



NEMA, mining and metallurgy and the social environment: implications from the melting pot

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Introduction

To be meaningful the sharing of ideas about the National Environmental Management Act (NEMA) and social issues within the context of Mining and Metallurgy (M&M) requires an honest scrutiny of the M&M/social environment relationship, both past and present. It is not a secret that this relationship has been and is fraught with difficulties. Thus from all perspectives (M&M, society and environmental and social consultants) such a dissection, that highlights the realities, both good and bad, is uncomfortable. For this section of the colloquium to have any value, the honest but difficult approach needs to be taken.

Since the formal creation of a South African state mining has been recognized by the state as a key sector of the economy. As such, the mining sector has been afforded the power to exploit non-renewable resources with few legislative constraints. Over the last decade, this sector has been required to assume some responsibility for, among others, the environmental consequences of its activities. This has lessened the power previously afforded to mining. For example, in the past, when a decision to exploit a deposit was taken, the necessity to relocate affected people was merely a logistic exercise, unless those affected were sufficiently capacitated to force the mine to take the social consequences of such relocation into account. Now, with the promulgation of NEMA the mining sector must capacitate affected people to affect decisions taken in the interests of sustainable development. This raises the potential for increased conflicts between the mining sector and interested and affected parties, as they become better equipped to respond to or resist development proposals which put their environment at risk. It will however ensure better decision making and could create opportunities for improved M&M/social environment¹ relations.

In order to understand the implications of NEMA for the M&M/social environment relationship it is necessary to look at NEMA from a social perspective. This is important because the practice of environmental management has largely moved away from the compartmentalization of the various components of the environment and thus a reading of the Act will not necessarily result in an awareness of its social implications.

This paper reviews NEMA from the perspective of the social environment against the backdrop of the historical relationship between M&M and the environment. Thereafter the paper considers the implications of NEMA for this relationship.

NEMA and the social environment

NEMA further empowers all people to exercise their environmental right as defined in the Constitution. The social environment is dealt with in the Act through the definition of environment and the inclusion of certain principles. These are considered below.

Definition of environment

Prior to the promulgation of the Constitution the approach to defining environment evolved from a biological and physical emphasis to one that included social, cultural and political aspects on a par with the biophysical. While not the perfect definition, this was helpful to enable recognition of the social environment. The Constitution moved away from this compartmentalized approach and introduced instead the notion of 'human health and well-being'. NEMA has followed the Constitution's concept of environment and essentially defines it as the biophysical surroundings within which humans exist in relation to the influence of these surroundings on human health and well-being². While this definition is all encompassing, the social aspects of environment are perhaps not as identifiable as in the pre-Constitution compartmentalized definition. This is positive in that by not being prescriptive it avoids the risk of excluding currently unrecognised social impacts. However, the difficulty that this presents lies in the subjectivity of the term well-being which can only be given meaning through the application of the Act.

National environmental management principles

The national environmental management principles (Chapter 2) of NEMA that are of most relevance to *further* empowering the social environment are:

- ▶ 'Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.'
- ▶ 'Development must be socially, environmentally and economically sustainable.'

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- ▶ 'Sustainable development requires the consideration of all relevant factors including the following ... that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions...'
- ▶ 'Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.'
- ▶ 'Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.'
- ▶ 'The participation of interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.'
- ▶ 'Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.'
- ▶ 'Community well-being and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.'
- ▶ 'The right of workers to refuse work that is harmful to human health and the environment and to be informed of dangers must be respected and protected.'
- ▶ 'Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.'
- ▶ 'There must be intergovernmental coordination and harmonization of policies, legislation and actions relating to the environment.'
- ▶ 'Actual or potential conflicts of interest between organs of the state should be resolved through conflict resolution procedures.'
- ▶ 'The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.'
- ▶ 'The vital role of women and youth in environmental management and development must be recognized and their full participation therein must be promoted.'

The power that NEMA affords the social environment, as evident from these individual principles, is far reaching. The tools, procedures and institutions through which some of these principles can be upheld are detailed in the Act. No guidance, is however, provided to assist us in fulfilling the majority of the principles. These principles, and the notion of well-being, are thus entirely open to individual interpretation and can only be defined through the repeated application of the Act.

From our perspective as practitioners in the social environment, the strength of the Act rests on the collective

intent of the legislation to '...respect, protect, promote and fulfill the social, economic and environmental rights of everyone and (to) strive to meet the basic needs of previously disadvantaged communities' as well as to redress '...inequality in the distribution of wealth and resources, and the resultant poverty...through planning, implementation and evaluation of decisions to ensure that development serves present and future generations.'³ We interpret this to imply that the implementation of NEMA will empower the social environment.

The principle that will operate as a catalyst to this empowerment is the requirement for public participation in environmental governance. The value in this principle is that people *must* have the chance to develop the understanding, skills and capacity that will empower them to provide the checks and balances on environmental decision making. Furthermore this capacity will truly enable people to engage in procedures provided in NEMA to challenge decisions taken, and thus to affect their own environments.

