Health and Safety Regimes

Health and safety is an integral part of the process for petroleum and minerals exploration and production in New Zealand.

It plays a key role in ensuring New Zealand has a robust regulatory system for the safe development of our valuable natural resources.

Regulations are enforced by the High Hazards Unit within WorkSafe New Zealand (WorkSafe) — a stand-alone Crown Entity with a sole focus on workplace health and safety.

WorkSafe’s Petroleum/ Geothermal and Extractives teams focus predominantly on process safety risks, rather than personal safety risks. They put significant emphasis on inspecting the management systems underpinning and shaping workplace practices. Inspectors will undertake regular inspections throughout the life cycle of a production oil rig or underground mine to ensure the operator is complying with its safety systems.
Petroleum exploration and production companies operating in New Zealand are required to comply with the Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016. These provide for the management of hazards associated with petroleum exploration and extraction activities, and are enforced by WorkSafe.

The regulations were strengthened from June 2013, and have been updated in 2016 to align with the new Health and Safety at Work Act 2015.

The strengthened regulations and enforcement ensure that health and safety regulation of petroleum exploration and extraction activities in New Zealand—both onshore and offshore—is more consistent with best practice in the United Kingdom and Australia.

The regulations contain a range of mechanisms to strengthen the management of hazards with the potential to cause a major accident at an installation (drilling unit or production facility).

These include:

- other than for lower tier installations, a permit operator of a production installation or a drilling contractor of a non-production installation must prepare a safety case for an installation and submit it to WorkSafe for acceptance before commencing operations. In the safety case any hazards to safety must be identified and control measures implemented;
- an independent and competent person must verify the suitability and state of good repair of safety critical equipment (including well control equipment) on the installation;
- the permit operator or drilling contractor must prepare an emergency response plan for the installation and submit it to WorkSafe before commencing operations. An emergency response plan is a plan for responding to emergencies that occur while petroleum workers are working on an installation; and
- WorkSafe will assess and inspect compliance with the regulations and ongoing implementation and compliance with safety cases.

The regulations also contain a range of safeguards to mitigate the health and safety risks associated with well operations. These measures may also contribute towards reducing the risk of an oil spill. These include:

- a well operator must carry out a full assessment of subsurface conditions before drilling to identify potential hazards. A well operator must also ensure that a well is designed, constructed, maintained and operated such that, so far as is reasonably practicable, there can be no unplanned escape of fluids from the well;
- a quality control check is required of the design and construction of the well by a competent person independent of the well operator (the well examiner) to ensure that it is fit for purpose;
- there is a statutory requirement for well operations to be notified to WorkSafe before they commence;
- a well operator must ensure that everyone involved in a well operation has the necessary knowledge, skills, experience and ability to carry out his or her responsibilities and perform his or her job safely and effectively;
- a well operator must also ensure that everyone involved in a well operation has received suitable information, instruction, training and supervision; and
- WorkSafe will assess and inspect well control and well integrity arrangements during onsite inspections.
Mineral exploration and production companies operating in New Zealand are required to comply with the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016. These provide for the management of hazards associated with both opencast and underground mining activities.

The regulations were strengthened from December 2013, and have been updated in 2016 to align with the new Health and Safety at Work Act 2015.

The strengthened regulations are part of the Government’s response to the recommendations of the Royal Commission on the Pike River Coal Mine Tragedy. See more information about the Government’s response to the Royal Commission’s recommendations here.

The regulations were developed in consultation with independent New Zealand and Australian mining experts, as well as the New Zealand mining industry, and bring New Zealand’s approach to mining health and safety into line with international best practice.

The regulations apply to underground and surface coal mines, underground and surface metalliferous mines (except alluvial gold and ironsand operations) and some tunnelling operations. The regulations require mining and tunnelling operators to:

› put in place health and safety management systems, carry out risk assessments, and prepare principal hazard management plans and principal control plans;
› appoint people to new safety critical roles;
› make sure mine workers meet competency requirements;
› comply with strengthened minimum standards;
› meet requirements for emergency preparedness and management; and
› meet notification and reporting requirements.

The regulations are enforced by WorkSafe. Inspectors focus predominantly on process safety risks, rather than personal safety risks. They put significant emphasis on inspecting the management systems underpinning and shaping workplace practices.

Some of the changes to strengthen the minerals mining regime are in the Health and Safety at Work Act 2015. These include:

› refreshed definitions of mining, tunneling and quarrying to clarify which operations are covered by the health and safety regime;
› strengthened worker participation in line with the Royal Commission’s recommendations, including giving Health and Safety Representatives (HSRs) special powers, eg, to require a mining operation to stop operations in case of imminent serious risk, and creating industry-wide HSRs for underground coal mining;
› creating a New Zealand Mining Board of Examiners to issue Certificates of Competence for specialist mining roles.
In addition to these changes, the Crown Minerals Act (CMA) was also amended in 2013 to strengthen regulatory agencies’ coordination on health, safety and environmental matters. The Royal Commission on the Pike River Coal Mine Tragedy recommended that “Mining permits should have a general condition requiring the need for compliance with the Health and Safety in Employment Act and regulations”.

In response to this recommendation the Government made changes to the CMA which ensure health and safety becomes an integral element of the permit allocation process, for both petroleum and minerals activities. This included:

- introducing an assessment of an operator’s ability to meet expected health, safety and environmental requirements of other regulatory agencies. This high-level assessment ensures an operator’s health and safety capability is considered at the very first stage of the petroleum and minerals regulatory regime.
- for minerals, introducing a two-tiered permitting regime making regulatory efforts more proactive, co-ordinated and focused on operations that have the highest technical and geological complexity.