

# NEW APPROVAL PROCESS FOR MANAGEMENT OF COAL MINING SUBSIDENCE POLICY

*The New South Wales Government is committed to ensuring that the mining industry meets contemporary standards for environmental management. Consequently the process for approving mining with the potential for surface subsidence has been reviewed to ensure its consistency with the Government's environmental policies. Approvals will be granted only after consideration of all potential impacts on landholders and the environment. The views of the community and other Government agencies will be fully taken into account during the approval process.*

## **Application of the Revised Process**

Previously, approvals of underground coal mining with potential for surface subsidence have been given under section 138 of the *Coal Mines Regulation Act 1982*, which provides that no method of underground mining of coal other than the bord and pillar system (ie first workings) can be used except with the approval of the Minister for Mineral Resources. This approval was used to control all potential impacts related to subsidence, including mine safety, public safety, resource utilisation, land use impacts and environmental impacts.

This process has been revised. In future, all potential impacts other than safety will be dealt with via an approval under the *Mining Act 1992*. This approval will focus in particular on land use and environmental impacts and will be required via a condition of title to be attached to all underground coal mining leases. This condition will be attached under powers available through section 239(2) of the *Mining Act 1992*. Occupational health and safety and public safety issues will continue to be dealt with under the *Coal Mines Regulation Act 1982* and its replacement, the *Coal Mine Health and Safety Act 2002* (not yet commenced).

The new condition will require the preparation of a Subsidence Management Plan (SMP) and its approval by the Department. An approved SMP will be required wherever underground mining will potentially lead to subsidence. An application for a section 138 CMRA approval will not be able to be granted until an SMP is in place.

The essential purpose of the SMP is to provide for the adequate protection of important natural and built features. Protection may involve the avoidance of damage to particularly significant features, the mitigation of damage, or its rehabilitation.

All applications for SMPs will be subject to merits based assessment. All information provided by the applicant, agencies and the community will be taken into account, in accordance with this approval process, in determining whether the approval is to be granted and the conditions to which it will be subject.

The SMP process will be applied to all underground coal mines. In the case of new coal mines, the key approval remains the development consent and subsidence impacts will primarily be considered as part of the consent process. Subsidence and its impacts must be addressed within the necessary environmental impact statement. The preparation and approval of an SMP in compliance with this process will then be required as a condition of consent. Approval of the SMP is necessary prior to mining commencing.

The Department will seek to ensure the full integration of conditions imposed under SMP approvals with those imposed under development consents and other approvals. Environmental impact assessment undertaken in association with development applications or other approvals will be taken into account in the SMP assessment process. The Department will seek to avoid duplication in assessment

processes and approval conditions. SMPs will need to reflect development consent conditions.

In the case of all existing underground coal mines, which already have development consent or else operate under existing use rights, preparation and approval of an SMP in accordance with this process is necessary before new mining (ie mining not previously approved under s. 138 CMRA) can commence.

### **Subsidence Management Plans**

Any titleholder proposing to undertake underground coal mining which may lead to surface subsidence will be required to prepare and submit to the Department a draft SMP and an application for its approval. SMPs are required to be prepared and approved prior to development of first workings (roadways) associated with secondary extraction panels such as longwalls or miniwalls.

SMPs also required to be prepared and approved prior to pillar extraction programs. If first workings alone may lead to subsidence of sensitive surface features, eg due to particular geological conditions, then an SMP must be prepared and approved prior to first workings.

The SMP must be appropriate to the nature and scale of the potential subsidence impacts, with the level of investigation and detail of reporting related to the scale of impact and the sensitivity of the features affected.

The intent of the SMP is to describe the area that may be affected; the process of subsidence prediction employed; the prediction and assessment of subsidence impacts on the area affected; the consultation process undertaken with government agencies and the community; the results of that consultation; and the proponent's proposals to prevent, mitigate or rehabilitate subsidence impacts.

