

Elevated Arsenic Levels

Background

Elevated levels of arsenic have been found in road reserves in the residential subdivision off Riverside Road in Frankton. Levels are below the national environmental standard for recreational activities and parks (80mg of arsenic per kg of soil) but some are above the standard for residential land (20mg/kg)

The law requires Queenstown Lakes District Council to record the information about any known contamination, including arsenic levels above the standard for residential land, and to note this on Land Information Memoranda (LIMs) relating to property on or near where elevated levels have been found.

WHERE DID THE SOIL COME FROM?

Contractors engaged by Remarkables Park Ltd (RPL) brought in soil from elsewhere in the 1990s when the subdivision was being developed. This soil was used to establish the roads and berms; it was not used within the sections that were subsequently built on. The source of the imported material is not known.

At that time there were no legal requirements to test soil before commencing residential subdivisions and RPL complied fully with all regulations in place at the time. The National Environmental Standard soil guidelines were introduced in 2012.

WHAT IS ARSENIC?

Arsenic is a heavy metal that occurs naturally in the earth's surface. It is associated with gold and schist rock, which is common in the Wakatipu area. Natural arsenic levels in soil can range from 1-40mg/kg of soil. Levels of under 20mg/kg are most common.

Humans are generally accustomed to exposure to small amounts of naturally occurring arsenic in the environment and that type of exposure is not thought to be harmful.

Worldwide, health issues related to arsenic are most common where it has been found in water supplies. Queenstown's water supply, which supplies the Frankton area, has been tested and has barely detectable levels of arsenic.

The Medical Officer of Health is confident that there is no risk relating to arsenic associated with the water supply in Frankton.

Health

The Medical Officer of Health, Dr Derek Bell says the level of arsenic on a property would need to be established to understand the degree of personal exposure and any personal health effects. Exposure would depend on the amount of soil ingested through gardening and from eating home-grown produce and the duration of that exposure. Eating soil is most commonly associated with small children. The health of people with no or limited exposure is unlikely to be affected.

The environmental standards are very precautionary and assume that a significant proportion of a person's diet came from home-grown produce over a lifetime. Anyone with health concerns is advised to consult their general practitioner. Information on arsenic and health is online via the Ministry of Health website www.health.govt.nz – type “arsenic” into the search box.

Property

The law requires QLDC to record information about any known contamination and to note this on Land Information Memoranda (LIMs) relating to property on or near where elevated levels have been found. QLDC has no discretion in this. Section 44A(2) of the Local Government Official Information and Meetings Act sets out all the matters a Council must include in a LIM. This includes the “likely presence of hazardous contaminants”.

QLDC has not taken samples from private property to test for arsenic. However, any LIM requested in the area will now record the information held about the levels of arsenic in the adjacent road reserve areas.

Owners and residents may choose to have samples taken from their property and analysed at their own expense. A typical test costs \$40-50 plus costs of collecting the sample. QLDC can provide a list of private laboratories which will provide this service.

If owners choose to have samples from their property tested, they can choose whether to share the results with QLDC. If the results show arsenic levels that are lower than the residential standard of 20mg/kg of soil and you advise QLDC, we are able to record that the levels are below 20mg/kg for the property and include the evidence for that.

THE STANDARD WORDING QLDC IS PLACING ON LIMs IS:

Arsenic – The Council holds information about arsenic levels as a result of surface soil sampling undertaken on its behalf by Davis Consulting Group from road reserve areas outside of private property in this area. The recorded arsenic levels are between the National Environment Soil Contaminant Standard for arsenic for residential soil (20 milligrams per kilogram of soil – mg/kg) and for parks / recreational land (80 mg/kg) as shown in the attached plan and results.

The wording used on the LIMs of properties where the Council is provided with results for that property says:

Arsenic – The Council holds information about arsenic levels as a result of sampling undertaken on private land at this site as attached.



Removing Soil

Remarkables Park Ltd has offered to accept delivery of soil from residential properties in the Riverside Road subdivision that is being replaced with new soil. RPL will dispose of the contaminated soil in a secure containment site, subject to obtaining the appropriate resource consents. RPL has also offered to provide residents with replacement soil for collection. Please email Brian Fitzpatrick for more information: b.fitzpatrick@remarkablespark.com

Want to get into more detail?

Please contact any of the following for further information:

SOIL DISPOSAL AND REPLACEMENT

Remarkables Park Limited:
03 442 3084

LAND INFORMATION MEMORANDA

Queenstown Lakes District Council:
03 441 0499 and ask for the Duty Planner

HEALTH-RELATED QUESTIONS

Contact your family doctor for any concerns about personal health.

Contact Public Health South for general inquiries about arsenic and health: 03 450 9156

