

Memo To: Hearing Panel AK C PPC 48 – 50

From: Marlene Oliver (Independent Facilitator for Expert Conferencing)

Date: 18 November 2021.

Subject: Additional Information arising from JWS dated 11 October 2021 – Stormwater.

The JWS Stormwater (Technical) dated 11 October 2021, stated (in part) as follows:

“5. Continuation of Issue Three: Stormwater treatment

5.1 Further to item 6.5 of the Joint Witness Statement dated 17 September 2021, the applicant has provided Water Quality treatment for private trafficked impervious surfaces memo (dated 7 October 2021) and included in Appendix B to this JWS. The memo analyses likely contaminants from private trafficked impervious surfaces and proposes stormwater quality treatment targeting gross pollutants, coarse sediments and minor amounts of hydrocarbons. At a minimum, private trafficked impervious surfaces should use a catchpit with a grate, sump volume and submerged outlet.

5.2 The applicants propose changing the Drury East and Waihoehoe SMPs to include the text at paragraph 5.3 below, in the body of the Drury East and Waihoehoe SMPs, with the memo provided as supplementary information in the Appendices of the Drury East and Waihoehoe SMPs.

5.3 The private trafficked impervious surfaces within the Drury East and Waihoehoe developments comprise private driveways, jointly owned access lots, private car parks (less than 30 parking spaces) and associated hardscapes. These surfaces are identified in the relevant Stormwater Management Toolboxes as mixed risk contaminant generating activity.

This activity does not include private car parking areas which have more than 30 car parks nor publicly accessible car parks nor hardscapes which do not receive runoff from the trafficked surface, which are covered by other activities in the Toolboxes in the Stormwater Management Plan and require GD01 treatment.

However, there still is a risk of contamination from occasional anthropogenic activities such as from spills or washing cars (hydrocarbons), and from coarse sediment and rubbish collecting on the driveway (sediments and gross pollutants).

On that basis, the treatment solution should target gross pollutants, coarse sediments and minor amounts of hydrocarbons. At a minimum private trafficked impervious surfaces should use a catchpit with a grate, sump volume and submerged outlet.

Acknowledging that the stormwater management approach requires hydrological mitigation of all impervious surfaces, the developer should look for opportunities to integrate water quality treatment for private trafficked impervious surfaces with the hydrological mitigation solutions. At the very least, hydrological mitigation for private trafficked impervious surfaces is likely to be provided through a detention tank downstream of the catchment, which will provide further water quality treatment. At the other end of the spectrum, the developer may choose to utilise a GD01 device, such as a rain garden, for hydrological mitigation and water quality.

5.4 This approach is agreed by Tim Fisher, Pranil Wadan, Charlotte Peyroux and Trent Sunich.

5.5 Paula Vincent remains concerned that there is cumulative effect from the lower contaminant generating trafficked surfaces that will have a negative impact on the receiving environment. This is in addition to the anthropogenic activities stated. For these reasons some form of bioretention treatment should be included.

5.6 Danny Curtis will need to discuss this technical approach further with his manager to confirm that this is appropriate.

5.7 This group of experts agrees to discuss this topic further when Healthy Waters response is available.”

In relation to para 5.6 above, Paula Vincent and Danny Curtis have provided the attached Memo (dated 10 November 2021). This additional information is being provided to the Hearing Panel and being uploaded onto the websites.

Para 5.7 (above) states the experts’ intention to discuss this topic further. However at this time the Parties are working to comply with the Hearing Panel’s Directions (dated 6 September 2021) which require the s.42A Addendum Report to be available tomorrow (Friday 19 November 2021) and the Applicants’ Rebuttal statements are to be available on the following Friday 26 November 2021. In these circumstances, as Facilitator, I have decided that it is not appropriate to schedule further expert conferencing on this topic. Should the Hearing Panel consider that further conferencing is required then they should Direct accordingly.

Memo

10 November 2021

To: Marlene Oliver, Charlotte Peyroux, Tim Fisher, Pranil Waden
cc: Nick Roberts, Rachel Morgan
From: Danny Curtis, Principal Catchment Manager
Paula Vincent, Principal Planner
Subject: Update on actions from 11 October 2021 Expert Witness Caucusing Stormwater for PC 48 – 50

Expert Witness Caucusing on 11 October 2021 focused on the level of water quality treatment required for different impervious surfaces and particularly on impervious areas of what has been referred to as 'mixed risk' which are impervious areas which have a range of traffic movements on them. A memo prepared by Tonkin and Taylor and Woods dated 7 October outlined the rationale for the proposed BPO for 'mixed risk' areas ('the memo').