Other pertinent clauses in NEMA

In addition to the principles, NEMA gives progression on the environmental right through tools, procedures and institutions. Those that are particularly noteworthy from the perspective of empowering the social environment are mentioned below.

Integrated environmental management (Chapter 5) promotes the application of appropriate tools to ensure the integrated management of activities. This supports Regulations 1182 and 1183 of the Environment Conservation Act, and is significant when read in conjunction with the principles of NEMA as discussed above.

With respect to access to *information* (Chapter 7, Section 31), NEMA reinforces section 32 (2) of the Constitution that gives individuals and organs of the state access to information relating to the environment and actual and future threats to the environment—information sought by individuals is accessed from or via the state. The grounds for refusal of providing such information are also detailed. NEMA allows the Minister to make regulations that will allow the public direct access to privately held information of relevance to the implementation of environmental legislation.

Protection of whistleblowers (Chapter 7, Section 31) is guaranteed so further supporting the public's right and access to information. The manner in which this information can be disclosed to ensure protection of the whistleblower is specified.

Legal standing to enforce environmental laws (Chapter 7, Section 32.1) has been broadened from *locus standi* and is now granted to any person or group of persons. In addition, the financial risks incurred by the person(s) is significantly reduced if the court is of the opinion that the person(s) acted reasonably out of concern for the public interest or the interest of protecting the environment, after having made due alternative efforts to seek relief. This has significant implications for enabling society to exercise its environmental right.

Private prosecution (Chapter 7, Section 33) allows private citizens the right to criminally prosecute other private individuals or institutions that are in legal breach of a duty concerned with the protection of the environment. This clause bypasses usual procedures for private prosecution and by so doing enables citizens to more easily enforce criminal law.

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Implications of NEMA for the mining and metallurgy/social environment relationship

Mining and metallurgy's attitude to the social environment

It is our view that it has been a long and difficult process for M&M to begin to recognize and take active responsibility for the impacts of their activities on the biophysical environment. The process has been encouraged by a combination of local and international trends including the popularizing of the concept of sustainable development, recognition of the finite nature of non-renewable resources and the recognition of cumulative environmental impacts. Debate around and enforcement of environmental policies and legislation has further aided the change. While these trends have contributed significantly to raising M&M's environmental awareness, they have not significantly highlighted the social environment. This in part explains M&M's lack of adequate consideration of its impacts on the social environment. Other contributing factors include the history of mining in South Africa, power held by the mining sector in relation to the apartheid state, the professions traditionally employed by the sector as well as the intangible and unpredictable character of the social environment.

NEMA's effect on the M&M/social environment relationship

Will NEMA necessitate M&M to change its focus so as to give the social environment equal status to the biophysical environment? NEMA, as a post-Constitution Act, furthers democratization in South Africa—in other words, it enables all people to be actively involved in decisions that affect their lives.

The application of NEMA, through redressing the existing power imbalances, is unlikely to result in immediate win-win situations. Rather, compromises between M&M and interested and affected parties will be required. Until now, society has largely borne the social costs of mining and it is

here the M&M is likely to experience future challenges. These will occur as empowered interested and affected parties use the Act to engage in shaping decisions of consequence to their environment.

M&M has no choice but to comply with the law. It can therefore operate within the spirit of NEMA and comply from the outset, or be reluctantly forced to comply. The latter is, by comparison, a costly and time consuming option that will create hostile relations with the social environment. The former could provide M&M with the opportunity to forge constructive relationships with the social environment. We are not naively suggesting that this will always be a less expensive option, but we believe that this will, at least, be a prudent long-term investment.

Conclusion

This paper considers the implications of NEMA for the M&M/social environment relationship. It is suggested that M&M's attitude to and actions toward the social environment will need to shift in order to comply with the Act. Also it is recognized that no transition is experienced effortlessly and painlessly and this one is not likely to be the exception for M&M.

The paper also recognizes, as a result of the principles focus of NEMA, as well as the use of the concept 'well being', neither of which has been tested in our courts, that the true test of NEMA's contribution to the social environment will be time. ♦

- 1 For the purposes of this paper the term 'social environment' is used to recognise the human component of the environment as it represents itself and its various historical, political, religious, spiritual, philosophical, cultural, and aesthetic perspective. The term also take into account the interrelationships between disaggregated human groupings within the social environment.
- 2 Act 107 of 1998 defines 'environment' to be made up of the land, water and atmosphere of the earth, micro-organisms, plant and animal life, any part or combination of the above and the interrelationships among and between them, as well as the physical, chemical, aesthetic and cultural properties as they influence human health and well-being.
- 3 Act 107 of 1998, Preamble.

Green Topics*

The EMEM Awards

The EMEM Awards of the Department of Minerals and Energy (DME) were formally launched on 3 March 2000 by Ms Susan Shabangu, Deputy Minister at the Department's Mineralia Centre in Pretoria. The launch was attended by invited guests from the mining and aggregate industries, representatives of the Patron Organisations (see below), non-government and scientific organizations, the media, other government departments involved with mining environmental management and members of staff of the DME, both nationally and regionally.

