Delafield Sanitary Landfill – Progress Report for the week of August 28 – September 1, 2017

August 29, 2017

- Mobbed equipment to the site and excavated the area near HMP-3. The 8" Header and valve was exposed and inspected. It was determined that the 8" valve at V3 did not operate at all because there were no valve spacers installed. It was decided that the 8" valve (V3) is not needed and that the least expensive option would be to remove the valve (V3) and electro-fuse a spool piece in its place. Electrofusion Equipment, 8" HDPE pipe SDR17 and 2 electrofusion couplers were picked up for use on Wednesday, August 30. Blower flow 270 cfm and well field vacuum -10".

August 30, 2017

- Before removing V3, Header vacuum at HMP-3 was less than 1". The valve (V3) was removed and our assumptions were correct, the butterfly valve could not operate because there were no valve spacers installed. The electrofusion couplers and spool piece was installed and fused to the existing header. The spool piece was installed successfully and the spool piece was allowed to cool over 1 hour. The gas system was started and the spool piece was inspected and soap tested for leaks. No leaks were observed and the excavation was filled and the area was restored and seeded. After the gas system was started, -5" of vacuum was recorded at HMP-3 and -7" of vacuum was recorded an hour later. Various gas wells and header monitoring ports were checked. Vacuum was established at the following locations:

EW-24	-1.5" (previously 0)
EW-5	-0.5" (previously 0)
HMP-4	-5" (previously 0)
HMP-5	-5" (previously 0)
EW-17	-4" (previously 0)
HMP-6	-5" (previously 0)
V-4	Was exercised and functioned correctly – note 6" valve -5" (open) and 0.0 (closed)
HMP-7	-6" (water in header) (previously 0)
EW-18	-2" (previously 0)
EW-19	0 (previously 0)
EW-20	0 (previously 0)

- At blower station - V1 was closed approximately 2/3 in an attempt to increase the vacuum in the header to the West and North portion of the gas system where the homes and apartment buildings are located. V2 is remained opened 100%.
    - As a result of removing V-3 Gas system, flow increased from 270 cfm to 321 cfm (approximately a 20% increase) and well field vacuum increased to -14" of vacuum.

Delafield Sanitary Landfill – Progress Report for the week of August 28 – September 1, 2017

Page 2

August 31, 2017

- HMP-7 and GC-3 were inspected and a perforated 4" drain pipe was installed next to the fiberglass box next to GC-3. Vacuum at HMP-7 was reduced from -7" to -5" as a result of closing V1.
- The blower station was inspected in hopes to reduce the positive pressure between the blower and flare which would increase vacuum to the well field.

  The flame arrestor was removed and cleaned.

  Ports at the base of the flare were removed and excess amounts of rust and debris were removed.

  The waste valve operator was inspected and exercised to open 100%.

  Gas system flow was still at 328 cfm.

September 1, 2017

- Gas System flow was at 329 cfm and well field vacuum -15.5" and flare pressure was +8".
- The 3" steel pipe between the gas system blower and waste valve was removed and increased to a 4" PVC pipe. Gas System flow was increased to 339.5 cfm and well field vacuum -16.5" and flare pressure remained at +8". Vacuum was checked again at the following locations:

  EW-17 - -5" (previously -4")
  EW-18 -2" (previously -2")
  EW-19 0 (previously 0)
  EW-20 0 (previously 0)
  G1 Above surface air Leak – the low-pressure port/tubing is broken off the header. Attempts were made to seal the leak, but were not successful. Needs to be repaired when the orifice plates are corrected.

General Comments

- As a result of establishing vacuum to the North and West the well field will be rebalanced on September 5.
- Gas system operation for July 13 – July 31 operating efficiency was 76.5% - 330.5 hrs. run time. 3 relights.
- Gas system operation for August 1 – August 31 operating efficiency was 56.0% - 416.4 hrs. run time. 5 relights.
- Grass still needs to be mowed on site.
- A phone line still needs to be connected.

Overall, we have made significant improvements. However, we still have gas probes with high gas concentration and we still need more vacuum (-10" of available vacuum) in the header to the North and West side of the site to be in compliance with WDNR.