The level of treatment needs to be documented in the Stormwater Management Plan and be designed to achieve both the Auckland Unitary Plan objectives and policies for water quality as part of managing the effects of the change in land use resulting from the plan changes and to meet the region wide Network Discharge Consent requirements.

As per paragraph 5.6 of the Joint Witness Statement dated 11 October, Danny Curtis has sought the advice of his manager, Kieren Daji, on whether the technical approach outlined in the applicants' memo was acceptable. Danny asked:

- Whether what has been provided to demonstrate a BPO through quoting sections of TR035 is appropriate.
- Whether providing a catchpit for JOALs and private car parks provides appropriate treatment.

Kieren Daji's reply stated:

- The BPO that has been presented is from the developers' perspective only and does not consider the receiving environment and what is required to protect it.
- The BPO presented is not compliant with the NDC and no detail has been provided to justify it as the BPO.
- There is no consideration of how an integrated stormwater management approach is being applied.

Danny and Paula remain of the view that the BPO presented in the memo is not adequate to meet NDC requirements or avoid or otherwise remedy or mitigate effects of the plan changes on the receiving environment.

Additional advice was sought by Danny Curtis from Nick Vigar, a water quality specialist who was involved in the Auckland Unitary Plan hearings and was part of the team who prepared TR035/2013.

His view is that water quality treatment is still required and that what has been proposed in the memo by the applicants is not adequate. In summary he noted:

- The DEQR methodology was identified through the PAUP hearings as being problematic and discontinued by mutual consent therefore he questions the appropriateness of relying on it in this discussion.
- Noted that the High Contaminant Generating Areas were intended to capture the worst contaminant activities across the region irrespective of the receiving environment. He believes that the BPO proposed does not consider the receiving environment.
- Agrees that in residential areas car washing is an activity that generates contaminants but disagrees with the analysis of contaminants of concern. Fine sediments and metals (from brake dust and tyre dust), along with hydrocarbons, PAHs and surfactants (detergents) are the primary contaminants of concern and the loads created by car-washing are extremely high. See the following reference:
<http://www.waterways.ac.nz/documents/Technical%20reports/WCFM%20TR%202011-004%20Stormwater%20Research%20ECAN14-12-2011.pdf>
- Nick notes settling devices as proposed as treatment for mixed risk areas will not address contaminants of concern and GD01 with some form of bioretention is the only treatment option that will address those contaminants of concern.
- Using underground detention tanks for both hydrology requirements and contaminant management was seen as undesirable as without sediment capture upstream of the device they quickly fill with sediment. GD01 states that "rainwater tanks may not be used as stormwater mitigation for unconnected impervious areas (such as roads, driveways and carparks).

Next steps for the Stormwater Management Plan

The process for adoption of the Stormwater Management Plan into the NDC is set out in the consent. There is the option of either party requesting that the Regulatory Manager make a decision on whether the SMP meets Schedules 2 and 4 of the NDC. The Regulatory Manager can either accept the SMP or decline it and the applicants would need to get their own discharge consent(s).

The issue of what surfaces require water quality treatment to what level under the SMP remains in contention. It is not in the scope of the plan changes for Commissioners to decide on the Stormwater Management Plan content. We do not believe what has been presented in caucusing represents the BPO for water quality treatment.

We have asked for an internal review of the Stormwater Management Plan, based on the SMP included in applicants' evidence and additional material in addenda to the Joint Witness Statements. The intention is to have a 'fresh pair of eyes' review the SMP to determine if the content meets NDC requirements. If not, we will request the Regulatory Manager to make a decision on the SMP which is the process indicated to Commissioners at the PPC 49 hearing. It would be the Regulatory Manager's role to call in the Technical Reference Group to provide additional advice to them along with information provided by the applicants and Healthy Waters to inform the Regulatory Manager's decision.

An update to Commissioners on the status of the SMP and next process steps is proposed to be provided prior to the reconvened hearing.