

Assessing Mining Proposals

GENERAL PRACTICE NOTE

APRIL 2006

This General Practice Note provides guidance to councils, applicants and the community about mining activities and the process for assessing mining proposals.



Exploration drilling

What is mining?

The *Victoria Planning Provisions (VPP)* defines mining as land used commercially to extract minerals from the land. It includes processing and treating ore. This definition is similar to that in the *Mineral Resources Development Act 1990 (MRD Act)* which regulates mining activities in Victoria. The purpose of the MRD Act is to encourage an economically viable mining industry which makes the best use of mineral resources in a way that is compatible with the economic, social and environmental objectives of the State. Mining does not include mineral exploration or extractive industry. Extractive industry is regulated by separate legislation.

What is mineral exploration?

Mineral exploration includes conducting geological, geophysical and geochemical surveys; drilling; collecting samples for analysis; the non-commercial extraction of minerals; and anything (other than mining) specified by an exploration licence. Mineral exploration is different to mining in planning schemes, as discussed above.

An exploration licence is granted under the MRD Act. The holder of an exploration licence is entitled to carry out exploration on the land covered by the exploration licence. Exploration cannot be undertaken until there is an approved work plan, a rehabilitation bond in place and necessary consents and authorities obtained. An exploration licence can cover an area of up to 500 sq. km. The term of an exploration licence is up to five years, with renewal available.

By law planning schemes must not prohibit or require approval for mineral exploration. Mineral exploration is managed solely under the MRD Act. Exploration is usually carried out under an exploration licence, but can also be carried out under a mining licence.

While a planning permit is not required for mineral exploration, the exploration licence conditions generally require that licensees make council aware of any exploration activities within the municipality.

A licensee who proposes to do work under an exploration licence must first lodge a work plan with the Department of Primary Industries (DPI). This does not apply to low impact exploration, which is separately defined under the MRD Act.

How does mining take place?

A mine will normally produce an ore or other commodity such as coal, gold or copper. These products may be mined in the following ways:

Shallow surface mining

This is shallow extraction of alluvial deposits, soil or weathered rock. Shallow surface mining varies from removal of surface material of a few centimetres in depth to shallow pits up to several metres deep. Shallow surface mining of gypsum, from evaporate and dune deposits, is common in north-west Victoria.

Open-cut mining

Open-cut mining usually involves removal of surface vegetation, topsoil and any overburden to uncover mineral deposits that are close to the surface. In Victoria, open-cut gold mines are typically up to 60 metres deep, but can be over 100 metres deep. Victoria's brown coal open-cut mines are generally over 100 metres deep.

Underground mining

Access to underground ore is gained by shaft (vertical or inclined), adit (horizontal) or decline openings into the ground. Mining excavation is generally achieved by drilling and blasting. Waste rock and mineral ore are transported to the surface by trucks or skips and waste rock is often used to backfill underground

voids (stopes) excavated during the course of mining to ensure a stable ground condition. Underground mining may follow open-cut mining with the decline opening (portal) being sited within the open pit.

Services provided to the underground mining operations may include provision of water; compressed air; electricity; telecommunications; fuel and ventilation air. Surface facilities may include: access roads; waste dumps and stockpiling areas; ore treatment plants; explosive stores; workshops; tailings storage facilities; wastewater treatment facilities; ventilation fans; administration and sanitary facilities.

Tailings treatment

Tailings are the waste product arising from separating valuable minerals from ore. Tailings contain finely ground rock and may also contain chemical residues such as traces of cyanide which is used to separate and remove gold. In the 19th and early 20th century goldmining was not as efficient as current day operations and the tailings can contain gold not recovered by the miners at the time. By reprocessing the tailings the remaining gold can be removed. Tailings treatment is regulated under the MRD Act.

Eductor dredging

Eductor dredging uses a portable suction device mounted on a floating barge to recover gold from the beds of streams and rivers by a gravity separation process. It is government policy not to grant mining or exploration approvals for eductor dredging in Victoria. However, mining operations using suction dredge plant floating in a constructed pond can be approved.



