GENERAL INSTRUCTIONS FOR EXCEL TEMPLATE:

1. Do not leave blank rows above or between comments.
2. Do not modify the instructions or the column headings (i.e. the top three rows).
3. Each comment must have an associated recommendation.
4. All formatting will be lost when this file is uploaded to the Online Comment Table.
5. If necessary, adjust the cell width and height in order to view all text.

TOPIC	COMMENT	RECOMMENDATION
Status of document	The format of the *2010 Plan* has been changed from previous versions, and there is a substantial reduction in the amount of information compared to previous versions. Previous versions were designated 'controlled document', presumably a reflection of ISO14000 requirements—there is no indication of the status of the current *Plan* .	An explanation by BHPB as to the changes and reasons for the changes in the new version would be helpful.
Definitions	Definitions for various mine wastes listed in Sec.1.2 are not provided.	This information should be added to the *WPKMP* .
Surface minesite water	The *Plan* states that surface minewater is pumped or trucked to LLCF [p2-2] but then adds vague wording that suggests other options, such as the possibility that water could be directed to Beartooth pit, or than an in-line flocculant treatment plant 'may be utilized' before water is discharged to LLCF, or that water may be discharged directly to the environment.	Exact arrangements for dealing with surface minewater should be clarified in the *WPKMP* . Water quality data from the collection sumps should be presented to support the choice made and contingency options available. The conditions under which water would be directed to Beartooth Pit or an inline floculant treatment plant should be indicated.

Fox drainage [2.1.4 & 2.2.3]	The *Plan* states that 'an in-line flocculant treatment plant may be utilized' depending upon water quality, before Fox minewater is discharged to Lac de Gras. It is not clear why this contingency may be needed. Part G, Item 1a (ii) of the Water Licence requires that a description of any proposed physical or chemical treatment of waste prior to discharge to the LLCF or other locations be provided in the WPKMP. This information is not presented.	Water quality data for Fox minewater should be presented, the conditions specified as to when water treatment would be required for discharge to LLCF, and the description of treatment required in the *Water Licence* should be provided.
Management of Open Pit Minewater	Sec 2.2.2 on the use of Beartooth Pit as a minewater sump does not mention what measure BHPB will undertake to ensure that the permafrost zone around the pit is maintained. There is one thermistor cable around the pit (between Beartooth and Upper Panda) but no monitoring regime is detailed pursuant to Part G section 1 a) iii) of the water licence where a description for ground temperature monitoring stations is to be provided that includes the sampling protocol and frequency.	BHPB should provide a description of the permafrost monitoring to be undertaken around the Beartooth Pit, including thresholds or triggers for corrective actions. A contingency plan in the event of permafrost failure should be specified.
LLCF	Sec 3 of the *Plan* pertains to the LLCF. A description of the facility is provided but management objectives and operational details are only vaguely described. Detailed information present in previous versions of the *Plan* has been dropped. Objectives for management and closure were previously provided, but are not present in the current *Update*.	BHPB should reinstate the format used in previous versions of the *Plan* which provides rationale, objectives, and methodologies for the management of each wastewater component on the mine site. Fleshing out the relevant information under these headings will greatly enhance the quality of the information in the *WPKMP*. This is a management plan, after all.

