Mail to:
Statements of Concern
Environment and Parks, Approvals Unit
5th Floor, South Petroleum Plaza
9915 108 Street
Edmonton, Alberta, T5K 2G8
Alternative email to: aep.waapplications@gov.ab.ca

Subject: Mountain Ash Limited Partnership, Summit Pit application to AEP, Location (W1/2 31-026-03-W5). DAPP0001717 & EMS 001-00481044

I wish to register a Statement of Concern with Alberta Parks and Environment regarding the proposed mining of gravel by Mountain Ash Limited Partnership's Summit pit which will be built in close proximity to Big Hill Springs Provincial Park.

The grounds for this Statement of Concern are as follows:

1. The winter frost line in the Rocky View County and Calgary area is at approximately 3 to 4 metres depth. Given that Mountain Ash Summit will be removing up to 25 metres of gravel and overburden from the aquifer, this will have the effect of lowering the winter frost line of the recharge zone to follow the new topography. The implication of this is that removal of 25 metres of gravel and overburden from the recharge zone, most of which does not freeze in winter, winter water flow to Big Hill Springs could be reduced or possibly cease to flow completely during part of the winter season.
2. Removal of 25 metres of gravel and overburden will likely have an effect on summer water temperatures in the recharge zone. Warmer water temperatures flowing through to the springs could possibly affect fish habitat in Big Hill Creek.

3. Given that Mountain Ash Summit will be removing 13 wetlands close to Big Hill Springs Provincial Park, this will likely affect ground water recharge to the springs in the park. The result will be likely be reduced water flow to the springs.
4. Thick, laterally extensive aquifers such as that of the Big Hill Springs aquifer serve to remove contaminants as water flows through the reservoir sands and gravel. Removal of 25 metres of gravel, sand and overburden may well increase contaminant flow which will make its way to Big Hill Springs, and then into Big Hill Creek. These contaminants could be detrimental to existing fish habitat in Big Hill Creek. The contaminants could also affect the health of the thousands of Albertans who use Big Hill Springs Provincial Park as a recreational resource. It is not uncommon to see young children splashing and playing in the spring waters in the park.
5. Big Hill Springs Provincial Park is visited and appreciated by tens of thousands of Albertans, mostly from Rocky View County, Cochrane and Calgary. There is a very strong chance that the proposed gravel extraction will negatively impact the enjoyment and nature appreciation currently provided by the park. Water flows will likely be reduced. Much of the proposed gravel extraction is due west of the park. Prevailing westerly winds will increase dust transport to the vicinity of the park, thereby reducing the appreciation of the natural area. The noise from the industrial-scale activity including bulldozers, graders, rock crushers, large trucks and conveyer belts will for sure be heard in the park, detracting from the positive natural experience of the park.

6. I write best-selling tour books encouraging Albertans to get out and explore scenic landscapes across Alberta. In writing these books, I have researched and written specifically about Big Hill Springs Provincial Park, as well the thermal Springs Banff Springs National Historic Site in Banff National Park, and Miette Hot Springs in Jasper National Park. I know full well the value of these springs as a natural recreational and tourism resource to Albertans and Canadians. There is always a sense wonderment to see spring water flowing from the ground.

Dale Leckie, Ph.D., P.Geol.

Personal Background

Dale Leckie has a Ph.D. in Geology from McMaster University, a M.Sc. in Geography from McMaster University and B.Sc. in Geography from University of Alberta. Dale is a professional geologist who has worked as a scientist at the Geological Survey of Canada and as chief geologist in a large Canadian energy company. He has edited numerous books and published more than one hundred scientific, refereed papers, many on the geology of western Canada. He is an adjunct professor in the Geoscience Department at University of Calgary. Dale has been president of the Society for Sedimentary Geology (SEPM) and president of the Canadian Society of Petroleum Geologists (CSPG). Dale is recognized for his long-term contributions to geology and is an honorary member of SEPM and CSPG. He has been awarded numerous awards from several geological societies. He has been leading geological field trips in western Canada throughout his career. He wrote a very popular book “Rocks, Ridges and Rivers: Geological Wonders of Banff, Yoho and Jasper National Parks”. He followed this up with his best-selling book “The Scenic Geology of Alberta: A Roadside Touring and Hiking Guide”. Big Hill Springs Provincial Park is included as a scenic stop in this book.