

Q1

Although Table W2 shows the monthly water balance volumes to and from the PKCA, including storage changes, Table W3 does not show the outflow volumes, contaminant concentrations or loads from the other wastewater streams (as per Figure W1) entering the PKCA. Is there a summary table of the PKCA contaminant load balance for Total Copper and the other contaminants of concern in another Technical Memorandum?

Q2

It is our understanding that Total Copper concentration values shown for each of the components (Areas A, B, C and the Pit Pond) were derived as an average from each of the contributing loads to that particular pit. Hence the reason that the Area Concentration values in Table W3 are less than the corresponding Component Area Concentrations in Table W1. Is there a summary table showing the individual loads and flow volumes into each Area which, in turn, shows the correlation between the Area Concentration in Table W3 and the Component Area Concentration in Table W1?

Q3

It is our understanding that the Area Concentration values in Table W3 assumed that the footprint of a particular dump or stockpile was in place at the onset of the project and, therefore as a result of this assumption, provided worst case values throughout the Operational Period of the project. Is there any information to show an estimate of the Area Concentration values (and the end result on effluent concentrations in the PKCA) at a time near the beginning of the project (for example at the end of the 2007 season) to illustrate the concentration differences that would be expected to occur at the onset of the project compared to the assumed worst case situation at the end of project?

We would expect that if a Component Area leached higher than expected contaminant concentrations for a particular parameter which, in turn, led to higher than expected concentrations in the PKCA effluent, then this situation would not occur until near the end of the operational period of the project. Could you please confirm that the PKCA would have sufficient capacity to store all site area runoff without any releases for a sufficient period of time near the end of the project (to enable the particular contingency measure to be implemented) as opposed to the “first two years of operations” as per page 15 of Technical Memorandum W. If treatment of a particular parameter was found to be necessary, then we would expect that this situation would not manifest itself at the beginning of the project but rather near the end of the project.

Q4

Page 14 of Technical Memorandum W states that the “...maximum proposed release rates [from the PKCA into Stream C3] are less than the 5 year to 10 year return period estimated flood flows...” and “...additional overbank flooding or local erosion due to the proposed PKCA releases are, therefore expected to minimal or non-existent”. Please confirm the basis for this conclusion since one might typically assume that the normal bankfull capacity of a stream channel corresponds to a 2 year return period flow rate. This would suggest that ‘out of bank’ flows and potential streambank erosion may occur in Stream C3 for the proposed PKCA releases. Was the bankfull capacity of the existing

Stream C3 channel determined in the field or estimated using hydraulic calculations in order to support the latter conclusion?

Q5

Our understanding of the proposed discharge limits for the release of effluent from the PKCA into Stream C3 (as per Table 4.2 of Technical Memorandum O) are based on 10 times the aquatic threshold minus background concentration for a particular parameter. Assuming the assimilative capacity of Stream C3 is minimal and therefore the water quality characteristics of Stream C3 will be synonymous with the PKCA effluent characteristics during the effluent release periods, can you please confirm that water quality impacts on aquatic biota in Stream C3 are expected to be minimal? Are any short-term and/or long-term impacts to aquatic biota in Stream C3 as a result of the project covered by the overall fish habitat compensation proposed for the project?