

**Former Town of Newton Gravel Pit
Data Gap Meeting Notes
City of Manitowoc, City Hall
9:00 to 3:00, Wednesday, February 19, 2014**

**Attendees: Kathleen McDaniel, Dan Koski, Dave Henderson, Tauren Beggs,
Liz Heinen, Annette Weissbach**

Project Update – very short update comments:

Yindra potable well replacement – schedule update

Contractor working on well today, started yesterday
When completed purge for one week at 2 gpm or ask if Luann wants to use prior to sampling.

Yindra VI report – formal WDNR acceptance & approval to remove probes

Terry Evanson (DNR Vapor Intrusion Specialist) and Liz Evans (DHS) reviewed results, determined no risk from Vapor Intrusion. DNR Concurrence Letter to remove sub slab sampling ports in basement will be issued February 21, 2014.

Latest potable well sampling outcome – summary

New ES detect 3023 CTH R, have bottled water, and filtration system installed, iron issues. Also talked about other samples on Orchard and CTH R. 3312 CTH CR not sampled due to health concerns when trying to enter the residence. James Blaha will be conducting a health inspection at residence and collect a water sample during that time, not scheduled yet. Orchard Lane Property without an address used as a garden, no water sample could be collected. Work plan due Feb 21 on schedule in DNR Second Additional Requirements Letter, City/AECOM asking for two week extension to March 7, verbally approved by DNR.

Remedial cap delay approval letter – temporary cap discussion

Temporary cap: main purpose to keep any added infiltration away from western source, doesn't necessarily have to be a cap, since it has grassy surface, redirect runoff from bare slopes where trees and brush were removed. City will submit a proposal.

Web site & mailing– status

Website is live: if we have additions, send to Kathleen. Flyer was mailed on Friday Feb 14, no one has received calls.

Alternative Sources Data Review:

Open House Comment Cards were reviewed
Beggs has compiled a list and cross checked who's been sampled or not, many outside the target zone of concern. In general 50% of those who asked have been sampled.

WDNR Warden – Case Activity Reports

- Vogt
- Hansen
- Aasen
- Voelker
- Hodek
- Determine questions to ask during possible interviewee site visits

Vogt (was original complainant 1991, also interviewed in 2013)

North gravel pit road past dog kennel, turn right (north) and proceed uphill around curve, dumping area past trees north of gravel pit road, not at dead end of road. Thought dumping area was east of Silver Creek.

Hansen

North gravel pit road past dog kennel, turn right (north) and proceed uphill around curve, overlooked Silver Creek, dumping area south of gravel pit road, at dead end of road. Thought dumping area was east of Silver Creek. Showed Animal Dispatch Building on Mancheski property in hand drawing.

Aasen

Area #1 in west curve of creek and #2 on north and east of creek

Nancy Voelker

Dog pound in area of former house

Dumping just northwest of the house and barn, Mirro dumping via open spickets

Flowed downhill and spilled into creek

Tauren suggests Stroess interview Nancy.

*DNR to proceed with site visits with interviewees in early Spring, let Stroess decide how to conduct site visits

City of Manitowoc

Dog “kennel” information

City Police Chief is currently interviewing retired employees. Location of Animal Dispatch Building and Dog Kennels west of Silver Creek, immediately adjacent to the creek.

Additional questions to ask:

- 1) Ask if flyash or foundry sand was disposed of at pit?
- 2) Northwest area of gravel pit: big lagoon pit and 4 nearby lagoons what were they used for? Washing, sorting?

Aerial Photos

- 1938 aerial photo, good detail
- 1961 aerial photo, good detail
- 1967 aerial photo, poor detail
- 1967 “blue” photo, great detail, City has original
- 1973 “blue” photo, good detail, with 2-foot topo
- 1974 aerial photo, poor detail
- 1979 aerial photo, poor detail
- 1990 “blue” photo, good detail
- Plus the City has other photos

1938

South entrance road at Mancheski property line, north across creek
4 structures at end of road, west of creek
Road leading northeast from main road, east of creek
There is a ravine east of the creek, not a hill

1961

Northern entrance road more prominent
Southern driveway at property pulls into Mancheski and Roberts Pits
Ravine has trees
House, chicken coop? west of Silver Creek
Road loops around entire property, police range in northwest
Gravel piles, dark spots east of Silver Creek near Hecker Road

1967

Poor detail
Same road, ravine still has trees, dark spots,
Mancheski & Roberts pits visible
Staging area? near bend in creek area (Aasen area #1)

1967 Aerometric map (blue 1967)

South road straight to Mancheski and Roberts pits.
North road, windrows, piles, pads,
Animal dispatch building was west of creek (grainery bldg.?)
Multiple buildings visible near house, barn
Pads in Aasen #1 area, has truck parking or staging. From pad road to east dumping area?

Maybe another dumping area to west, circular/oval in shape, maybe northern source area
Also see areas around current police house and big lagoon and four smaller pits

1973 blue topo with 2 ft contours

Shows that you can't go right (north) and uphill east of the creek, there's a ravine there, not a hill
Animal Dispatch Building and kennel west of creek
Losing definition of staging area and circular pit

1979

Poor detail, but can see big lagoon and water filled areas.

