

Compilation of Issues

Issue	INAC	GC	AE	BCC	Comments	Proposed Action by BCC	July 27, 2007 Meeting Decisions	On action on August 29, 2007
					Part 3.5 requires that a layer of granular material in "uniform" condition be placed on the bottom and sides of the lagoon as indicated. Where is this detailed indicated? Normally there should be a layer of bedding sand or gravel side of the GCL. This is not shown. Note that the liner is shown being placed on a 1:1 slope on Drawing 111. The slope appears too steep to safety work on and to carry out the installation procedures as specified and would also be too steep for placing any of the bedding material that has been omitted from the drawings. But it should be in the specification (Part 3.10). Comparison of the drawings and the specification is difficult. Dillon would confirm the liner on a 1:1 slope. It is in accordance with the manufacturer's specifications. Dillon should present a stability analysis to confirm that the proposed liner condition is stable.	AMEC provided the review of the liner installation.	Dillon confirmed that sand bedding is being provided from the gravel source at 300m thickness. AMEC to perform stability analysis on date at 1:1 GCL slope under thawed conditions. Ensure design meets GCL manufacturer specifications. Ensure design meets safety standard for slopes.	AMEC report attached.
					Part 3.6.2 indicates that the liner sheets are to be cut out to fit accurately around inlets, outlets, sleeves, concrete structures and other projected ones through the lining. There are no further details provided in either the specification or the drawings with respect to this critical component of the lagoon relief on system.	Will provide responses.	Dillon will provide record drawings and contractor procedures.	Record Drawings not attached.
					Part 3.7 Leachate Testing. This section is completely inadequate for the purposes intended and poorly conceived. The purpose of the leachate is to retain water in order for the sewage to be treated. There is no way that the method given in the specification will yield any discernable data to determine the ability of the GCL to contain leachate. Direct the contractor to undertake repairs at no cost.	agreed: no leachate testing will be completed	required by standard action. Test in field in spec. is not what will be done. No in-situ hydraulic testing will be completed.	Record Drawings not attached.
					Some of the analysis and concerns with respect to the methodology provided are as follows: [refer to page 7 of the submission from BCC] BCC was provided copies of drawings 101, 102, 103, 104, and 105. BCC has stamped/sealed drawings "issued for review". These copies were undisturbed by contractors on site with the Board's stamped copies. If not, they should be.	No action	resolved as above: line 40) Part 3.7.	
Drawings	INAC also recommends that the NWB requires the applicant to file final as-built designs that are stamped, signed, and dated by a qualified professional, prior to the lagoon's start-up operation date.				the access road should be regulated as it is a key component to the success of the proposed sewage collection and treatment system and should be properly engineered and constructed under license terms and conditions.	No action	Access Road is only an NWB review item. Access crossings are involved or road causes impacts to wetlands. NWB has indicated that the road is outside the NWB jurisdiction in small dated certificate in 2008/7. NWB to locate the final and contact Dillon if unable to locate. Review road with respect to operations and maintenance issue with AE resolved.	
					Drawing 101: There is no information to show that the lateral extent of the GCL is sufficient to prevent seepage around the edge of the liner at the abutments to both the east and west bays.	Line extended past the limit of the berm by a minimum of 2.0 meters.	Dillon confirmed that GCL will extend beyond the berm indicated if shattered rock is found. Resolved.	
					Drawing 105: The north berm is constructed using Type II granular material. It is also designed to act as a surface water runoff drain on berm. There is a horizontal component in this matter, however it will not act as a seepage barrier, particularly since the steeped hydraulic gradient is through the berm. Therefore, the same seepage problem can be expected. The same problem applies to the south side of the lagoon.	See note above on ditching	See resolution to BCC issue 3.18) line 1.	
					Drawing 111 [Refer to submission from BCC page 8-9]	Resolved. Dillon will submit record drawings and AMEC will submit geotechnical report on as constructed. Possible to submit before bedding but not 30 days in advance. Confirmed that excavating 2m below stripped surface of foundation. Confirmed backfilling GCL trench with sandy silt.	Record Drawings not attached AMEC Report attached	
						Re Detail 4: Confirmed that detail is longitudinal section of abutment to main man berm. As such details will be provided.	Record Drawings not attached	
						Re Detail 6: Dillon confirmed they will provide bedding and aprons, see note under detail 10. Bedding aprons must be inspected by PE before construction. Bedding aprons must be actual way, just to access bedding under manure.	Record Drawings not attached	
						Re Detail 8: Dillon to clean up detail 8, particularly down stream toe.	Record Drawings not attached	