Underground at Ballarat Gold Mine

How is mining regulated?

Mining is carried out under the provisions of the *Mineral Resources Development Act 1990* (MRD Act) which is administered by the Minerals and Petroleum Division (MPD) of the Department of Primary Industries (DPI).

Mining operations can only commence once the Minister administering the MRD Act ('the Minister') grants a mining licence and DPI approves a work plan and grants a work authority.

Mining activities must be undertaken in accordance with the conditions of the approved work plan and the conditions of the planning permit (if required). Planning permits for mining are regulated under a planning scheme approved under the *Planning and Environment Act 1987* (P & E Act).

Once all relevant approvals are granted and the project commences, DPI's mining inspectors, appointed under the MRD Act, are responsible for all aspects of regulation related to mining within the mining licence area. Planning schemes and planning permits are administered by a planning authority, usually the council or shire in which the mining will be undertaken.

How does the mining assessment process work?

There are separate processes that a mining proponent must follow before mining can commence:

1. The mining licence, work plan and work authority process regulated under the MRD Act.
2. Planning permit process regulated under the P & E Act **or** the Environment Effects Statement process administered under the *Environment Effects Act 1978*.

MRD Act Process

How does the MRD Act process work?

The MRD Act establishes a three-stage approval process for mining (see Figure 1).

Stage 1 – Mining Licence

The first stage involves the granting of a mining licence by the Minister. The licence confers mineral rights from the Crown to the licence holder (licensee) but does not give the licensee authority to carry out mining operations. The licensee/mining proponent is required to advertise the licence application in a newspaper circulating generally in Victoria and in the locality of the licence (small mines that are less than 5 hectares only need to advertise in a local newspaper). Any objections received are considered by the Minister before deciding whether to grant the licence. The Minister may impose conditions on the mining licence. Prior to granting the licence, the licensee/mining proponent is required to have addressed all native title matters in accordance with the *Commonwealth Native Title Act 1993*.

Stage 2 – Work Plan

A licensee who proposes to do work under a mining licence must lodge a work plan with DPI. DPI requires that the work plan be first submitted in draft form.

The draft work plan covers the detail of on-site works associated with the mining operation and subsequent rehabilitation of the land. The draft work plan must be prepared in consultation with DPI and the Department of Sustainability and Environment (DSE) to ensure all relevant issues are addressed. DPI and DSE have a Memorandum of Understanding that ensures relevant divisions of both departments have input into the development of the draft work plan. This arrangement ensures that relevant government policies and legislative requirements are addressed in the preparation of the draft work plan.

Prior to lodging a draft work plan, DPI will arrange a site meeting of relevant officers from DPI, DSE, the responsible authority and other relevant government agencies. Following the site meeting the licensee will be advised of the issues to be addressed in the draft work plan.

Typically the draft work plan and associated conditions will cover the following areas:

- health and safety
- dust emission control
- noise emission control
- drainage and discharge control (including storm water management)
- erosion control
- noxious weeds and pests control
- removal or restoration of native vegetation
- progressive rehabilitation
- final rehabilitation
- ground water protection
- internal buffers
- internal screening
- internal roads
- fencing and security.

Development of the draft work plan to an advanced stage prior to lodging the planning permit application ensures that amendments to the planning permit are less likely later because of variations to the approved work plan.

What is 'endorsement' of a draft work plan?

DPI endorses a draft work plan when both DPI and DSE are satisfied that the plan has met appropriate standards for content and technical accuracy and is satisfactory for submission with the planning permit application. DSE may still be involved in addressing issues that may arise during the planning permit application process.

What are work plan conditions?

The DPI may endorse the draft work plan subject to conditions. The conditions are finalised when the work plan is approved and must be observed by the licensee when implementing the work plan. Site specific mining work plan conditions can be changed as a result of input from the responsible authority or the Victorian Civil and Administrative Tribunal (VCAT).

The licensee must submit a copy of the endorsed work plan and draft work plan conditions to the responsible authority for consideration with the planning permit application.

The draft work plan development and endorsement process assists the planning process by ensuring that an appropriate amount of supporting information is included with the planning permit application.

