

PROPOSAL FOR HOUSTON COUNTY BAN ON SILICA SAND MINING / PROCESSING ACTIVITY

Introduction and Assumptions

1. The existing section 27 Mineral Extraction of the Zoning Ordinance would remain and continue unchanged. Aggregate producers do not want to be identified with the problems attributed to silica sand projects, and are opposed to increased mining regulation. The current mining practices of aggregate producers do not justify making changes to the existing section 27 rules. The existing section 27 Mineral Extraction would continue to regulate current and future aggregate and construction mining activity.
2. The proposed new section 28 Silica Sand Projects would regulate and apply only to new silica sand mining activity. Permitted mines already engaged in silica sand mining activity would not be banned from continuing to mine silica sand. The proposed section 28 Silica Sand Projects bans and prohibits “silica sand projects” at any site or location within Houston County.
3. The proposed ban is justified by the industrial scale and harmful nature of “silica sand projects”. The ban is justified because the mining and processing silica sand is more harmful than the mining and processing of aggregate limestone and dolomite. The proposed ban does not distinguish between different end uses of silica sand. The proposed ban does not attempt to prohibit silica sand intended to be sold and used any specific purpose, including for hydraulic fracturing.

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The Board of Commissioners of Houston County acknowledges the following concerns and findings regarding the possibility of silica sand mining, processing and transfer activity within the county:

1. The Houston County Board of Commissioners, planning commission, businesses and residents spent many hours studying the potential land use, environmental, road and bridge, and public health impacts of mining, processing and transporting both construction minerals and silica sand.

2. The stated purpose of the Houston County Zoning Ordinance includes the following: (i) *To Promote And Protect The Health Safety And General Welfare. To implement policy and standards that protect the public health, safety, comfort, convenience and general welfare,* (ii) *To Preserve Agricultural Land. To implement policy and standards that protect and conserve agricultural land,* (iii) *To Provide For The Orderly Development Of The County. To implement policy and standards that protect and conserve the social and economic stability of the County by providing for agricultural, residential, commercial, and industrial land use districts that allow compatible uses and promote their orderly development,* (iv) *To Assure Adequate Utilities And Transportation. To facilitate adequate and economical provision of transportation, water supply, and sewage disposal,* (v) *To Conserve The Scenic Beauty Of The County. To implement policy and standards that conserve the natural and scenic beauty and attractiveness of the County,* (vi) *To Conserve Natural Resources. To implement policy and standards that conserve the natural resources in the County including bluff-land, wetland, shoreland, and woodland,* (vii) *To Prevent Pollution. To implement policy and standards that minimize environmental pollution.*

3. Work done by the Minnesota Biological Survey identifies some key resources in “*Natural Communities and Rare Species of Houston County, MN*”, and “*Minnesota’s Remaining Native Prairie a Century After the Public Land Survey*,” that justify and require special land use protection. In addition to those identified in the Minnesota Biological Survey, Houston County has sensitive bluffs, karst features, trout streams, river watersheds, woodlands, and wetlands requiring special land use protection. Recreational trails, nature centers, and businesses have been built because of the presence of these resources allowing the public to enjoy and appreciate them by engaging in activities such as bicycling, canoeing, walking and hiking.

4. The primary land uses in Houston County are for agricultural, residential, recreational, and commercial purposes, and not for significant industrial or manufacturing purposes.

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5. Houston County has some limited quarry and mining areas containing construction minerals which are mined for repairing and maintaining roads throughout the region, and providing bedding and other materials for farming and construction.

6. The Minnesota Department of Health has identified that (i) exposure to crystalline silica poses a health risk to workers and nearby residents, (ii) use of flocculants and other chemicals used in silica sand projects are of potential concern to contaminate drinking water, (iii) increased truck traffic poses risks of increased accidents and increased levels of engine exhaust, (iv) use of large volumes of water in silica sand mining projects poses risk of groundwater depletion, and (v) increased health and nuisance issues related to noise due to blasting, operating equipment and truck traffic..

7. Houston County has limited resources in staffing, expertise, and funds to effectively implement sophisticated monitoring necessary to enforce regulation that will protect residents from adverse effects on human health, rural drinking water quality, ground water quantity, natural resources, road infrastructure, and the general character and aesthetic nature of the county.

