Memo

From: Anna MacKenzie - Resource Scientist - Contaminants

To: Leif Pigott

Re: Hail Comments on Mapua Boat Ramp Plans with Buildings Removed

Date 7 October

The following memo is the Hail comments on Mapua boat ramp plans with buildings removed. The variation to the boat ramp design, with the building removed, will reduce the amount of proposed soil disturbance.

Earthworks:

Volume of contaminated soil to be disturbed and where it will be used.

The RFI response to queries on soil disturbance show that excavation below 0.5 m is proposed- so soil with elevated concentrations of contaminants will be encountered- The amount of soil disturbance proposed under the capping layer is unclear - the volumes of contaminated soil to be disturbed was previously stated to be approximately 180m3 of soil disturbed as part of a stormwater trench. (See RFI response dated 15 November 2023) - however the plans have now been revised and building and services removed (Amended Plans July 2024). No updated volumes of soils has been provided.

Site Management Plan:

A site management plan (SMP) was prepared by Davis Ogilvie for the Mapua Boat Ramp Trust and submitted as part of the application for the proposed development (RFI Response Site Management Plan). The site management plan includes a summary of the expected conditions including the soil, sediments and groundwater. The plan has recommendations on health and safety protection measures and environmental management. The off-site disposal of waste is discussed below.

The site management plan will need to be updated once redevelopment plans are finalised.

Should excavations along Tahi street be required- then further assessment of ground conditions will be required.

The controls on environmental management include minimising off-site tracking, dust management, erosion and sediment control, stormwater treatment, spill containment, noise and traffic management. The plan has no discussion on sediment control within the marine environment.

The assigned responsibilities in the management plan will need to be checked given that TDC are site owners and regulators. In allocation of responsibilities, the plan needs to define who is responsible for implementing and monitoring the controls detailed within the SMP.

Marine Foreshore and sediments

No controls on sediment disturbance are discussed in the existing management plan and there is potential for effects on the marine ecosystem.

Soil testing and re-use criteria are based on the adopted site specific criteria for Mapua FCC. The adopted criteria for sediments proposed is 0.01mg/kg for DDx (total) and sum of Aldrin, dieldrin and 10% Lindane. These re-use criteria are 8- 3.5 x higher than the Australian and New Zealand default sediment quality guidelines for sediments.

It should be noted that the sediments have elevated DDT compared to default guideline values and there is potential for deeper sediments to be impacted- currently there is limited sampling depth data along the foreshore of 0.25m.

An assessment of the effects of disturbing the contaminants on the marine foreshore has not been provided- see response for item 43 of the RFI response- controls on sediment quality and disturbance of impacted sediments during any earthworks along the foreshore, and during the use of the area for boat launching has potential to release DDT to the marine environment. On-going monitoring will be required and possible further remediation. Site management plan will need to address this.

The sampling undertaken has shown DDT exceeds the site specific criteria for sediment quality. It is recommended that the sampling for organics should be undertaken to include an adjustment for organic carbon.

Off-site waste disposal

Surplus soil will be stockpiled on site and tested prior to being reused or taken off-site for disposal- The off-site disposal of Persistent Organic Pollutants (POPs) contaminated waste may not be an acceptable option. The applicant states that the HSNO obligations do not apply to soil contamination and further clarification on the obligations will be sought from the EPA. The concentration of contaminants in soil below the cap exceed the Low POPs threshold of 50mg/kg.

Groundwater Monitoring

No dewatering is anticipated for foundation or excavation of services. The groundwater network is monitored annually- and it is noted that BH1a is located in the pathway of the proposed ramp- this would need to be maintained. All groundwater monitoring wells will be identified and remain accessible during and post construction. - All groundwater wells are not shown on the current plans provided- including bores in the vicinity of the existing timber jetty (BH112)and in the concrete turn around area (BH110) and proposed boat parking area (BH106, BH105). Groundwater should not be used for any washdown/drinking purposes.