Tailings Characterization – FPK	The *WPKMP* lacks a full description of PK that previous versions provided. The description of PK gets 10 lines, compared with the 2007 version in which the description of PK starts at p.25 and goes to p.31 [Secs 3.2, 3.3]	BHPB should be required to provide sufficient and current information about PK characterization and behaviour so that the Board can have a reasonable and reliable understanding of the operational and closure issues of the LLCF. Presumably more is learned about PK behaviour each year and this additional information is important for the PK Management Plan.
EFPK	The *2010 WPKMP* is virtually silent on the EFPK problem. EFPK is a known challenge to LLCF managers, but gets only <u>one</u> paragraph in the new version—a brief description <u>without any discussion of management issues or closure implications</u>.	BHPB should be requested to provide <u>current</u> information on EFPK characterization and behaviour in the LLCF in the next revision of the *WPKMP* . The *WPKMP* should tell us what is known to date, what studies are ongoing to address what remaining issues, with results to be reported by what date.
EFPK	The one paragraph discussing EFPK [p3-4] notes that 'the short-term behaviour of EFPK must be monitored to prevent negative impacts on process plant recycle water', but provides no explanation about this. It also notes, without explanation, that studies of the long-term consolidation characteristics, behaviour and management of EFPK are part of the ICRP. This is a switch from the 2007 *WPKMP* which stated that such studies 'are on-going and will be presented to the WLWB for review and comment upon completion' [Sec.3.3.5 *2007 WPKMP*].	The *WPKMP* should provide sufficient information about the uncertainties and challenges relating to the management (and closure) of EFPK in LLCF. Investigations should be described, results provided, and a schedule for research tasks established in the *WPKMP* .
PK deposition	The *2007 WPKMP* describes an 'optimized' LLCF operation and management plan [Sec.3.4] over approximately 7 pages of text, and includes a description of Option 3aM deposition plan for the deposition of FPK and EFPK in the various cells with information on timing and volumes. The 2010 *Update* contains none of this information.	Updates to the Plan should generally provide enhanced information over time, not less. The detailed deposition plans from previous versions should be moved forward into each new update, with refined and relevant information as operating experience and monitoring in LLCF generates new information.

PK deposition	Part G, Item 1a (iv) requires that the *WPKMP* provide a schedule of PK discharge in LLCF over the term of the licence, including detailed maps showing deposition locations. This information is not provided.	The *WPKMP* is out of compliance with this licence condition and needs to be supplemented with the requested information.
PK deposition	Part G, Item 1a (v) requires that the *WPKMP* provide stage-volume curves and water balance calculations showing life expectancy of the LLCF. This information is not provided.	The *WPKMP* is out of compliance with this licence condition and needs to be supplemented with the requested information.
PK deposition	The *Plan* briefly states [p3-4] that FPK deposition will be completed in upper end of cell B 'to create a stable reclamation surface', such that 'the planned reclamation research pilot can be undertaken as early as practical.' No dates or details are provided. Uncertainties raised in previous versions of the *Plan* about high susceptibility of FPK to water erosion are not identified or addressed in this version.	Sufficient information needs to be in the *Plan* to demonstrate to the Board that reclamation in cell B is viable, that there are effective measures available to prevent erosion of FPK surfaces, that the beaches can provide a stable reclamation surface, and that reclamation (or reclamation research) will be initiated by a specific date. Links to the ICRP and relevant Reclamation Research Plans would be helpful.
Cell C dike	The 2007 *WPKMP* identifies the crest elevation of cell C dike as 454 m [p21], while the 2010 version identifies the current elevation as 456 m, and announces plans to increase this to 458 m 'to increase storage capacity'. Unfortunately, the new *Update* does not provide the storage capacity profiles of the various cells in LLCF provided in early versions of the *WPKMP* , so it is difficult to understand why the modifications are needed.	Information discrepancies should be reconciled. An explanation of the new plan to increase storage capacity of cell C should be provided.