8. Businesses and residents of Houston County are concerned about the potential adverse impacts from silica sand projects of (i) damage to township and county roads, (ii) reduction of water resources, (iii) unhealthy air emissions, (iv) contamination of rural drinking water, streams and aquifers, (v) damage to agricultural resources, bluffs, woodlands and wetlands, and (vi) other environmental problems; if Houston County should allow mining, processing and transporting of silica sand to occur.

9. Businesses and residents of this county are concerned that adding the mining and processing of silica sand to the already existing limited mining of construction minerals would create highly industrialized areas of the county, contrary to the goals and purposes contained in the county ordinance and comprehensive land use plan.

10. Residents and businesses are concerned they will experience financial damages because the value of their investments in residential and commercial properties will decrease due to the proximity of large industrial silica sand mining operations.

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11. Houston County is not attempting to regulate a mineral or product. Houston County proposes to prohibit a mining and processing land use activity. The Houston County Board of Commissioners recognizes that the land use operations for mining and processing silica sand used for industrial purposes are very different from the land use operations for mining and processing construction minerals. Silica sand mining land use operations (i) create more intense, larger-scaled industrial activity, (ii) consume more appropriated water, (iii) permanently remove agricultural land from production, (iv) permanently expose and damage more landscape to scarring and alteration, (v) require more high-volume, heavy truck hauling traffic to single destinations, and (vi) embrace other operational differences than the mining of construction minerals.

12. The Houston County Board of Commissioners determines that large-scale mining and processing of silica sand are incompatible with (i) this county's comprehensive land use plan, (ii) the non-industrial character of this county, (iii) the protection of agricultural activity as an essential part of the local economy, (iv) this county's aging and fragile road and bridge system, (v) the protection of the sensitive natural features prevalent throughout this county, (vi) the protection of the health of the citizens from the dangerous air emissions associated with industrial silica sand mining and transportation, (vii) the protection of rural drinking water and other groundwater supplies, sensitive streams, aquifers and other water resources in this karst area, and (viii) the need to protect residential, recreational and commercial areas.

13. This Board of Commissioners believes that the proposed amendments to county zoning ordinance are in the best interests of Houston County, and will protect and preserve the health, safety, welfare, environment and economy of the people of this county.

Based upon these concerns and findings of fact, the Board of Commissioners of Houston County approves, enacts and ordains this ordinance for the prohibition of the mining and processing of silica sand.

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SECTION 28 ~ SILICA SAND PROJECTS

0110.2801 Purpose

The purpose of this Section prohibiting silica sand projects is to (i) protect and preserve agricultural land and farming activity, (ii) protect fragile karst features, water resources, aquifers, rural drinking water, streams (including trout streams), and rivers from excessive contamination and appropriation, (iii) protect residents from unhealthy air emissions of industrial mining activity and associated heavy truck traffic, (iv) minimize road and bridge damage from high-volume and heavy truck traffic hauling silica sand, (v) minimize traffic hazards, (vi) preserve forest lands, natural communities, rare species, native prairies and other natural features of biodiversity significance, (vii) protect natural landscapes from scarring and damage of excessive excavation and mining activity, (viii) minimize soil erosion, (ix) protect existing recreational and tourist businesses, (x) protect homeowners' and business owners' investments in their properties (xi) prevent the industrialization of agricultural, open space and residential communities, and (xii) minimize land use conflicts.

0110.2802 Definitions

For the purpose of this Section, certain terms are defined as follows:

Subd 1. Excavation and Mining. The term "excavation and mining" includes any process or method of digging, excavating, mining, drilling, blasting, tunneling, dredging, stripping, or removing silica sand from the land surface or underground. The term "excavation and mining" applies to all activity occurring at excavation or mining sites, including sites commonly identified as quarries and sand pits.

Subd. 2. Construction Minerals. The term "construction minerals" includes natural common, low-grade quartz sand and rock, limestone, dolomite, aggregate, gravel and sand that is produced and used for local construction purposes, including road pavement, unpaved road gravel or cover, concrete, asphalt, building and dimension stone, railroad ballast, decorative stone, retaining walls, revetment stone, riprap, mortar sand, construction lime, agricultural lime and bedding sand for livestock operations, sewer and septic systems, landfills, and sand blasting. The term "construction minerals" does not include "silica sand" as defined in Section 0110.2802, subd. 3.

