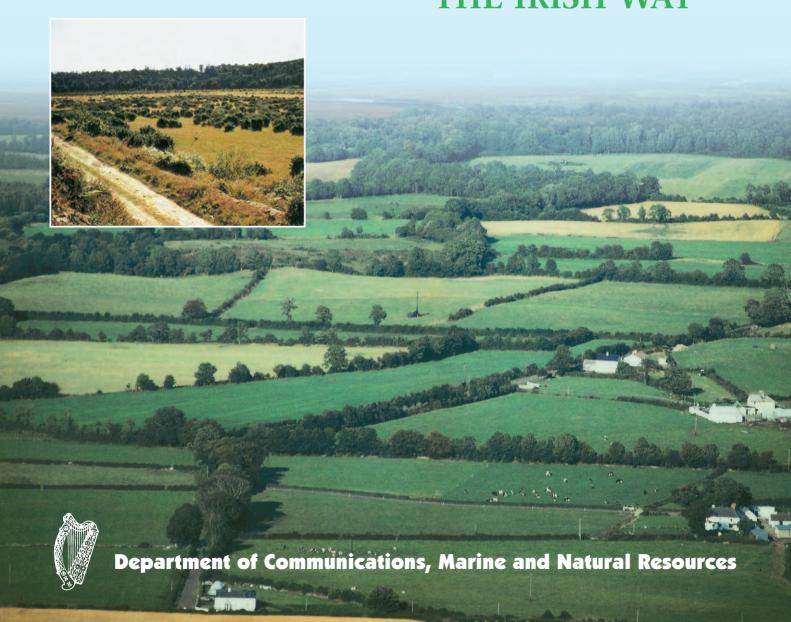
EXPLORATION AND MINING DIVISION IRELAND

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ENVIRONMENTAL SAFEGUARDS

THE IRISH WAY



The Approach

While the economic benefits of mining are clearly recognised in Ireland, concern about the impact of mining on the natural environment has increased in recent years. Both Government and the mining industry have recognised this concern, and have acknowledged the importance of their environmental responsibilities by adopting a range of protective measures. Indeed Mr. Michael Lowry, T.D., the then Minister with responsibility for Mining and Exploration, in September, 1995, at the foundation stone ceremony at Arcon Mines, Galmoy, Co. Kilkenny, highlighted the importance of establishing a sound environmental protection strategy as a vital step in encouraging exploration and mining when he stated that:

"Now that we have in place a rigorous evaluation process that fully meets our environmental concerns, we are ready to shift our attention to stimulating the growth of this industry that has such potential".

Towards this end the Government has implemented a suite of pragmatic environmental legislation, which aims to secure an expanding future for the mining industry in the context of sustainable development.

Under the provisions of the Minerals Development Acts, 1940 to 1999, the Minister for Communications, Marine and Natural Resources is empowered to issue Prospecting Licences and subsequently, when an economic deposit has been defined, a State Mining Facility. Under different Acts there are separate but complementary procedures and agencies responsible for land use planning control and environmental issues, namely the relevant Local Planning Authorities and the Environmental Protection Agency (EPA). Environment in this context means emissions to air and water, noise including vibration, waste storage and disposal. Planning Permission and an Integrated Pollution Control Licence must be obtained before the commencement of commercial extraction.

Exploration

As mineral exploration should not of itself have long-term planning implications or significant environmental pollution potential, it is not governed by planning controls. However, to ensure that exploration is carried out with only minimal disturbance of the environment, the prospecting licence holder is required under the terms of the licence to conduct exploration programmes in a "proper and workmanlike manner in accordance with the methods and practices customarily used in good prospecting practice". In addition the licensee must abide by the 'Guidelines for Good Environmental Practice in Mineral Exploration', which are issued by the Department of Communications, Marine and Natural Resources. These Guidelines cover such issues as:

- Agreements with landowners and supervision of works.
- Drilling, including location relative to geological features and water sources; construction of boreholes and their sealing after completion; site management; water discharges.
- Trenching, including location relative to sensitive features; fencing and security; water discharges; reinstatement.
- Protection of water sources.
- Pump and other groundwater tests.
- Geophysical surveying.
- Restrictions on exploration within Nature Reserves, National Monuments and archaeological sites.

A licensee must indemnify also the Minister for Communications, Marine and Natural Resources against claims arising as a result of activities of the licensee by



Rehabilitated site of exploration trench beside hedgerow in foreground, near Inishannon, Co. Cork. Inset: open trench.

nominating the Minister as an interested party on the licensee's Third Party and Employer's Liability Insurance. It is important to note that only persons who comply with the requirements of their prospecting licences will be considered for State Mining facilities within the licence area.

Development

PLANNING CONTROLS

Formal control of land use planning is codified in the Local Government (Planning and Development) Act, 2000 and Regulations made thereunder. Important concepts enshrined in these include: public participation in all aspects of the planning process, local development plans, and a permitting process for individual developments.

Development Plans are prepared by each Local Planning Authority. These plans are the main public statements of planning policy for the local community, having been adopted by the elected Councillors following an extensive consultation process. The plans, which set out land use, amenity and development objectives, are usually revised every five years. They will include development objectives such as the general considerations that must be fulfilled before an individual development will be allowed, and areas or features whose conservation is favoured. Any development should be in conformity with the Development Plan as it will be extremely difficult otherwise to obtain planning permission. There are no prohibitions on mining in development plans. For example, in the County Tipperary (North Riding) planning area, where the Lisheen zinc-lead mine was recently brought into production, the Development Plan will "encourage and safeguard existing and future mineral extraction in the area and will also facilitate subject to appropriate conditions, the exploitation of any future mineral deposits that may be found in any part of the County." The plan also will "ensure that all mineral activities current or future will not result in damage to the environment"

Prior to the commencement of the development of a mine **Planning Permission** must be obtained. As the definition of development is wide ranging, any new mine will require permission for the mine and also any associated processing, waste storage facilities and infrastructure.