The draft SMP must include a:

- ✓ full description of the area proposed to be impacted by mining activity, including areas of environmental, heritage or archaeological sensitivity,
- ✓ outline of existing mine workings within the application area, the proposed mine plan and a schedule of proposed mine development for the period to be covered by the SMP;
- ✓ predictions of the expected extent of subsidence for each longwall panel or other stage of mining;
- ✓ full assessment of the potential environmental, land use and other impacts of that subsidence;

- ✓ assessment of the economic and social benefits and impacts of the proposed mine development;
- ✓ extracts of relevant conditions of any associated development consent held, relevant conditions of other licences held, and relevant policies of other agencies (including the MSB and DSC);
- ✓ description of previous subsidence projections and impact assessment associated with any previous development application;
- ✓ proposals to minimise impacts of surface subsidence, particularly in areas of environmental, heritage or archaeological sensitivity or important built surface features;
- ✓ proposals for ground and surface water management;
- ✓ proposals for any necessary rehabilitation of subsidence impacts;
- ✓ results of consultation with affected landowners, State and local agencies, and the general community; and
- ✓ details of any proposed Community Consultation Process.

Applicants are encouraged to submit applications for SMP approval in respect of complete longwall domains. However, an SMP can only be approved to cover up to seven years of projected mining operations. If the full domain or other area subject to the SMP approval has not been mined out within seven years, an application to extend the term of the approval will be required.

An application to vary the existing SMP approval will be required if it is proposed to change the mine layout, as attached to the existing approval, in a manner that may vary subsidence impacts. Applications will also be required if significant variations are proposed to previous subsidence predictions, subsidence impact predictions, or subsidence management strategies and techniques. Extension or variation of the SMP approval may involve further assessment and altered conditions.

When approved, the SMP will form part of the Mining Operations Plan required under the mining lease, and therefore be subject to the requirement for lodgement and review of an Annual Environmental Management Report. Annual Environmental Management Reports, including the report against the SMP, will be provided to all agencies with an identified interest.

Further details of the issues to be addressed in an application for SMP approval are set out in the accompanying Schedule A.

## Departmental Approval Process

The SMP will be subject to the approval of the Director-General of the Department of Mineral Resources. Draft SMPs and applications for approval should be submitted to the Director Environment. The draft SMP will be assessed by a Departmental SMP Review Committee comprising the Director Environment (Chair), Chief Inspector of Coal Mines, the Principal Subsidence Engineer, Manager Policy and Legislative Review, and Chief Geologist Coal and Petroleum.

The SMP approval process will address:

- ✓ development of conditions for the Director-General's approval;
- ✓ advice on any additional security deposit needed to reflect possible subsidence-related impacts;
- ✓ consultation with and/or participation by other potentially-affected agencies (including DIPNR, SCA, NPWS, etc);
- ✓ consideration of the impacts of the proposed activities on the environment, where required under Part 5 of the *Environmental Planning & Assessment Act 1979*;
- ✓ consideration of the need to consult outside expertise, as appropriate, in considering and conditioning subsidence-related environmental impacts;
- ✓ review of the results of previous on-site monitoring during and after extraction; and
- ✓ requirement for the titleholder to obtain an independent environmental audit or assessment where circumstances warrant.

Flow charts showing the process for SMP approval, including the process for consultation with other agencies and the community, are attached.

## Interagency Participation in SMP Approvals

As part of their application, applicants will be required to obtain and report to the Department the views of all affected State agencies. Such agencies may include the Department of Infrastructure, Planning and Natural Resources, Sydney Catchment Authority, Department of Environment and Conservation, National Parks and Wildlife Service, NSW Fisheries, Mine Subsidence Board, Roads and Traffic Authority, Heritage Office, Dams Safety Committee, etc. Applicants may also be required to produce evidence of any necessary licences or other approvals required from other State agencies.