A licensee should only lodge an application for a planning permit once a mining licence has been granted, the draft work plan has been endorsed and draft work plan conditions are issued by DPI.

An endorsed work plan should not be confused with an approved work plan. A work plan is only approved by DPI once the licensee has obtained all the necessary planning approvals.

Stage 3 – Work Authority

The third stage requires the licensee to apply to DPI for a work authority (formerly an authority to commence work). DPI will only grant the work authority when the licensee has:

- obtained all necessary consents from landowners and other parties
- obtained a planning permit or EES and all other necessary permits and other approvals from government agencies
- lodged a work plan and obtained DPI approval
- lodged a rehabilitation bond (the rehabilitation bond is determined once the planning permit and work plan have been finalised)
- given advance notification to the owners or occupiers of the affected land and to the Chief Mining Inspector of the intention to commence work
- settled compensation with the owners or occupiers of private land affected by the mining proposal
- satisfied DPI as to the level of public liability cover held.

Once all requirements are satisfied, the work authority is granted by DPI and mining can commence.

Are mine operators required to rehabilitate land following mining and exploration?

The work plan must include a rehabilitation plan showing proposals for the progressive rehabilitation and stabilisation of extraction areas, revegetation and removal of plant and equipment. The rehabilitation plan must be approved by DPI before a work authority can be granted. Exploration and mining licensees are also required to submit a rehabilitation bond to the Minister administering the MRD Act. This provides a guarantee that the obligation to rehabilitate the affected land will be met. On Crown land, the Minister for Resources must determine the level of bond required in consultation with the Department of Sustainability and Environment. On private land, the Minister for Resources must consult with local government and, in the case of a mining licence, with the owner of the subject land. The Minister may use the bond to fund necessary rehabilitation works not satisfactorily completed by the licensee.

Planning process

How does the planning process work?

The MRD Act and Clause 52.08 of the VPP allow the licensee to either apply for a planning permit or, if required by the Minister for Planning, to prepare an **Environment Effects Statement (EES)** in accordance with the *Environment Effects Act 1978*.

Under the provisions of the MRD Act and Clause 52.08 of the VPP, mining is not a prohibited land use. Under Clause 52.08 a planning permit is required to use or develop land for mining, unless:

- An EES has been prepared under the *Environment Effects Act 1978* and mining is exempt from the requirement to obtain a permit under section 42 or section 42A of the MRD Act.
- The mining is in accordance with and within an area covered by a mining licence granted by Order made by the Governor in Council under section 47A of the *Electricity Industry Act 1993*.

Although the approval processes under the MRD Act and P & E Act are undertaken separately, coordination of both processes is important to ensure the adequate and timely assessment of mining proposals.

How does the EES process work?

If a project is in an environmentally sensitive area or close to an urban area, the licensee should consider the need to refer a project to the Minister for Planning to determine if an EES will be required. This should be done as early as possible.

Matters that are normally addressed in the planning permit assessment process are addressed in the EES process.

In summary, the EES process for a mining proposal is:

1. The mining project is referred to the Minister for Planning for a determination as to whether an EES is required. Any party including the proponent of the mining project may make the referral.
2. The Minister determines whether an EES is required.
3. An EES Technical Reference Group may be convened to guide preparation of the EES document.
4. The proponent prepares the EES (the EES may include a copy of a draft work plan).
5. The EES is placed on public exhibition and submissions are invited.
6. An inquiry may be appointed to consider the submissions and the EES.
7. After considering any inquiry's report, the Minister for Planning makes recommendations to the Minister administering the MRD Act.
8. The Minister administering the MRD Act determines whether the work plan should be approved and if the work authority should be granted.

For more information refer to section 3.8.7 of *Using Victoria's Planning System*, Department of Sustainability and Environment.

How does the planning permit process work?

When should the licensee lodge an application for a planning permit?

A licensee should only lodge an application for a planning permit once a mining licence has been granted, the draft work plan has been endorsed and draft work plan conditions are issued by DPI.

What consultation should take place prior to lodging a planning permit application?

