news flashes as soon as enough pertinent information is available for release. The inspectorates also regularly publish information bulletins, safety bulletins and reports for more detailed releases of incidents or issues affecting industry.

RSH regularly communicates with its stakeholders through newsletters, emails, social media posts, information sessions, toolbox talks or web updates to assist in understanding their obligations.

In addition to the regular communication releases, RSH provided additional guidance to stakeholders including:

- Mines Inspectorate: published *Irrespirable atmosphere in a mine or quarry: Incident learnings and recommendations* report; the *Queensland Mines Inspectorate preliminary observations: North Goonyella High Potential Incident; Investigation Report: Report into a fatality at Goonyella Riverside Mine on 5 August 2017; Recognised Standard 16: Use and control of polymeric chemicals at underground coal mines; QGN 31: Tyre, wheel and rim management* and *QGN 02: Isolation of plant*.
- Occupational Health and Hygiene Unit: undertook a major communication campaign on the early detection of coal workers' pneumoconiosis and other mine dust lung diseases amendments to the Coal Mining Safety and Health Regulation 2017. Information sessions were conducted with doctors in Brisbane and Mackay, with a booklet developed *Key information about the Coal Mine Workers' Health Scheme: doctor information booklet* to assist doctors undertaking health assessments under the Scheme.
- Petroleum and Gas Inspectorate: published the *Guideline for managing gas safety at public events* and the *Guideline for gas safety and compliance caravans, camper trailers and recreational vehicles* and held regional Gas Awareness Sessions with the downstream trades.

Decision-making and procedural fairness

RSH sees the significant benefits in supporting and promoting good decision-making processes and practices. It achieves this through ensuring information, resources and technical expertise is available to support good decision-making and through the enrolment of officers in the Advanced Government Decision-Making and Statutory Interpretation training. This training examines the administrative processes that are essential in making good decisions including the fundamental steps to be followed in developing a lawful decision-making process, identification, the gathering and analysis of relevant evidence and the rules of natural justice.

In 2018-19 the Explosives Inspectorate had four external reviews lodged with Queensland Civil and Administrative Tribunal related to suspension of licenses and a compliance action. The Petroleum and Gas Inspectorate received one internal review application related to a compliance direction. The Mines Inspectorate did not receive any review applications for the financial year.

Significant initiatives and continuous improvement reporting

Diesel emissions management in underground coal mines: best practice and recommendations

The Mines Inspectorate has been collecting and reviewing diesel particulate matter data from underground coal mines since the early 2000s. Despite the improvements observed over time longwall move activities continue to represent the highest risk similar exposure group (SEG) in underground coal mines.

During 2018 the Mines Inspectorate completed a series of structured inspections focusing on diesel emissions management at all ten operational underground coal mines. Observations from the structured inspections were collated and shared at the industry Diesel Emissions Management Forum held in September 2018. The information shared included details of what was considered to be good practice as well as opportunities for improvement in the management of diesel emissions in underground coal mines.

In February 2019 the Mines Inspectorate published *Diesel emissions management in underground coal mines: best practice and recommendations* on the department's website. The document was distributed to underground coal mine SSEs and mine managers.

Methane management in underground coal mines: best practice and recommendations

The Mines Inspectorate expects all underground coal mines to have effective gas monitoring systems with suitably placed methane detectors, to prevent explosive accumulations of methane in areas where it could be ignited.

In 2018, as a result of investigations into gas exceedances at Queensland underground coal mines, the Mines Inspectorate completed a series of gas management compliance audits. As part of this audit program, eight mines were required to provide their real-time gas monitoring data from 2016 to 2018 to enable detailed analysis.

It was evident from the results of regulatory compliance audits that underground coal mines needed additional guidance on methane management.

The *Methane management in underground coal mines: best practice and recommendations* was developed and delivered to underground coal mine SSEs and mine managers on 18 June 2019.

Key performance indicator 3

Compliance actions undertaken by RSH are proportionate to the regulatory risk being managed

Performance measures

3.1 RSH inspectorates apply a proportionate approach to compliance obligations, engagement and regulatory enforcement actions, as determined by respective legislation.