A new interagency committee will also be established to review draft SMPs and to advise on conditions for their approval and to participate in ongoing monitoring of subsidence management. This interagency SMP Review Committee will be chaired by DMR's Director, Strategic Planning & Policy and will include representatives from all agencies with significant interests affected by the proposed SMP. Examples include the Sydney Catchment Authority (within water catchment Special Areas) and the Department of Infrastructure, Planning and Natural Resources (where rivers and significant streams are affected). All other agencies with responsibilities affected by particular SMPs will be able to participate in the consideration of those SMPs by the committee.

Interagency involvement in review of proposed SMP approvals by the Review Committee will be determined in accordance with a set of criteria, or triggers. Related triggers will be used to determine interagency involvement in monitoring of SMP implementation, review of conditions, audit of adherence to conditions or review by an external panel. These triggers will include:

- ✓ location of the features or values subject to potential impact (eg within a Special Area);
- ✓ significance to the agency concerned of the features or values subject to potential impact;
- ✓ extent, scale or longevity of the anticipated impact on features or values; and
- ✓ the expected difficulty in mitigating or rehabilitating the anticipated impact.

In addition, in recognition of the particular values of the water catchment Special Areas, new high-level liaison arrangements with the Sydney Catchment Authority will be implemented. The Department will develop a Memorandum of Understanding with the Sydney Catchment Authority which will specify the process of consultation between the two agencies with respect to assessment and approval of SMPs within Special Areas. The Department's Director-General will consult with the Chief Executive Officer of SCA before approving any SMP within a Special Area.

## Consultation and Participation by the Community

*Community Input during Preparation of draft SMPs*

During development of their draft SMP, applicants must:

- ✓ advertise in a local and a State newspaper their intention to submit an SMP and application for approval for the identified area;
- ✓ identify all landholders and local councils directly affected by their proposals;
- ✓ consult with all such landholders and councils; and
- ✓ take into account the views expressed in responses received.

Throughout the process of community consultation, applicants for SMP approvals are encouraged to apply the *Guidelines for Best Practice Community Consultation in the NSW Mining and Extractive Industries*, developed by the NSW Minerals Council. Consultation with landholders is to include discussions on integrating any proposed mitigation works with the management of the property as a whole.

### **Submission of draft SMPs and Applications for Approval**

In association with submitting a draft SMP and application for approval, applicants must advertise in a local and a State newspaper their submission of an application for an SMP approval. The advertisement must contain a map of the affected area, information about where a copy of the draft SMP and application may be viewed and obtained, and information about where submissions concerning the draft SMP and application may be sent (including to the applicant and the Department's Director Environment).

As part of their application, applicants must:

- ✓ report the public consultation process undertaken with affected landholders, local councils, the local Aboriginal community and the general community;
- ✓ fully report and discuss the views expressed during the public consultation process;
- ✓ discuss how those views have been taken into account in the draft SMP; and
- ✓ report proposals for any Community Consultation Process.

#### *Community Input during Consideration and Approval of SMP Applications*

All members of the community are free to make submissions to the Department in its consideration of the draft SMP and application for approval. The applicant's advertisement will draw attention to this fact. The Department will take all such submissions into account and will

ensure that views expressed to it directly by the community, or community views reported by the applicant, are reported to the interagency SMP Review Committee.

The community is also free to make representations to other affected agencies. Such views may be represented by those agencies through the interagency consultation process.

The community will be given access to the final terms of the SMP approval. The Department will make a list of SMPs and their full terms and conditions publicly available, including on its website. Applicants are also required to make the terms of their SMPs and approvals publicly available.

#### *Community Consultation Process*

The applicant may include proposals for a Subsidence Community Consultation Process (SCCP) within their draft SMP. An SCCP would usually be required in sensitive areas, or in areas where significant numbers of residents are directly affected by proposed mining operations. If no SCCP has been proposed by the applicant, the Department may still require the preparation of a satisfactory process as a condition of the SMP approval.