Adjoining landowners and occupiers should be contacted for small mining operations. Broader consultation may be appropriate for larger mining applications. The licensee should develop an effective consultation program that is appropriate to the location and the scope of the proposal.

What information should accompany a planning permit application?

Before applying for a planning permit the licensee should discuss the proposal with the responsible authority to ensure that all the requirements of the planning scheme are addressed in the application.

In addition to the general requirements for submitting a planning permit application, an application for mining should also include, as appropriate:

- a copy of the **current mining licence**
- a copy of the **endorsed work plan**
- a copy of the **draft work plan conditions**
- a location plan showing the full site area, abutting and nearest intersecting roads, any significant features in proximity to the site and all weather access
- a site and context plan showing site shape, dimensions and size, orientation and slope, natural physical features of the site, including waterways, drainage lines, areas subject to flooding, wetlands and wildlife corridors, boundaries and easements, significant views to the site from major roads, existing land uses and the siting and use of existing buildings on adjacent and nearby properties and any other notable features or characteristics of the site

- a development plan and description of the specific operation including proposed buildings and works, landscaping, waste management, access and proposed dams and hours of operation
- the location, type and significance of any native vegetation to be removed and whether the proposal is consistent with *Victoria's Native Vegetation Management – A Framework for Action – August 2002*
- a description of any landscape, botanical, zoological or geological features on the site and surrounding area and their potential significance
- details of any archaeological or heritage features on the site and potential significance and a copy of any Aboriginal heritage assessment, if required
- details of measures to be undertaken to mitigate environmental impact
- proposed method of ore processing and any products or chemicals that will be used
- a preliminary assessment of the proposed rehabilitation bond level
- details on proposed rehabilitation.

Most of the above information will be included in a work plan endorsed by DPI.

Referral of the proposal to DPI

Clause 66 of the VPP requires a planning permit application for mining to be referred to DPI under section 55 of the P & E Act. Local schedules to zones and overlays may also trigger referral to other agencies such as DSE, Catchment Management Authority, VicRoads, Heritage Victoria, the water authority or the EPA.

The responsible authority must ensure that a planning permit application referral to DPI is accompanied by a full copy of the endorsed work plan and draft work plan conditions. DPI will notify the responsible authority within 28 days if it requires any further information and whether or not it objects to the planning permit application. DPI will provide the responsible authority with any conditions it requires to be included on the planning permit.

Who should be notified of a planning application for mining?

Section 52 of the P & E Act sets out the requirements for giving notice of a planning permit application. These include a requirement that notice of a planning permit application be given to the owners and occupiers of adjoining land and to any other persons, unless the responsible authority is satisfied that the grant of a permit would not cause material detriment to any person. The responsible authority must also consider whether any other person would be caused material detriment and if so, notice must also be given to them. Other notice requirements are set out in section 52 of the P & E Act.

In considering the question of material detriment the responsible authority should be aware that the possible effects of mining, such as dust, noise, ground vibration and transport may have an impact on properties some distance from a proposed mine site.

Responsible authorities should be aware that the **MRD Act does not provide for a public notification process when work plans are approved or varied.**

The provisions of the MRD Act are framed on the assumption that formal notice of the application will be undertaken in accordance with s. 52 of the P&E Act.

What matters should the responsible authority consider when assessing a planning permit application for mining?

When assessing an application for mining the responsible authority must consider the requirements of section 60 of the P & E Act and Clause 65 of the VPP.

The responsible authority should also consider the wider implications of a mine operation on the local area, including the impact on roads and the local amenity, as well as at the site. In particular, consideration should be given to:

- the State, regional and local benefit of the proposal
- any environmental issues
- any heritage conservation issues
- the likelihood of dust and noise emissions
- the proposed hours of operation
- any traffic impacts such as (accessibility, car parking, road degradation and maintenance, road pollution, road safety or disturbance to residents)
- the availability of services such as water, power, flood and fire protection
- the general amenity.

Some of the above matters will already be addressed or resolved in the endorsed work plan.

What happens after the responsible authority makes its decision on the planning application?

