MINING CERTIFICATION EVALUATION PROJECT

FIELD TRIAL PROCESS REPORT

BHP BILLITON CANNINGTON

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SUMMARY

The purpose of the Mining Certification Evaluation Project (MCEP) is to evaluate the feasibility of establishing independent, third party certification of the environmental and social performance of mine sites. An important component of the project is the field trial period, which involves evaluations of how Mine Site Operators (MSOs) are addressing health & safety, employee relations, environmental, and community relations issues.

The first MCEP field trial had a dual purpose:

1) To collect information about how the site was addressing the issues identified in the protocol. This data would assist in the development of performance measures that will enable the scoring of mine site performance during subsequent MCEP site audits.
2) To test the field trial process, including the protocol (its adequacy, clarity, redundancy and so on) as well as the process of gathering data, and to make recommendations as to how the process might be improved in subsequent iterations.

This review was undertaken at the BHP Billiton Cannington Mine (Cannington) in central Queensland over the period 14 to 20 July 2004. The team consisted of a Team Leader, the Project Officer, and three staff members from other BHP Billiton operations.

The key process issues and suggested improvements, identified through the trial, are summarised below.

- The Field Trial Team made extensive comments on the protocol, which were incorporated into a new version.
- A fully external audit team would likely require additional time to evaluate the site's management systems and performance, especially in areas related to corporate governance.
- Time constraints were a concern. For the actual certification audits, it may be necessary either to allow more time or to expand the audit team.
- The team was unable to interview a representative cross section of employees. Other forums for interviewing employees may be required, as well as guidelines as to numbers of employees to interview and ways to ensure that a representative sample of employees are interviewed.
- A variety of sampling methodologies should be investigated and an evaluation should be made as to whether it would be feasible to apply these techniques when using the Social Section of the protocol.
- There was a high degree of subjectivity in the audit team's findings, which reflected the team members' own experience, interests and concerns. This subjectivity resulted from the approach implemented at the Cannington field trial, at which team members did not score mine site performance for each criterion against agreed-upon performance measures. Future versions of the MCEP trial protocol will need to incorporate performance measures and a ranking system.
- There was considerable overlap with other audit processes. An audit under a future mine site certification scheme should not merely replicate existing audit processes.
- However, it was noted that the MCEP protocol surpassed the other audit processes in significant ways, including a relatively greater emphasis on outcomes as opposed to systems, as well as a focus on stakeholder engagement. The MCEP's differentiating features should be emphasised.
- The substantial overlap with existing audit and certification processes highlights the need to consider how the eventual mining certification process will interact with those other processes.

Introduction

The purpose of the Mining Certification Evaluation Project (MCEP) is to evaluate the feasibility of establishing independent, third party certification of the environmental and social performance of mine sites. *Working Paper 1 – Principles and Criteria for Certification* lists criteria for evaluating performance, building on the principles developed by the International Council on Mining and Metals.

These criteria have formed the basis of a protocol to be used in field trials, which comprise Phase 2 of the MCEP. These field trials, to be conducted at five sites around Australia and one overseas, involve evaluations of how Mine Site Operators (MSOs) are addressing health & safety, employee relations, environmental, and community relations issues. These issues are outlined in the principles and criteria and elaborated in a protocol approved by the MCEP Working Group. The trials will provide an opportunity for performance standards and a rating system to be developed and tested. They will also allow opportunities for experimenting with various data-gathering techniques. The final phase of the project will address questions of governance and institutional arrangements for an eventual certification scheme.

The first MCEP field trial had a dual purpose:

1) To collect information about how the site was addressing the issues identified in the protocol. This data would assist in the development of performance measures that will enable the scoring of mine site performance during subsequent MCEP field trials. (See Appendix 1 for definitions of performance measures and scoring.)
2) To test the field trial process, including the protocol (its adequacy, clarity, redundancy and so on) as well as the process of gathering data, and to make recommendations as to how the process might be improved in subsequent iterations.

This review was undertaken at the BHP Billiton Cannington Mine (Cannington) in central Queensland over the period 14 to 20 July 2004. This silver-lead-zinc mine has been in operation since 1997 and currently employs about 600 people (contractors and direct employees), producing at a rate of 2 million tonnes of ore per year. The ore is processed at the on-site concentrator with the majority of concentrate shipped by truck to a transfer at Yurbi and then on to Townsville by rail for subsequent sea transport to smelters around the world. A portion of the concentrate is shipped by road to Mt. Isa for smelting at Xstrata's smelter.

The Field Trial Team was comprised of:

- Peter Southern (Managing Principal ERM, Environment, Team Leader);
- Leah Horowitz (Project Officer, WWF, Social), and
- Gary Brassington (BHP Billiton Illawarra Coal, Environment)
- Melinda Buckland (Manager Social Responsibility, BHP Billiton Corporate, Social);
- Liz Sanderson (Health Coordinator, BHP Billiton HVEC, Health & Safety).

Data gathering techniques included:

- review of documents provided by the MSO;
- team members' observations during site tours, including tours of the plant facilities and the underground operations;
- interviews with MSO staff;
- interviews with external parties.

The interviews were conducted both in person and by telephone. Interviews with staff were arranged by the site contact, after the Team Leader and the Project Officer had provided him with a list from the organisational chart. Interviews with external parties were arranged by the Project Officer, mainly from a list of members of the Cannington External Advisory Panel, an

independent group open to all community members. This list was provided by the site contact. All interviews were conducted subsequent to approval by the site contact.

Although the purpose of the field trial was not to score or evaluate the site's performance, team members provided feedback at the exit meeting, as a service to the site. This consisted of team members' professional opinions as to Cannington's achievements and opportunities for improvement, as identified through this trial. This meeting also provided site personnel with the opportunity to provide comments on the field trial process.

