

FINAL ADVICE TO THE MINISTER FOR NATURAL RESOURCES ENVIRONMENT AND HERITAGE IN RELATION TO THE REVIEW AND ASSESSMENT OF A PETROL SPILL AT RIO TINTO ALCAN'S GOVE ALUMINA PLANT

The inquiry undertaken by the EPA, reviewing and assessing the unleaded petrol leak at the Rio Tinto Alcan (RTA) Gove mine site in June 2010, established the following facts:

- 70 000L of unleaded fuel was stored in a tank within a storage tank compound at the RTA mine site at Gove.
- In June 2010 RTA staff discovered that the tank was empty.
- Further investigation showed that the fuel had leaked from a hole in the tank into the concrete bunding surrounding the compound.
- The tank and bunding were constructed in 1968.
- The tank was not subject to suitability or adequacy testing under the site Mining Management Plan.
- The Mining Management Plan did not include a minimum infrastructure standard.
- Statutory obligations regarding tank inspections had not been complied with on site.
- There was no established regular site inspection regime or schedule being implemented by the regulator to assess compliance with standards.

These established facts have revealed the following systemic issues:

1. Infrastructure monitoring and environmental risk

The environmental soundness or validity of infrastructure on mining sites is currently not assured by any monitoring regime in the Northern Territory. The Department of Resources' (DoR) responsibilities extend to securing compliance with Mining Management Plans (MMPs). It is not a legal requirement that MMPs specify site infrastructure and monitoring standards. If the authorised MMP does not specify site infrastructure standards or monitoring regimes DoR are unlikely to capture mine site infrastructure in their field inspection reports. NT WorkSafe monitors and inspect infrastructure only for the purposes of maintaining workplace health and safety.

Australian Standard 1940 (AS1940) addresses the environmental validity of mine site infrastructure.¹ This standard has been adopted and implemented in the Northern Territory under the *Dangerous Goods Regulations*, and compliance with the inspection regime established by the standard is therefore a statutory obligation upon RTA. Neither AS1940, nor the *Dangerous Goods* legislation is, however, referred to within the RTA Gove MMP.

Recommendation

It is advised that improved management of the environmental risks posed by mining would be achieved if:

- All MMPs require² specification of infrastructure standards and inspection requirements for mine site infrastructure.
- The MMP should clearly specify the responsibilities of each party in relation to the implementation and monitoring of compliance with standards.

¹ Standards (statutory and non-statutory) relevant to mine site infrastructure include AS1940 (implemented under Regulation 211 of the *Dangerous Goods Regulations*), the *National Standard for the Storage and Handling of Workplace Dangerous Goods* (also incorporated into the *Dangerous Goods Regulations*), and API (American Petroleum Institute) Standard 653 'Tank Inspection, Repair, Alteration and Reconstruction'.

² Under Section 40 of the *Mining Management Act*.

- An MOU between the mine authorising agency and NT WorkSafe should be formed, clearly articulating the division of responsibility for environmental protection and human health and safety in relation to mine site infrastructure.

2. Insufficient resources within DoR

Whilst compliance with a MMP is a pre-condition to a Mining Authorisation being granted, once that Authorisation is granted, ensuing compliance becomes the responsibility of DoR. Evidence indicates that a lack of resources within DoR has resulted in sporadic and infrequent inspections and auditing of MMP compliance at the RTA Gove site. The current practice is to schedule field inspections where there is a particular issue that requires further examination. Considering the dated infrastructure on the RTA Gove site (which was obviously not considered an issue warranting extra attention), this approach proved inadequate in the present case.

Mining is the largest industry contributor to the NT economy, accounting for 26.5 percent of gross state product (GSP), and with a value of \$4.9 billion in 2009-10. This high contribution to GSP is maintained by existing mine operations and the approval of new mines. There is no upper limit on the number of mines that can be authorised by the Resources Minister. Whilst the EPA understands and acknowledges DoR has recently received additional funding enabling the employment of another five mining officers, there is no formula applied that ensures that where a new mine or a mine expansion is authorised, that DoR gets a corresponding increase in resources to monitor mining. This lack of correlation between increased activity and Government investment in the resources of the regulator has resulted in DoR having inadequate resources to implement a comprehensive monitoring program to ensure that MMP commitments are being acquitted and the environmental risks associated with resource extraction are managed appropriately.

