

**BEFORE A COMMISSIONER APPOINTED BY THE OTAGO REGIONAL
COUNCIL AND THE CENTRAL OTAGO DISTRICT COUNCIL**

IN THE MATTER OF

the Resource Management Act 1991

AND

IN THE MATTER OF

applications by Cromwell Certified
Concrete Limited for resource
consents to expand Amisfield Quarry

**SUPPLEMENTARY EVIDENCE OF TRAVIS ALLISON
(OPERATIONS)
IN RESPONSE TO FOURTH MINUTE OF THE COMMISSIONER**

Dated: 28 March 2022

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1 **INTRODUCTION**

- 1.1 This evidence clarifies certain matters as requested by the Commissioner in a Fourth Minute issued on 9 March 2022.

2 **CLEANFILL DEPOSITION AND SITE REHABILITATION**

- 2.1 Cleanfilling does not form part of this proposal and there is currently no market for cleanfill supply in Cromwell. Notwithstanding this, Amisfield Estate Society requested that a condition be volunteered to require that if any cleanfill is brought to the site in the future for rehabilitation purposes (recognising the life of the quarry), its location would be recorded and reported on. This requirement would be in addition to the requirements of any resource consents needed to place cleanfill at that time.
- 2.2 Should cleanfill be brought to the site in the future, it would not be placed within any area of exposed groundwater in the deepened excavations. This is reflected in the proposed consent conditions.
- 2.3 The deepened excavation within the existing quarry is proposed to be backfilled with virgin excavated natural materials from the site, to above groundwater level.

3 **MOBILE REFUELLING**

- 3.1 The Commissioner's Minute states that if consents are granted, it is anticipated that conditions would require all vehicle refuelling to occur within a designated bunded area as per Mr Whyte's recommendation. If the applicant seeks an alternative approach, further information has been directed to be provided.
- 3.2 Fuel for all vehicles and machinery used on the site is stored near the workshop in a double bunded fuel cell. The fuel cell is a certified, modern enclosed tank provided by Z Energy. It has been installed on an impervious pad, as can be seen in Figure 1 of Appendix 1 to my evidence. If the cell were to leak, all fuel would be contained inside the unit itself. The lubricants can be bunded to contain 125%.
- 3.3 Currently, re-fuelling of quarry vehicles and machinery takes place at the fuel cell and in the lower pit area via mobile trailer tanks. Spill precaution measures are undertaken when re-fuelling, both at the fuel cell and when using the mobile tankers. Staff are trained in spill

management and there are emergency response procedures in place. Spill kits are located on the mobile tanker and next to the fuel cell. Any spills are recorded and reported to me.

- 3.4 Operations on the site can be managed so that the loaders, dump truck and watercart are only refuelled at the designated refuelling area (i.e at the fuel cell). The only piece of machinery which will need to be refuelled by a mobile tanker is the long-reach excavator.
- 3.5 The long reach excavator will use approximately 700L of diesel per day and will require re-fuelling each operating day. It will operate mostly in the eastern end of the quarry (Lot 3) once deepening of the existing quarry has been completed. Once the excavator has started work within Lot 3, it will remain in that area until excavations are complete.
- 3.6 It is not practical, safe or efficient to detach the boom from the excavator and have it travel back to the designated refuelling area at the workshop (an approximately 1.8km return trip from Lot 3) for the following reasons:
- (a) It is a large piece of equipment and travels very slowly. It is not designed to routinely travel such distances.
 - (b) It is a tracked machine that is wide and heavy, and would have multiple blind spots if it were to navigate back through the quarry and around the stockyard/workshop areas where there is a lot of activity.
 - (c) There is no safe daily pathway for the excavator to come out of the expansion land and then walk 3.6km there and back to refuel along SH6 and the right of way.
- 3.7 Mobile refuelling of the excavator is proposed to occur using a method which is similar to that used to refuel passenger jets. It will use a Banlaw BNM800H Dry Break Nozzle which incorporates a shut-off valve and sensor system. This system prevents fuel from leaking out over the nozzle and over-filling of the tank. A copy of the Product Data Sheet for Dry-Break Diesel Refuelling Nozzles is attached to my evidence as **Appendix 2**. Refuelling using this system offers no pathway for contamination of groundwater.

4 **CONVEYOR**

- 4.1 I confirm that if consents are granted to quarry the expansion land, a conveyor will be used exclusively to transport aggregate from that area back to the process plant. Haul trucks will not be used.
- 4.2 Trucks will only be used in the expansion area to assist with the stripping and creation of the bunds (during winter months). After those works are completed, there will be no trucks operating within the expansion land.