The compliance record of regulated entities is recognised.

3.2 RSH inspectorates' approach to risk is regularly reviewed. Strategies amended to reflect changing priorities without diminishing regulatory certainty or impact.

RSH's regulatory approach is proportionate to the legislated compliance obligations and the safety, security or health risks that the industry's activities presents to workers and the community. The approach takes into consideration information collected from legislated safety and health reporting obligations; inspections and audits; complaints; licensing; certificates of competency and through regular engagement with industry stakeholders.

Industry reporting informs RSH of safety and health trends, as well as highlighting possible emerging issues. Inspections and audits can identify both non-compliances and good practices, and the licensing and certification of high risk positions within hazardous industries assists in ensuring competent licence and statutory position holders are working within these industries.

The inspectorates communicate their expectations to regulated industries through a variety of sources including published alerts and bulletins, website information and guidance material, directed letters from the Chief Inspectors and at the annual Industry Leaders Briefing.

The RSH Compliance Policy is published on the department's website and sets out the principles and practices that underpin our compliance and enforcement actions. The policy sets a clear direction for decision-making when inspectorates are determining their approach and allows for a range of regulatory responses having regard to risk, systemic or recurrent non-compliance and the nature of the non-compliant behaviour.

All relevant and available compliance data contained in inspectorate databases, along with the RSH Compliance Policy, provide the systems and information required to determine compliance schedules based on a range of available data including the compliance record of operations, risk rankings and emerging significant hazards. This includes graduated approaches to inspections and audits.

We understand that there may be alternative ways for regulated entities to achieve compliance with the legislation. Mechanisms such as accountability meetings and review processes also provide regulated entities with the opportunity to demonstrate to the inspectorate how they propose to achieve compliance.

The information obtained from inspections and audits is an important component in setting and reviewing strategies to reflect changing risk priorities and conveying the inspectorates' future priorities.

To ensure inspectors and specialist officers have a solid grounding in risk, RSH provides formal training and refresher training in risk management alongside other targeted training required to undertake their roles.

Significant initiatives and continuous improvement reporting

Well integrity review petroleum industry

The Petroleum and Gas Inspectorate is responsible for monitoring industry compliance with well integrity management requirements under the regulatory framework. This is achieved through three proactive actions (engagement, inspections and audits) and three reactive actions (response to enquiries, complaints and incidents). In April 2019 the inspectorate compiled a summary of the recent work it had conducted on well inspections and audits, with a focus on well integrity.

The Petroleum and Gas Inspectorate conducts well inspections as part of its risk-based compliance program. These are in addition to the inspections performed by industry. While recent inspections have found well integrity related deficiencies requiring rectification, no major or systemic problems have been identified. Industry generally appears to be proactively addressing any deficiencies through their own well integrity management processes.

The Petroleum and Gas Inspectorate is in the process of ensuring a renewed focus on well integrity during its own inspections through structured and standardised inspections. This is part of a continuous improvement process and is a risk-based decision informed by the data that has been gathered. This will help to ensure the program is not simply focused on quantity of inspections but on outcomes and quality.

In the first half of 2019 the inspectorate conducted audits of well integrity management systems of the four major CSG producers, against the Petroleum and Gas Inspectorate's Code of Practice: *For the construction and abandonment of coal seam gas and petroleum wells and associated bores in Queensland*, released in September 2018. The audited companies operate 98 per cent of the producing CSG wells and 96 per cent of all producing petroleum wells within Queensland.

Results from the audit showed documented well integrity management systems that were compliant with all criteria in the Code of Practice. Despite there being no areas of non-compliance in the documentation there were still minor areas of improvement highlighted in the audits which were presented at an industry consultation meeting and the audited operators were provided with the report.

Evaluation report: The effectiveness of Penalty Infringement Notices

On 1 July 2016 Penalty Infringement Notices (PINs) commenced as a compliance and enforcement tool for the Petroleum and Gas Inspectorate to use in the gas work and devices ('downstream') sector of the Queensland gas industry.