If there are no objections to the planning application, the responsible authority may issue a permit immediately. The permit must include all conditions required by DPI and must not include conditions which contradict the work plan conditions.

If there are objections, the responsible authority can only issue a Notice of Decision to Grant a Permit and the objector may apply for a review of this decision by the Victorian Civil and Administrative Tribunal (VCAT). If a permit application is refused, the applicant can apply for a review of this decision. If a permit is granted subject to conditions, the applicant can apply for a review of conditions. In such cases, VCAT will make the final decision on the application. If VCAT directs that the permit application should be refused DPI cannot grant a work authority.

Can mining commence immediately after a planning permit is issued?

Once a planning permit is obtained, DPI will, subject to all other requirements being met, approve the work plan and grant a work authority. If necessary, the work plan will be amended to ensure that it is consistent with the planning permit. Once the work plan is approved and work authority is granted, mining can commence.

Can mining operations change in the future?

Many licensees will require work plan variations and planning permit amendments during the life of the mine. This is a normal feature of the majority of mining operations and particularly common for large mines with an active exploration and development program.

If approached by the licensee or DPI the responsible authority must advise if the proposed variation to the approved work plan:

- requires a new planning permit or an amendment to the existing permit
- can occur under the existing permit
- can occur without a permit under the planning scheme.

Can mining take place on Crown land?

The MRD Act defines three categories of Crown land. They are:

Exempted Areas

These areas include national parks, state parks and wilderness areas scheduled under the *National Parks Act 1975*. Approximately 30% of Crown land falls within this category. While planning schemes ensure mining is a permit required use, the *National Parks Act 1975* prohibits mining. Exploration and mining licences **cannot** be granted over these areas, but existing licences and leases within these areas can continue and may be renewed.

Restricted Crown Land

Licences can be granted over this land, but access for exploration and mining requires the consent of the Minister administering the *Crown Land (Reserves) Act 1978* or the *Forests Act 1958*. This consent or refusal must be given within 28 days and the consent must not be unreasonably withheld.

The land in this category includes:

- regional parks
- coastal parks
- marine parks
- flora and fauna reserves
- nature conservation reserves
- wildlife reserves
- natural features and scenic reserves
- bush land reserves, historic areas and reserves
- streamside and coastal reserves
- national heritage parks
- land covered by the *Alpine Resorts Act 1983*
- declared heritage rivers or natural catchments under the *Heritage Rivers Act 1992*, except land covered by the *National Parks Act 1992* and *Reference Areas Act 1978*.

Unrestricted Crown land

Approximately 50% of Crown land falls within this category which includes all Crown land other than *Exempted Areas and Restricted Crown Land*. Access to this land to carry out exploration or mining does not require the consent of the Minister administering the *Crown Land (Reserves) Act 1978* and the *Forests Act 1958*. However, the Minister administering the MRD Act must consult with the Ministers administering the *Crown Land (Reserves) Act 1978* or the *Forests Act 1958* prior to issuing a work authority.

What are the native title obligations of proponents?

The requirements of the *Commonwealth Native Title Act 1993* must be complied with prior to issuing mineral tenements on Crown land. Native title may exist over Crown land where it has not been extinguished by a prior validated act. All native title matters must be addressed prior to the grant of a mining licence. The matters are dealt with by DPI, not the responsible authority.

What requirements must be met for mining in water supply catchments or on public highways and roads?

If mining is proposed in a water supply catchment that is owned by, vested in or managed or controlled by the Melbourne Water Corporation or an Authority under the *Water Act 1989* the consent of that Board or Authority must be obtained. The matters are dealt with by DPI, not the responsible authority.

