Community Advisory Committee (CAC) for Soil Study
Wednesday, August 16th 2018 Meeting Notes

In attendance: Dr. Joe Gardella (JG-UB), Dr. Mike Milligan (MM-SUNY Fredonia), Katie Little (KL-UB), Rich Mpelezos (RM, Buffalo Resident), Anne Bazinet (AB-ToT Resident), Jay Farqueson (JF, Grand Island resident)
Absent: Jeanine Justin (JJ, Grand Island Resident), Sue Mazur (SM, ToT Resident), Dr. Tammy Milillo (TM-UB), Jackie James-Creedon (JJC-CSCR, Kenmore Resident),

Review last month's notes
July notes were reviewed and approved

Updates on Soil Study progress
Phase 1 maps:
(**JG**) We tested for around 170 chemicals and created maps for each one. There are at least four different versions of the maps for each chemical. The DEC requested additional maps that are specific to the SCO values for NY State. The maps have been shared with the representatives from DEC/EPA and they are actively reviewing them. Ben McPherson, the representative from the DEC, took GIS classes with Tammy and the DEC feels that Ben is their mapping specialist. Tammy's impression of Ben is positive.
After we receive feedback from DEC/EPA we will hold a meeting with DEC,EPA, and CAC to provide the opportunity to ask questions of the agency representatives. KL will invite a few others from the community so that we have more resident participation. It is unclear if the meeting to review draft maps with elected officials will happen before or after the meeting with DEC, EPA, and CAC.

(**JF**) What is the difference between the draft and final maps?
(**MM**) They could be the same.
(**JG**) We will hear feedback from DEC, EPA, CAC, and elected officials before the maps are released and take that into account. We will be releasing maps; the elected officials do not have veto power.
We had a meeting with Supervisor McMurray and went over the draft maps. We tried to set up a meeting with Mayor Davis, but he declined to attend.

(**JG**) TM has created versions of the maps using super sophisticated mapping techniques called indicator kriging. We will be releasing simpler versions of these maps. The difference between the two is that the simpler maps produce 'fuzzier' boundaries and the sophisticated maps produce clearer boundaries.

(**RM**) What is the motive for the elected officials?
(**JG**) They are concerned that the study and the maps will affect property values.

(**JG**) There are differences in style and substance with how the DEC/EPA review the maps. The DEC feels bound by NY State SCOs and they are saying that we have to conduct the study a particular way because they will be responsible for the cleanup after the study is done. As professors at a university we have academic freedom to conduct sound scientific research. The only thing we are bound to follow specifically is the judge's order. We have conducted two phase studies with other projects successfully. As with those projects, Phase 1 is a screening study so that we can eliminate clean areas and focus on getting more information in areas of interest in Phase 2. People are relieved when they are in an area that is identified as clean.

Phase 2 sampling:
(**JG**) We agreed to sample public places like schools and churches whether they are in a hot spot or not. Phase 2 sampling has begun. We are starting by collecting samples at the Grand Island and City of Tonawanda Schools. There are three general areas of interest.
(**KL**)

- We have delivered over 20,000 flyers in the areas of interest.
- Since we are sampling in stages we are calling this first group of samples phase 2.1.
- We have identified 53 residents in phase 2.1.
    - 10 have returned the permission form, 1 declined to participate
- We are using the two part permission form.
    - We announced publicly at the press conference last year that we were using 2 part permission forms. TM and I did not want to change the permission process without the same level of announcement. To prevent further delays in sampling and to minimize confusion and concern about changing soil study policy we are using the two part permission.

(**JF**) Is there a deadline to complete Phase 2?
(**JG**) We have a budget for two years of work. We have spent conservatively and have enough money to carry major staff through December 2018. There will be a grad student working on the source apportionment through the spring. We will hopefully complete Phase 2 by December 2018. We are planning to finish soil sampling and deliver resident reports by year end.

(**JG**) In Phase 2 we will not be sampling for VOCs (hardly any were detected in Phase 1 samples). We will also not be sampling for Pesticides. We will be sampling all PAHs and SVOCs because each of those are all one test; there is no price break for a subset of those suites.
Any chemical detected over the SCOs can trigger a cleanup, but we have to be sure to follow the judge's order and focus on the historical impact of TCC.
We sampled a piece of their coke product and it's very pure.

(**JG**) We have to report on the historical impact of TCC. I have consulted with the EPA and have determined that 'historical' refers to approximately 20 years. I am calculating a wind rose for the past 20 years at the EPA's request. A wind rose shows the percent of time the wind was blowing at a particular time.

(**JF**) Is it possible to correlate and/or date the chemicals you find to identify the company that emitted them?
(**JG**) We are dating using pesticides as a timestamp, as well as a negative control. (a negative control group is a group in which no response is expected) If we see a hotspot for the negative control we know that is not due to TCC.
We did detect pesticides in the 6 inch samples. Those pesticides were phased out of use 30-40 years ago, so the 6 inch samples were validated as representative of historic deposition.
Pesticides are not in TCC feedstock and would not be detected even if they had gone through the coking process.
We know TCC burned PCB laden feedstock, which is why we are testing for PCBs.