1982, 1986, city aerometric maps, excellent detail

Ask if fly ash or foundry sand was disposed of at pit?

Blue 1990 (also city aerometric map with excellent detail)

Shotgun range, road loops around

Ravine filled in, road changed, some pads

South road sort of still there

House is gone, western source area

WDNR

- 1975 – xxx pit, fly ash report
Reviewed, showed Fehrman Pit (now vogel property), matched up with 60s air photos
- Bed rock cross section drawing
Reviewed, showed bedding planes dip east ~3 degrees
- Mag survey results
Mag survey showed drinking water well location, we assume it was abandoned as per documentation, no need to further investigate

AECOM

- 1993 report
- 1996 report
- 2009 report
- Current draft cross-sections

Reviewed Figure 3 2009 report, site layout and boring locations

Discussed northern source area investigation

1992 EM survey, test pits, backfilled pit, no metal objects found

Debris, wood, iron, tree branches found in test pits

1995 shallow temp wells, Hydropunch to bedrock, limited detects

Discussed Boring WP-08: 26-ft depth

Depth to water 23 feet

Benzene, naphthalene detected

Boring B16: 10-12 feet

Soil: elevated levels of metals did not exceed DNR standards: Lead 350, chromium 1500, would metals be associated with anodization process? No chlorinated VOCs detected.

Was Northern source area location of acids dumping from Aluminum Specialty (Vogt/Hanson recollection) or did dumping actually occur further east, more in line with Aasen area #1?

Was groundwater sampled for aluminum or acetone? No

Was Teflon coating used at Mirro? Unknown

Were MWs in northern source area deep enough?

Northwest area of gravel pit: what are the big lagoon pit and 4 nearby lagoons used for
Sampling for metals, acetone in Groundwater WP-08

Sample for acetone and aluminum at current MWs in northern source area?

Area #1 further east of northern source area.

Determine data gaps

- **Alternative source areas**
Two potential areas: northern source area and Aasen #1 area
- **Groundwater plume**
Two plumes?
 - Sand & gravel southeasterly
 - Bedrock: easterly and northeasterly

AECOM surveyed elevations of Silver Creek bed in October, compared to water table wells, maybe a surface water divide running NW to SE across Roberts?

Need to connect dots between western source area and Yindra: three or four nested wells (piezos) between source and southeast?

Need to connect dots between source area and impacted potable wells on north end of CTH CR: three or four nested wells (piezos) north on Hecker?

A series of grab water samples (Geoprobe,Hydropunch) along Hecker?

- **On gravel pit property**

Is there another area (maybe Area #) 1 east of northern source area?

Lagoons on northwest side of property?

However, general agreement that current priority is impacted potable wells, more research into other on-site sources less of priority, western source area known as a concern.

- **Off gravel pit property**

Burning area north of gravel pit road?

SE corner Viebahn/Hecker?

However, general agreement that one person's anecdotal recollection not sufficient to require city to investigate elsewhere when with known western source area free product and potable well issues are known

Old gravel pits:

Fehrman, Fricke, Mancheski, Roberts, Bruenig. DNR to write 103e letters?

Potable Well Data Review:

Data review:

- AECOM draft lab data tables
- AECOM draft Figure 2
- Map of potable wells w/in City

AECOM and city to estimate cost of city water extension vs. point of entry treatment/individual potable well installations with long term monitoring.

Also data gap on local geology, bedrock (Henderson to contact WGNHS, or USGS)

Weissbach explained two EPA options:

- 1) Pre-cerclis: funding for either source definition (on city property) or receptor definition (one time additional potable well sampling)
 - 2) Removal (emergency response): assistance with save drinking water source and PRP search with cost recovery, potential reduced recovery from city due to past expended costs
- Weissbach gave EPA telephone numbers of Ribordy and Halbur to McDaniel who will call one or both February 20 or later.

Determine data gaps

- **Horizontal extent of investigation**
Extent defined with the exception of sampling some properties still within the target zone.
- **Vertical extent of investigation - screened intervals**
Not completely defined. Only have approximately 50% of potable well construction information. Is it worth the time and money to investigate this since each potable well construction can vary tremendously?

Next Steps Forward:

- 1) No Vapor Intrusion issue associated with contamination – DNR Concurrence Letter to remove sub slab sampling ports in basement will be issued February 21, 2014.
- 2) Potable Well Monitoring Plan – deadline extended to March 7, 2014. Monitoring Plan will initially cover one year period with quarterly sampling (Hecker Rd full VOC, east of I43, could reduce to just cis-1,2-DCE and VC). Heinen, Beggs, and City/AECOM to work out details and additional properties to sample.
- 3) City/AECOM discuss cost estimate of city water vs. potable well replacement and long term monitoring, decision will be made after assessing the new potable well currently being installed at 3518 Hecker Road. Also discuss potential for well nest installation.
- 4) City to submit proposal for temporary cap of Western Source Area. Discussed possibly tarping area or diverting water using berms.
- 5) Beggs to follow up with Stroess on interviewee site visits in early Spring to help distinguish the two other potential source areas.
- 6) McDaniel to call Kathy Halbur and/or Mike Ribordy on February 20 or soon after to discuss EPA involvement.