An SCCP is a means by which the affected community is advised regarding the terms of an SMP approval, the proposed timetable for approved mining activities, the expected impacts of subsidence, proposed remediation and rehabilitation, and other information regarding the mining process that may be of interest to the community. The advisory process may include media releases, advertisements, public meetings, workshops, seminars, mine site tours, etc. It would generally be appropriate for the applicant to utilise an existing mine Community Consultative Committee as a forum for ongoing consultation over the development of the SMP, or establish such a Committee if none already exists.

#### *Ongoing Community Monitoring*

The SCCP may also make provision for the involvement of the community in the ongoing monitoring of mining and mining-related impacts. It may also address community involvement in development and implementation of rehabilitation strategies. Such involvement may take place through a mine Community Consultative Committee. A company with a number of mines within a relatively small area may wish to establish a

single Community Consultative Committee to consider issues associated with all those mines.

### **Subsidence Monitoring and Reporting Program**

As a condition of approval of the SMP, the applicant must undertake a detailed and ongoing Subsidence Monitoring and Reporting Program to the satisfaction of the Director Environment. Monitoring shall compare predicted impacts with actual impacts on both built structures and natural features and ecological values, and shall include monitoring of ground and surface water levels and quality.

Summary results and analysis of the monitoring must be reported to the Department's Environment Unit on a six-monthly basis. Conditions of SMP approvals may require more frequent reporting and analysis of monitoring in sensitive areas. Detailed results and analysis must be included within the Annual Environmental Management Report (AEMR) to the Department. Copies of the AEMR, including the report against the SMP, must also be provided by the applicant to all other agencies with an identified interest.

The applicant must also report all significant incidents or variations to predicted subsidence or subsidence impacts to the Department's Environment Unit within 48 hours of their identification.

Review by the Department of the results of monitoring or incident reports may lead to a requirement to review the SMP, the amendment of its conditions, or a requirement to undertake necessary rehabilitation works. The Department may require that the titleholder appoint an Expert Review Panel or obtain an independent environmental audit of subsidence management and subsidence impacts. Use of Expert Panels or audits may be required where mining is impacting on sensitive areas or if monitoring or incident reports indicate unsatisfactory performance or unanticipated impacts.

### **Security Deposits**

Section 70 of the *Mining Act 1992* contains provisions whereby a condition requiring lodgement of a security deposit "for the fulfilment of the obligations arising under [the

Act in respect of the lease" can be imposed on a mining lease. Section 79 of the Act allows the Minister for Mineral Resources to increase the amount of the security deposit. Additional security deposits may be required to reflect potential subsidence-related impacts. The Department's SMP approval process will include development of advice on any additional security deposit considered necessary. The interagency SMP Review Committee will have a role in formulating this advice.

Section 265 of the *Mining Act 1992* contains provisions relating to landholder compensation. All landholders are entitled to compensation for any "compensable loss" suffered or likely to be suffered as a result of the exercise of rights under a mining lease. This includes compensable loss arising from surface subsidence.

### **Enforcement of SMP Approvals**

All the enforcement provisions of the *Mining Act 1992* for adherence to conditions of title will apply in the case of SMP approvals. The Minister for Mineral Resources is able to give directions relating to environmental management and rehabilitation conditions under section 240. If necessary, the Minister is able to suspend mining operations under section 125(3)(b) or cancel the lease under section 125(1)(b).

