



Office of the Mayor

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Lehi City Residents:

In recent months, we have received a number of comments from residents regarding the potential health risks from dust associated with mass grading. We take the health of our residents seriously and will do what is within our power to ensure that we protect the health of our community.

We are not experts in dust mitigation and environmental concerns. We have applied much effort in the research of this issue and we believe it is best to rely on the expertise of representatives from our state agencies to determine if there are any associated risks with such activity. As such, we have been in contact with representatives from Utah County, the Utah Division of Air Quality (DAQ) and the Utah Department of Health. According to Dr. Sam LeFevre of the Environmental Epidemiology Program (EEP) of the Utah Department of Health, "While construction work that puts a lot of dirt in the air is annoying, it is not a significant public health concern."

According to the EEP, experts consider two factors when determining if fugitive dust (containing silica) is harmful: (1) size of the particle and (2) duration of exposure. Development of silicosis or other illnesses takes many years of persistent exposure to very fine particles of dust. The mouth and throat capture larger particles. Exposure must be long enough to overwhelm the ability of the mouth and throat to capture particles and penetrate the lungs.

The Occupational Safety and Health Administration (OSHA) has determined allowable limits of exposure in a work environment to be an average of 50 micrograms per cubic meter of air in an 8-hour workday. The EEP states that this standard is not meaningful for the typical duration in a non-working environment (or transient exposure) that the public may experience. Transient exposure, however, may trigger chronic respiratory or immune diseases (e.g. asthma or COPD). If any of these conditions develop, residents should visit with their physician. These transient exposures may come from many different dust sources and are not exclusive to grading activity.



In addition, the “Agency for Toxic Substances and Disease Registry” with the Centers for Disease Control and Prevention (CDC) has developed a toxicological profile for silica to address potential health concerns. They provide no recommendation for transient public exposure. According to the EEP, there is insufficient data to indicate that there is a health concern.

While these agencies do not feel fugitive dust is posing a significant health risk to our residents, we remain concerned with the overall health and wellbeing of our community. As such, we will be creating an “Environmental Sustainability Committee” to address health and environmental risks, including air pollution, vehicle idling, storm water pollution and other potential concerns. This will help us target issues that are harmful to our health and are within our ability to address. This committee will also work to improve our recycling efforts. More information about this program will be coming in the near future.

The DAQ permits and monitors fugitive dust. A representative from this department responds to complaints and ensures compliance by monitoring opacity levels. Complaints related to mass grading should be filed with DAQ. Residents can easily submit a complaint online by visiting deq.utah.gov/legacy/compliance/air-quality/stationary-source/complaint-form.htm.

We remain committed to ensuring the health, safety, and welfare of our residents while promoting a family-friendly, innovative community.

Sincerely,

Mayor Mark Johnson
Council Member Johnny Revill
Council Member Mike Southwick
Council Member Chris Condie
Council Member Paul Hancock
Council Member Paige Albrecht



More Information

Representatives from the EEP: Dr. Sam LeFevre, Program Manager; Dr. Nathan LaCross, Assessment Section Manager/Epidemiologist; Dr. Evelyn G. Reategui Zirena, Toxicologist/Risk Assessor.

Council Presentation from Dr. Sam LeFevre:

http://lehi.granicus.com/MediaPlayer.php?view_id=2&clip_id=183&meta_id=38387

Presentation from Dr. LeFevre on the health effects of silicate construction dust, as presented during City Council on August 28, 2018: <https://www.lehi-ut.gov/wp-content/uploads/2018/10/Lehi-Presentation-Dust.pdf>

Toxicological Profile for Silica:

<https://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=1483&tid=290>

Evaluation of a similar gravel pit in Brigham City, as conducted by the EEP:

http://www.health.utah.gov/enviroepi/appletree/BrighamCitySand+GravelPits_HC091906.pdf
