

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of a resource consent application for the proposed upgrade and operation of the Martinborough Wastewater Treatment Plant and associated discharges to water.

REBUTTAL STATEMENT OF EVIDENCE OF BRIAN COFFEY
ON BEHALF OF SOUTH WAIRARAPA DISTRICT COUNCIL
(Aquatic Ecology and Water Quality)

1.0 INTRODUCTION

1.1 My name is Brian Thomas Coffey. My qualifications and experience are set out in my Evidence-in-Chief dated 20 April, 2015.

1.2 I have been asked to comment on the evidence of Dr Olivier Ausseil and Ms Nicola Arnesen from an ecological / water quality perspective.

1.3 I am not aware of any remaining areas of disagreement between my evidence and that of Dr. Ausseil.

1.4 There are two remaining areas of disagreement between my evidence and that of Ms Arnesen in terms of the monitoring of the MWWTP discharge to the Ruamahanga River. These relate to the recommended imposition of instream compliance standards as a condition of consent (and the locality of appropriate river monitoring sites) and what is a reasonable zone of non-compliance in the Ruamahanga River during Stage 1A and potentially Stage 1B of the MWWTP upgrade.

2.0 Are instream compliance standards (as opposed to monitoring parameters) necessary in this instance?

2.1 In my Evidence in Chief (para 86) I confirmed that my preference was to monitor baseline parameters at appropriate distances upstream and downstream of the MWWTP to provide a basis to assess the instream effects of the combined discharge following each stage of the proposed upgrade.

2.2 In her evidence, Ms Arnesen maintains the position she held when preparing the staff report and recommends compliance standards should be set at distances of 250 and 500 m downstream of the pond discharge.

2.3 My reason for not supporting monitoring compliance standards in the Ruamahanga River 250 m downstream of the MWWTP is that there has been insufficient mixing of the current MWWTP discharge with river water 250 m downstream of the MWWTP to meet all the compliance standards proposed in Condition 16 of the staff report (particularly that relating to QMCI).

2.4 Furthermore as a measurement point at 500 m is likely to pick up most (but not necessarily all) of the diffuse discharge from groundwater sourced from the land

treatment sites post Stage 1B of the upgrade, I do not support monitoring compliance standards 250 m downstream of the MWWTP discharge. However, I do support monitoring baseline water quality and instream community structure parameters within the mixing zone for the MWWTP discharge.

- 2.5 In my opinion, the purpose /benefits of the instream monitoring programme is to describe the expected, progressive, improvement in river health during the MWWTP upgrade programme.
- 3.0 If compliance standards are found to be appropriate what should be the length of the “non-compliance zone”?
- 3.1 The current low river flow situation is a worst case scenario that is technically not a problem after full mixing of the MWWTP discharge with river water occurs.
- 3.2 The perceived problem is the extent of the footprint of the mixing zone for the MWWTP discharge under low flow river conditions (paragraph 19 of evidence of Ms Arnesen).
- 3.3 This matter (the extent of the mixing zone on the left bank of the river) could be resolved by installing a diffuser in the river to replace the current point source discharge to the left bank of the river during Stage 1A for example.
- 3.4 However, I do not consider this is warranted, as in my opinion there is no effects-based problem with a reasonable mixing zone, or a non-compliance zone, being at least 500 m downstream of the MWWTP.
- 3.5 Following Stage 1B upgrades, at low flows the MWWTP discharge will be diffuse (via groundwater) and is expected to extend at least 500 m from the existing discharge point. In order to allow for the mixing of that discharge and in order to monitor the effects of that discharge, the measurement point (and thence the length of the non-compliance zone) needs to be at least 500m downstream of the MWWTP.
- 3.6 I do not therefore, support Paragraph 19 of the evidence of Ms Arnesen where she states she cannot support Option 2 (a 500 m long zone of non-compliance zone) as she consider that it compromises the ‘environmental bottom line’ for the Ruamahanga River for a period of time which is unacceptable.

Brian Coffey

22 May 2015