Cell D	The *2010 Plan* states that FPK deposition into cell D 'may commence once the available storage capacity in cells A, B and C has been utilized.' This possibility has been known since the beginning of mine operations—why do we not have updated monitoring information at this time to more accurately predict the outcome? (See next item also.)	The *WPKMP* should provide a detailed schedule of FPK deposition, and provide a more useful prediction of whether FPK will need to be discharged to cell D. Better yet would be an indication of the conditions under which such discharges would be needed and what is being done to avoid this.
Deposition monitoring	Sec.3.3.4 of the *2010 Plan* describes the monitoring activities being conducted in relation to FPK deposition, but provides no results or useful information about what is being learned. This section states that management adapts to changing conditions and that FPK properties differ among different kimberlite pipes and phases within a pipe, and that 'on-going management must be continuously refined as a result of observed changing conditions.' No further explanation of what is going on is provided. Despite the statement [p.3-5] that 'monitoring results are used for performance assessment, calibration of deposition models, prediction of future deposit development and revision of deposition plans to optimize the LLCF performance,' no such results are provided, or evidently used in the operation of the LLCF as described in the *WPKMP* .	The four monitoring activities listed for FPK deposition [p3-5] need to be greatly expanded to include a summary of what is being learned through the monitoring programs and how this is informing FPK management. A notable gap in current information relates to the mineralogical, depositional and hydrogeological characteristics of the various types of FPK alluded to in the text. This is the sort of information that, we believe, the WLWB needs to approve the updated WPKMP.

Contingency planning	Sec 3.5.2 references the planned raising of dike C in 2010 which would provide 2 to 3 years additional storage of flows. Is this modification strictly for contingency planning purposes, or are there operational reasons for raising dike C? How much additional storage of FPK and EFPK would be provided in cell C through this modification? What effect could this have on the timing of FPK deposition to cell D?	More rationale for the possible causes of running out of storage capacity in LLCF should be provided. More information about the raising of dike C and the implications for FPK deposition scheduling should be provided.
Contingency planning	Sec 3.5.2 also notes that 'an appropriate adaptive management response will be developed and implemented depending upon the nature of the upset condition.' A list of options that the adaptive management plan 'may contain' is provided. At this stage in the mine life, a proper contingency plan should be in the *WPKMP* . What is provided is too vague to be acceptable. Potential failure modes for the LLCF are now known. These need to be matched to an effects analysis to identify risks, and these to specific mitigation or contingency measures that will be implemented if a failure occurs.	BHPB is requested to include a properly developed, risk-based contingency plan in the *WPKMP* .

Closure & Reclamation	The information provided in Sec 3.6 respecting this topic is too ambiguous and conceptual, and provides less information than previous versions. There is no recognition of the serious reclamation and closure challenges identified in previous versions of the *WPKMP*. No data from various monitoring activities in LLCF is presented, nor is information on water quality trends investigated in the *LLCF Water Quality Prediction Model* brought into the discussion. It appears that BHPB has been collecting a variety of valuable data about tailings solids and liquid behaviour and characteristics over the years, but this information is not finding its way into refining the *WPKMP*.	This section should either be upgraded to reflect the current state of knowledge and reclamation planning for the LLCF (our preference), or else deleted as its present condition provides no useful information. Links to the ICRP and relevant Reclamation Research Plans would be helpful.
Appendix A	Appendix A is incomplete. Proper completion of this section might have identified the non-compliant issues identified above	Appendix A should be completed.
Fig 8. *2008 Ekati Water and Waste Summary*	Information shown is not current.	This should be revised to show current status of Beartooth pit as receiving minewater, not producing wastewater and wasterock.
Fig 9. *Conceptual Model of Water Management in the LLCF*	Clarification of figure is required.	Fox pit water optionally discharging to Beartooth pit. Some indication of flow quantities on this diagram would be helpful.
Fox ore	Previous versions of the *WPKMP* identified concerns about the Fox ore, one of the main sources of EFPK. 'There are numerous unknowns currently with the processing of Fox ore and with the discharge of underground saline water. A number of studies are currently in progress regarding these issues and once completed the studies will be forwarded to the WLWB for review.' [*2007 WPKMP*, p24]. No mention is made of this topic in the *2010 Update*.	Important unresolved issues should not be dropped in subsequent versions of the *WPKMP*. Updates should track how issues and uncertainties identified in previous versions are being addressed and resolved by the company. BHPB should provide full and current information about the status of investigations into Fox ore, results to date and implications of these for operations and closure, and details of work needed to complete the investigations.