

**From:**  
**To:** [Hearings](#)  
**Cc:**  
**Subject:** Notifications Consent Submission: Group 592  
**Date:** Friday, 27 November 2020 1:29:23 PM  
**Attachments:** [CDHB-Airborne-dust-and-health-effects.pdf](#)

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**Group ID: 592**

**Consent name:** Taggart Earthmoving Limited

**Consent number:** CRC204106, CRC204107, CRC204143, CRC211629, RC205104

**Name:** Christina and Dean Foster

**Care of:**

**Mailing address 1:**

**Mailing address 2:**

**Suburb:**

**Town/City:**

**Post-code:**

**Country:**

**Mobile phone:**

**Work phone:**

**Home phone:**

**Email:**

**Contact by email:** No

**Is a trade competitor:** No

**Directly affected:** Yes

**Consent support/hearing details**

- CRC204106: oppose | NOT to be heard | will NOT consider joint hearing
- CRC204107: oppose | NOT to be heard | will NOT consider joint hearing
- CRC204143: oppose | NOT to be heard | will NOT consider joint hearing
- CRC211629: oppose | NOT to be heard | will NOT consider joint hearing
- RC205104: oppose | NOT to be heard | will NOT consider joint hearing

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**Reasons comment:**

We oppose the consent applications for the following reasons: 1) The proposed quarry site is too close to neighboring properties. The quarry site boundary is only 130 meters from the Rangiora Eco Holiday Park which has permanent residents, 200 meters from the

Arlington residential subdivision, 300 meters from an early learning childcare facility and 350 meters from a public park. International standards applied elsewhere in the world to quarry set back from neighboring properties are 500 to 600 meters. 2) Increase in air pollutants (dust) being released into neighboring residential properties, retail businesses, child care facilities, and aged care facilities. Assumptions made in the application on the environmental impact from dust generation from the quarry operation are flawed. The nuisance level and health hazards from dust produced by the quarry will be detrimental to those living close by. I refer to a community fact sheet prepared by Canterbury District Health board issued on 19/06/2018 relating to "Airborne dust and health effects" which states: "People who may be most vulnerable to health effects from dust. Some people may experience more severe outcomes when exposed to dust. This includes: - infants and young children - the elderly - people with respiratory condition's, such as asthma, bronchitis and emphysema - people with heart disease, and - smokers." The proposed operation will have a negative impact on our family's health and in particular D Foster - resident at the above address who suffers from chronic asthma and is sensitive to dust particles. In addition we have two young children (6 years and 5 years of age) who enjoy outdoor activities at our home and in the neighboring Arlington Park. 3) The proposed activities will cause an increase in noise caused by the heavy machinery required for the operation to be carried out at the proposed site. Noise pollution generated by proposed quarry operations is significantly different by way of level and duration to that generated on the average rural zoned property. This will have negative health impacts on C Foster - resident at the above address who is employed by an essential service in a role requiring shift work (shifts commencing from 0345 and finishing up to 0100 hours) and as such is required to sleep at home during the proposed hours of operation for the quarry. 4) The proposed quarry site is situated in a Community Drinking Water Protection Zone. This zone has been established to protect the aquifer that supplies a number of bores/wells and the reserve water supply for the Rangiora community. This aquifer must be protected from potential contamination. The proposed excavation down to "1 meter above the water level at the time" will be below the highest recorded water level (HRGWL), putting water in the aquifer below at risk. Remediating the quarry site by dumping potentially contaminated clean fill below the HRGWL will contaminate the aquifer. 5) Diversion of flood waters will put nearby properties at risk. The mitigations proposed by the applicant do not adequately address the effects of the dust and noise, potential drinking water contamination, and the loss of amenity value to the local community. The Waimakariri District Council has an obligation under Objective 12.1.1 of the District Plan to; Maintain the amenity values and a quality of environment appropriate for different parts of the District which protects the health, safety and wellbeing of present and future generations.