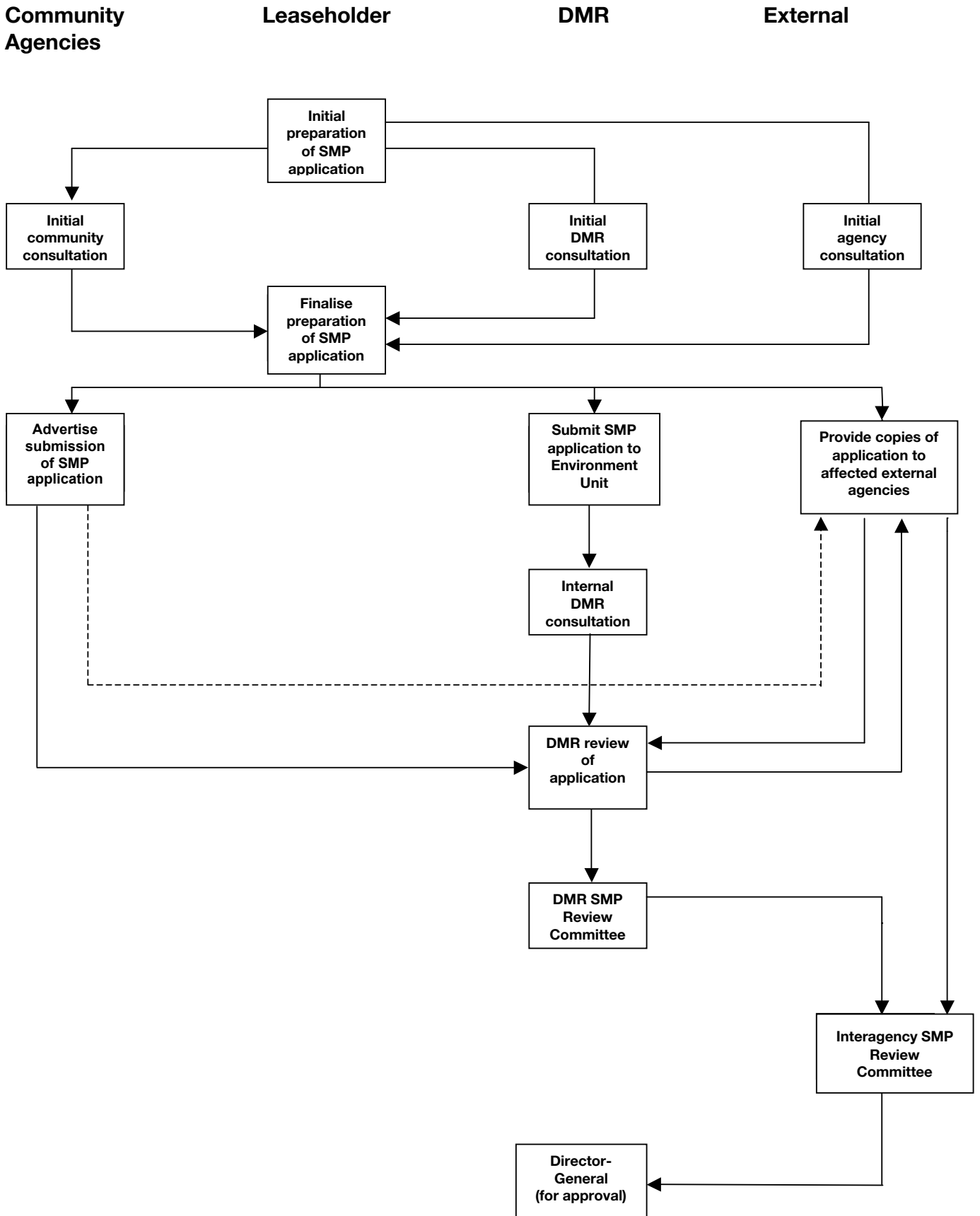
For contravention of conditions of title related to environmental management, fines of up to \$110,000 can be imposed under section 374A. Penalty notices for certain offences can also be issued by the Department's Environmental Officers under section 375A.

Additional environmental management conditions can also be attached to the mining lease under section 239(2). Costs of any necessary rehabilitation undertaken by the Department can be recovered under section 242. Failure to satisfactorily adhere to conditions or to satisfactorily remediate damage will be taken into account when deciding whether to grant further SMP approvals.

