# Community Advisory Committee (CAC) for Soil Study
# Monday, November 19th 2018 Meeting Notes

**In attendance**: Dr. Joe Gardella (JG-UB), Dr. Tammy Milillo (TM-UB), Dr. Mike Milligan (MM-SUNY Fredonia), Katie Little (KL-UB), Rich Mpelezos (RM-Buffalo Resident), Anne Bazinet (AB-ToT Resident), Jeanine Justen (JJ, Grand Island Resident), Sue Mazur (SM-ToT Resident), Dave Gardner (DG-ToT Resident), SallyJo Robins (SR-ToT Resident)
**Guests**: DEC Representatives Ben McPherson (BM), Chad Staniszewski (CS)
**Absent**: Jackie James-Creedon (JJC-CSCR, Kenmore Resident), Jay Farqueson (JF-Grand Island resident)

**Introduction of Guests from DEC and their perspective on TCC Soil Study**

Chad Staniszewski (**CS**) is an environmental engineer from the Buffalo area and has experience with the TCC situation. He is continuing to provide feedback for the TCC Soil Study to maintain continuity.
Ben McPherson (**BM**) is an environmental engineer who manages the day to day issues at the TCC facility.

(**CS**) The DEC is not involved with decision making for the TCC Soil Study. Our role is to look at the data and the maps and provide feedback. We rely wholly on the New York State Soil Cleanup Objectives (SCOs) as a basis for our decision making. Thousands of TCC Soil Study maps were submitted to the DEC. We compared those maps to residential SCO values.
(**TM**) Phase 1 was a screening study using lower SCO values with the objective of identifying areas of potential concern and limiting exposure to residents. This method also ensured we did not miss areas of concern. Additional maps were made using the NYS-DEC SCO values.
(**CS**)

- For a developed urban area the results of the TCC Soil Study were positive. There was no pattern to the exceedances, which suggests that the exceedances are not due to deposition from the air.
- Near surface soils are not contaminated to an appreciable degree that would impact health.
- Results from Phase 1 of the study show a positive outcome, this should help to put people at ease.
- Moving forward our role will be to look at the data for the TCC Soil Study to see if there are any health concerns.

**Update on progress at TCC facility**

(**CS**)

- The EPA has taken over the site. The DEC is not qualified or capable to handle the tasks the EPA is carrying out.
    - EPA has hired some TCC employees to help identify certain components of the facility (shutoff valves, etc.)
- The EPA is stabilizing the site so that there is no offsite migration of contaminants.
    - EPA should be commended. The worst is over. They were dealing with a range of materials, some of which can be explosive.
- The TCC facility is no longer running.
    - The exhaust coming from the stack is steam from a boiler that is running to assist in shutdown of the facility.
- The DEC has a lot of information about Site 108 (OU3) a portion of the property that was already undergoing a cleanup process.
    - Site 108 does not have a lot of migration of chemicals via groundwater, but some contaminants may be transported via stormwater during rain events.
- Coal tar is a hazardous material, but it has commercial uses. It is used in products such as driveway sealant and dandruff shampoo.
- The EPA is dealing with the berm and storage tanks. Immediate issues are being stabilized, however paperwork and procedures need to be followed. The site will likely sit for a while after immediate issues are addressed. The facility has been shut down and contaminants are not very mobile.
    - 160 acres will take a long time to remediate.
- State superfund doesn't' have the funds to handle the TCC site.
    - We will try to make the site eligible for Federal superfund.
- The site is not as bad as the news describes, the EPA is handling the site well, and work is being done.

(**JG**)

- The EPA released a FAQ sheet about the TCC site. The EPA didn't get approval to speak to the TCC Soil Study Community Advisory Committee, but has been a part of the soil study and data review process.

- The plan going forward with Phase 1 maps are to show where the areas of interest for Phase 2 are. We want to determine the edges of the areas of interest and delineate where there is contamination in the community. The judge's order is to determine the impact of TCC, which we are looking to do in the source apportionment part of the study.
- The soil study has received a no-cost extension from the court through September of 2019.
- In Phase 2 of the soil study samples are spaced closer together.
- A big part of the maps is to show where there is nothing to be concerned about. The maps show areas of interest, but they also show us where we do not need to focus on because the soil is clean.
- The area for Phase 1 was a lot larger than the area outlined for the DEC air study.
- We are sampling in areas where people congregate whether they are in a hot spot or not in order to make sure those areas are safe for the people who visit them. We have extended the opportunity for soil sampling to schools, churches, and parks.
- JG will be going to school board meetings in December to report the findings from samples taken from school properties.

**Details about the maps**

(**TM**) Noted that the range of the intervals chosen to represent the different concentration ranges (colors) on the map changes the appearance of the map. In order to make decisions for the soil study we make maps that show spatial distribution (small variations) between sampling locations. Just because a map shows darker colors doesn't necessarily mean that the areas those colors are representing are above NYS SCOs. Additionally, Jon Gabry the EPA representative, also commented that the maps sometimes look darker near the edge due to how the interpolation calculates values for those areas. "Edge effects", lack of data, or holes in the grid could affect the model and create artificially darker areas. Unless there is a concentrated dark spot, darker colors are not a concern.

(**CS**) The EPA uses BAP equivalent as an SCO, the DEC does not. We judge based on Benzo(a)pyrene.

