

## **ASX ANNOUNCEMENT**

**19 DECEMBER 2014** 

## RADIOLOGICAL BASELINE STUDY REPORT FOR THE KUUSAMO GOLD PROJECT COMPLETED

Dragon Mining is pleased to announce that the final report for the Radiological Baseline Study on the Kuusamo Gold Project in northern Finland, has been received from the Finnish Radiation and Nuclear Safety Authority ("STUK").

The aim of the radiological baseline study was to examine the natural radioactivity in the environment, around the Kuusamo Gold Project area. The baseline study is required when planning a mining operation in areas that may contain elevated radiation levels.

STUK reported that samples were collected in 2012 and 2013 from various environmental settings in the Juomasuo area, which hosts the Juomasuo, Hangaslampi and Pohjasvaara gold deposits. The samples were analysed for concentrations of naturally occurring radioactive substances such as uranium (U-238 & U-234); radium (Ra-226 & Ra-228), lead (Pb-210) and polonium (Po-210). In addition external radiation dose rates were measured onsite and the area was measured for outdoor radon.

It was concluded from the study that radioactive concentrations in the Juomasuo area and its near vicinity are comparable to the concentrations measured elsewhere in nature. The highest concentration levels were measured in the sediment samples, water plant, mosses and fish and were similar to samples of the same kind, collected elsewhere in Finland. The activity levels in environmental samples showed no significant annual variation, any variation linked to the sample type and location. The natural products in the area such as mushrooms, berries, as well as foods, fish, agricultural products, game and reindeer meat can be used safely as normal.

A full transcript of the English translation of the report summary is provided in Appendix 1.

A copy of the final report in Finnish and the English translation of the report Summary are available on the Dragon Mining website www.dragon-mining.com.au.

For and on behalf of **Dragon Mining Limited** 

## Appendix 1 - English Translation of the Summary from the Juomasuo Area Radiological Baseline Study Report

Dragon Mining is currently investigating the possibility of commencing gold mining operations in the Juomasuo area, north of the Kuusamo township in northern Finland. Elevated concentration levels of uranium occur in certain localities in this area, but no continuous zone of uranium at high concentration levels has been observed. The concentration level of uranium in the rock material in the Juomasuo area is mainly low.

A study of the current state of the natural environment has included a radiological baseline study of the Juomasuo area. The radiological study was focused on the Juomasuo area, which hosts the main gold deposits (Juomasuo, Hangaslampi, Pohjasvaara) that will be mined if mine development commences. The Juomasuo area is also one of the alternative locations for the proposed processing facility. The radiological study was commenced in the autumn of 2012 and continued into 2013 with the completion of additional sampling. The Finnish Radiation and Nuclear Safety Authority (STUK) has undertaken the baseline study on a consulting basis.

During the baseline study samples from various environmental settings were collected including air dust samples, river, lake and groundwater samples, soil and sediment samples and a variety of mosses, berries, mushrooms, water plants, venison, fish and farming products. The samples were analysed for concentrations of naturally occurring radioactive substances such as uranium (U-238, U-234), radium (Ra-226, Ra-228), lead (Pb-210) and polonium (Po-210). In addition, external radiation dose rates were measured on-site and the area was measured for outdoor radon.

Radioactive concentrations in the Juomasuo area and its near vicinity are comparable to the concentrations measured elsewhere in the nature. The highest radioactive concentration levels were measured in the sediment samples, water plant, mosses and fish. The radioactive concentration levels were similar to samples of the same kind, collected elsewhere in Finland. The activity levels in environmental samples showed no significant annual variation. Variation was linked rather to the sample type and sampling location. The natural products in the area such as mushrooms, berries, as well as foods, fish, agricultural products, game and reindeer meat can be used safely as normal.

The radiation dose for a representative inhabitant of the area was calculated based on the analysed results. The representative was assumed to live nearby the Juomasuo area, use water from his own well and collect natural products and eat local fish. In addition, external radiation and radon concentration in outdoor air was taken into account in the dose calculation. The calculated effective radiation dose was 0.43 mSv per year. This is 13% of the average annual dose of a Finn. The above analysis is based on the calculation of the highest measured activity concentrations and exposures and therefore the actual radiation dose is smaller than presented here. The highest dose was caused by drinking water, about half of the calculated dose. The second-largest dose was caused by eating fish. The proportion of berries, mushrooms, external gamma radiation and radon in outdoor air from the total dose is only about 20%.