### **New Guidance Notes**

Applicant's should refer to the Department's *Guideline for Applications for Subsidence Management Approvals* in preparing their draft SMP and application for approval.

## Process for SMP Pre-Approval Consultation



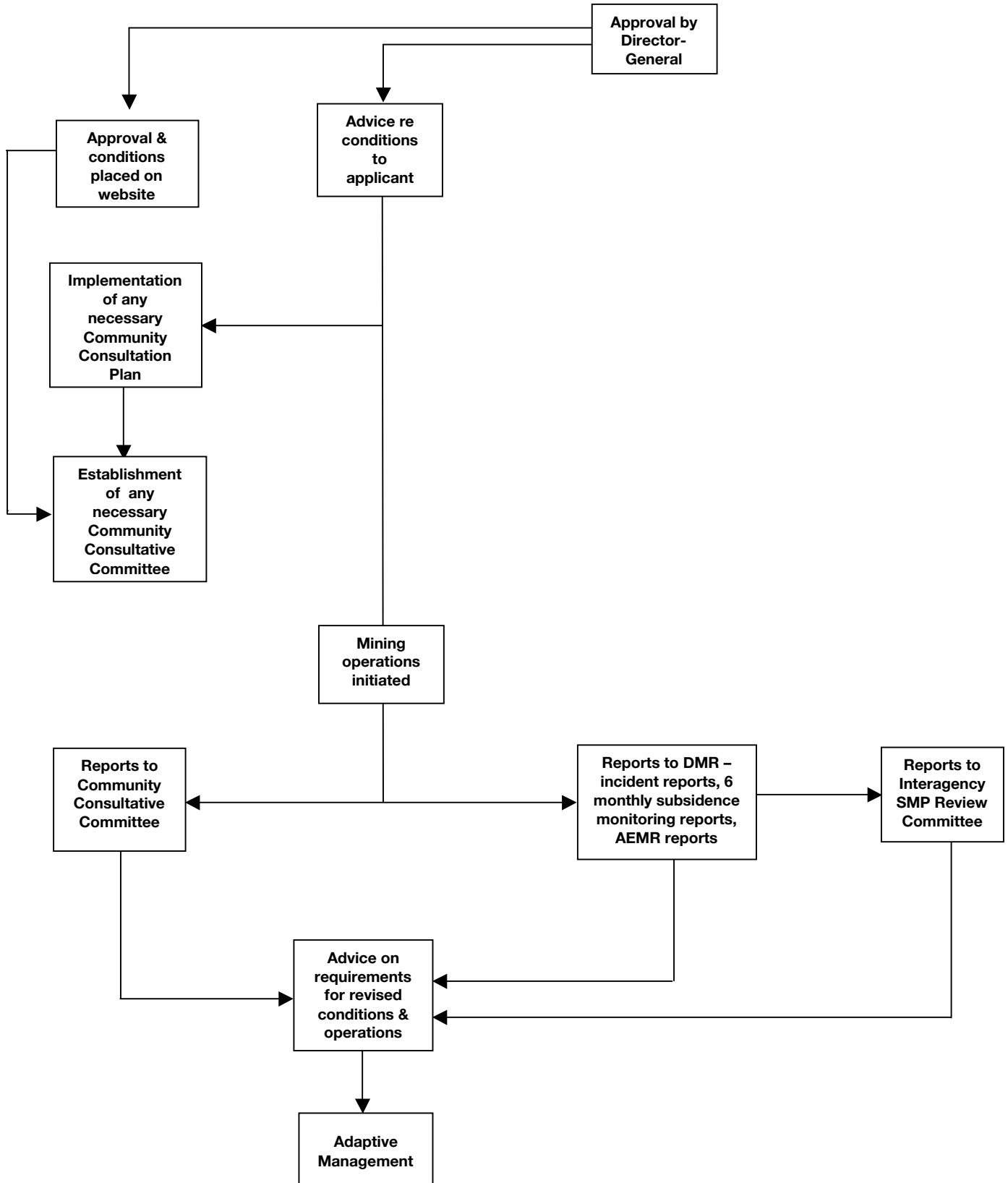
## Process for SMP Post-Approval Consultation