Process Issues

The Protocol

The Field Trial Team made extensive comments on the protocol, which were incorporated into a new version, emailed to the Working Group (with changes indicated in Track Changes mode) on 3 August 2004.

Additionally, Question #1 (on ethical business practices and systems of corporate governance) was deemed to be relevant to all three sections of the protocol. It was therefore extracted from the Economic section and presented as a separate question to be addressed by all team members in the subsequent field trial.

Data gathering issues

Industry knowledge

The Field Trial Team's knowledge of the broader BHP Billiton objectives, systems and activities assisted significantly in identifying where corporate systems and guidance or requirements would be applicable. Without that knowledge, the process would likely have taken longer.

Process Improvement: A fully external audit team would likely require additional time to evaluate the site's management systems and performance, especially in areas related to corporate governance.

Time constraints

The team members reported that they were unable to examine all the questions as thoroughly as they would have liked, with sufficient interviews and verification. There was inadequate time to conduct interviews with a representative sample of employees and external stakeholders. This would have allowed the team to determine stakeholders' levels of awareness of policies, procedures, risks etc. as well as their concerns. The general consensus was that instead of nine person-days of interviews and document review, the team members would have required 15.

Process Improvement: For the actual certification audits, it may be necessary either to allow more time or to expand the audit team.

Sampling of workforce

The team was unable to interview a representative cross section of employees. This was due to low staffing levels, as is common to many modern mines, as well as the team's concerns about disrupting production or employees' free time. The team was able to interview shift workers in spot interviews during site tours, and conducted extensive interviews with two union representatives. However, no guidelines were provided as to how many shift workers should be interviewed in order to evaluate satisfaction with working conditions and awareness of health & safety, employee relations, equal opportunity, and environmental policies and procedures.

Process Improvement: Other forums for interviewing employees may be required, as well as guidelines as to numbers of employees to interview and ways to ensure that a representative sample of employees are interviewed.

Sampling of external stakeholders

The team was able to interview approximately half of the Cannington External Advisory Panel as well as other external stakeholders, both by telephone (before the field trial and while on site) and in person (on the way to the site). However, no guidelines were provided as to how many stakeholders to interview and what would constitute a sample that was representative of ethnic groups, interest groups and gender balance. Moreover, the short timeframe limited data collection. In this case, the team relied on the site contact for assistance in identifying external stakeholders and for permission to conduct interviews.

Clearly, the size and composition of the population of external stakeholders will vary from site to site, making it difficult to set guidelines that would be applicable across sites. Also, it may not be feasible, given the time constraints, to implement typical social science sampling techniques when selecting interviewees.

Process Improvement: A variety of sampling methodologies should be investigated and an evaluation should be made as to whether it would be feasible to apply these techniques when using the Social Section of the protocol.

Subjectivity

The purpose of this field trial was to collect data rather than to score the site's performance. However, as noted above, the exit meeting provided the team members with an opportunity to give the site their professional opinions as to the most significant areas in which they were performing well and those in which there was room for improvement. Because the trial protocol did not contain performance measures against which to assess the site's performance, the evaluations made by team members, and the priorities they identified, clearly reflected their own experience, interests and concerns.

Although the evaluations were offered for the benefit of the site rather than the MCEP process, the subjectivity inherent to these reports served to highlight the importance, to any certification scheme, of designing a protocol that would, to the extent practicable, eliminate interpretation by individual auditors.

Process Improvement: Future versions of the MCEP trial protocol will need to incorporate a ranking system with performance measures for each level, against which the site's performance can be measured.

Relationship of the MCEP to existing audit processes

Similarity to existing audit processes

Comments from site personnel indicated that the process and protocol as trialled at Cannington had considerable overlap with other audit processes such as ISO 14001, SA8000, AS4801, OSHSA 18001. The overlap with ISO14001 was particularly strong.

If a certification audit, under a future certification scheme arising from the MCEP, were to be conducted simply in addition to the above audits, site staff would be likely to view the process as redundant, burdensome and unnecessary.

Process Improvement: An audit under a future mine site certification scheme should not merely replicate existing audit processes. Instead, differentiating features should be developed and emphasised, and potential interactions with existing processes should be investigated (see below).

Differences from existing audit processes

At the same time, however, comments from the Field Trial Team as well as from site staff revealed that the MCEP protocol surpassed the other audit processes in significant ways.

One important differentiator was the focus on outcomes. Although they indicated that this feature could be developed further, team members and site staff noted that the MCEP protocol focused on evaluating the effectiveness of the MSO's programs and activities, to a greater extent than did the other audit processes which focused mainly on systems.

Furthermore, MSO personnel and team members commented that the MCEP protocol addressed the issue of stakeholder engagement to a far greater extent than did many other audit processes. Although it was suggested that in some instances the protocol emphasised this issue too greatly, on the whole this feature of the MCEP trial was seen as positive.

Process Improvement: The MCEP's differentiating features should be emphasised.

Potential interactions with other audit processes

The substantial overlap with existing audit and certification processes highlights the need to consider how the eventual mining certification process will interact with those other processes. This could be achieved in a number of ways.

One possibility would be for auditors to use a number of different protocols in a single audit, so that the site could simultaneously seek, for example, ISO14001, SA8000 and the certification proposed by the MCEP.

Another option would be for the auditors to accept certification under other audit programs as evidence that a number of issues, identified in the MCEP protocol, had been adequately addressed. Clearly, either option would require all certification protocols to be strongly aligned.

Process Improvement: It will be necessary to evaluate the degree to which the MCEP protocol overlaps with existing audit protocols. It may be useful, at a future field trial, to test the degree to which it would be possible to use the results of another audit process to answer some of the MCEP protocol questions.