

CITIZENS ENVIRONMENTAL QUALITY COMMITTEE

AGENDA ITEM: Air Quality Monitoring Recommendations

PREPARED BY: Carlos Espinosa

DATE: July 16, 2013

At the June 24th Planning Commission meeting this item was referred back to the CEQC for review and comments in light of the state legislature's actions. Please see attached for the Commission's agenda.

PLANNING COMMISSION

AGENDA ITEM: 2. CEQC Air Quality Monitoring Recommendations

PREPARED BY: Carlos Espinosa

DATE: June 24, 2013

Summary

The Citizens Environmental Quality Committee (CEQC) reviewed the topic of air quality monitoring at silica sand facilities in April/May and made the following recommendations:

1. We recommend monitoring, but defer to the MPCA for protocols, expertise, and resources. A final decision on air quality standards should be determined by the MPCA.
2. The City of Winona should conduct interim monitoring for crystalline silica if action to commence monitoring is not immediately available from the MPCA.
3. Interim monitoring at facilities should commence as soon as possible and use an annual average of $3\mu\text{g}/\text{m}^3$ PM₄ as a limit for ambient crystalline silica exposure.
4. Any firm hired to complete interim monitoring should be selected and hired by the City of Winona in consultation with the MPCA.
5. Any costs associated with monitoring should be paid by the industry.
6. Interim monitoring should also include baseline 2.5 particulate monitoring along truck routes.

Since these recommendations were made, the state legislature passed an omnibus environmental bill. The bill calls for the Environmental Quality Board to work with other state agencies to develop model silica sand ordinances by October 1, 2013. The bill also establishes a Silica Sand Technical Assistance Team (by October 1, 2013) to provide assistance to local governments on silica sand related issues (see attachment).

In response to the CEQC's recommendations, staff proposes they be forwarded to the Silica Sand Technical Assistance Team for review and recommendation. Should the Commission concur with this approach, it may be forwarded to the City Council for consideration.

The Commission may also forward the CEQC's recommendations without staff's recommendation and/or add to the CEQC's recommendations.

Attachment:

-Portion of HF976 signed by governor on 5/23/13

120.1 transportation, the chair of the Board of Water and Soil Resources, and a representative of
 120.2 the governor's office designated by the governor. The governor shall appoint five members
 120.3 from the general public to the board, subject to the advice and consent of the senate.
 120.4 At least two of the five public members must have knowledge of and be conversant in
 120.5 water management issues in the state. Notwithstanding the provisions of section 15.06,
 120.6 subdivision 6, members of the board may not delegate their powers and responsibilities as
 120.7 board members to any other person.

120.8 Sec. 89. Minnesota Statutes 2012, section 116C.03, subdivision 4, is amended to read:

120.9 Subd. 4. **Support.** Staff and consultant support for board activities shall be provided
 120.10 by the ~~Office of Strategic and Long-Range Planning~~ Pollution Control Agency. This
 120.11 support shall be provided based upon an annual budget and work program developed by
 120.12 the board and certified to the commissioner by the chair of the board. The board shall
 120.13 have the authority to request and require staff support from all other agencies of state
 120.14 government as needed for the execution of the responsibilities of the board.

120.15 Sec. 90. Minnesota Statutes 2012, section 116C.03, subdivision 5, is amended to read:

120.16 Subd. 5. **Administration.** The board shall contract with the ~~Office of Strategic and~~
 120.17 ~~Long-Range Planning~~ Pollution Control Agency for administrative services necessary to
 120.18 the board's activities. The services shall include personnel, budget, payroll and contract
 120.19 administration.

120.20 Sec. 91. **[116C.99] SILICA SAND MINING MODEL STANDARDS AND**
 120.21 **CRITERIA.**

120.22 Subdivision 1. **Definitions.** The definitions in this subdivision apply to sections
 120.23 116C.99 to 116C.992.

120.24 (a) "Local unit of government" means a county, statutory or home rule charter city,
 120.25 or town.

120.26 (b) "Mining" means excavating silica sand by any process, including digging,
 120.27 excavating, drilling, blasting, tunneling, dredging, stripping, or by shaft.

120.28 (c) "Processing" means washing, cleaning, screening, crushing, filtering, sorting,
 120.29 processing, stockpiling, and storing silica sand, either at the mining site or at any other site.

120.30 (d) "Silica sand" means well-rounded, sand-sized grains of quartz (silicon dioxide),
 120.31 with very little impurities in terms of other minerals. Specifically, the silica sand for the
 120.32 purposes of this section is commercially valuable for use in the hydraulic fracturing of
 120.33 shale to obtain oil and natural gas. Silica sand does not include common rock, stone,

121.1 aggregate, gravel, sand with a low quartz level, or silica compounds recovered as a
121.2 by-product of metallic mining.

