Conference Call w/ Bob Livermore @ So Sioux City

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Marshall Notes 11/21/16

Sewer workers noticed WW to be black (septic)
Making effort to assemble all data in one place
1st fingered out Big Ox "a few days" after, "More H_2S than one would expect"
Drove into the plant - could smell H_2S.
About same time frame was worker casualty
Also just one meter that measures H_2S
dropped "Odorless" into manhole O.S. Big Ox and read 1000 ppm H_2S

10/31/16 - Meeting - Shut down the plant (but not hauled)
Monitoring increased - backing up into other laterals

After shut down - took a few days to begin decline

Hired ACS out of Sux Bluffs
SSC → Hired McClure Engineers - determine locations & frequency. McClure directs ACS what to do.
Big Ox has provided health professionals.
20 households displaced @ peak. Down to 10 about now.
Cracked pipes / vents in crawl spaces, (smoke testing)
residual odor in drapes, carpets, mattresses, insulation
Big Ox contracting the plumber
Service Master is contractor
City is paying to people up @ motel.
Big Ox giving gift cards in addition to households - one-time $250
36" rubber plug used to shut off gasses. Damage had already been done.
Week & half ago added bioxide upstream to tie up sulfates.

Normal is about 10 ppm in a sewer.

Will install tomorrow. (Nov 22)
Has 2 crews ready to install as soon as NE approves. Would have completed by mid Dec. (15)

Big Ox would not be able to come on line until force main constructed.

1st phase would isolate homes. Big Ox would be able to discharge after phase 1 is built. Phase 2 might not be finished until mid spring.

Will do vapor phase eval to ensure problem isn't just transferred to SC.

Big Ox is trucking to SC. Liquid waste not going to Ox. Hauled waste is treated and treated waste is retained by truck to

BPI, CHS, Richardson Milling - 3 largest contributors

Web Site - air + liquid monitoring - massive amt of data
Sites are changing. Seeing elevated readings

Cof Call everyday @ 10 am - both cities, sampling people, engineers. Every Monday - press release