<u>Preliminary Tech Review – Nanisivik Mine Waste Disposal Plan</u> – NWB1NAN0208 Part E, Item 16



Note: Review comments are written in italics.

- 16. The Licensee shall submit to the Board for approval an Underground Mine Solid Waste Disposal Plan which shall include but not be limited to:
- i. Standard operating procedures for the decontamination and disposal of equipment to the underground including quality assurance and quality control measures for cleaning equipment and environmental mitigation measures for disposal activities;

Procedures are briefly cited in Section 4, but no detailed is offered. QA/QC measures are not mentioned (check off lists, photographic record?) <u>Is additional detail required? Request specifics in letter back to proponent.</u>

ii. A simple classification system for Waste designated for underground disposal based on type and future risk;

Is included in Section 3

iii. Criteria for segregation of material according to the classification system adopted;

Is included in Section 3

iv. Identification and allocation of available space, based on the premise that those materials posing the greatest risk will be stored in the deepest portions of the workings;

Space is identified

v. Placement methods and schedules for the various material types;

Placement methods are indirectly described in section 5 and more directly described in section 7. Schedules are not-provided. As open pits are included in this report, there is little there describing methods to reduce voids and frost heaving there. Approximate amounts of material is provided. Is the info required prior to board approval or do we need to request clarification from the Licensee prior to bring the request to the Board?

vi. Maps and sections showing typical or critical components of the disposal areas both before and after filling;

Sections are shown for mill complex and underground areas, but not for *Open Pits*

vii. Plans and sections showing the extent of the proposed disposal areas including coordinate grid on all plans showing underground openings and exact coordinates of all surface openings (shafts, adits, ramps, etc);

Plans are shown, however the maps are fairly general, of low quality, and coordinate grids are not offered.

viii. An estimate of the percentage of each void space to be filled;

Specific void spaces are not cited in Section 8, however the plan generally suggests that 60-75% of void spaces can be filled in benched areas, and 40% in drifts. Information seems sufficient.

ix. An evaluation of those locations that pose the greatest risk of long-term instability including monitoring requirements if applicable;

Not mentioned

x. Summary of conclusions and recommendation of existing stability assessments; and

Not mentioned

xi. An outline of the documentation that will confirm compliance that will be on file following closure.

Section 5 offers examples of how documentation will be covered. Seems to sufficient at this point. Photographic documentation should be added. Maybe approximate coordinates (as per Polaris LRD) for above-ground disposal?

Preliminary Review Comments:

The Waste Disposal Plan appears to be deficient in several areas (i, v, vi, vii, ix, x). In these deficient sections there is a need provide more detail. Wait for response of reviewer on this, but I imagine it will come up.

There is also a need I believe to incorporate the aspects of the soil disposal into the plan. There has been no accounting for the quantity of material that is required for disposal. Perhaps the plan should go back to the proponent and this information should be incorporated as the "Phase III" is likely to be close to completion and such data is to be available.

Finally, since there above-ground disposal is being incorporated in this document, there may be a need to cross-check it will Landfill Protocols for NWT. <u>Drawing a blank on this 'protocol'? Clarify what above ground disposal is proposed or are you referring to Open pits?</u>

Recommend use new format include a section providing snapshop of the proposal/background information in summary form.