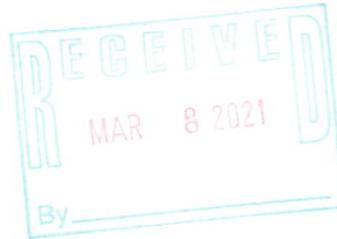


February 25, 2021



Dear Neighbor:

The Hanson Material Service Federal Quarry in McCook recently transitioned from surface mining of limestone to underground mining. You may, on occasion, feel minor vibrations caused by our blasting. From 1990-2018, we surface mined the southern end of our property and these ground vibrations were more likely to be felt near the intersection of East Avenue and Plainfield Road. Currently, we are mining in the central and northern sections of our property and it is more likely that the vibrations may be felt near the intersection of 47th Street and East Avenue. The underground mining will progress to the north and east during 2021.

Mining underground requires smaller, more frequent blasting than surface mining. Currently, the underground mining activities include drilling and blasting five or six times per week in order to dislodge the limestone deposits for further processing. We are scheduled to blast underground between 1-3 p.m. Monday through Saturday. We are not mining under your property; we are only mining on our own property.

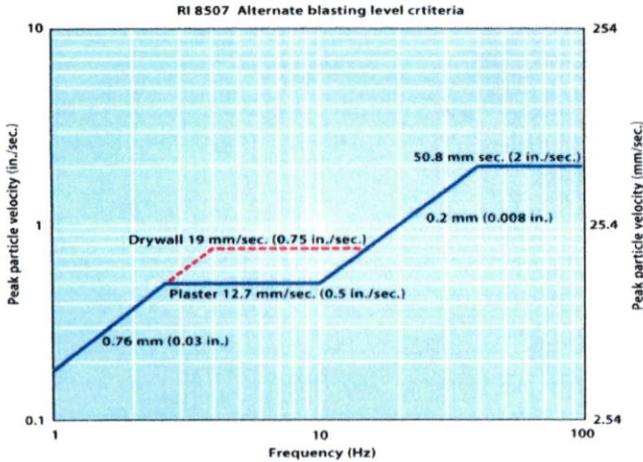
Please know that Hanson follows all applicable laws and regulations to protect the health and safety of our employees and our neighbors. We also endeavor to design the blasts to reduce environmental impacts and control ground and air vibrations at nearby structures and homes.

Enclosed with this letter is a pamphlet that may answer more of your questions. If at any time you have questions or concerns, please feel free to call the Lyons Township Quarry Advisory Council Hotline at 866-WeHearU (866-934-3278).

Sincerely,

Bret Thompson
Plant Manager

U.S. Bureau of Mines "Z-chart"



Examples of vibrations caused by everyday activities

Activity	Ground Vibration Equivalency (up to)
Walking	0.29 in/sec
Entrance door slam	0.60 in/sec
Sliding glass door slam	1.40 in/sec
Sinking nails	2.16 in/sec

How are the vibrations measured?

A blasting seismograph is a very sensitive instrument designed to measure the intensity of ground vibrations and air-blast. Blasting seismographs are manufactured to specifically measure the vibrations from blasting. The resulting measurements are on a different scale from those used for monitoring earthquake vibrations or noise level meters. As such, the particle velocity measured by blasting seismographs cannot be compared to earthquake measurements made on the Richter scale or noise meters.

Underground Mining

Very little surface mining remains at Federal Mine. In 2020, Hanson exclusively mined underground from within the existing footprint of our property. Underground mines require smaller, more frequent blasts to remove the limestone. A typical underground blast that is the same size as a surface blast will be less intrusive to surrounding neighbors because the air blast is minimized due to the ground above the blast muffling the air-blast. In addition, ground vibration would also be reduced because the blasts are at least 250 feet deeper than a quarry blast and therefore, further away from neighbors. A time delayed blasting technique is used to not only increase blast efficiency, but to decrease ground vibrations.

This is all good information, but what about the cracks in my walls, or my foundation, or my windows? They must be caused by the mine, right?

Hanson takes many precautions in its blasting practices to prevent damage to the surrounding homes. The regulations set by the Illinois Department of Natural Resources require quarries to stay below certain vibration limits in order to prevent any damage. All buildings, like everything else, deteriorate over time; some quicker than others depending upon their construction. Cracks in walls and foundations in a home or other structure are quite common and are generally the result of normal aging and settling. 2020 mine blast ground vibrations recorded at seismographs were all less than 85% of the damage threshold.

Where do I get more information?

Hanson Material Service strives to establish and maintain trusting relations with our neighbors. If you would like more information or have concerns, please contact us via the Lyons Township Quarry Advisory Council Hotline at 866-WeHearU (866-934-3278).