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**Consent comment:**

We ask the consenting authorities to reject the following consent applications: Canterbury Regional Council CRC204106 – A land use consent to excavate material. CRC204107 – A discharge permit to discharge contaminants into air from an industrial or trade premise or process. CRC204143 – A discharge permit to discharge contaminants to land from backfilling with virgin excavated natural materials. CRC211629 – A water permit to divert floodwater. Waimakariri District Council RC205104 - A land use consent to establish, maintain and operate an aggregate quarry in the Rural Zone. If the application should be approved we would like the following conditions included: 1) The hours of operation are limited to: 0700 to 1500 hours; Monday to Friday For the avoidance of doubt, there shall be no extraction or cartage on Saturdays, Sundays or public holidays. 2) Material stockpiled on the site shall only be sourced from within the site. 3) All dust generating activities shall cease during dry weather conditions (i.e. no rain has fallen during past 24 hours and ground conditions are visibly dry).



## Airborne dust and health effects

### Community Fact Sheet

#### What is dust?

Dust is a common air pollutant. Dust consists of particulate matter (PM) in the air. Particulate matter describes very small solid or liquid particles in the air.

Dust particles vary in size. Some of these particles are big enough to be seen, while others are so small that they are invisible to the human eye. Particles smaller in size than 10 µm (micrometre) diameter are known as PM10. Particles less than 2.5 µm are called PM2.5.

Dust can come from natural sources or human activity.

#### Limiting exposure to airborne dust

Reducing your exposure to dust is a good idea and may help to reduce health-related issues. When you are irritated by dust or on poor air quality days consider:

- Reducing outdoor activity.
- Reducing vigorous exercise, especially if you have asthma or a breathing-related condition.
- Staying indoors in air-conditioned premises if possible and ensure regular maintenance of air conditioner filters and close windows and doors.
- Vacuuming indoors regularly with a high efficiency particulate air filter.

#### Possible health effects from dust exposure

Health effects from dust depend on the size of the particles, the amount of dust there is, the composition of the dust, how long people have been exposed to dust, and people's health.

The most common symptoms experienced during a period of high dust exposure are irritation to the eyes, ear, nose, throat and upper airways.

Small or fine particles (i.e. particles less than 10 µm), can get deeper into the respiratory tract and lungs and may cause breathing-related problems.

#### People who may be most vulnerable to health effects from dust

Some people may experience more severe outcomes when exposed to dust. This includes:

- infants and young children
- the elderly
- people with respiratory conditions, such as asthma, bronchitis and emphysema
- people with heart disease, and
- smokers.

## Specific types of dust

Specific components of ambient dust may have the potential to cause health effects.

Examples include:

- Compost dust may contain soil microbes, pathogens, including legionella
- Dust from contaminated land sites may contain toxic metals e.g. lead
- Pollens
- Particulate matter from wood smoke or vehicle exhausts

## Respirable crystalline silica (RCS)

RCS is a component in some ambient dusts.

Although RCS carries a known risk of respiratory disease, including lung cancer, in occupational settings where exposures are typically high, the risk to non-occupational groups (including residents living near quarries) from lower level RCS exposures is not well understood. Taking a precautionary approach by generally limiting exposure to dust is recommended.

In 2018, the Christchurch City Council, Environment Canterbury and the Canterbury District Health Board ran a three-month air quality monitoring programme, specifically looking at RCS risk in the Yaldhurst area. The results found no public health risk from RCS.

## What to do if you experience symptoms

If you experience symptoms related to dust exposure, phone Healthline (0800 611 116) for free 24-hour health advice or see your doctor.

If you have asthma or another respiratory condition and you develop symptoms such as shortness of breath, coughing, wheezing or chest pain, follow your prescribed treatment plan. If symptoms do not settle quickly, seek urgent medical advice.

## For further information

Report an environmental issue: <https://www.ecan.govt.nz/report-an-environmental-incident/> or phone (03) 366 4663 or 0800 765 588

About work place exposure to silica see: <https://worksafe.govt.nz/>

About air pollution see: <https://www.cph.co.nz/your-health/air-quality/> and <http://www.letscleartheair.co.nz/>

About the Canterbury Air Regional Plan see: <https://www.ecan.govt.nz/your-region/plans-strategies-and-bylaws/canterbury-air-regional-plan/>