(**JF**) Could Huntley plant emissions complicate telling what came from TCC? Wondering in terms of how the data could be used in court to prove TCC is at fault.
(**JG**) Yes, Huntley emissions will complicate the source apportionment process. But we can't design the study with a lawyer's strategy in mind. We have to conduct an unbiased study or else the data will not hold up in court. We can't guarantee 100% that the source apportionment will work.
(**MM**) We have to be as objective as possible so that we don't look like we're trying to hang TCC. We can't tune the study for a specific outcome.
(**AB**) The data is the data.

(**JG**) Based on the testing that Nellie did when she worked at TCC, the Huntley plant was more responsible for particulate matter than TCC was. Now that Huntley is shut down particulate matter could be coming from any of the ~50 air regulated facilities.
The white smoke coming from TCC is steam. They recycle and collect the organic components to power the heating of the coke ovens.

Update of DEC progress with TCC
(**KL**) TCC submitted a request for a hearing. The hearing is in the process of being scheduled, which will be within 60 days. DEC expects the meeting to be at the end of September. The meeting will be public, but the location and details of the meeting are yet to be determined. The revocation hearing is open to the public, however we are in the process of clarifying qualifications to be an "intervening party". The initial answer from the DEC is that residents can't be an intervening party. The public can attend and listen, but can't be involved. The process is fairly long; the Commissioner makes the decision, opens it up for comment, and then TCC can appeal.
The DEC is going out to the facility for weekly inspections. DEC is measuring for fine particulate matter, PM_{10} and $PM_{2.5}$. The data is available online. The data show that TCC has not gone above the air quality standard limits. There is Benzene monitoring more frequently, approximately every 15 minutes-1 hour. We have not seen the numbers approaching guidelines for health.
TCC has not exceeded the Ambient Air Quality Standards. DEC representative says: "We have a good case for revoking TCC's permit, but it's a crap shoot if we will be successful".

(**JG**) Opacity has gone up, but opacity only tells you about the size of the particles, it doesn't say what they are.

(**RM**) What would a modern coke plant look like?

(**JG**) The bricks of the oven would be different. The infrastructure surrounding the ovens would be different. There would likely be different geometry the exhaust recapture system. The recapture system would be engineered to be more efficient.

Sampling at TCC
(**MM**) We met with Mr. Durkin and Mr. Saffrin, the President and CEO of the company (respectively). The cease and desist order delayed our plans to sample on site.
(**JG**) We are going through the process of scheduling sampling at TCC. I didn't want to bug them during the issues with the DEC. We have gotten ideas for where to sample by talking to the President, CEO, and Nellie - who knows where stuff is buried from when she worked there.

Consequences if TCC shuts down
(**JG**) If we don't get an air sample that will significantly affect the source apportionment part of the study. Once we are approved to sample soil on site we will move quickly to schedule air sampling.

Air sampling update
(**MM**) We will be using 2 different sampling units. The larger unit is currently running on the roof of the building at Fredonia to practice using it and get out any kinks.
The Fredonia equipment samples for SCOCs and PAHs. It captures the gas phase and can also capture particulate in a foam plug (PUF). We can distinguish between gases and particles.
The UB equipment samples for volatiles like benzene.
Sampling in the fall may be better because the Fredonia equipment is noisy and people can shut their windows.
We want to be clear that there won't be maps made from the air samples. There are not enough samples to produce good maps. The air samples will be used as complimentary data to the soil study. We can tease out any unusual chemical markers that may help with the source apportionment.
There will not be enough samples to assess air quality – the DEC is already assessing air quality.

(**JG**) Different PAHs have different weights. There are environmental standard reference materials for things like diesel and coal fly ash. We will compare our samples with known substances to identify what we find.
Even if we find something TCC will find an expert to refute our results.
This study will be used in a court case. If the data show that there is not a large impact from TCC they will use it as evidence.

(**JF**) TCC hasn't violated any air quality standards? I thought there was more there.
(**JG**) The DEC will take action with extensive community complaints. The DEC/Attorney general did not have the data to support an immediate shutdown in the Seneca-Babcock community or in the case of the Amigone Funeral Home. Those two facilities were shut down with nuisance violations.

(**JF**) Can you compare NOCO to TCC emissions?
(**JG**) I can't speak to that. Benzene doesn't have a smell. You're smelling gasoline fumes, which are carcinogenic.

(**KL**) Will the results of the air samples be shared with the community and, if so, how?
(**MM**) We will report the results to residents who host the equipment. We do not yet have a plan to share the data with the wider community. The samples are a way of responding to concerns about the air quality and the data will help with source apportionment.

(**AB**) Is there still an air monitor at the Holmes School?
[KL – According to a 1993 feasibility study by the Department of Energy to determine the impact of activities related to separation of uranium ores on the Tonawanda site, the monitor at the Holmes School only measures total suspended particulates (tsp). Could not find any other information about it.]

(**JG**) The Erie County Department of Environment and planning offers free radon tests.

Next meeting Wednesday September 19th, 2018
6pm – 3200 Elmwood, Room 210