



17 August 2017

Greater Wellington Regional Council
Attn: Kirsty van Reenen – Senior Resource Advisor
Shed 39, 2 Fryatt Quay
Pipitea
WELLINGTON 6011

RE: T&T Landfill – Clean Water Diversions August 2017 Update

Dear Kirsty,

Mr Ray O’Callaghan (Engineering Director) on behalf of T&T Landfill has submitted the following information by way of a progress report including a revised programme for completing the clean water diversion works at the T & T Landfill –

- Letter dated 25 July 2017 - T & T Landfill, Surface Stormwater Diversion Works – Revised Program;
- Construction Programme (Gant Chart) - T & T Cleanfill Stormwater Diversion Project, July 2017;
- Drawing “2017 Construction Programme”

I have reviewed the revised programme and also met with Mr O’Callaghan along with the landfill operators on 26 July to discuss the works completed to date as well as the proposed changes for the remaining works including the time for completion of various aspects.

A summary of the works completed to date are as follows –

- The steep lower section of rock lined swale through to chainage 1030 m has been completed;
- The lower reach of the western diversion channel has been completed;
- The Mitchell Street contour drain has been completed.

At the time of the site visit the pumping solution for the Mitchell Street pond was not in place. Further investigations were undertaken subsequent to the site visit to identify the source of suspected residual inflows into the pond. Subsequent correspondence from Mr O’Callaghan (3 August 2017) confirmed that no further piped stormwater systems were discharging into the Mitchell St pond and that the observed elevated and persistent water levels in the pond were in fact due to the french drain outlet becoming blocked.

During a follow up discussion with Mr O’Callaghan on the 17 August 2017 it was explained by Mr O’Callaghan that the blockage had subsequently cleared by itself and the original proposal of plugging the french drain outlet with clay and installing a pumped outlet solution connected to the eastern diversion channel would be completed by the 31 August 2017. This is somewhat later than originally agreed completion date for this work (13 July 2017) but it is acknowledged that the majority of the clean water previously entering the Mitchell Street pond has already been intercepted by the completed contour drain. It was highlighted that expedient completion of the clay plug and pumped solution was still important and that it must be completed by the new deadline of 31 August 2017.

A notable change has been proposed with regard to the upper reach of the eastern diversion channel where it connects to the eastern dam as part of the latest programme. Due to operational constraints in this area it is proposed to temporarily connect the eastern dam outlet into the western diversion channel via a new swale running across the upstream extent of the fill. Mr O’Callaghan has confirmed that the western diversion channel has the capacity to take this additional flow in the immediate future as the western diversion channel has been designed for anticipated future climate change as well as having freeboard. This is accepted as being an adequate solution for the next 5 years and that once the upper eastern area of the landfill has been completed it will be possible to connect the eastern dam outlet to the eastern diversion channel.

At the time when the eastern dam is connected to the eastern diversion channel there could be consideration of whether it is desirable to maintain low flows from the eastern dam into the western diversion channel for maintaining the habitat that may have established and that the connection into the eastern swale may only be for taking excess flood flows. Monitoring of flows and the development of habitat in the western channel will be undertaken to help inform this decision when the time comes.

The other works, in particular the western dam foundation preparations and western diversion channel are progressing in line with the agreed programme and are still scheduled to be completed before the end of this calendar year. It is suggested that a further site visit is held before the end of September to verify that the Mitchell Street pond plug and pumped solution is fully operational and that the western dam embankment construction is progressing as anticipated. Please feel free to contact me if you have any queries regarding the above.

Yours faithfully,



Kyle Christensen

Director – Christensen Consulting Limited