The objectives for introducing PINs were to provide a more cost-effective enforcement tool for minor gas work offences and to act as a deterrent to potential offenders, as well as reducing the administrative and cost burden of prosecuting minor offences.

In 2018-19 the Chief Inspector of Petroleum and Gas conducted an assessment of the effectiveness of PINs since their introduction, which included consultation with industry stakeholders.

An evaluation report of this exercise was completed and published on the department's website.

The evaluation concluded that since the introduction of PINs on 1 July 2016, the resources required to finalise breaches reduced from approximately 260 days to 40 days. Legal costs for this category of breaches have been eliminated, where previously prosecuting each unlicensed gas work offender cost approximately \$18 000 per matter. These savings can now be redirected into more proactive compliance efforts by the Petroleum and Gas Inspectorate.

Mining critical risk controls

The Mines Inspectorate recognises that industries have moved towards the identification, implementation and management of critical risk controls (CRC) as a method of ensuring risks on mines are at an acceptable level and as low as reasonably achievable. A CRC can be defined as a control that is crucial to preventing the event or mitigating the consequences of the event. As a risk based regulator the Mines Inspectorate also believes that the effective implementation of CRC would make a significant improvement to mine site safety and health.

Mines inspectors have received training in CRC identification and implementation, with the learnings applied in the review of key structured inspection guides.

The challenge for the Mines Inspectorate is to ensure mines review outcomes of the risk management process to ensure CRC are considered and effectively implemented to reduce incidents in the Queensland mining industry. Where applicable consideration will also be given to mandating CRC to manage risks.

A number of CRC have been identified that require a consistent and non-negotiable approach by all mines inspectors to ensure effective implementation. Mines inspectors will inspect/audit mines and review accident investigations to ensure outcomes are focused on effective CRC implementation. The findings of the review into mine incident investigations will be communicated to industry.

The Mines Inspectorate will continue to monitor industry best practice in risk management to ensure risks on mines are at an acceptable level and as low as reasonably achievable.

Compliance against Coal Mine Workers' Health Scheme Clinical Pathway

Review of outcomes of coal mine workers' abnormal spirometry results

All coal mine workers must undergo respiratory screening, including spirometry, at least every five years as part of regular health assessments under the Coal Mine Workers' Health Scheme.

The Health Surveillance Unit (HSU) in Occupational Health and Hygiene recently conducted a review of health assessments for coal mine workers identified as having abnormal spirometry results. The review was to ensure that workers' results were investigated by their Appointed Medical Advisers (AMAs) as per the Clinical Pathways Guideline. These actions seek to ensure that by following the guideline, AMAs are able to reach a diagnosis on potential cases of mine dust lung disease in a reasonable timeframe, reducing worker anxiety and providing more consistent outcomes.

A review of health assessments with abnormal respiratory screening results held by HSU identified that a significant proportion of cases were not referred for further investigation by the AMAs as required by the guideline.

HSU has commenced a tiered response for these cases. Initially, HSU sought additional information from AMAs and provided advice on compliance with the pathway. This process was successful in identifying cases where appropriate referral occurred but was not clearly documented.

The process also triggered remedial action by AMAs for a number of cases to comply with the guideline, and confirmed continuing non-compliance for other cases. The department will now consider appropriate action against AMAs found to be non-compliant with the Clinical Pathways Guideline.

Key performance indicator 4

RSH compliance and monitoring approaches are streamlined and coordinated

Performance measures

- 4.1 RSH inspectorate information requests are tailored and only made when necessary to secure regulatory objectives.
- 4.2 RSH inspectorates utilise information received from government agencies, through formal information sharing arrangements, to limit requests made to regulated entities, where possible.
- 4.3 RSH inspectorates take into account the circumstances and operational needs of the regulated industry.

RSH's information systems and databases give us the ability to access up-to-date information about our stakeholders and our regulatory environment to inform our regulatory response approaches.

RSH identified the importance of having information systems and databases that meet the need of a modern organisation, so commenced the Modernisation of Regulatory Activity Platform Project in 2018-19. This project is reviewing our business requirements as a regulator with the express purpose of finding suitable information technology solutions to see our organisation well into the future.