Travis Allison

28 March 2022

Appendix 1: Existing Certified Permanent Fuel Tank



Figure 1: DC100 Enclosed Fuel Tank (Note: Spill kit is located in yellow bin in the foreground).

fuel chief		CONSTRUCTION MATERIAL	
AUSTRALIA & NEW ZEALAND		CARBON STEEL	
SUITABLE FOR C1/C2 COMBUSTIBLE LIQUID		DESIGN LIQUID DENSITY (kg/L)	
<ul style="list-style-type: none"> Tank built to AS1692 – 2006 Category 3 Only transport when empty To be installed on a flat level surface To be installed and maintained in accordance with local standards 		1.0	
MODEL		POSITIVE DESIGN PRESSURE (kPa)	
DC100		23.8	
SERIAL NUMBER		NEGATIVE DESIGN PRESSURE (kPa)	
DC100- 0088		ATMOSPHERIC	
SAFE FILL (Litres)		LENGTH (mm)	
9900		2996	
DATE OF MANUFACTURE		WIDTH (mm)	
7 - 2019		2310	
FABRICATOR NUMBER (NZ)		HEIGHT – TANK ONLY (mm)	
FAB0069		2550	
		WEIGHT – TANK ONLY (kg)	
		2470	
		DESIGN NUMBER (NZ)	
		TNK15025	

Figure 2: Fuel Tank Specification Plate



Figure 5: Refuelling hose stored internally behind locked door

**Appendix 2: Product Data Sheet for Dry-Break Diesel Refuelling
Nozzles**

Banlaw ReFuelling™

Thank you for purchasing this high quality Banlaw product. Please read through and understand the information in this Product Data Sheet (PDS) BEFORE installation or operation of the product to avoid accidental personal injury or property damage.

1 PRODUCT DESCRIPTION

Banlaw Dry-Break Diesel Refuelling Nozzles are fluid (e.g. diesel fuel) dispensing couplings which incorporate both calibrated (automatic) pressure shut-off, and “dry break” functions.

Banlaw introduced their first dry-break diesel refuelling nozzles into the market in the 1980’s in response to a requirement for a more ergonomic and robust “industry standard” nozzle rated for higher diesel flowrates.



Figure 1 - Examples of Banlaw Nozzles

Figure 1 shows examples of current Banlaw 800 and 1000 series Nozzles. The “800” refers to the maximum rated diesel flowrate of 800LPM (211GPM) of the 800 series, and likewise the “1000” refers to the maximum rated diesel flowrate of 1000LPM (264GPM) of the 1000 series.

Banlaw Nozzles are available in a variety of models (variants) within each series, including the Banlaw FuelTrack™ Nozzles incorporating the Banlaw proprietary automatic (vehicle) identification – i.e. “auto ID” – feature. Banlaw Nozzles also incorporate other features including the patented[#] means of adjusting the automatic shut-off setting ([#] US 6,622,760).

The 800 series “Mining” Nozzles are compatible with the industry standard refuelling “receivers”, commonly used as the means of refuelling plant equipment and smaller bulk diesel storage tanks in the mining and construction industries. Other 800 series models – e.g. “Rail” – and Banlaw 1000 series Nozzles are only compatible with the matching Banlaw receiver.

This document specifically covers the principal specifications, installation, commissioning, operation, maintenance and servicing requirements and guidelines of Banlaw 2” (DN50) Diesel Refuelling and Fluid Transfer Nozzles. End-users requiring additional information should refer to the Banlaw website, contact Banlaw or your nearest authorised Banlaw distributor. Similarly, persons wanting information other Banlaw refuelling products and Nozzle accessories should also refer to the website or same contacts.

