ENVIRONMENTAL QUALITY COMMITTEE MEETING NOTES

DATE: April 18, 2013

TIME: 4:00 p.m.

PRESENT: Hoffman, Dr. Lenz and Dr. Nosek

ABSENT: Mark Moeller, City Planner and Carlos Espinosa, Assistant City Planner

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The meeting began at 4:00 p.m. with an introduction from Carlos Espinosa, Assistant City Planner, summarizing the Committee's purpose in reviewing of this matter. He stated that during the past year, the Planning Commission has been studying a variety of issues relative to recent silica sand mining and processing operations within the City. Given this study, City Council enacted a number of code amendments in February of this year, one of which requires that sand and/or other materials, with the "potential" to produce particulate emissions, be tested to promote a minimum moisture level of 2.5%.

Following the previous, City Council, on March 4th, directed staff to further study the possibility of requiring air quality monitoring in association with silica sand mining and processing operations. Following its consideration of the Council directive, the Planning Commission, on March 25th, referred the matter of air quality monitoring to the Citizen's Environmental Quality Committee for study, and its recommendation to the Commission.

At this point, Mr. Espinosa reviewed data that had been included in the committee's agenda package and relating to recent ambient air quality studies that had been conducted for certain Wisconsin mine and processing facilities. Of these, one silica sand processing facility is located at Chippewa Falls, Wisconsin, while the others, pertaining to mines, is located within the Town of Howard and Cooks Valley. All testing had been conducted by Dr. John Richards whose methods for monitoring crystalline silica had been previously used to monitor for the California crystalline silica standard. Being at the forefront of the silica sand monitoring industry, Doctor Richards's methods for monitoring PM_4 are also being studied by the Minnesota Department of Health for recommendation to the MPCA. This is expected to occur sometime in 2013.

Outside of these studies, Mr. Espinosa noted that other monitoring is currently occurring at two Minnesota facilities in North Branch and Jordan. It is expected that monitoring results from these facilities should be available in mid to late 2013. Additionally, the State of Minnesota is currently studying statewide standards for crystalline silica. Bills addressing this issue are currently working their way through the state legislature. At this point, bills differ in approach but all include provisions for technical assistance to local governments from state agencies such as the MPCA. Given this activity, Mr.

Espinosa stated that it may be prudent to wait for the state to complete and implement appropriate air quality standards prior to moving ahead with a local ordinance.

In addressing the Dr. Richards studies, Mr. Espinosa emphasized that preliminary results did indicate that hazardous levels of ambient crystalline silica dust were not evident.

At the local level, Mr. Espinosa referenced another study that had been done in January of this year under the supervision of Dr. Crispin Pierce, a professor of public health at the University of Wisconsin, Eau Claire. Taken within the area of the City's central garage, measurements provided a snapshot of air quality affected by wind, precipitation and activities within the area. Results of that study sampled air for a one hour period on January 14th. Results of that measurement included that although air quality at that location was below federal standards for $PM_{2.5}$ in a 24 hour period, it was above federal $PM_{2.5}$ standards for an annual period. As noted in a communication from Dr. Pierce, drawing firm conclusions from this information should be treated cautiously.

In concluding, Mr. Espinosa again noted that once the Committee has completed its review and recommendation process, these would be forwarded to the Planning Commission for additional study/action.

Dr. Nosek agreed that the study conducted by Dr. Crispin was too brief to draw any conclusions from.

Dr. Lenz then outlined medical concerns associated with silica sand, silicosis, etc.

Dr. Lenz noted that source particulates are impacting on ambient air qualities. She further questioned why rail cars, transporting silica sand, are not properly covered. Mr. Espinosa responded that the regulations of rail transport operations are not overseen by the City. Additionally, under performance standards of City Code, the testing of sand or the materials with potential to produce emissions would be required to be maintained at 2.5%. Again, this might affect the loading operations, only, of rail cars.