As far as possible, the data collected and stored on inspectorate databases is reused for inspectorate activities, minimising frequency of stakeholder information collection. We document and disseminate information through corporate publications such as the Department of Natural Resources, Mines and Energy Annual Report and Service Delivery Statements, as well as through inspectorate publications such as the annual Queensland Mines and Quarries Safety Performance and Health Report, safety alerts, bulletins, safety and health educational material and safety statistics on the website.

Through the information collected via existing reporting mechanisms, and through formal and informal information sharing practices with other government agencies including Memoranda of Understanding, RSH attempts to minimise impact on regulated industries.

The inspectorates also achieve this through regular internal information sharing forums including regular inspectorate regional meetings, regular RSH and inspectorate stand up meetings and RSH Leadership Team meetings.

Coordinated inspections

RSH understands the importance of coordinating inspections with other RSH inspectorates and external regulators where appropriate, to minimise disruption to the operation of regulated industries. However, the scheduling of coordinated visits may not always be practical when considering each regulators planned schedules and specific industry priorities.

- Mines and Explosives Inspectorates conducted 17 joint inspections, four joint audits, four joint investigations, one joint site meeting and one joint accountability meeting.
- Mines Inspectorate also regularly undertakes joint visits with the department's mining registrars and field access officers.
- Explosives Inspectorate participated in two joint audits with the Hazardous Industries and Chemicals Branch of Workplace Health and Safety Queensland on major hazard facilities and two joint vehicle stop operations with the Department of Transport and Main Roads.

- Petroleum and Gas Inspectorate participated in two joint audits with the Workplace Health and Safety Queensland Major Hazard Facilities Unit and two joint investigations with the Office of Industrial Relations. The inspectorate also participated in a total of 20 joint inspections with other agencies including the Queensland Building and Construction Commission, WorkCover Queensland, Electrical Safety Office, Australian Border Force, Queensland Fire and Emergency Services, QLeave, Labour Hire Licensing Queensland, Office of Fair Trading Queensland, Gold Coast City Council and Department of Environment and Science.

Significant initiatives and continuous improvement reporting

Modernisation of Regulatory Activity Platform Project

On 5 October 2018 RSH began the Modernisation of Regulatory Activity Platform (MRAP) project. The objective of this project is to investigate options for information technology systems to replace the primary systems used for planning, recording and reporting on regulatory activities and industry incident data. A small project team was established reporting to the RSH Leadership Team.

The RSH Leadership Team set overarching criteria that the options should ensure RSH is integrated, efficient, adaptable and achieves best-practice as a data-driven regulator. The MRAP project team (the team) was tasked with consulting internal stakeholders and providing advice to the RSH Leadership Team on the requirements for information technology systems to achieve these criteria and the options available for implementation.

Between October and November 2018 the team interviewed key user representatives from across the business to develop a high-level overview of the current state of RSH systems and requirements for any new system. The team released a report to the RSH Leadership Team containing their conclusions and recommendations in March 2019.

In March and April 2019 the team held workshops with the RSH Leadership Team and a small group of users to establish a shared vision for the desired future state of RSH's information technology systems. A report containing the conclusions of the team was delivered to the RSH Leadership Team in April 2019.

The team commenced a program of workshops in May 2019, meeting with groups of internal stakeholders across head office and regional offices to understand in detail the processes that users follow.

The team will continue their work in 2019-20 reviewing the findings of stakeholder consultation to assist with the development of detailed business requirements for potential information technology systems. They will then evaluate alternatives for information technology systems and make recommendations to RSH leadership.

Explosives licensing system improvements

The Explosives Inspectorate is implementing measures for suitable security clearance of authority holders to ensure appropriate persons have access to explosives. In the past this has been completed when a license has been applied for or renewed (five yearly).

New legislation regarding the introduction of a security clearance card for all people who require unsupervised access to explosives will come into effect on 1 February 2020.