Recommendation

It is advised that:

- Government investment in mining compliance and inspection resources be linked directly to the number of mines authorised in the NT by the use of a formula that equates man hours required to conduct inspections and audits with the man hours resourced through the budget. It is also suggested that 'compliance' be included along with 'inspection' and 'authorisation' in budget paper 3 as output reporting measures for DoR. This improved reporting would provide for better assessment and public accountability of how environmental risks of mining are being managed in the Northern Territory.

3. Monitoring and compliance

Notwithstanding the resource constraints identified above, the mining compliance regime in the Northern Territory also seems to be impacted by a lack of clarity around compliance requirements and monitoring mechanisms to the extent that the industry has become largely self-regulating post authorisation. This has led directly to the situation where infrastructure at the RTA Gove site has not been maintained to meet standards that would lessen environmental risk.

The intention of DoR, reflected in RTA's MMP, is that compliance with the MMP is to be audited on an annual basis. Evidence gathered by the EPA, however, demonstrates that in practice this does not occur. The last audit of the RTA Gove MMP was undertaken in 2007.

Notwithstanding MMP audits, there are also field inspections, less thorough inspections which result in a field inspection report, with the inspection date logged in a register system. Mine site infrastructure is rarely commented on during these inspections. As inspections largely focus on safety and compliance with the MMP and MMA (neither of which address fuel storage infrastructure to any extent), this infrastructure was neglected in monitoring and inspection regimes. The summary of fuel tank inspections provided by RTA to DoR as part of their investigation into the petrol leak incident shows a number of gaps and that there was no schedule or plan in place for infrastructure inspections.

In addition to inadequate inspection regimes, environmental risk from mining in the Northern Territory is increased by the use of self-reporting in relation to environmental incidents on site. Evidence gathered by the EPA, indicates that there were at least three environmental incidents at the Gove site in the past ten years that

went unreported.³ Such a regime is reliant upon the environmental goodwill of mine operators to manage the risks to the environment.

Recommendation

It is advised that:

- The *Mining Management Act* be amended to provide a requirement that the Minister must consider all evidence relating to the previous ability of the applicant to achieve compliance with MMPs at any other sites at which they operate, prior to granting a Mining Authorisation.
- The requirement under the *Mining Management Regulations* that the operator is to report on matters relating to occupational health and safety should be expanded to provide that the operator is also required to report on environmental incidents, environmental risks identified and matters of non-compliance with the MMP.
- Environmental Management Objectives for different mine types in the Northern Territory should be formulated and include minimum inspection requirements according to environmental risk. Such objectives should take account of site-specific sensitivities, construction and infrastructure standards, extraction methodologies and substance volatility. These EMO's should then be used as guidelines for individual Mine Management Plans.

4. Lack of robust offence mechanism

The RTA Gove petrol leak incident has revealed a failure of the mining legislative framework to provide a robust and effective offence mechanism where a mining company conducts its activities in a way that creates unacceptable environmental risk. Current offences all rely upon proof of some level of environmental harm. Attempts at prosecutions under other environmental protection legislation containing the same proof requirements have demonstrated the difficulty with which these standards can be established before a court.⁴ Whilst the EPA notes that possible legal action in relation to this particular incident is currently being considered by DoR, there has never been a successful prosecution brought under the MMA for environmental harm. Section 21(2) of the *Mining Management Act* creates further difficulty for the establishment of an environmental offence, providing that 'the fact that environmental harm has occurred on a mining site is not of itself evidence of an offence under [the Act].'

There is no offence under the Mining Management Act for a failure to comply with a MMP.⁵ MMP commitments can only be enforced through the requirement that a proponent comply with the conditions of a Mining Authorisation. MMP commitments are, however, typically worded in a general and imprecise manner, making it inherently difficult to establish a breach of those commitments and hence the Authorisation conditions.

