



CROWN MINERALS ACT 1991
MINERALS PROGRAMME FOR MINERALS (EXCLUDING PETROLEUM) 2013

Guidance on good industry practice

Good industry practice is a key concept of the Crown Minerals Act 1991 (the “Act”) and is tied to many of the considerations in the Minerals Programme for Minerals (Excluding Petroleum) 2013 (the “Minerals Programme”). All activities carried out under the Act are required to meet standards of good industry practice. This is specified in general conditions of almost all prospecting, exploration and mining permits.

NZP&M has substantial regulatory power to apply the requirement of good industry practice to assessment of applications and to compliance with permit work programmes. This may be carried out in collaboration with other regulators, especially WorkSafe New Zealand.

PURPOSE

This guideline explains the concept of good industry practice as referred to in the Act and the Minerals Programme. Applicants and permit holders need certainty around how NZP&M considers and applies the concept of good industry practice to the assessment of permit applications and to compliance on work programmes, including reporting.

Considering whether an activity has been or will be carried out in accordance with good industry practice¹ is a matter of professional judgement and advice, taking into account the information and evidence provided to NZP&M when comparing against accepted industry practices. The 1996 Minerals Programmes (Part 14) dealt with this directly: “good exploration or mining practice cannot be defined unequivocally.....” .

LEGISLATIVE CONTEXT

Good industry practice, in relation to an activity, is defined in the Act as “acting in a manner that is technically competent and at a level of diligence and prudence reasonably and ordinarily exercised by experienced operators engaged in a similar activity and under similar circumstances, but (for the purposes of this

Act) does not include any aspect of the activity regulated under environmental legislation”.

Section 29A (2)(iii) of the Act requires that before granting a permit, the Minister must be satisfied that the proposed work programme is consistent with good industry practice in respect of the proposed activities.

Section 33 (1)(b) of the Act requires that permit holders perform activities under the permit in accordance with good industry practice.

The concept of good industry practice applies to NZP&M’s consideration of exploration work programme proposals under *clause 9.3(1)(d)* and mining work programme proposals under *10.2(1)(g)* of the Minerals Programme.

The Minerals Programme further interprets good industry practice under *1.3(11)* to include (without limitation) the following:

Personnel and procedures

- (a) At all times the permit operator, contractors and their staff have the skills, training and experience required to carry out all prospecting, exploration and mining operations in a competent, safe and effective manner.

Operational

- (b) Exploration and appraisal activities, mine development and mining operations are designed and conducted to maximise economic recovery and minimise sterilisation and waste of the mineral resource, within reasonable technical and economic constraints.

¹ The 1996 and 2008 Minerals Programmes refer to ‘good exploration and mining practice’. The amended Act and the 2013 Minerals programme refers to ‘good industry practice’. While the semantics can be argued, for the purposes of the legislation they are considered to mean the same thing.



(c) Methods of prospecting, exploration or mining are suitable and will be technically effective, given the objectives of the work programme, the geology of the area, and the results of previous prospecting, exploration or mining.

(d) In the case of mining, any ongoing appraisal and definition of the geology and presence, degree of mineralisation and coal quality of the mineral deposit will be in sufficient detail to plan and execute the most suitable mine development and mining operations.

Risk management

(e) The operator has risk assessment systems and management and auditing processes in place to avoid, mitigate and manage operational risks, including health and safety risks.

Acquisition of data

(f) Prospecting and exploration/appraisal and mining operations are conducted so as to ensure that sufficient good-quality, objective data is acquired, within reasonable technical and economic constraints. Sufficient data allows testing of the understanding of a mineral prospect or mineral exploration target in an exploration permit to a level of confidence commensurate with satisfying technical and economic criteria implicit in the (recognised) resource/reserve reporting codes. In appraisal and development, sufficient data needs to be acquired to understand with appropriate certainty, the mineral development cost and timeline taking into account the known uncertainties that normally affect economic mineral recovery.

APPLICABLE GUIDELINES

Good industry practice for prospecting and exploration permit applications, work programmes and reporting obligations

Proposed work programmes accompanying applications for prospecting and exploration permits are evaluated by NZP&M against the concept of good industry practice. Applicants must demonstrate an acceptable level of understanding of the geology of the permit area in order to construct appropriate work programmes. The definition in the Act applies to the considerations for assessment of work programmes under *Parts 8.2, 8.3, 9.2 and 9.3 of the Minerals Programme*.

Compliance on reporting on exploration activities is also evaluated against the concept of good industry practice. For example, reporting on a drilling obligation would normally be expected to include an interpretation of drilling results even if there was no specific work programme obligation to do so.

