

Tonawanda Coke Soil Study

Frequently Asked Questions

UNIVERSITY AT BUFFALO, CITIZEN SCIENCE COMMUNITY RESOURCES, AND SUNY FREDONIA

In federal court, the Tonawanda Coke Corporation was convicted of breaking serious environmental laws. Their pollution may have endangered the health and environment in our community. As a result of the court case, they are now required to fund work to help the community study and address its effects. The Tonawanda Coke Soil Study began planning in 2016. To learn more about the history of this issue, please visit www.csresources.org.

1. Why are we doing soil testing?

Soil testing results will help the community learn how much pollution may have entered the soil in the communities surrounding the plant. This knowledge is the first step toward cleaning up the mess left behind.

2. Where are we sampling?

Sampling will take place in the areas that are most likely to be affected. This includes: Eastern Grand Island (14072), Town and City of Tonawanda (14150), Kenmore (14217), Black Rock/Riverside (14207), and the north western part of (14216).

3. Who is conducting the study?

This study is being conducted by faculty, research staff, and students from the University at Buffalo Department of Chemistry, led by Professor Joe Gardella, as well as staff from the local nonprofit Citizen Science Community Resources, led by Jackie James-Creedon, and faculty from SUNY Fredonia Department of Chemistry led by Professor Mike Milligan. In addition, documents from the EPA and DEC have been helpful in providing guidance for the study. Residents are an important part of this study's success! Contact us to find out how you can get involved.

4. What is the plan for the soil study?

The study will have two phases. During the first phase we will collect around 300 samples from around the community so that we understand which areas have been most affected. During the second phase, we will return to areas where there were higher levels of contaminants to determine the size of hot spots in those areas.

5. Who will do the testing?

Sample analysis will be done by ALS Environmental, a certified environmental testing laboratory. UB and SUNY Fredonia will conduct additional studies.

6. When will you start?

We are currently gathering equipment and locations for soil testing. We began testing for a pilot study in the Spring of 2017. Sampling will begin again in August 2017.

7. What should I do if my soil is contaminated?

You have to disclose the results of the study if you sell your home. If you have concerns about contamination the soil study will provide consultation about remediation options.

8. What are the target chemicals of the tests?

Samples will be tested for a large range of EPA priority pollutants by a NYS Department of Health certified testing laboratory, by UB, and by SUNY Fredonia.

9. How will you know what is emitted from Tonawanda Coke?

The Court ordered Tonawanda Coke to provide a soil sample from the industrial site, a sample of coke product, and a sample of the air emissions from the factory. This, along with additional testing conducted by UB and SUNY Fredonia, will help us understand who caused any pollution we find.

10. How will the samples be taken?

A study team will ask for permission to sample from the top few inches of soil. We will be looking for areas that are relatively undisturbed.

11. What roles will community members have in the development of the testing and interpretation of results?

We are excited to include community members in this project! We are working with a Community Advisory Committee to help foster participation. We still need volunteers for soil sampling and volunteers for permission to enter property.

Contact Information:

Professor Joseph A. Gardella Jr.
tcsoilstudyquestions@gmail.com | Office: 716-645-1499
Jackie James-Creedon | jackie@csresources.org | Office 716-873-6191

Katie Little | katie@csresources.org
Office: 716-873-6191 | Cell: 716-400-9410
3200 Elmwood Ave. Room 212, Kenmore, NY

Professor Mike Milligan | michael.milligan@fredonia.edu
Office 716-673-3500



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Frequently Asked Questions continued

12. What is coke?

Foundry coke is a purified form of coal used in the steel-making process. It is made by heating coal in the absence of oxygen, which creates the harmful emissions and particulates that this research will be studying.

13. Who is Tonawanda Coke?

Tonawanda Coke Corporation (TCC) is a company located off River Road in the Town of Tonawanda that manufactures foundry coke. In 2013 they were found guilty on 14 counts of criminal charges related to toxic emissions and the handling of hazardous wastes.

14. How was the soil study funded?

As a result of the criminal conviction in 2013 TCC was ordered to fund a 2-year, \$711,000 study. This project will determine the extent and distribution of pollutants that settled out of the air from TCC's emissions.

15. How were the boundaries of the soil study determined?

The University at Buffalo research team has prior experience with soil studies in Western New York. Based on this past experience and prevailing winds the research team was able to create an evenly distributed sampling grid within the affected communities.

16. If I do decide to get my soil tested, what happens next?

After the homeowner signs a form giving the sampling team permission to enter property, a soil sampling team will collect a sample from your yard. The sample will then be sent to the lab for analysis. After the research team receives the results, there will be a private meeting with Dr. Joseph Gardella, the head of the research team, and a public meeting where the results will be discussed.

17. How could my health have been impacted?

For more information on health related issues and the Health Study contact:
Dr. Denise Feda | dmfeda@buffalo.edu
716-829-5607

18. I like to garden and grow my own vegetables. What are safe ways to garden in urban soil?

- Use raised beds filled with 12 inches of clean topsoil - build with untreated lumber and away from buildings with peeling paint.
- Use a doormat, remove shoes when coming inside, and wear gloves for gardening - this all helps keep soil outside.
- Covering soil with clean materials like stones, mulch, topsoil, or wood chips provides a layer of protection and prevents soil from coming inside with you. This is especially true for play areas!
- Wash and/or peel produce before eating it.

19. Will everyone who is interested be able to get their soil tested?

- We will be collecting around 300 samples in Phase 1 of the Soil Study. Sample locations are chosen strategically, based on the research team's modeling software, so that we can get a broad understanding of where contaminants may have been distributed throughout our community.
- The research team doesn't need to test every yard to get an understanding of how our community has been affected.
- Additional samples will be taken in Phase 2 of the Soil Study (Summer 2018) to get more information in places where contaminants may be elevated.
- We are working on identifying alternative options for those who would like their soil tested, but are unable to be included in the Tonawanda Coke soil study.

20. If you do find contamination, what are you going to do?

We will push for remediation if the results of the soil tests show that the soil needs to be cleaned up. There are state and federal funds available for cleanup. We have the support of elected officials and the community. Remediation for soil typically includes removing the contaminated soil and replacing it with clean topsoil.

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