

EEPAC working group on Summary Statement Tote Road Pit

Reviewers: Gabor Sass, Bill Medford, Chris Smart, Nati Bergman

The working group is united that the application of extraction of gravel be rejected in its current form (and maybe at all) as it is located next to a wetland and this SLSR is incomplete and must be sent back to the proponent. There is serious concern for significant irreversible damage if this development goes forward and so a proper EIS must be carried out.

Specific comments:

- 1. **ESA on property** Most of the floral and faunal inventories were done 6 years ago (2008) which does not meet city standards these need to be updated. The older data do suggest that the Lower Dingman Corridor ESA does extend onto the subject site. This necessitates ESA boundary delineation and the setting of necessary buffers. The vegetative fringe should not be considered part of the buffer. It is part of the habitat of the snake and turtle endangered species listed. What does habitat check in 2012 mean? Flora?
- 2. **Hydrology** The data presented show the existence of perched water tables which most likely feeds the wetlands on the adjacent ESA, although the hydrological report magically omits this fact in the conclusion section. There is serious risk that the aggregate extraction will dewater the perched water tables and cause significant damage to the wetlands to the west. A proper hydrological investigation needs to be conducted that looks at both surface and shallow surface flowpaths including the quantity of water that will be diverted from the wetlands. The possibility of keeping the wetland levels intact has not been guaranteed. There are 3 kettle ponds in the woodlot. The north one has 12 to 18 inches of water and frogs, the eastern one is 30 ft from field's edge, 10 ft below it and contains water that seeps out into a small stream through a berm. The western one appears dry and has low vegetative growth. We believe these are part of the wetland. If so, the east one is close to the field edge.
- 3. **Hydrogeology** The primary problem is that the analysis considers deep groundwater with a water table below the proposed pit floor. The real impact of excavation will be on shallow groundwater that is effectively excluded from the deep screened wells. Shallow seasonal groundwater is held in the gravels targeted for extraction. This groundwater supports the surrounding fens and wetlands. Removal of these gravels will largely terminate this source of supply and so destroy the wetlands. Shallow groundwater will enter the pit and likely require pumping out to some unspecified destination. This water and infiltrating water is also quite likely to be contaminated by fuel spilled during routine operation of the pit.
- 4. Extraction process we question where the topsoil and subsoil will be placed and stored during the extraction process. How will this medium removal affect the wetland? The southwest end of this site slopes dramatically toward the wetland and their gravel processing machinery will be by Tote Road but at top of this slope. There is a significant risk for major erosion processes of the hillslope once the mining disturbance starts. Considering that the disturbance is long-termed (e.g. 20,000 tonnes a year, up to 250,000 tonnes total translating to more than 12 years of site operation), no stabilizing vegetation

or erosion control measures (temporary or permanent) are specified although the recommendations of Thompson Environmental (2008) mentions them (page 9, recommendation 1). We highly doubt that eroded sediments will not reach the wetland during wet periods because of elevation differences. Such anthropogenic uncontrolled sedimentation will affect the wetland by creating high turbidity in the water column, burial of flora and fauna and eventual destruction of the wetland's habitat.

5. **Monitoring** - If the site will operate for more than a decade, we propose continuous groundwater monitoring program of the observation wells throughout the project not only for one year since project commencement to maintain the 1.5 m above groundwater criteria. Furthermore, the wetland itself should be monitored for any adverse effects originating from the proposed mining site. In case such detrimental processes are detected in the wetland, the mining operation will cease immediately, UTRCA and MNR are notified and no further mining works will be conducted until the problem is fixed and operation allowed resuming again.

6. **Rehabilitation** – Even if the site will be turned back into an agricultural land when the project ends, it will still need substantial Best Management Practices (BMPs) to protect the wetland (if it will still exist) from sediment erosion or water contamination from the

nearby tilled crop fields. There is no reference to any such measures in the report.