Good industry practice for mining permit applications

Feasibility studies² for minerals mining permit applications are the most important supporting information for applications and for judging whether a work programme proposal meets the standards of good industry practice. A well prepared feasibility study demonstrates the intention to continue in accordance with good industry practice over the life of the permit. External review is encouraged for mining projects regardless of scale, complexity or perceived risk.

² The expectation of scoping, pre-feasibility and feasibility studies is covered in a separate guideline.

Important considerations in relation to considering good industry practice for opencast mines include, but are not limited to:

- › resource and reserve estimates
- › stripping ratio
- › resource recovery
- › mine planning (short term, life of mine)
- › mining method and equipment
- › production rates and scheduling
- › recruitment and training (miners, technical and supervisory staff)
- › highwall design
- › overburden landform design
- › water management
- › rehabilitation

Important considerations for underground mines include, but are not limited to:

- › resource and reserve estimates
- › resource recovery
- › mine planning (short term and life of mine)
- › mining method and equipment
- › production rates and scheduling
- › mine design in relation to geology, resources and surface constraints
- › pillar and roadway support design
- › strata control hazards identification
- › strata control management plans, including structured geotechnical monitoring programmes
- › geotechnical basis for pillar and roadway support design
- › geological factors influencing gas management in coal mines.

Consideration of operational risks includes health and safety risks³. In partnership with WorkSafe New Zealand, NZP&M may consider Principal Hazard Management Plans that are a requirement under the *Health and Safety in Employment Act 1992 (H&SEA)*. For example, to be satisfied about the operational and health and safety risks around roof stability in an underground mine, which is in turn related to resource recovery and sterilisation, and thus directly to good industry practice, NZP&M may review some components of this (or other) plans even though they are principally required under the H&SEA. Without perusal of the Principal Hazard Management Plans, an application may not meet the test under the Act that the requirements of the H&SEA are likely to be met⁴. A separate guideline *Health and Safety and the Crown Minerals Act* covers this in more detail.

³ The relationship of the Crown Minerals Act to the Health and Safety in Employment Act is considered in a separate guideline.

⁴ The Minerals Programme reflects the wording of s 29A (2)(d) of the Act: that the Minister must be satisfied that "in the case of a Tier 1 permit for exploration or mining, that the proposed permit operator has, or is likely to have, by the time the relevant work in any granted permit is undertaken, the capability and systems that are likely to be required to meet the health and safety and environmental requirements of all specified Acts for the types of activities proposed under the permit".

Good industry practice and work programme monitoring and compliance

Once prospecting, exploration or mining begins, the obligation to meet acceptable standards of good industry practice applies to all activities carried out under the permit. This is monitored through Annual Summary reporting, site visits, notification received from the Health and Safety regulator (WorkSafe), and Annual Review Meetings conducted under *s 33D of the Act*. Annual summary reporting is most important in providing mine plans and production information which can be compared to the obligations set out in the permit work programme. Resource and reserve reporting using a recognised code is also expected to meet the standards of good industry practice.

NZP&M will liaise with other regulators as necessary to monitor whether a permit holder is compliant with requirements to carry out work programmes according to good industry practice. This applies particularly to Tier 1 and large Tier 2 mining permits.

Disclaimer

This document is a guideline only and is not intended to cover every possible situation. Where this guideline is inconsistent with the Act, relevant Minerals Programme or relevant regulations, the Act, Programme and regulations prevail. This guideline has no binding legal effect and should not be used as a substitute for obtaining independent legal advice.

New Zealand Petroleum and Minerals (NZP&M) is not responsible for the results of any action taken on the basis of information in this guideline, or for any errors or omissions in this guideline. NZP&M may vary this guideline at any time without notice.

There may be factors taken into account in any application process, transaction or decision that are not covered by this or any other guideline. Adherence to this guideline does not guarantee a particular outcome. NZP&M retains the discretion to decline any application where the statutory requirements for that application are not met.



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NZP&M is a division of the Ministry of Business, Innovation and Employment. We lead and actively manage New Zealand's petroleum and minerals portfolio ensuring the country's economic interests and assets are comprehensively protected. Our goal is to use our wider understanding of the energy and resources sector to increase national and regional prosperity via petroleum and minerals exploration and production.

As a government agency, we engage with Councils, iwi and communities about petroleum and minerals development and regulation of the industry. We manage compliance and revenue collection on behalf of the Crown and aim to maximise the return that these important industries deliver for the benefit of all New Zealanders.

We report to the New Zealand public through the Minister of Energy and Resources.