(**TM**) We tested for 176 chemicals. We don't know exactly what was historically emitted from TCC.
Heavy metal concentrations are above our screening levels. For example, we set a low screening level for arsenic. We have done work in other communities to establish an acceptable background level for arsenic.
(**JG**) 4-5 parts per million (ppm) is a typical background level for arsenic in NY. We set the background level for the maps at 8ppm because of the industrial history of the area.
(**TM**) The arsenic map shows the probability that the levels of arsenic in the soil exceed 8ppm.

(**JG**) We tested for chemicals that we aren't sure come from TCC. We tested coke product, TCC soil, and a 24hr air sample from TCC in order to determine what chemicals may come from TCC. The choices for Phase 2 locations are based on areas of interest that overlap from maps for different chemicals.

(**BM**) The maps should show the DEC SCO level in the legend of the map.
(**CS**) We come at this from a different perspective. If you use 13ppm baseline for arsenic (NYS SCO), you don't see any exceedances of the SCOs.
Maps that show impact do not necessarily show impacts to the degree that would affect human health. The goal of the soil study is not necessarily the same as identifying a public health concern. The impact of air deposition on the soil may be so small that there is no significant impact on human health.
(**TM/CS**) We are surprised to find that the soil is cleaner than we expected.

(**JG**) We may only release a map of the areas of interest for Phase 1 of the study.
(**TM**) We have said that the data will be available, but we should do that in a constructive way.
(**CS**) The maps are difficult for people to interpret.
(**JG**) We made maps to identify areas of interest based on the grid sampling in Phase 1.
(**AB**) Dark colors on the map do not necessarily mean the area needs to be cleaned up. I don't think most people will understand that.

(**SM**) Will all the chemicals found at TCC be public knowledge?
(**JG**) Phase 2 of the soil study will answer that question.
(**CS**) Remediation plans potentially cause more stress due to misinformation and incorrect interpretation of the maps and data.
(**AB**) The NYS SCO should be listed on the map so that people can see how the colors relate to it, otherwise people won't know which areas on the map are below SCOs.

(**JG**) We made a promise to elected officials to show them the maps first before they are publicly distributed. One of the elected officials asked us to stop after Phase 1, but we have an order from the judge and we have to fulfill it.
(**CS**) Phase 2 sampling is important to narrow down areas of interest.
(**JG**) We have to distinguish TCC from 50 other polluters in the area. We are not guaranteeing positive results, but we have confidence in our source apportionment strategy.
30 years ago Huntley was one of the worst polluters in the country.
We tested for PCBs because we know that TCC burned PCB laden feedstock. We found only a few PCB exceedances and they seem to be due to other sources based on their distribution.

(**SM**) What about the exceedance in 2009 of chemicals like benzene?
(**JG**) We tested for chemicals like benzene, but didn't find any. They don't persist in soil.
(**TM**) There were approximately 35-40 chemicals that had 1-2 hits.
(**CS**) That's good for an area of this size.

(**JJ**) Who would clean up on site at TCC?
(**CS**) The EPA is doing that. They are focusing on stabilizing materials and preventing migration off site.
(**JJ**) Where do contaminants go when they are cleaned up?
(**JG**) They used to sell it.
(**MM**) It is likely incinerated.
(**CS**) The boiler at TCC is running and it is burning natural gas – that's what's making the steam you see coming from the stack. The black stuff on the ground is breeze, which is powdered coke and coal. Breeze does have production value. Coal tar is blended for consumers and is used in products like dandruff shampoo. It also has combustion value. Coke, breeze, coal, etc. will be sold.

(**MM**) What is the depth of breeze on site?
(**BM**) We don't have data for that.
(**CS**) It's highly variable. Breeze is high in PAHs. You need to ingest it and be exposed to it for it to cause health concerns. We're at the beginning stages of investigation for remediation of sub-surface soils.
(**MM**) Do you use soil cores to test?
(**CS**) We will typically use geoprobes - 2 inch metal probes.
(**JG/TM**) At other sites we have seen geoprobes up to 14 feet. deep.
(**CS**) In our program they have to go down to native type material. The depth could change depending on the situation, but they have to delineate the full matrix.
We would remove hotspot areas, remove and deal with the hazardous waste. No one would pay to remove the breeze, that's millions and millions of dollars. Breeze doesn't leach chemicals, so we would consolidate that on site under some type of a cover. The site will be remediated to commercial use which means that the cover would be 1 ft. deep. This type of site would be good for passive recreation.
The EPA rule requires NRG to clean up to certain standards that are not conducive to development.
Call the DEC with any questions about remediation: (716) 851-7220
We are willing to come back and provide feedback for maps made from Phase 2.

**Update on Phase 2 Sampling**

(**KL**) KL and students are working on getting permissions to sample, sampling, processing data from ALS, creating reports, delivering reports, and following up with participants.

- # Samples sent to ALS – 132 (92 residential)
- # Reports delivered - 65
- # Secondary permissions – 19

Participants are encouraged to come to a Talks with Tammy event to have an in-person consultation about their data, may have a phone call with JG to discuss data, and are also encouraged to call KL with any questions.

**Next meeting Wednesday December 19th, 2018**
**6pm – Kenilworth Library, 318 Montrose Ave, Buffalo, NY 14223**