**Community Agencies**

**Leaseholder**

**DMR**

**External**



## Schedule A

In preparing the SMP and application for approval, the applicant shall:

- ✓ identify properties and update ownership and land use within the area subject to the application;
- ✓ fully describe the physical landforms and environment of the area, including watercourses, wetlands, aquifers, water-related ecosystems, forests, cliff lines and other sensitive areas, together with areas of potential conservation, cultural, heritage or archaeological significance;
- ✓ survey drainage channels within and adjacent to the relevant area and fully describe base line surface and groundwater flows and levels and water quality;
- ✓ fully describe the inventory of surface infrastructure and other built features within or adjacent to the area which is subject to the SMP, including but not limited to:
  - buildings (dwellings, offices, business premises, sheds, etc);
  - sealed or gravel roads, access tracks, other tracks, etc;
  - dams, bores, tanks, springs, water reticulation systems, etc;
  - on-site waste water systems, swimming pools, tennis courts, etc;
  - service infrastructure and utilities (telecommunications lines, transmission lines, water, sewage and other pipelines, etc);
- ✓ assess current agricultural utilisation, agricultural improvements and the agricultural suitability of the area;
- ✓ review current utilisation of the land for business purposes (other than agriculture), including the value of improvements and businesses;
- ✓ provide comprehensive subsidence predictions, taking into account the results of any relevant previous subsidence monitoring undertaken and other factors such as topographic variations and geological complexities, with a full description of the methodology and assessment of the reliability of the predictions;
- ✓ provide detailed results of pre-mining base-line monitoring in areas of environmental sensitivity of environmental values that may be damaged by subsidence (such as ground and surface water flows, water quality and water dependent ecosystems), based on at least a twelve-month survey;
- ✓ identify features and values that will potentially be subject to significant impact resulting from subsidence, and fully describe the expected impacts, including:
  - surface watercourses and groundwater resources (impacts on water quality, river or groundwater flows, and areas that will potentially be drained, inundated or affected by cliff falls, etc);
  - lake foreshores and flood prone areas;
  - other significant natural features, particularly cliffs;
  - significant ecological values;
  - major surface infrastructure;
  - other built structures and surface improvements;
  - known proposed surface developments;
  - surface features of community significance (including cultural, heritage or archaeological significance);
- ✓ identify dwellings that may be subject to damage beyond safe, serviceable and repairable criteria;
- ✓ identify agricultural or other businesses likely to be adversely affected;
- ✓ identify and quantify the economic and social benefits of the proposed mine development (eg jobs, continued mine operation, regional economic development, royalties, etc) such as to provide sufficient information for balanced assessment;
- ✓ investigate feasible mitigation and remediation measures that can be implemented to reduce and/or rehabilitate subsidence impacts on significant natural features and ecological values;
- ✓ investigate feasible mitigation and remediation measures to reduce and/or rehabilitate subsidence impacts on built structures, to the satisfaction of landowners and in consultation with the MSB;
- ✓ where required, provide risk management plans for areas of environmental, heritage or archaeological sensitivity or important built surface features, addressing both the

- planning and operational phases of mining. In the case of major surface infrastructure, risk management plans may be required to be endorsed by the infrastructure owner prior to the operational phases of mining;
- ✓ identify the costs (production foregone, delays, added costs, etc) associated with various mitigation, remediation or surface feature protection options;
  - ✓ investigate other options if subsidence impacts cannot be reduced satisfactorily, such as compensation, acquisition, temporary relocation, or any other form of agreement with landowners; and
  - ✓ identify all areas of potential compensable loss under the *Mining Act 1992* and either reach agreement with landowners in regard to likely compensable loss, or determine suitable mitigation measures to minimise compensable loss.