Subd. 3. Silica Sand. The term "silica sand" is defined by the State of Minnesota in Minnesota Statutes Section 116C.99, subd. 1(d). and means naturally existing, well-rounded, low impurity, high quartz level silica sand (silicon dioxide) with very little impurities in terms of other minerals. The term "silica sand" is categorized as an industrial mineral by the North American Industry Classification System under classification no. 212322. The term "silica sand" does not include "construction minerals" as defined in Section 0110.2802, subd. 2.

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Subd. 4. Silica Sand Project. The term “silica sand project” is defined by the State of Minnesota in Minnesota Statutes Section 116C.99, subd. 1(e). and means the excavation and mining and processing of silica sand; the washing, cleaning, screening, crushing, filtering, drying, sorting, stockpiling, and storing of silica sand, either at a mining site or at any other site; the hauling and transporting of silica sand; or a facility for transporting silica sand to destinations by rail, barge, truck, or other means of transportation.

0110.2803 Application of Section 28.

Subd. 1. This Section 28 only applies to silica sand projects. Section 28 does not apply to the (i) excavation and mining of construction minerals, (ii) processing of construction minerals, (iii) storage of construction minerals, or (iv) transfer of construction minerals. The regulation, monitoring and control of (i) the excavation and mining of construction minerals, (ii) processing of construction minerals, (iii) storage of construction minerals, and (iv) transfer of construction minerals are governed solely by Section 27 of the Zoning Ordinance.

0110.2804 Prohibited Silica Sand Projects Activity

Subd. 1. All silica sand projects are prohibited at any property or site located in this county. No person shall (i) excavate or mine silica sand, (ii) process silica sand, (iii) store silica sand, or (iv) transfer silica sand at any property or site located in this county, except as allowed in this Section 28. No person shall construct, develop or operate any silica sand project at any property or site located in this county.

Subd. 2. No employee or agent of this county shall issue a permit authorizing any person to develop, operate or engage in any silica sand project, at any property or site located in this county, except as allowed in this Section 28.

0110.2805 Existing Silica sand Projects and Nonconforming Uses.

Subd. 1. Any person engaged in the excavation operation of a silica sand project at a property or site in this county, at the date this ordinance is enacted, is engaged in a nonconforming use.

Subd. 2. If a person holding a conditional use permit to mine nonmetallic minerals has been continually excavating and mining silica sand at a property or site located within the county, such person shall be entitled to continue excavating or mining silica sand at such property or site at the same scope, intensity, scale and size. Such person will not be entitled to increase or expand the scope, intensity, scale or size of such nonconforming use at the mining site, as determined by reference to the original scope, function and purpose of the nonconforming use,

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type of processing activities, the hours of operation, traffic, parking, noise, exterior storage, signs, exterior lighting, odors, area of operation, and other factors deemed relevant by county.

Subd. 3. If a person has been continually excavating or mining silica sand at a property or site located within the County, but does not hold a conditional use permit to mine nonmetallic minerals, such person shall be entitled to continue excavating or mining silica sand at such property or site at the same scope, intensity, scale and size. Such person will not be entitled to increase or expand the scope, intensity, scale or size of such nonconforming use at the mining site, as determined by reference to the original scope, function and purpose of the nonconforming use, type of processing activities, the hours of operation, traffic, parking, noise, exterior storage, signs, exterior lighting, odors, area of operation, and other factors deemed relevant by county.

Subd. 4. If a mining site has been inactive continually for at least 12 months, no person shall be entitled to excavate or mine silica sand at such property or site. Such person will be entitled to excavate or mine construction minerals, consistent with Section 27 regulating and controlling the excavation and mining of construction minerals.

Subd. 5. If the county zoning administrator questions whether a person is lawfully entitled to excavate or mine silica sand at a property or mining site, such person shall furnish the zoning administrator with a copy of the conditional use permit or other proof that such person is entitled to excavate or mine silica sand at such property or site located. If such person is unable or unwilling to provide the zoning administrator with such proof, the Board of Commissioners shall then be entitled to take any necessary legal action against such person to prevent such person from excavating or mining silica sand at a property or site located within the county.

0110.2806 Exception to Prohibition of Silica Sand Projects.

Subd. 1. Any person shall be entitled to excavate or mine silica sand within an area up to 1 acre in size on property owned by such person, for personal farming and construction use at such property.