The system being developed to support the legislation will incorporate real-time monitoring of the status of all individuals issued a licence. The development of this system commenced in 2018-19 and has

involved considerable interaction between the Explosives Inspectorate, Australia Post (as an agent), the Queensland Police Service and the Australian Federal Police.

The system will be linked to the Queensland Police Service and will address criminal activities, including domestic violence. A similar link to the Australian Federal Police will address the national concerns of politically motivated violence, as well as federal criminal history, at the time of initial application for a license or security clearance card.

The objective is that the system will identify inappropriate people and prohibit them gaining unsupervised access to explosives on application. Additionally an ongoing check of their suitability will be conducted for the entire period a person holds such a clearance to ensure they remain an appropriate person.

Memorandum of Understanding with Queensland Health

Exchange of information regarding notifiable conditions under the *Public Health Act 2005*

Queensland Health initiated the development of an inter-departmental agreement regarding the sharing of information about workplace lead exposures between our two agencies. The updated memorandum of understanding with DNRME–RSH was signed-off in October 2018.

Information on occupational lead exposures notified to the Department of Health through the notifiable conditions register will be useful to RSH in regard to monitoring workplace lead exposure as required by the *Mining and Quarrying Safety and Health Act 1999* and the *Work Health and Safety Act 2011*.

A key outcome from the sharing of information is a reduction in workplace death, injury and disease on Queensland mining sites. This information has the potential to improve identification and management of risks at a mine and enable targeted strategies to improve mine worker health.

Memorandum of Understanding with the Office of Industrial Relations

The department has entered into a memorandum of understanding with the Office of Industrial relations to receive quarterly reporting of confirmed cases of mine dust lung disease through the Queensland Workers' Compensation Scheme. This reporting, along with the department's own records, assists in accurate reporting of disease, and informs public reporting on the department's website.

A similar memorandum of understanding is in development with Queensland Health, pertaining to the Notifiable Dust Disease Register that commenced on 1 July 2019. This additional sharing of information will ensure relevant agencies are more aligned in disease reporting and capture disease diagnosed outside of the Queensland Workers' Compensation Scheme and the Coal Mine Workers' Health Scheme.

Key performance indicator 5

RSH is open and transparent in its dealings with regulated entities

Performance measures

- 5.1 RSH inspectorates' legislation and compliance policy are publicly available in a format which is clear, understandable and accessible.
- 5.2 RSH inspectorates are open and responsive to requests from regulated industries and other relevant stakeholder representatives regarding the operation of the regulatory framework and approaches implemented by RSH.
- 5.3 RSH inspectorate performance measurement results published in a timely manner to ensure accountability to the public.

RSH seeks to be open and transparent in its dealings with regulated industries. Overall, legislation administered by RSH inspectorates provides clear objectives and obligations and the published RSH Compliance Policy provides a clear framework for our compliance approach. This is supported by our publication of critical safety and health incident information and investigation reports.

RSH releases performance information on the department's website through the annual Queensland Mines and Quarries Safety Performance and Health Report's chapter on compliance activities and outcomes and to industry stakeholders at the annual RSH Industry Leaders Briefing.

The Commissioner for Mine Safety and Health also publishes an annual performance report on the Queensland Mines Inspectorate. This report is delivered to the Minister and tabled in Parliament, as required by legislation.

Significant initiatives and continuous improvement reporting

Mining fatality review

In 2018–19, RSH initiated a review of all fatalities in Queensland mines and quarries from 2000 to 2019 since the introduction of the current mining safety and health legislation.

Forensic structural engineer Dr Sean Brady was engaged to examine the coal mining, mineral mining and quarrying incident and injury reporting data for this period to better understand:

- the causes of fatalities, serious injuries, high potential incidents and other incidents reported by industry over the past two decades;
- how industry can use these findings to improve safety and health; and
- where the industry should focus its resources to prevent further fatalities.

It is anticipated that the review will be completed before the end of the 2019 calendar year and a report will then be tabled in the Queensland Parliament.