Applications for Planning Permission are made to the Local Planning Authority and decided initially at local level. Intention to apply for such a permission must be advertised in newspaper and on-site notices. Details of application requirements can be obtained from the relevant local authority. However, as preparation of a valid application can be complicated, professional assistance is recommended.

An important requirement of an application for mineral development is that the development is subject to Environmental Impact Assessment. Therefore an Environmental Impact Statement (EIS) must be prepared by the developer. The EIS must contain the developer's analysis of the likely effects of the project, good or bad, on the environment, including effects on people, flora, fauna, soil, water, landscape, cultural heritage, etc. Only those aspects of the EIS which relate to land use planning can be considered within the planning process. Issues relating to air and water pollution, noise and waste are adjudicated on by the EPA as part of the Integrated Pollution Control Licensing process outlined below.

Because of the wide range of potential impacts which are associated with mining ventures, and possible public concern, it is advisable for the EIS to be **scoped** by consultation with interest groups and especially the regulatory authorities, to ensure that it addresses fully their concerns. The EPA has prepared draft guidelines on the form and content of an EIS and has also issued guidance on the likely issues of significance for mining. EISs can be complex documents and it will almost always be necessary to engage experts when preparing one.



Tailings pond at Navan, Co. Meath. (Courtesy: Tara Mines Ltd).

Once an application has been received, the Planning Authority has two months to do one of four things:

- Grant without conditions this would be unusual;
- Grant with conditions;
- Refuse with reasons;
- Ask for further information.

For complex applications such as most mining projects, a request for further information is usual. If this happens, once the developer replies the Planning Authority has a further two months to make its decision.



Rehabilitated tailings pond area at Navan, Co. Meath. (Courtesy: Tara Mines Ltd).

Development (cont'd)

If it grants with conditions, these can cover many areas, but must be relevant to planning and to the proposed development, enforceable, precise and reasonable. Reasons must be given. Common conditions for mines would concern replacement of water supplies, upgrading roads, landscaping, control and monitoring of subsidence and provisions for closing the operation once the deposit has been mined out. Closure conditions will normally include some form of surety to ensure that funds will be available to rehabilitate the site.

There is a right of appeal against the initial decision. Anyone in Ireland can do this, including the applicant. There may thus be appeals against the decision to grant or refuse, or only against specific conditions. Appeals are made to An Bord Pleanála (the Planning Appeals Board), and must be lodged within one month of the initial decision. The Board, which is an independent national statutory body, will then decide the issue. In doing this it may consider either only the written appeals or, if it decides that the proposal is of sufficient importance and interest, hold a public hearing. The Board will normally make its decision within four months of the date of the appeal, but it can extend this period for complex proposals.

Once a development has been given permission, the developer must abide firstly by the conditions, but must also follow the details as proposed in their application (except where the conditions require something different).

Appeals to the High Court are possible, but only under the limited circumstance that the Court decides that there is a substantial point of law at issue.

ENVIRONMENTAL CONTROLS

In an effort to ensure that the highest practicable standards of environmental protection and management are implemented for a number of industries, including mining, the Environmental Protection Agency Act, 1992 established a new process for the control of environmental pollution which had previously been the responsibility of the Local Authorities. The Act established the Environmental Protection Agency (EPA), an independent State agency which is responsible for regulating and

controlling all areas of industry, including mining, which are likely to pose a threat to the environment through their activities. Since May, 1994, it is obligatory for new mining developments to obtain **Integrated Pollution Control** (IPC) licences from the Agency. All aspects of air and water pollution, noise and waste are covered by this single integrated licence.

The main objective of IPC licencing is to prevent or solve pollution problems rather than transferring them from one part of the environment to another. A key aim is to minimize risk to the whole environment by preventing the emission of potentially polluting substances wherever practicable, or to minimize such emissions where this is not possible.

In granting an IPC licence, the EPA must be satisfied that best available technology not entailing excessive costs (BATNEEC) will be used to prevent or limit emissions. The emphasis in determining what is BATNEEC is placed on pollution prevention rather than "end of pipe" solutions. The EPA has compiled a guidance note on mining which sets out current views on what is BATNEEC. These will have regard to the current state of technical knowledge, the requirements of environmental protection, and the application of measures which do not entail excessive costs taking account of the risk of pollution.

The preparation of an application is complex and professional advice is recommended. In addition the EPA will normally provide guidance to ensure that its requirements are met. The application procedure for an IPC licence is analogous to that for Planning Permission. Public notice must be given that an application is being made. When it is received, the EPA has two months to consider the application and to publish a proposal to grant or refuse a licence or to ask for further information. If the last happens, once the information is received, the EPA has a further two months before making its initial decision. Any party then has one month to make any objections to the proposed decision. If there are objections these will be considered and there may, at the EPA's discretion, be an oral hearing. A recommendation is then made to the Agency by the inspector dealing with the application, and the EPA makes the final decision to grant the licence with or without conditions, or to refuse the application.

Additional Information

For further information please contact:

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Resources

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Relevant legislation may by purchased from:

Government Publications Sale Office

Sun Alliance House

Molesworth Street Tel: 353-1-661 3111 Dublin 2, Ireland Fax: 353-1-678 0645

Cover photographs: Aerial view over the Lisheen Zn-Pb deposit, Co. Tipperary before development (Courtesy: Ivernia West plc); inset, view of rehabilitated tailings pond of Avoca Cu deposit, Co. Wicklow (Courtesy: D. Dunnells).