

KURT ALLEN FISHER
P.O.B. 11753
Salt Lake City, Utah 84147-0753
fisherka@csolutions.net
(801) 414-1607 (cell)
May 30, 2019

VIA EMAIL: mayor@slcgov.com

Honorable Jacqueline M. Biskupski
Office of the Mayor
SALT LAKE CITY CORPORATION
451 South State Street
Salt Lake City, Utah 84111

Cc:

VIA EMAIL: chris.wharton@slcgov.com

Chris Wharton, District 3 Councilperson

VIA EMAIL: holly.mullen@slcgov.com

Holly Mullen, DPU Community Engagement Manager

Re: Request that the Mayor invoke Utah Code Annotated § 79-3-202(f) to request siting technical assistance from the Utah Geological Survey with respect to the Department of Public Utilities ("DPU") proposed 4th Avenue Chemical Treatment Plant (the "Well")¹ at approximately 4th Avenue and 200 North Canyon Road, Salt Lake City, Utah
DPU Detailed Project No. 5132268-2015-0213² in Mayor's 2019-2020 Budget

Mayor Biskupski:

The Salt Lake City Department of Public Utilities ("DPU") has become overly fixated on the siting Option 2b³ for the proposed Well at approximately 200 North Canyon Road in Salt

¹ Salt Lake City Department of Public Utilities. 2019. Information Website on 4th Avenue Well Project (url: <https://www.slc.gov/utilities/fourth-avenue-well-project/>, accessed May 2019).

² Department of Public Utilities 2019-2020 Line Detail Budget, April 28, 2019 (url: https://stories.opengov.com/saltlakecity/published/MSDLn3_f and File: Attachment 1 - draft Proposed Public Utilities FY2019-20 Budget.pdf at page 33, Attachment "A" hereto).

³ Memorandum by David E. Hansen, Hansen, Allen and Luce, Inc., to B. Stewart, Salt Lake Department of Public Utilities, re: 4th Avenue Well Assessment (hereafter "HAL Report") (url: https://docs.wixstatic.com/ugd/80b28b_3607f771b2984d63a44ce7a4c3d1c7a9.pdf).

Lake City. The DPU has not given sufficient weight to substantial cloudburst flooding and earthquake risks⁴ at the proposed 4th Avenue and 200 North site.

I attribute the agency's preference to this site to be the result of the sunk costs problem. The DPU's proposed 2019-2020 budget⁵ reveals that agency DPU has already spent \$464,636 on the 4th Ave Well project in direct costs and a total of \$200,000 in common administrative costs, of which I allocated 60% or \$120,000 to current expenditures, for the sum of \$584,636 in current expenditures. The DPU proposes to expend the sum of \$3,100,000 in direct costs on the Well during 2019-2020 and another \$1.5 million in five-year common administrative costs, of which I allocate 60% to the 4th Ave Well or \$900,000, for a total five year project cost of \$4,584,636. Current sunk costs of \$584,636 represent 12.8% of total five year project costs. Those sunk costs have been incurred before the first brick has been moved at the 4th Avenue and Canyon Road proposed site.

Independent expert geotechnical siting advice is needed and is available from the Utah Geological Survey⁶ pursuant to Utah Code Ann. §79-3-202(f). That section authorizes, conditioned a request from a local municipality, to “assist local and state agencies . . . *at the request of state agencies or other governmental agencies, [to] review the siting of critical facilities . . .*” (*id*, *emphasis added*).

The DPU proposes to build the chlorine chemical treatment plant at level of the existing grade in the geologic streambed of City Creek Canyon. The site was underwater during the 1983 high-snowpack runoff of flooding with a peak flow of 331 cubic feet per second. The structure is vulnerable to foundation undermining, structural failure, chemical release and-or a toxic chlorine gas release from a 2,400 cubic feet per second cloudburst flood. In 1945, a cloudburst flood of that size that came down Perry's Hollow and “M” and “N” streets in 1945 and moved 300 lb. boulders, grave headstones and eight cars from the cemetery to South Temple (Salt Lake Telegram August 20, 1945). City Creek is at risk of a similar catastrophic cloudburst flood that destroyed downtown Farmington in 1923. *See* references in Attachment “B”.

The soils on which the plant is proposed to be built are susceptible to ground liquefaction and horizontal ground movements of 0.3 to 1 meters during the Wasatch Front's expected to greater than 6.75 magnitude earthquake (references in Attachment “C”). The chemical plant's foundation or the outflow connections to its chlorine storage tank could fail during such an earthquake resulting in residents and first responders having to cope with both a 500 to 900 gallon chlorine spill and-or toxic chlorine gas release as they dig their neighbors out from underneath their homes.

⁴ Letter by Kurt Fisher to Holly Mullen, Communications and Engagement Manager, DPU, dated May 25, 2019, re: flooding risk, Attachment “B” hereto; Letter by Kurt Fisher to Holly Mullen, Communications and Engagement Manager, DPU, dated May 26, 2019, re: supplemental note on seismic risk, Attachment “C” hereto.

⁵ Attachment “A”.

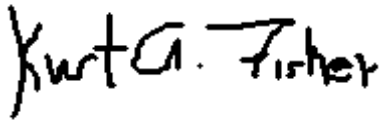
⁶ ; William Keach, Utah State Geologist, billkeach@utah.gov; Mark Milligan, P.G., Geologist, Utah Geological Survey, (801) 537-3326, MarkMilligan@utah.gov.

I request that you *sua sponte* exercise your executive power to request Utah Geologic Survey assistance in reviewing the siting of the proposed critical facility - 4th Avenue Option 2b chemical treatment plant site at 4th Avenue and Canyon Road. A review by an independent expert will quickly reveal that the proposed well should be moved to the May 9 open house Option 2c site in the park at State and Canyon Road in a redesigned anti-terrorist and earthquake hardened structure, admittedly at a higher cost.

Our able DPU Director Briefer proposes the chemical plant 4th Avenue and Canyon Road out of a desire to conserve public funds. But sometimes engineers get fixated on economic efficiency. That is when citizen oversight, in form of your office's powers, is most needed.

Please feel free to contact me with any questions regarding this matter.

Very Truly Yours

A handwritten signature in black ink that reads "Kurt A. Fisher". The signature is written in a cursive, slightly slanted style.

Kurt A. Fisher

Attachments

A - Excerpt from DPU Detailed Line Budget

B - Comment to DPU on Flooding Risk

C - Supplemental Comment to DPU on Earthquake Risk and Liquefaction