



DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

January 26, 2015

Mara S. Georges
DALEY AND GEORGES, LTD
20 South Clark Street, Suite 400
Chicago, IL 60603-1835

Re: Gulf Sulphur Services Ltd., LLLP
12200 S Carondelet Ave., Chicago, Illinois
Request for Variances from Air Pollution Control Rules and Regulations for control
of Emissions from the Handling and Storage of Bulk Material Piles

Dear Ms. Georges,

On behalf of the Commissioner of the Chicago Department of Public Health ("CDPH"), I am writing in response to the April 23, 2014 request from Gulf Sulphur Services Ltd, LLLP, (hereafter "GSS Request Letter"), for variances from certain of the above-referenced Rules and Regulations (hereafter "Bulk Material Rules"). Under Section 8.0 of the Bulk Material Rules, the burden of proof is upon the applicant for the variance to demonstrate that issuance of the requested variance will not create a public nuisance or adversely affect the surrounding area, the surrounding environment, or surrounding property uses. In the event that the applicant does not meet this burden, the variance request will be denied.

At this time, CDPH finds that GSS' application is incomplete, and provides an additional 30 days from the date of this letter to provide additional information needed to complete our review of your request, as specified below.

- 1) First, in all eight of the requests set forth in the GSS Request Letter, you stated that sulphur prill generates very little fugitive dust. You mentioned the pelletized design of sulphur prill, and you also listed some emissions numbers that indicate that the amount of PM10 emissions from a 75,000 long ton stockpile of sulphur prill is 0.24 lb/hr. You also noted that you could provide more scientific or industry data in support of your claims.

Please provide additional details regarding fugitive dust emissions from sulphur prill stockpiles, including any scientific studies or reports and any site-specific technical evaluations. Please also be sure to include citations and supporting calculations for all of the sources of emissions data and other information upon which you rely. In addition, discuss the potential for sulphur prill to generate fugitive dust during all handling activities at your site, including the possibility of prills being crushed by heavy machinery. Finally,

explain why the proven emissions you cited will not create a public nuisance or adversely impact the surrounding area, surrounding environment, or surrounding property uses.

- 2) Secondly, please note that Section 8.0(2)(b) of the Bulk Material Rules requires each request for a variance to set forth, in detail, “A description of the process or activity for which the variance is requested, including pertinent data on location, size, and the population and geographic area affected by, or potentially affected by, the process or activity.” While the GSS Request Letter notes that the site is in Planned Development No. 1178, and that the nearest residences are located approximately 3,000 feet from the site, CDPH requires additional detail regarding the specific location and description of each activity for which a variance is requested (e.g. storage areas, conveyors, etc.), as well as specific information about the surrounding area.

Accordingly, please provide detailed information as required by Section 8.0(2)(b) of the Bulk Material Rules, including maps, diagrams, and any other pertinent supporting information.

- 3) Item number 3 in the GSS Request Letter references “equipment manufacturer specifications and industry standards” in conjunction with the moisture content of the sulphur prills, and states that a moisture content higher than 2% would not result in an appreciable reduction of dust emissions.

Please provide verifiable documentation to support these statements regarding moisture content. In addition, if a moisture content standard below 3% is established by an applicable State Permit, Law, Rule or Regulation (see the definition of “Moist Material” in Section 2.0 of the Bulk Material Rules), then please provide such information.

- 4) Item number 4 in the GSS Request Letter requests a variance from having to install rumble strips or “a more elaborate washing station.” However, please note that Section 3.0(8)(d) of the Bulk Material Rules states that:

All outgoing material transport trucks, whether loaded or empty, pass through a wheel wash station and pass over rumble strips that will vibrate the trucks and shake off loose materials and dust, unless the approved Fugitive Dust Plan specifies other measures to ensure that the trucks will not cause any track-out of materials onto the public way. [Emphasis added.]

We note that GSS’s June 17, 2014 Fugitive Dust Plan, which is pending approval by CDPH, includes a section that discusses transportation and roadway cleaning. This section of the Fugitive Dust plan describes truck cleaning measures that are also set forth in the GSS Request Letter, including use of paved roads, truck sweeping, and use of a wheel washing bath.

Thus, if you believe that the current measures in place are effective to ensure that trucks do not cause track-out from the facility onto the public way, then please withdraw this variance

request. If CDPH determines that additional measures are required, these may be addressed in the Fugitive Dust Plan.

- 5) Item number 5 in the GSS Request Letter seeks approval for a 42-foot high stockpile. This request mentions a state permit allowing pile heights of 42 feet, and further states that “sulphur prills cannot ‘escape’ from a properly designed and operated stockpile.”

Please provide detailed information describing the design and operation of the 42-foot high stockpile, including a scientific explanation to demonstrate that a pile of this height will not adversely impact the surrounding area, surrounding environment, or surrounding property uses.

- 6) With regard to storage of materials within fifty feet of waterways, the GSS Request Letter states that the site “has been structured to minimize the likelihood that prilled sulphur will reach the river, including, for example, GSS’ construction of a containment berm around the storage area.”

Please provide additional details describing in full all of the design measures and the complete operating program that will prevent materials from falling or blowing into waterways when stored within fifty feet of the river.

- 7) Item number 7 in the GSS Request Letter requests a variance to allow handling of sulphur prill during times when wind speeds are above 15 miles per hour (mph), up to 30 mph. However, please note that Section 5.0(4) of the Bulk Material Rules states that:

Disturbance of outdoor Bulk Solid Material piles, including but not limited to outdoor loading, unloading, and any other Processing, shall be suspended during High Wind Conditions, as detected by the wind monitor required under 3.0(5), unless alternate measures are implemented to effectively control dust in accordance with the approved Fugitive Dust Plan. [Emphasis added.]

Notably, GSS’s June 17, 2014 Fugitive Dust Plan, which is pending approval by CDPH, does not address measures to control dust during high winds, whether above 15 mph or 30 mph. CDPH asks that you consider revising the Fugitive Dust Plan to address High Wind Conditions as defined in the Bulk Material Rules. If you do, then please withdraw this variance request.

- 8) Item number 8 in the GSS Request Letter requests a variance from the requirement to install and operate a Dust Suppressant System to prevent fugitive dust emissions. However, the request letter also states that a water-based, non-toxic, biodegradable dust suppressant, called Envirobind, is sprayed onto the formed sulphur.

In addition to the information requested above regarding dust emissions and moisture content of prilled sulphur, please provide additional information explaining how and when

Envirobind is applied to the prills and explaining how this is effective to control fugitive dust at all times.

- 9) Finally, if there is any further information that GSS believes is relevant to meeting its burden of proof in connection with its variance request, or which it would like to make part of the record for the City's consideration of this issue, it is invited to do so. In addition, if GSS wishes to respond to any public comments regarding its variance request, it is also invited to do so. The public comments are posted on the City's website at www.cityofchicago.org/environmentalrules.

Please submit the above-requested information to my attention within thirty (30) days. If you have any questions, please call me at (312) 745-7206.

Sincerely,



Otis Omenazu
Chief Air Engineer