



AGNICO-EAGLE MINES LTD.
Meadowbank Division

***PRE-DEVELOPMENT CAMP AND SEWAGE TREATMENT
PLANT DESCRIPTION FOR THE MEADOWBANK PROJECT
SITE***

**NWB WATER LICENSE 8BC-TEH0708
KIA LAND USE LICENSE KVCL303H305**

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1. Introduction

The Meadowbank project, operated by Agnico-Eagle Limited (AEM), is located approximately 70 kilometres north of the Hamlet of Baker Lake, Nunavut. The project is located on Inuit Owned surface lands (IOL BL-14) and as such access is subject to licensing and permit approval by the Kivalliq Inuit Association and the Nunavut Water Board. The campsite for the Meadowbank project is located at 65° 01' 9.12''N latitude and 96° 04' 1.91''W longitude on NTS map sheet 66H/1.

At the end of 2006 the Meadowbank Project completed an extensive environmental assessment process under the Nunavut Land Claims Agreement directed by the Nunavut Impact Review Board (NIRB). A Project Certificate was approved by the Minister of Indian Affairs and Northern Development clearing the Project to apply for the permits required to construct and operate the project.

In September of 2007 AEM applied to the Nunavut Water Board (NWB) for a Type A Water License that will cover construction, operation, closure, reclamation and post closure activities at the proposed Meadowbank gold mine project. This application is under review and if a positive decision is reached could lead to the start of construction in the summer of 2008. Due to the remote location and short summer ice free construction season AEM projects that it will take one full summer ice free season to construct the first dewatering dike (the East Dike) required allowing for development of the Portage Pit. This requires the pre-development of the two on-land starter pits on the Portage deposit to develop a stockpile of broken rockfill material ahead of the start of construction that will be required to construct the outer shells of the East Dike. AEM has applied for the renewal and amendment of the Tehek Lake Access Road Type B Water License 8BC-TEH0708 to allow for the construction and operation of a camp and sewage treatment plant during the pre-development phase (i.e., until the Type A Water License is approved) to support the proposed pre-development activities. If the Project does not receive a Type A Water License from the NWB or Commercial Production Lease from the KIA or the required authorizations from Fisheries and Oceans Canada and thus cannot proceed then this camp and sewage treatment plant will be decommissioned and removed by AEM.

2. Description of the Proposed Camp

The proposed camp will consist of 74 pre-fabricated trailer units assembled to provide a total of 340 rooms, washrooms and shower facilities, laundry facilities, a kitchen facility, recreation and television trailers and office units to support initial construction activity all joined together by Arctic corridors. During this phase of the Project AEM is requesting that the water license allow for maximum average water use of 45 m³/day to support a maximum camp capacity of 200 persons (200 x 225 l/per person/day).

3. Sewage Treatment Plant

Through this application AEM is applying to have the Tehek Lake Access Road Type B Water License amended to allow for the construction and operation of a rotary biological contactor sewage treatment plant (STP) at the Meadowbank Project site to support the pre-development activities. The proposed sewage treatment plant will consist of the following elements:

- A lift station and pump to transfer sewage from the camp to the sewage treatment plant which would be set up adjacent to the north end of the site airstrip;
- A 65 m³ capacity equalization tank to attenuate the flow peaks entering the STP;
- A standard Seprotech Systems L-333 series rotary biological contactor with a primary settling tank, a standard RBC, and a final settling tank;
- A lift station and pump to transfer treated overflow effluent from the final settling tank to Tear Drop Lake; and
- A plate filter press set up in an adjoining Seacan container with filter feed pump to filter sewage sludge drawn through sludge ports on the bottom of the primary settling tank on an as needed basis with the filtrate being recycled to the equalization tank and the sludge incinerated.

Seprotech systems of Ottawa Ontario (<http://www.seprotech.com/>) have advised AEM that the nominal capacity for this arrangement will be approximately 300 persons assuming a discharge standard at end of pipe as follows:

Parameter	Maximum Average Concentration (mg/L)	Maximum Allowable Grab Sample Concentration (mg/L)
pH	6-9	9
Total Suspended Solids (TSS)	100	100
BOD ₅	80	80
Fecal Coliforms	10,000 CFU/ 100mL	10,000 CFU/ 100mL
Total Oil and Grease	5 and no visible sheen	10 and no visible sheen

All sewage and greywater from the camp and its associated facilities will be collected and drain by gravity pipelines to a lift station located at the camp. The lift station will then pump the untreated sewage and greywater through a heat traced insulated pipeline to the STP equalization tank. The STP will be located at the east end of the on-site airstrip (see Figure 1 – located at end of this document). It will be constructed on a rockfill prepared pad and will be insulated on the bottom and sides to prevent heat transfer into the underlying ground.

STP influent will enter the 65 m³ capacity equalization tank. The equalization tank will attenuate the expected peak flows of influent both in the morning and evening as crews prepare and/or return from their respective worksites. It has been sized to accommodate the expected 12 hour flow volume. Untreated influent will flow from the equalization tank into the primary settling tank component of the RBC.

The STP is a Model L-333 Rotodisk aerobic wastewater treatment plant manufactured by Seprotech Systems Inc. of Ottawa Ontario. This wastewater treatment plant is a tertiary treatment plant designed to remove organic material and nutrients. It is comprised of a primary clarifier, a Rotary Biological Contactor and a final clarifier.

