**24Th OCTOBER**

I discussed with the Mine the need to develop a mine re-entry management plan, based on risk assessment. I recommended that, when looking at options for re ventilating the Mine, that the Mine should consider the use of a forcing fan as this could be used to reduce the risk of high levels of methane passing over the blades of an exhaust fan. I suggested that H9 shaft could be used to site a forcing fan. It would take some modification to the infrastructure on the surface at H9. I recommended that the Mine should consider a staged re-ventilation and re-entry process.

**Recommendation**

***The Mine should develop a detailed Re-entry Management Plan, based on risk assessment, with the appropriate level of technical expertise involved in the development of the plan. The details of what the Mine should consider in developing the Re-entry Management Plan are included in the Recommendation attached to this Mine Record Entry.***

***I explained that Inspector Nugent would attend the Mine on Friday 26 October to attend the feedback meeting and to review progress.***

**Number Recommendation Due Date 9th November**

Mine Re-entry Management Plan

***1. The Mine should develop a detailed Re-entry Management Plan, based on risk assessment, with the appropriate level of technical expertise involved in the development of the plan. In developing the management plan the Mine should consider the following as a minimum;The re-entry process must not commence until the Mine has determined that the underground atmosphere is clearly understood such that the Mine can determine, with high confidence, that there are no sources of ongoing combustion occurring that could be re-ignited by the re-entry process and introducing an unacceptable level of risk to coal mine workers.***

***2. The Mine should consider whether a staged re-ventilation strategy would be a more appropriate method of re-ventilating the Mine;***

***3. The Mine should consider using the QMRS MRAS system and protocols as a standard for the requirements for re-entry;***

***4. A management structure that details the supervision for each stage of the process and for the competencies of the people/coal mine workers involved that are appropriate to the hazards being managed;***

***5. Requirement for detailed work instructions to coal mine workers for each stage of the re-entry process. This to include restrictions on persons working alone;***

**6. Establishment of appropriate "fresh air bases" or places of safety and the minimum requirements for these as they are established during the re-entry process;**

**7. A detailed gas monitoring plan that clearly shows the status of the mine atmosphere for each stage of the process and the appropriate location of monitoring/sampling points to achieve this;**

**8. The locations of gas monitoring points/sample locations must be accurately known and be located in locations that will give results that are reliable and representative of the mine atmosphere in that location;**

**9. Specific TARPs should be developed that are appropriate to the re-entry process and include actions to ensure that coal mine workers are not exposed to an unacceptable level of risk;**

**10When establishing a TARP the Mine should consider the rate of change to ensure timely actions are taken so that coal mine workers are not exposed to an unacceptable level of risk (very important when relying on tube bundle monitoring as the prime monitoring system);**

**1 1 . The reliance on monitoring that is not continuous, such as tube bundle monitoring rather than continuous real time monitors and the impact on the ability to detect changes and the rate of change in a time frame that ensures an acceptable level of risk to coal mine workers;**

**12. TARPs should include actions to be taken should the gas monitoring system fail during the re-entry process;**

***13. Management plan to address actions to be taken should conditions be encountered that are not as expected, (i.e. should re-entry process be halted while the change in conditions is investigated and assessed to determine the effect on the acceptable level of risk to coal mine workers;***

***14. Failed VCD's discovered during re-entry process — actions to be taken and reporting requirements. Including possible reassessment criteria;***

***15. Impact on the mine atmosphere of the re ventilation and the introduction of Oxygen into the airways and ventilation circuits (i.e. could create an explosive mixture or re-ignite any heating);***

***16. Communication requirements and the re-establishment of communications during all stages of the re-entry process;***

***17 Emergency response and first aid requirements to protect coal mine workers involved in the re-entry works;***

**18. Actions to be taken before any changes to the detailed re-entry plan are to be implemented, including risk management processes to assess the impact on the exposure of coal mine workers to an unacceptable level of risk;**

***19. Analysis and treatment of residue from the spontaneous combustion event that may be found on the roof, ribs and floor of the mine workings to ensure coal mine workers are not exposed to an unacceptable level of risk;***

**20. The status of the in seam methane drainage system throughout the Mine;**

**21 . The possible influence of the changes to previously sealed areas of the Mine;**

**22. The possible impacts on strata control of the events prior to re-entry;**

**23. The effects of GAG product and temperature on services and strata control;**

***24. The self-escape strategy for coal mine workers involved in the various stages of the re-entry process;***

***25. Firefighting capability during the various stages of the re-entry process;***

***26. The ability to emergency seal the Mine should conditions warrant it;***

**27. Re-establishment of services during each stage of the re-entry process. This to include a determination of which services must be re-established at each stage of the re-entry process**.

**The SSE to respond to this Recommendation to Inspector Marlborough by e-mail by Fri 9 Nov 2018**

**Please provide a written status report on each SCP together with the actions taken to address each item by their due dates**

**Please provide a written status report on each Directive together with the actions taken to address each item by their due dates**

**Please provide a written status report on each Directive and SCP together with the ac ions taken to address each item by their due dates**