

Questions from the S3 Panel for the Homestake Reverse Site Visit Team:

HoI. The information item below from the Code of Federal Regulations describes an MSHA standard on underground escapeways in operating mines. Please discuss it in the context of your proposed site.

30 CFR § 57.11050: Escapeways and refuges.

ESCAPEWAYS--(Metal/nonmetal) UNDERGROUND ONLY

(a) Every mine shall have two or more separate, properly maintained escapeways to the surface from the lowest levels which are so positioned that damage to one shall not lessen the effectiveness of the others. A method of refuge shall be provided while a second opening to the surface is being developed. A second escapeway is recommended, but not required, during the exploration or development of an ore body.

(b) In addition to separate escapeways, a method of refuge shall be provided for every employee who cannot reach the surface from his working place through at least two separate escapeways within a time limit of one hour when using the normal exit method. These refuges must be positioned so that the employee can reach one of them within 30 minutes from the time he leaves his workplace.

HoII. As the evolution of large projects has repeatedly indicated, funding profiles, and their integral, do not always match expectations. Decisions related to scope, staging, etc. may have to be made to keep the project within an available cost and schedule envelope. The choices might entail re-optimizing the funding routed between the different science/engineering projects, infrastructure capabilities, size/scope of laboratory space and access, etc.

- a) How will the possible decisions alluded to above be made by your collaboration - that is, what is the process that you foresee governing such decisions?
- b) How will the resulting impact to the scientific/engineering program be assessed and decided?

HoIII. In order to successfully launch DUSEL and to begin garnering the support it will need from all quarters, it will be critical that the field rally around the chosen site after S3 is complete. While a number of entities are important here, much of what will be required can only be enabled by the DUSEL collaboration(s) working constructively with the community.

If your site is chosen, what specific steps will you take to embrace members of the other teams? Positions of responsibility within the project, in management and elsewhere, must be made available to new collaboration members in order to attract them, and allow them to lend their skills to the next stages of DUSEL development in a manner that optimizes the design and development of a world-class Laboratory. Do you have specific plans for, or thoughts on, how to accomplish this? How will the current project

leadership work with the field as a whole to try to unify the community behind the chosen DUSEL?

HoIV. At the recent site visit, you explained that local communities have demonstrated great support for a Homestake DUSEL. Such support is of course not always unanimous.

- a) Please discuss any interchange you may have had with any community or local groups, including, but not limited to, Native Americans, who do not necessarily support establishing a DUSEL at your site, and your approach to engaging these groups in the DUSEL process and working constructively with them going forward. Include in this discussion any interchange that members of the Homestake team have had with representatives of the Great Sioux Nation Tribes and/or the National Congress of American Indians pertaining to the transfer of the Homestake Mine to the South Dakota Science and Technology Authority, and the possible conversion of the mine into an underground laboratory. Please also address the Position Statement from the Defenders of the Black Hills opposing the development of the Homestake Mine into a laboratory.
- b) How extensively has the level of local support for a DUSEL been investigated by members of your team? Please elaborate.

HoV. Currently, there is a deep, broad knowledge of the site from those who worked in the mine during operation. Please present a plan for transfer of their knowledge to a new generation of Homestake team members that will ensure continuity as people retire.

HoVI. Please present a preliminary plan and rough cost for:

- a) Expansion of the hoist to 25 t capacity
- b) Expansion of the hoist to 25 t and 20 foot container
- c) a) + b) plus expansion of the No. 6 Winze to 15 t

HoVII: Three-part question related to environment:

- a) Indicate what steps are being taken to monitor the stability of the Grizzly Gulch tailings dam and protect the collar of Shaft #5 from a potential accidental inundation by tailings if the dam were to give away. In addition, how is the Open Cut's slope stability monitored and how is its drainage controlled to protect the mine from debris flows or flooding through the bottom of the Cut?
- b) Is there a contractual commitment by Homestake/Barrick to construct a treatment plant for the leachates of its reclaimed properties? Would there be a joint use of the water treatment plant that has been transferred to the Authority to serve both Homestake's reclamation needs and the Authority's need for treating the dewatered mine water and, if necessary, of mine discharge water?
- c) Considering the 1959 and 2002 wildfires that threatened the mine's infrastructure and the adjacent towns, what measures does the Authority intend to take to reduce such prospects around the mine area?