Key performance indicator 6

RSH actively contributes to the continuous improvement of regulatory frameworks

Performance measures

- 6.1 RSH inspectorates establish cooperative and collaborative relationships with stakeholders to improve the efficiency and effectiveness of the regulatory framework.
- 6.2 RSH inspectorates engage with stakeholders in the development of options to improve safety and health outcomes.
- 6.3 RSH inspectorates regularly share relevant stakeholder feedback with the RSH policy and performance units to improve the operation of the regulatory framework and administrative processes.

Significant initiatives and continuous improvement reporting

Consultation on major policy and legislation changes

RSH has been involved in a significant amount of consultation with industry stakeholders on proposed major policy and legislation changes in 2018-19. This has included consultation on a new regulator model for Resources Safety and Health and proposed amendments to the *Coal Mining Safety and Health Act 1999*, the *Mining and Quarrying Safety and Health Act 1999*, the *Explosives Act 1999* and the *Petroleum and Gas (Production and Safety) Act 2004* and accompanying regulations.

RSH regulator model

The independently led Project Management Office (PMO) established by the Queensland Government in 2017 finalised its report in June 2018. The report suggested that further consultation with key stakeholders was required to ensure stakeholders were fully aware and had an opportunity to comment on the additional components recommended in the PMO's regulator model.

Between September and October 2018, the RSH Policy Unit released an information paper and undertook targeted consultation with industry and union stakeholders on additional components of the regulatory model proposed by the independent Project Management Office.

Industrial manslaughter and other legislative amendments

The RSH Policy Unit released an information paper and undertook targeted consultation with industry, union, government and legal sector stakeholders between November 2018 and February 2019 on industrial manslaughter and other legislative amendments. The information paper invited comments from stakeholders on whether certain provisions in the *Work Health and Safety Act 2011* should be adopted in resources safety legislation.

Steel casing in horizontal wells

In consultation with the Petroleum and Gas and the Coal Mines Inspectorates, the RSH Policy Unit undertook targeted consultation and released a draft operation policy to industry stakeholders between March and April 2019 regarding the assessment of applications to use steel casing in horizontal wells.

Stakeholder feedback assisted in refining the draft policy, which was publicly released on 31 May 2019.

Petroleum and Gas Inspectorate

Between February and June 2019, the Petroleum and Gas Inspectorate and members of the RSH Policy Unit consulted with industry stakeholders including the Australian Petroleum Production and Exploration Association (APPEA), the Queensland Resources Council (QRC) and members of the Petroleum and Gas Inspectorate's Stakeholder Engagement Committees (SECs) regarding the implementation of the Land, Explosives and Other Legislation Amendment Act 2019 (LEOLA Act) and amendment regulations to support the LEOLA Act provisions.

Explosives Inspectorate

Consultation occurred in 2018-19 with the Australasian Explosives Industry and Safety Group (AEISG), the Firearms Dealers Association of Queensland, the Transport Workers' Union and relevant government agencies regarding the explosives provisions contained in the LEOLA Act, which was passed by the Parliament on 27 March 2019.

The RSH Policy Unit supported the Explosives Inspectorate to undertake consultation with industry between February and June 2019 on policy changes relating to the introduction of fees for LEOLA Act amendments relating to security clearances and explosives driver licences and security clearance notifications.

Mines Inspectorate

The RSH Policy Unit has supported the Mines Inspectorate in stakeholder engagement and communication regarding the legislation changes contained in the *Mines Legislation (Resources Safety) Amendment Act 2018*, which was passed by the Parliament on 31 October 2018. The significant policy changes include the introduction of civil penalties, increased maximum penalties, stricter competency requirements for ventilation officers and new powers to suspend or cancel certificates of competency.

Between August and December 2018, consultation occurred with stakeholders, the Coal Mining Safety and Health Advisory Committee and the Mining Safety and Health Advisory Committee regarding regulation amendments and a new recognised standard and guideline regarding the adoption of the globally harmonised system (GHS) for the classification and labelling of hazardous chemicals.

Consultation also occurred with stakeholders and the Coal Mining Safety and Health Advisory Committee between March and June 2019 on proposed regulatory amendments to the Coal Mining Safety and Health Regulation 2017 regarding methane monitoring.