121.3 (e) "Silica sand project" means the excavation and mining and processing of silica
121.4 sand; the washing, cleaning, screening, crushing, filtering, drying, sorting, stockpiling,
121.5 and storing of silica sand, either at the mining site or at any other site; the hauling and
121.6 transporting of silica sand; or a facility for transporting silica sand to destinations by rail,
121.7 barge, truck, or other means of transportation.

121.8 (f) "Temporary storage" means the storage of stock piles of silica sand that have
121.9 been transported and await further transport.

121.10 (g) "Transporting" means hauling and transporting silica sand, by any carrier:

121.11 (1) from the mining site to a processing or transfer site; or

121.12 (2) from a processing or storage site to a rail, barge, or transfer site for transporting
121.13 to destinations.

121.14 Subd. 2. **Standards and criteria.** (a) By October 1, 2013, the Environmental
121.15 Quality Board, in consultation with local units of government, shall develop model
121.16 standards and criteria for mining, processing, and transporting silica sand. These standards
121.17 and criteria may be used by local units of government in developing local ordinances. The
121.18 standards and criteria shall be different for different geographic areas of the state. The
121.19 unique karst conditions and landforms of southeastern Minnesota shall be considered
121.20 unique when compared with the flat scoured river terraces and uniform hydrology of the
121.21 Minnesota Valley. The standards and criteria developed shall reflect those differences in
121.22 varying regions of the state. The standards and criteria must include:

121.23 (1) recommendations for setbacks or buffers for mining operation and processing,
121.24 including:

121.25 (i) any residence or residential zoning district boundary;

121.26 (ii) any property line or right-of-way line of any existing or proposed street or
121.27 highway;

121.28 (iii) ordinary high water levels of public waters;

121.29 (iv) bluffs;

121.30 (v) designated trout streams, Class 2A water as designated in the rules of the
121.31 Pollution Control Agency, or any perennially flowing tributary of a designated trout
121.32 stream or Class 2A water;

121.33 (vi) calcareous fens;

121.34 (vii) wellhead protection areas as defined in section 103I.005;

121.35 (viii) critical natural habitat acquired by the commissioner of natural resources
121.36 under section 84.944; and

- 122.1 (ix) a natural resource easement paid wholly or in part by public funds;
 122.2 (2) standards for hours of operation;
 122.3 (3) groundwater and surface water quality and quantity monitoring and mitigation
 122.4 plan requirements, including:
 122.5 (i) applicable groundwater and surface water appropriation permit requirements;
 122.6 (ii) well sealing requirements;
 122.7 (iii) annual submission of monitoring well data; and
 122.8 (iv) storm water runoff rate limits not to exceed two-, ten-, and 100-year storm events;
 122.9 (4) air monitoring and data submission requirements;
 122.10 (5) dust control requirements;
 122.11 (6) noise testing and mitigation plan requirements;
 122.12 (7) blast monitoring plan requirements;
 122.13 (8) lighting requirements;
 122.14 (9) inspection requirements;
 122.15 (10) containment requirements for silica sand in temporary storage to protect air
 122.16 and water quality;
 122.17 (11) containment requirements for chemicals used in processing;
 122.18 (12) financial assurance requirements;
 122.19 (13) road and bridge impacts and requirements; and
 122.20 (14) reclamation plan requirements as required under the rules adopted by the
 122.21 commissioner of natural resources.

122.22 Subd. 3. **Silica sand technical assistance team.** By October 1, 2013, the
 122.23 Environmental Quality Board shall assemble a silica sand technical assistance team
 122.24 to provide local units of government, at their request, with assistance with ordinance
 122.25 development, zoning, environmental review and permitting, monitoring, or other issues
 122.26 arising from silica sand mining and processing operations. The technical assistance team
 122.27 may be chosen from representatives of the following entities: the Department of Natural
 122.28 Resources, the Pollution Control Agency, the Board of Water and Soil Resources, the
 122.29 Department of Health, the Department of Transportation, the University of Minnesota,
 122.30 the Minnesota State Colleges and Universities, and federal agencies. A majority of the
 122.31 members must be from a state agency and all members must have expertise in one or more
 122.32 of the following areas: silica sand mining, hydrology, air quality, water quality, land use,
 122.33 or other areas related to silica sand mining.