The penalties for failure to comply with the Authorisation conditions are weak and conditions appear to merely repeat the requirements set out in the legislation, adding little strength to the obligations placed upon the operator. Whilst the Minister retains the power to revoke an Authorisation, this has never happened, neither has an action under any of the provisions of the *Mining Management Act* on the basis of environmental risk or concern, ever been brought against RTA. The lack of a third party enforcement mechanism within the Act creates a further obstacle to the enforcement of offence provisions.

Recommendation

It is advised that:

- Environmental offences within the *Mining Management Act* be reviewed and strengthened. Mining activities should be captured by the operation of the *Waste Management and Pollution Control Act*, and dangerous or hazardous substances used or extracted on mine sites should be included in the schedule of 'listed wastes' under the *Waste Management and Pollution Control Regulations*. It is advised that the

³ The incidents included i) the April 2010 alumina release into Melville Bay; ii) a leak in Tank T777-13 containing heavy fuel oil/caustic; and iii) a diesel spill in 2003.

⁴ The *Waste Management and Pollution Control Act*, *Water Act*, and *Marine Pollution Act* all contain offences based on levels of environmental harm. No prosecution under any of these pieces of legislation has ever been brought.

⁵ An offence of this nature is currently being considered as an amendment to the MMA by the NT Government. The EPA strongly supports this proposal.

Mining Management Act provide a strict liability (regulatory) offence where a mine operator releases any of those listed substances.

- A penalty system is introduced for ongoing failure to comply with a MMP. For example, where monthly reporting reveals more than 3 non-compliances within a 6 month period, this should result in a fine being imposed directly on the operator.

5. Lack of transparency and accountability

It has been identified that the regulation of mining activities is undertaken without any public participation, or without any requirements for government accountability. MMPs are not public documents and the monitoring and enforcement activities conducted by DoR are not required to be reported in any form or forum. The public are unable to access information regarding environmental incidents at mine sites, the causes of such incidents and how these are being dealt with except through the user pays, public interest based freedom of information scheme. .

The process of this inquiry has demonstrated to the EPA that there are issues with timely and full disclosure of information. DOR provided indications that information of this nature regarding environmental monitoring and enforcement is spread across various Departmental files and not compiled or collected in one file area, register or database. Such a system fails to uphold and encourage open and transparent environmental monitoring and enforcement practices and the EPA encourages discussion about the adequacy of the management of mining regulation records.

Recommendation

It is advised that:

- Mining Authorisations, Authorisation conditions, and MMPs be made public documents under the *Mining Management Act*.
- A register containing information and reporting undertaken by DoR relating to site inspections be made available to the public via the DoR website.
- Third party enforcement mechanisms are included in the *Mining Management Act*, in relation to the offence of failing to comply with a Mining Authorisation.⁶

6. Leasing arrangements

The Special Mineral Lease (SML) under which RTA Gove currently operate, was granted under the *Mining (Gove Peninsula Nabalco Agreement) Act* prior to self-government in the Northern Territory, and remains an agreement between RTA and the Commonwealth Government. Whilst the administration of the lease and its conditions has been delegated to the NT Government, the Minister for Primary Industry, Fisheries and Resources, the NT Administrator and the Commonwealth all have shared responsibilities for administration of that Act, creating uncertainty as to the appropriate enforcement agency/body where a condition of a lease is breached. Further confusion is created with the Department of Lands and Planning, who also have a role in the administration of other Special Purpose Leases granted under the same Act over the mine site.

Recommendation

It is advised that:

- At the expiry of the current lease period the NT Government should encourage the Commonwealth Government and advise them regarding the need for the lease conditions to demand a higher standard of environmental management than that currently required. This may include a condition that the failure to adequately manage environmental risk will be viewed as a breach of the lease, resulting in its repudiation and implementation of a recovery or restoration order at the expense of the lessee.

⁶ Section 39, *Mining Management Act*.