

PROGRAMS ADMINISTRATION GAS AND OIL GEOLOGY AND MINERAL RESOURCES MINED LAND REPURPOSING MINERAL MINING MINES OFFSHORE WIND RENEWABLE ENERGY & ENERGY EFFICIENCY

COMMONWEALTH OF VIRGINIA

Virginia Department of Energy Washington Building / 8th Floor 1100 Bank Street Richmond, Virginia 23219-3638 (804) 692-3200 FAX (804) 692-3237 www.energy.virginia.gov

FOR IMMEDIATE RELEASE November 22, 2022 Tarah Kesterson (276) 356-3405 tarah.kesterson@energy.virginia.gov

Virginia Energy Concludes Investigation into August Fly Rock Incident in Warren County

Charlottesville, Va. –The Virginia Department of Energy (Virginia Energy) found that a geologic anomaly paired with the explosive load in an adjacent blasting borehole caused material to leave the Hanson Aggregates Pennsylvania, LLC mine in Warren County on August 24, 2022. Two people received minor injuries. Buildings and vehicles were also damaged from the rock. The agency concluded its investigation this week.

"Our inspectors have removed the closure order for blasting at the mine after a new blasting plan was submitted and approved by Virginia Energy," **said Director of Mineral Mining Phil Skorupa.** "We have observed three blasts and think our recommendation of improved blasting technology will prevent future incidents."

Fly rock is any uncontrolled material generated by the effect of a blast that is hazardous to persons or to property not owned or controlled by the operator. Fly rock incidents are extremely uncommon. Material from blasts should remain within the permitted site for safety and for successful mining for the company selling their commodity.

When blasting, companies create boreholes to load explosive material into. If those holes contain voids or mud seams, the blasting operator will add stemming or inert crushed rock material in the borehole in the area of these geologic anomalies to confine the blast energy. Virginia Energy investigators concluded that the loaded portion of an adjacent hole was too close to the geologic anomaly to adequately confine the blast energy resulting in the flyrock incident. The agency approved a new blasting plan from the mine operator. It includes creating 3D models of the face boreholes and using downhole cameras to inspect each one before blasting. Virginia Energy also recommended to turn the working face of the quarry, when possible, away from highways.

In addition to the blasting closure order which was lifted after the agency monitored blasting over some time, a notice of violation was issued to the Certified Blaster in Charge. That violation was lifted after the blaster took significant training in the loading of blast holes where geological anomalies are present.

Hanson Aggregates Pennsylvania, LLC is located at the corner of Interstate 66 and Route 522. Operational since the early 1800's, the mine was first permitted in 1969. Over 500,000 tons of limestone was produced at this site in 2021. The mine employs four people.