

R. L. H. V
Taggart joint hearing
10 May 2024

In the matter of Taggarts Resource Consent Application.

Site- Rangiora Racecourse

Dear Commissioners-

I oppose the application by Taggarts to operate a quarry in the Rangiora Racecourse.

Land use to excavate.

Land use to establish, maintain and operate an aggregate quarry.

The basis for Taggarts application is the increased economic returns resulting from reduced heavy vehicle movements to the benefit of the applicant. This is not a sound basis to disrupt the environment and place the health safety and wellbeing of residents at risk.

Alternative more appropriate locations have not been investigated.

Rangiora's North West region is typically residential property with rest homes, schools, pre-schools and retail business areas, campground, and reserves. The application has and continues to distress residents, business owners, the retired and the local school communities. The impact of the application alone has widespread health and wellbeing concerns and there is no consideration on the applicant's behalf for this. Further the property values will be impacted if this application should be successful, and this will be of concern to the mental health of residents. People's homes are their sanctuaries and their greatest assets, should a quarry appear then buyer interest in the area will demise, this is common sense. How will Taggarts mitigate this concern.

The commissioners and Environment Canterbury have a mandate to protect the environment, and by simple definition the residents are the most important component of the environment, again Taggarts do not consider the residents wellbeing and health in the application.

Discharge Contaminants to Land-

Taggarts state that, Virgin Excavated Natural Material or VENM, will be imported to back fill the open excavation. Taggarts do not provide evidence of how testing and monitoring will be conducted to ensure all VENM is considered "clean fill" material.

Further the applicants' descriptions of where the VENM will be sourced from is not made clear. The determination of "virgin material" does not confirm it is "clean" and therefore this requires much greater substantiation.

If soils are imported from rural locations, as the result of earthworks from subdivision developments or civil works to construct engineered building platforms, then it is almost certain to contain chemicals from farming activities, which would be typically above background or BRANZ levels. If the VENM material is imported from city developments, then there is a high likely hood that the VENM will contain asbestos, heavy metals and hydro-carbons.

The application should state, that only "clean fill" be deposited. Within the submission there is no clear evidence for testing and compliance to ensure soils are below BRANZ or background levels of contamination. Tests for heavy metals, hydrocarbons and asbestos at minimum should be necessary for each imported load of VENM, Taggarts have not provided this evidence.

So, water quality is at risk if contaminated material above back ground levels is introduced as back fill material, as the water table is only circa 3.0meters below the FGL and natural filtration to ground water occurs during rain events, then naturally ground water can be contaminated. Further to this concern when VENM is freshly deposited and not consolidated/compacted then the filtration of contaminants will be rapid to ground water.

The application should state, that every imported load of VENM is required to be tested and cleared of contaminants ensuring all material would be below the background levels of contaminants, Taggarts do not have robust plans to manage this concern.

I have experience in removing contaminated soils in civil works and I can comment that a visual inspection is insufficient, laboratory testing is the only way to fully ensure clean material is imported. In my experience soils are not consistent in how contaminants are disbursed across natural ground and so this further drives the need to test all material to site.

Taggarts have indicated two locations for the stockpiled VENM however there is no indication for implementing dust suppression for these stockpiles and further I cannot see that consideration is given to silt run off to these stockpiles. Bunds and gantry sprinkler systems are the only reasonable and practical mitigations to manage these concerns, water trucks would be ineffective.

Discharge Contaminants to Air-

Taggarts evidence on the mitigations of dust suppression fail to be practical. The wind monitoring typically uses average wind speeds, however the modelling should consider peak expected wind speeds. By using averages, the modelling embellishes the actual effects.

Taggarts have indicated that although they seek consent to excavate up to 2Ha at any one time, they in fact intend to only excavate .5Ha of that area at any one time. They do not guarantee this though, and a staging plan is not provided to support this claim. Therefore, it is more likely that while they say they have intentions to excavate a smaller area, should it be, more profitable to excavate the entire 2.0Ha then they will do so, they do not state otherwise.

This would increase the surface area of material needing dust suppression. Hydraulic reticulated design or sprinkler systems are not prescribed in the submission as evidence of how the dust will be mitigated. And so, it must be assumed that the intention is to utilise a water trucks to dampen the ground. This will be in-effective.

- Water trucks will not keep pace with hot dry conditions and if needed on a Sunday or outside of operational hours then this comes with noise disturbance afterhours.
- Water trucks will not dampen down battered excavation faces, this needs to be an engineered specific solution by way of gantry reticulated spray jets.
- How will Taggarts ensure that all after hours wind events will be mitigated? This remains subject to dependance on workers, this will come with expectations for human error and delays in reaction time.
- A dust suppression system would need to be fully automated and be deconstructed at the completion of each stage and re-established prior to commencing new stages.
- The application does not provide actual water demand for dust suppression. It is not possible and over-use will result. The calculations are not substantiated.

I note, Dust fencing is used in quarries in overseas quarry operations and is considered best practice globally, this is the only clear way of fully mitigating the issue of contaminants to air. Taggarts have not investigated this.

A responsible Contractor who has environmental sustainability at heart and who is interested in safeguarding the life-supporting capacity of air, water, soil and ecosystems would have included this in the application.

Water Permit-

Taggarts are applying for approval to dig to a depth of 5 meters, the water table can be as high as 3 meters. And there is a mandate to be clear of ground water by one meter.

There is no clear and robust framework around how the triggers would be managed to ensure there is no breach of this one-meter rule.

- How will the ground water level be monitored?
- What is the clear reaction time to move 20,000m³
- Taggarts note that they can move this amount of material in 4-8 hours.

I question Taggarts capacity to move this amount of material without substantially more resources. Currently it is planned for a digger, a loader and a motor scraper to be on site.

Should 2Ha of open excavation need to be filled to a level of 1 meter in depth then tip trucks, additional diggers and additional motor scrapes will be necessary. Taggarts approach is an under resourced plan and will be subject to lead time to transport the machinery to site.

Should Taggarts make decision to collapse the pit walls then they could be in breach of the 2Ha maximum pit size.

Further, mechanical failures occur on heavy machinery and diesel and hydraulic oils will contaminate ground water when this occurs. This will happen and there are no mitigations.

Within Taggarts response to the water use questions they do not respond with absolute understanding, instead they have descriptions like predicted, and approximately, there is no clear calculations, and they suggest that they are confident that sufficient water is available, is this good enough, should they be confident or should they know. The response suggests there are assumptions being made.

In closing let us broadly bullet point this application....

- Taggarts are requesting to increase traffic heavy traffic movements.
- Taggarts are requesting to place acoustic bunds to the east and west but not the south where the greatest concentration of residential properties is.
- Taggarts have no concern for existing residential property values.
- Taggarts have no concern for the mental health and well being of residents.
- Taggarts do not consider dust suppression or silt run off from stockpiled VENM.
- Taggarts do not have a plan to eliminate contaminated VENM.
- Taggarts do not fully understand the water demand, but say they are confident.
- Taggarts are requesting permission to discharge harmful and nuisance dust to the air.
- Taggarts are then requesting permission for the use of quality ground water to mitigate the dust they want to discharge to the air.

This application is not fully planned and lacks a lot of detail and evidence of systems and processes. This application is not in the interests of the protection of the environment or the well-being, health and safety of residents or natural resources.