Dr. Lenz stated that she is concerned about air quality along designated truck routes within the City and suggested that some sort of air quality monitoring along these might be appropriate.

Mr. Espinosa stated that Dr. Pierce had conducted additional air quality samples in Winona County, one, he thought, relating to a County Road. Should the Committee decide that such a study would be appropriate, it could recommend that to the Planning Commission.

Dr. Nosek asked if agricultural or other airborne emissions had been removed from Richard's data prior to calculations. Mr. Espinosa responded that it was his understanding that this had been done and that results related only to airborne silica

emissions. Dr. Nosek observed that Richard's data all evolved during the fourth quarter of 2013. He asked if there could be seasonal fluctuations to this data. Mr. Espinosa responded that all study sites were operational during testing, and that changes may occur by way of market demands.

In response to a question from Ms. Hoffman, Mr. Espinosa stated that the Richard's study did capture the smallest airborne particles. He also noted that monitor standards were observed in all cases.

Dr. Lenz again suggested that a baseline level for diesel monitoring of truck routes should be a first step.

The Committee then recognized Jim Gurley who noted that the Commission's directive related only to emissions related to silica sand. The diesel issues will be dealt with separately.

Dr. Nosek stated that although he fully concurred that air quality within the City should be monitored, he would prefer that the lead for this be conducted by the Minnesota Pollution Control Agency, and in accordance with standards developed by that body. He did not feel that this should be a City function.

Ms. Hoffman stated that if the MPCA does not have standards, perhaps interim monitoring should occur until standards are in place. Any firm hired would be approved by the MPCA.

The Committee recognized Mr. Gurley who suggested that taxpayers should not be expected to pay for these studies. That should be a function of industry.

The Committee recognized Jane Cowgill, 317 Walnut Street, who asked how standards would protect workers exposed to silica sand. Dr. Lenz responded that this is a function that rests with the worker's company.

Ms. Cowgill noted that railcars filled with silica sand had been known to sit at one location for an extended period of time. Mr. Espinosa responded that if they become a problem, performance standards of the zoning ordinance can be used to address them.

The Committee recognized Mr. Gurley who stated that in a recent citizen meeting in St. Paul, neighborhood residence had been concerned that blowing dust from a neighboring industry. Mr. Espinosa stated that in that case a consultant was brought in and no issues were identified.

Dr. Nosek stated that larger dust particles can be a nuisance whereas smaller can be a health risk. Ms Hoffman stated that if the City was to wait until the MPCA has defined appropriate standards for monitoring, she asked how dust issues within the City would be managed. Mr. Espinosa explained that, given recent Council amendments, moisture

testing and enforcement would apply. The Committee recognized Mr. Gurley who noted that it was his understanding that the method of measuring moisture at a silica sand pile would not always require testing on the outer limits of the pile. Mr. Espinosa responded that the protocol of testing would require sand to be disturbed prior to sampling.

Following further discussion, the consensus of the Committee was to direct staff to prepare a list of recommendations/alternatives discussed today, for the Committee's next meeting. Mr. Espinosa responded that this would be done, and that alternatives would more than likely reflect those California standards that had been developed by Dr. Richards as minimums.

A question arose relative to the requirement by a silica sand mine or processing facility to look at impacts resulting from truck traffic. Mr. Espinosa responded that, at present, a traffic impact analysis (TIA) would be required for any new facility generating more than 200 truck trips per day. This threshold would not prevent the City Engineer from requiring an analysis for projects where heavy commercial vehicles from the operation would contribute more than 20% of the traffic on any local street. Additionally, the City Engineer could waive the requirement for a transportation impact analysis for various reasons.

The Committee recognized Ms. Cowgill who thanked Mr. Espinosa for his presentation this afternoon. She emphasized that this was a very complicated issue to understand and that Mr. Espinosa had done a very good job in helping her understand it.

Notice of the Committee's next meeting will be forthcoming.

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Mark Moeller
City Planner