## BEFORE THE CANTERBURY REGIONAL COUNCIL

In the matter of: Applications by Lyttelton Port Company Limited to the

Canterbury Regional Council to channel deepen dredging at

Lyttelton Port

CRC172455 - coastal permit to dredge (disturb the seabed) and

deposit material on the seabed

CRC172456 – coastal permit to discharge contaminants and

deposit material on the seabed

CRC172522- discharge contaminants into water associated

with channel deepening dredging

CRC172523 – discharge permit to discharge contaminants into

water associated with maintenance dredging

## 7<sup>th</sup> Minute of the Commissioners

## **Questions to the Applicant**

 The material filed in response to Minute 5 (for which we are grateful) has answered some questions, but given rise to others. Regrettably, we have decided that there are some further matters we must clarify concerning the Turbidity Triggers section of the conditions. We regard this section as of critical importance to an evaluation of the M-IFD system.

## Questions:

- 2. "Predicted Dredging Turbidity" is now defined as the TSS "predicted from the hydrodynamic modelling detailed in Appendices 9, 10A and 10B....", but there is no further indication of how the predicted TSS value for an individual monitoring site will be established. Please explain:
  - i. using a practical step by step example how a predicted TSS value for a particular site will be established by reference to the appendices?
  - ii. will the TSS concentration be calculated by reference to a one year modelling hindcast (as step 5 in appendix 2 seems to imply)?
  - iii. If the answer to question 2(ii) is "yes", is a one year hindcast already available, or is further modelling to be undertaken?
  - iv. is it the case that a temporal match between modelled TSS and monitored turbidity is required (as seems to be indicated in step 5 at (1) given the reference to the "same day month and hour")?
  - v. once total turbidity in NTU has been established and the Intensity (NTU) for each tier at each site is calculated (pursuant to steps 5 & 6), do those intensity values remain constant into the future?

Issued by the Hearing Commissioners
Sir Graham Panckhurst –Chair, Peter Atkinson and Raewyn Solomon

Dated: 31 May 2017