122.34 Subd. 4. **Consideration of technical assistance team recommendations.** (a) When
 122.35 the technical assistance team, at the request of the local unit of government, assembles
 122.36 findings or makes a recommendation related to a proposed silica sand project for the

123.1 protection of human health and the environment, a local government unit must consider
123.2 the findings or recommendations of the technical assistance team in its approval or denial
123.3 of a silica sand project. If the local government unit does not agree with the technical
123.4 assistance team's findings and recommendations, the detailed reasons for the disagreement
123.5 must be part of the local government unit's record of decision.

123.6 (b) Silica sand project proposers must cooperate in providing local government unit
123.7 staff, and members of the technical assistance team with information regarding the project.

123.8 (c) When a local unit of government requests assistance from the silica sand
123.9 technical assistance team for environmental review or permitting of a silica sand project
123.10 the local unit of government may assess the project proposer for reasonable costs of the
123.11 assistance and use the funds received to reimburse the entity providing that assistance.

123.12 **EFFECTIVE DATE.** This section is effective the day following final enactment.

123.13 Sec. 92. **[116C.991] ENVIRONMENTAL REVIEW; SILICA SAND PROJECTS.**

123.14 (a) Until two years after the effective date of this section, an environmental
123.15 assessment worksheet must be prepared for any silica sand project that meets or exceeds
123.16 the following thresholds, unless the project meets or exceeds the thresholds for an
123.17 environmental impact statement under rules of the Environmental Quality Board and an
123.18 environmental impact statement must be prepared:

123.19 (1) excavates 20 or more acres of land to a mean depth of ten feet or more during its
123.20 existence. The local government is the responsible governmental unit; or

123.21 (2) is designed to store or is capable of storing more than 7,500 tons of silica sand or
123.22 has an annual throughput of more than 200,000 tons of silica sand and is not required to
123.23 receive a permit from the Pollution Control Agency. The Pollution Control Agency is the
123.24 responsible governmental unit.

123.25 (b) In addition to the contents required under statute and rule, an environmental
123.26 assessment worksheet completed according to this section must include:

123.27 (1) a hydrogeologic investigation assessing potential groundwater and surface water
123.28 effects and geologic conditions that could create an increased risk of potentially significant
123.29 effects on groundwater and surface water;

123.30 (2) for a project with the potential to require a groundwater appropriation permit
123.31 from the commissioner of natural resources, an assessment of the water resources
123.32 available for appropriation;

123.33 (3) an air quality impact assessment that includes an assessment of the potential
123.34 effects from airborne particulates and dust;

124.1 (4) a traffic impact analysis, including documentation of existing transportation
124.2 systems, analysis of the potential effects of the project on transportation, and mitigation
124.3 measures to eliminate or minimize adverse impacts;

124.4 (5) an assessment of compatibility of the project with other existing uses; and

124.5 (6) mitigation measures that could eliminate or minimize any adverse environmental
124.6 effects for the project.

124.7 **EFFECTIVE DATE.** This section is effective July 1, 2013, and no permit for
124.8 a silica sand project subject to this section may be approved after that date unless the
124.9 required environmental review has been completed.

124.10 Sec. 93. **[116C.992] TECHNICAL ASSISTANCE, ORDINANCE, AND PERMIT**
124.11 **LIBRARY.**

124.12 By October 1, 2013, the Environmental Quality Board, in consultation with local
124.13 units of government, shall create and maintain a library on local government ordinances
124.14 and local government permits that have been approved for regulation of silica sand
124.15 projects for reference by local governments.

124.16 Sec. 94. Minnesota Statutes 2012, section 116D.04, is amended by adding a
124.17 subdivision to read:

124.18 **Subd. 16. Groundwater; environmental assessment worksheets.** When an
124.19 environmental assessment worksheet is required for a proposed action that has the
124.20 potential to require a groundwater appropriation permit from the commissioner of natural
124.21 resources, the board shall require that the environmental assessment worksheet include an
124.22 assessment of the water resources available for appropriation.

124.23 Sec. 95. Minnesota Statutes 2012, section 282.04, subdivision 1, is amended to read:

124.24 Subdivision 1. **Timber sales; land leases and uses.** (a) The county auditor, with
124.25 terms and conditions set by the county board, may sell timber upon any tract that may be
124.26 approved by the natural resources commissioner. The sale of timber shall be made for
124.27 cash at not less than the appraised value determined by the county board to the highest
124.28 bidder after not less than one week's published notice in an official paper within the
124.29 county. Any timber offered at the public sale and not sold may thereafter be sold at private
124.30 sale by the county auditor at not less than the appraised value thereof, until the time as
124.31 the county board may withdraw the timber from sale. The appraised value of the timber
124.32 and the forestry practices to be followed in the cutting of said timber shall be approved
124.33 by the commissioner of natural resources.