RSH internal information sharing activities

All RSH inspectorates and business units are represented at the biannual RSH review days where participants are encouraged to share their knowledge and experiences through formal presentations and face-to-face dialogue with their colleagues. The rotation of participants at these events demonstrates to the individuals that the functions they perform in their role are an important part of the organisation's business. The free expression of diverse views encourages new ways of thinking that can lead to positive change and approaches to our business.

Regular information sharing across RSH inspectorates and business units also happens at regular RSH Leadership Team meetings.

RSH Policy Unit internal information sharing activities

In addition to industry consultation, the RSH Policy Unit have had a number of formal and informal meetings with the inspectorates and business units across RSH to discuss a variety of policy or legislation changes or initiatives.

These discussions have primarily centred around policy initiatives and amendments to the Coal Mining Safety and Health Regulation 2017, the Mining and Quarrying Safety and Health Regulation 2017, the implementation of explosives and petroleum gas amendments contained in the LEOLA Act, and the implementation of the *Mines Legislation (Resources Safety) Amendment Act 2018*.

In February and March 2019 the RSH Policy Unit delivered information sessions to RSH staff on policy and legislation processes to enhance staff understanding of the government framework and processes for making policy and legislation.

In August 2018 the RSH Policy Unit held a planning and information session with inspectorates and the Occupational Health and Hygiene Unit to discuss proposed key policy or legislation changes and to develop a RSH policy work program for 2018-19.

Petroleum and Gas Inspectorate

Members of the RSH Policy Unit regularly attend the quarterly Petroleum and Gas Inspectorate SEC meetings and quarterly Petroleum and Gas Inspectorate review meetings to provide updates on policy and legislation matters.

The RSH Policy Unit provides specific policy and legislation updates to the Chief Inspector's weekly stand-up meetings as required.

Formal and informal meetings occurred between the Petroleum and Gas Inspectorate and the RSH Policy Unit to discuss various policy projects and other matters including developing an operational policy regarding the assessment of applications to use steel casings in horizontal wells and amendments to the Petroleum and Gas (Safety) Regulation 2018 to support implementation of provisions contained in the LEOLA Act.

Explosives Inspectorate

Formal and informal meetings occurred between the Explosives Inspectorate and the RSH Policy Unit to discuss policy projects and matters related to the implementation of explosives amendments contained in the LEOLA Act and proposed amendments to the Explosives Regulation 2017 to support the LEOLA Act provisions.

The RSH Policy Unit regularly attended project board meetings held by the inspectorate to progress implementation of systems and policies to support the LEOLA Act amendments.

Mines Inspectorate

Formal and informal meetings have occurred between the Mines Inspectorate and the RSH Policy Unit to discuss various policy projects and matters related to the regulatory framework. These have included discussions regarding legislation changes contained in the *Mines Legislation (Resources Safety) Amendment Act 2018*, and regulation amendments including the adoption of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

Occupational Health and Hygiene Unit

The RSH Policy Unit liaised with the Coal Mine Workers' Health Scheme within the Occupational Health and Hygiene Unit in progressing a number of policy projects, including the new regulator model and recommendations contained in the Coal Workers' Pneumoconiosis (CWP) Select Committee report regarding the structure and funding of the regulator.

Formal and informal meetings have occurred between the Occupational Health and Hygiene Unit and the RSH Policy Unit to discuss various policy projects and matters related to the regulatory framework, including the introduction of mobile health units and matters relating to health assessments.

Members of the RSH Policy Unit attend Occupational Health and Hygiene Unit stand-up meetings as required.

RSH Performance and Governance Unit internal information sharing activities

The RSH Performance and Governance Unit collaborated with the inspectorates primarily for the purposes of internal and external performance reporting, inspectorate training, statistical analysis and partnering on reviews and reports. This included various work programs and projects such as the 2017-18 Queensland Mines and Quarries Safety Performance and Health Report, 2017-18 RSH Performance Accountability Framework Self-Assessment Report and the 2018 industry survey. The unit has also worked with inspectorates on investigation reports and other public release publications.

Stakeholder surveys

No stakeholder surveys were conducted in 2018-19.