

City of Augusta, Maine
DEPARTMENT OF DEVELOPMENT SERVICES

AUGUSTA STATE AIRPORT
CODE ENFORCEMENT
ECONOMIC DEVELOPMENT

ENGINEERING
FACILITIES & SYSTEMS
PLANNING

Memo

To: City Council
Bill Bridgeo, City Manager

From: Matt Nazar, Director of Development Services

Date: August 1, 2014

Re: Possible Mineral Extraction Ordinance and Blasting Ordinance Amendments

At the City Council meeting of July 10, 2014, the Council reviewed a package that proposed a number of changes to the Mineral Extraction Ordinance (MEO) and Blasting Ordinance (BO). The most substantial change proposed was to the Section 6-73 of the MEO, which exempts mineral extraction sites licensed as "Existing Mineral Extraction Sites" from many of the performance standards in Section 6-76 of the MEO. While there was a lot of discussion about a few of those standards at the July 10 meeting, Corporation Counsel made it clear to the Council several times that the proposal before them would mean that all of the 6-76 Performance Standards would apply to all mineral extraction sites if the proposal went forward. There was no indication from Councilors that this was not the desired starting point.

So the proposal you have will change the MEO to make all mineral extraction sites subject to all performance standards in section 6-76. The standard most discussed by the Council was Section 6-76(10) Dust. The Council requested a measurable, enforceable standard for dust. The state DEP Air Quality Division uses EPA's Method 9 to measure opacity of dust clouds. It is a method that has been in place since 1974, but it does not work well for dust generated by a single, short term event like a blast. Method 9 requires measurements of opacity be taken by a certified individual for a single point in space every 15 seconds over 5 minutes. A dust cloud from a blast often does not last long enough to create a violation. The standard in state law is 20% opacity over five minutes within any one hour (Title 38, Section 490-Z(12)).

There are other standards that require sophisticated equipment and some level of expertise to use. I've now spent about eight hours reading various scholarly works on methods to measure dust and it appears that the tools run from \$2,500 to \$10,000 to get accurate dust readings and then we'd have to figure out what is an acceptable level of dust beyond the ambient levels already in the air. That is a question that will require an expert in the field of air quality, which I am not.

A standard was suggested by a Council member that dust associated with mineral extraction activities be confined to the mineral extraction site. That standard would not allow any dust to

migrate from the mineral extraction site under any circumstances. As Corporation Counsel stated at the last meeting, that is likely to be an impossible standard to meet. Dust migrates across property lines everywhere in the city every day and setting such a standard for mineral extraction sites, where some dust is always going to be generated, creates a situation where violations are almost guaranteed, even if the operator uses every best management practice available.

Maine DEP indicated that they do not use any method besides EPA's Method 9, and suggested some method of measuring deposited dust might work better. However, our contact at Maine DEP did not have a method to offer. He stated he would keep looking for one. In order for the method to be enforceable, and withstand a court challenge, I recommend a clearly measurable standard that has some level of wider acceptance in world of air quality monitoring. My research and conversations with experts in Maine has yet to provide that method and standard, but I am continuing those conversations and research.

Please review the other changes that result from applying all performance standards in Section 6-76 to Existing Mineral Extraction sites by cross referencing the standard that they are exempted from via Section 6-73. Putting it into a memo would likely cover pages and pages of discussion that wouldn't be as helpful as it was confusing.

In the Blasting Ordinance, the proposed changes are to further improve the clarity on blasting times and modify the notice requirements so the 24 hour notice requirements are clear and the allowance of door hangers is included rather than just phone calls, which is increasingly difficult with cell phones.

Finally, Councilor Munson asked if we could require the blast warning whistle could be louder or one be placed on Riverside Drive. I spoke to Maine Drilling and Blasting and they indicated that the whistle is really intended for the people inside the secured blast area of the pit, but he'd be happy to place one at the CN Brown property assuming they allow it, as that's private property. Does the Council want to somehow codify that whistles are placed in various locations as requested? That may become problematic if the requests start to pile up.