Untreated sewage and greywater is pumped into the primary clarifier. Settling separates heavy solids and the clarified water enters the aeration section through the inlet slot located at the bottom of the non drive end section of the biozone. This is the first section of four and contains two rotating assemblies. The second third and fourth stages each have one rotating assembly. This is the stage where most of the BOD reduction occurs. The succeeding 2nd, 3rd and 4th stages are mounted on the second shaft. It is in the 2nd

stage that further BOD is reduced, and that nitrifying bacteria start to predominate. The 3rd and 4th stages are just for nitrification. The 4th disk bank has recycle buckets. Partially treated water from the RBC now enters the final clarifier. Spent biomass particulate settle in this chamber. Sludge is returned to the primary clarifier. A schematic of the flow through the RBC is presented in Figure 2.

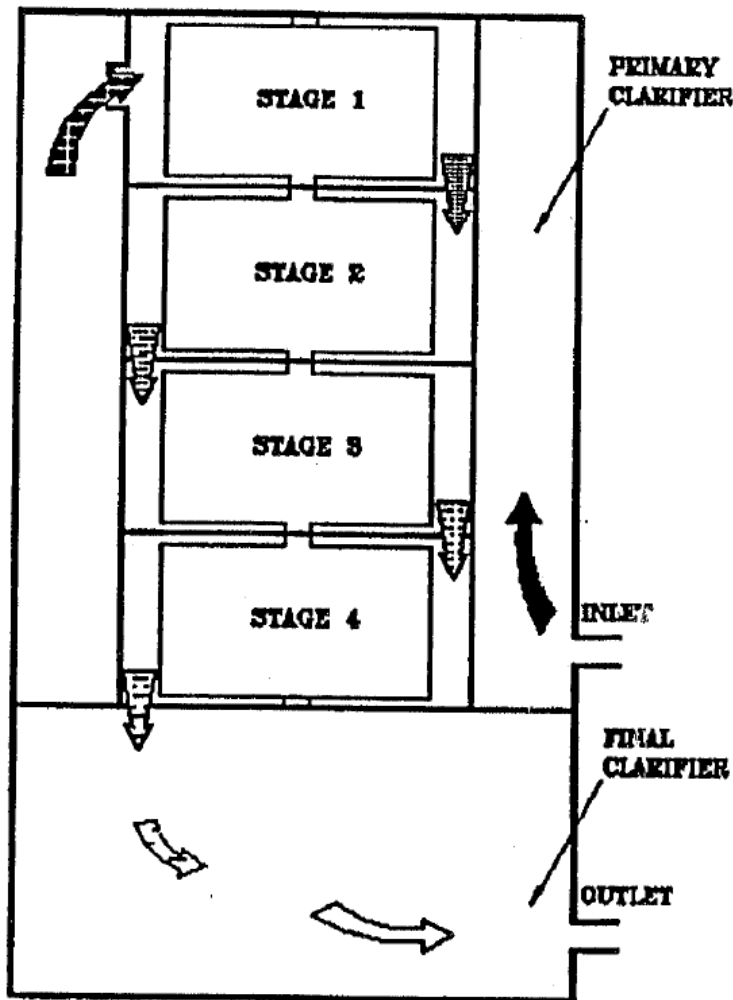


Figure 2 : Schematic Flow through the STP – RBC Unit

The following pictures show similar RBC units during assembly so that the internal structure is visible. The Meadowbank unit is housed within an insulated tank with an insulated cover and is equipped with immersion heaters to ensure efficient operation under Northern temperature conditions.



The treated effluent from the final clarifier will flow to a lift station and be pumped through a heat traced insulated pipeline into Tear Drop Lake (the proposed site Stormwater management pond).

This is a used RBC plant that was originally purchased by Voisey's Bay Nickel Company for use at the construction camp at this project. It was originally purchased in July of 2003. AEM has purchased a plate and frame filter press as an add-on package unit to allow sludge to be drawn as needed from the bottom of the primary clarifier and then filtered into storage bags. The filtrate will be returned to the primary equalization tank. In this way the build up of sludge can be bled from the system as needed to maintain operational efficiency. The dewatered bagged sludge will then be burned in the camp incinerator

The kitchen will be equipped with a grease trap to separate grease from the kitchen greywater to keep this material out of the sewage treatment plant influent. The grease trap will be manually cleaned and the recovered grease incinerated.

The camp rules and purchasing practices will prohibit anti-bacterial soap products from being used on site to keep these products out of the STP influent to protect the biological activity in the RBC unit.

Operation of Tear Drop Lake as a Stormwater Management Pond

Tear Drop Lake is a small non-fish bearing pond located in the immediate area proposed for the Meadowbank Gold Project mill and service facilities. It is a shallow pond that freezes to its bottom each winter. AEM proposes to build up the depth of this pond through construction of impervious walls constructed as part of the proposed roads that encircle this pond to allow the pond to act as a Stormwater management pond. During this phase the treated sewage from the STP would be pumped into this Stormwater management pond. Overflow from this pond would be pumped into the northwest arm of Second Portage Lake only after it met the following proposed discharge criteria:

Parameter	Average Concentration	Maximum Concentration of a Grab Sample
pH	6.0 to 9.5	6.0 to 9.5
TSS	25 mg/L	50 mg/L
Al	1.5 mg/L	3.0 mg/L
BOD	25 mg/L	50 mg/L
F.Coli	1000 CFU/dl	2000 CFU/dl