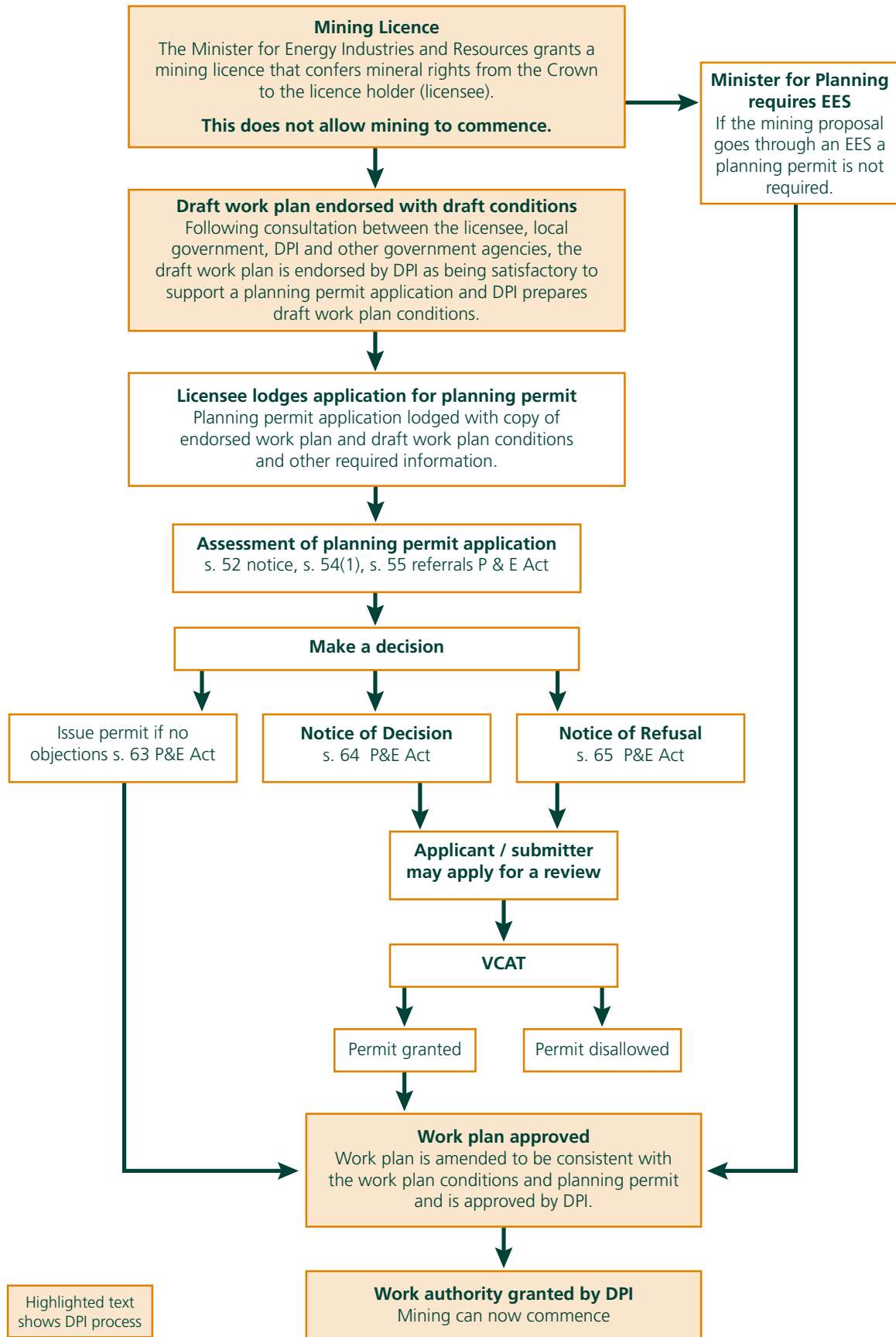
If mining is proposed on land on which there is a public highway, road or street, the licensee must give 21 days' notice of the proposed work to the person or body having the care or management of the public highway, road or street.

Can native vegetation be removed without a planning permit?

A planning permit is not required to remove, destroy or lop native vegetation necessary for mining or mineral exploration authorised by an **approved work plan** and in accordance with a **work authority** granted under the MRD Act (see Clause 52.17 of the VPP).

DPI's draft work plan endorsement process ensures that relevant government agencies have considered native vegetation removal and considered the appropriateness of any protection, restoration or offset requirements prior to a planning application being lodged with the responsible planning authority.

Figure 1: Approvals process for mining



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