The EMEM (pronounced em-em) Awards System has been developed by the DME to promote Excellence in Mining Environmental Management. In this the Department has been, and continues to be advised and assisted by the South African Institute of Mining and Metallurgy (SAIMM), the South African

Chapter of the International Association for Impact Assessment, and the Mine Water Division of the Water Institute of South Africa (WISA) as invited patrons. Other important players are the Aggregate and Sand Producers Association of South Africa (ASPASA) who have had the experience of setting up their own environmental awards, non-government organizations (NGOs) such as the Group for Environmental Monitoring (GEM), scientific organizations as above and those government departments which have a major interest in the impact of mining on the environment—namely the Department of Water Affairs and Forestry (DWAF), the Department of Environmental Affairs and Tourism (DEAT) and the National Department of Agriculture.

Background

To Quote from the DME's EMEM Awards brochure:

Green Topics—The EMEM awards (continued)

Mining is an essential part of development and is an activity of primary economic importance in South Africa. However, it has an unfortunate image of being a destructive activity. Many mine operators have, however, adopted a more positive and pro-active approach to environmental management. As a result, there are many operators whose mining operations not only reflect environmental responsibility but excel in this regard. There is a need to stimulate and promote such performance in a manner that is not dependent on the command and control regulatory approach.

Mining legislation in South Africa incorporates binding obligations relevant to environmental management and the requirements for effective environmental management are continually being reviewed to ensure improvement. In particular, through the Minerals Act, 1991, a mining operator is required to submit and to comply with the conditions specified in an approved environmental management programme (EMP) until closure is granted. The EMP must be based on a thorough understanding of the environmental impact of the project and must incorporate the requirements of all other laws pertaining to the environment.

Awards for excellence in environmental management in the mining industry have been implemented successfully in other countries and it has undoubtedly assisted in raising public awareness of what today's mining industry can do to ensure the integrity of the environment within which it operates. Although other organizations have presented environmental awards in South Africa, these either do not cater exclusively for the mining industry or for the total mining industry. Certain award systems focus primarily on safety and health. The environmental award system required for the mining industry in South Africa needs to be more specifically and generally orientated to suit the requirements of the whole of the mining industry.

Through discussions with various role-players, including the mining industry, other government departments and professional institutions, the development and implementation of the EMEM Awards system for excellence in environmental management has been accepted and agreed upon. The Department of Minerals and Energy is appropriately structured to implement and manage the system.

Emblem

At the culmination of her keynote address, the Deputy Minister unveiled the emblem of the EMEM Awards to the accompaniment of photographs taken for publicity and for television broadcast on 50/50. The awards emblem, which is reproduced here, is a composite wherein the triangle represents the aim of balanced and sustainable development and the circle, encompassing the leaf (environment), the headgear (mining) and the swallow in upward flight, conservation and the striving for excellence.



Award categories

There are four award categories covering:

- ▶ large open-cast operations (more than 500 000 tons

moved per annum)

- ▶ small open-cast operations (less than 500 000 tons moved per annum)
- ▶ underground operations
- ▶ offshore operations.

Awards will be made at regional and national levels. Both will be on a biennial basis, alternating with one another.

This year nominations for Regional Awards will close on 31 August at each Regional Office. Nominations will be adjudicated and awards will be made to the winners of each category on dates set by each Regional Office towards the end of the year.

The winning entry in each category from each region will be sent forward in the following and each succeeding alternate year (i.e. 2001, 2003, etc.) for adjudication for National EMEM Awards.

Presentation of the National Awards is planned to take place at a prestigious event towards the end of each of those years.

Nominations

Nominations can be made by individuals, interested and affected parties, mining companies, professional bodies, consultants or government officials. Nominations must be made on the printed nomination form available together with a brochure on the awards from the DME offices countrywide. Nominations for Regional Awards this year will close on 31 August at Regional Offices.

Management structure

The DME has set up an EMEM Awards Steering Committee on which all the organizations discussed above are represented and to which the Regional and National Adjudication Panels will report. On account of its size, its members have elected a smaller Executive Committee to make recommendations and to draft documentation for approval by the Steering Committee. At this stage the basics have been implemented but the Executive Committee, involving the DME, representatives of the Patron Organisations and of ASPASA, is still finalizing the adjudication criteria in time for the closing date at the end of August.

In addition, and this is an area of specific responsibility for our Institute, an Administrative and Financial Control Subcommittee of the Steering Committee has been set up with the responsibility of organizing and funding, through sponsorship, the award ceremonies with particular emphasis on the national event at the end of next year and each alternate year thereafter.

The SAIMM office is well positioned to offer his service. It has the administrative resources and the experience of organizing and financing prestigious events. It can also provide a repository for funds to be used for such events, separate from those budgeted and administered by the DME.

The launch of the EMEM Awards is a major step forward in encouraging excellence in mining environmental management and deserves the full support of Institute members and the full participation of the mining industry.

For further information contact Mr Willie van Zyl or Ms Elize Swart at the DME's office at Private Bag X59, Pretoria, 0001 or Telephone (012) 317-9190 or Fax (012) 320-6786.

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