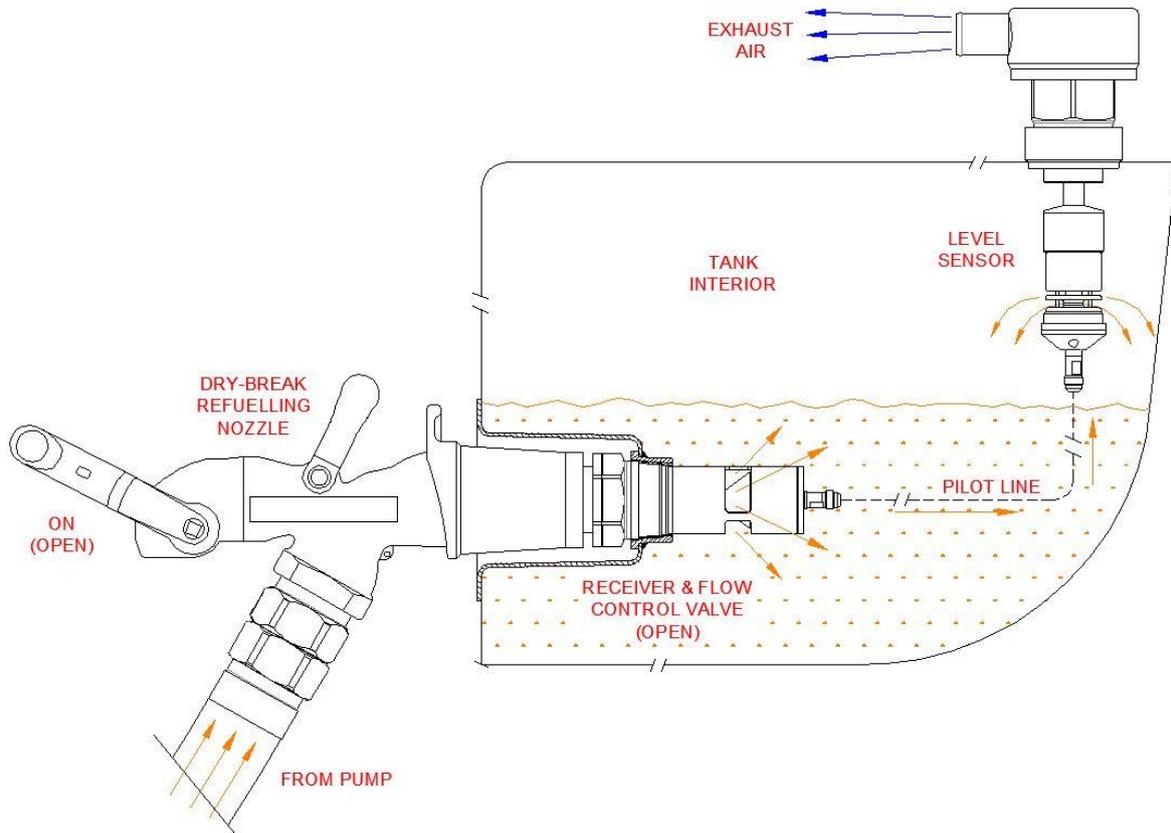


Figure 2– Example of a “Pressurised Tank” Refuelling System with Separate OFF

Key Features

Since their inception, Banlaw refuelling nozzles have evolved as a key part of Banlaw’s commitment to innovation and continuous improvement. Considered a market leader, Banlaw nozzles provide industry-leading standards of safety, reliability, durability and serviceability. Designed to provide an extended service life, some of the earliest generation of Banlaw nozzles are still being serviced and returned into operation!

Key advantages of Banlaw nozzles include;

- Patented means of adjusting the automatic shut-off (closure) setting, accommodating a **wider variety** of refuelling applications.
- Banlaw 800 model “Mining” series Nozzles (e.g. BNM800M) suit **all** industry standard Receivers, e.g. Wiggins ZN2 & JNX series, Caterpillar, FloMAX FR series, etc.
- Industry-proven **ball lock** latching mechanism, providing superior safety and durability.
- Wearing and structural parts manufactured from metals, **not** plastic.
- Parts manufactured from **stainless steel** for superior durability.
- **Serviceable** by accredited (trained) Nozzle Repair Agents in most regions and countries.
- **“Arctic”** (cold temperature) models available for safe and reliable operation in extreme cold climates.
- High **quality** OEM fluid seals used in all dynamic sealing applications, not inexpensive O’Rings.
- Manufactured, assembled and factory **tested** in accordance with Banlaw’s ISO9001 certification. Every nozzle is traceable by its serial code.
- Banlaw FuelTrack™ models available to support the **automatic identification (auto ID)** functionality of a Banlaw FuelTrack or ResTrack system – arguably the most **secure** fuels and resource management system of its kind available in the market.



The fluid flow path through a connected Nozzle and Receiver assembly is controlled by the operating handle (T-Handle) of the Nozzle. Whilst the operating handle is latched in the OFF position, the fluid path is closed. The flow path is open whenever the handle is not latched in the OFF position, and fully open when the handle is on the ON position. The fuel flow through the Nozzle and Receiver may be manually controlled by the operator. The Nozzle will automatically close once the internal fluid pressure reaches the shut-off pressure.

The dry-break feature of the nozzle will prevent the discharge of fuel from the Nozzle outlet irrespective of the position of the operating handle.