NEWS RELEASE

For Immediate Release: August 21, 2018 For Information: David Bond // 802.440.4324 // <u>dbond@bennington.edu</u>

Community Health Questionnaire Finds Illnesses Associated With PFOA in Hoosick Falls, Petersburgh, and Bennington

A recent community health questionnaire identified previously unreported cases of cancer and illnesses linked to PFOA exposure in Hoosick Falls and Petersburgh, NY and Bennington, VT.

In response to community concerns, a ten-question health questionnaire was distributed to current and former residents of three New York and Vermont communities impacted by PFOA. This questionnaire asked local residents about their own understanding of their health and the health of their family as it relates to six illnesses linked to PFOA exposure.

This questionnaire generated 443 responses that provided health information about individuals and members of their family. After removing duplicates and verbally confirming many of the responses, the questionnaire reported 31 instances of kidney cancer, 11 instances of testicular cancer, and over 230 instances of thyroid disease in Hoosick Falls, Petersburgh, and Bennington.

Summary of Results	Total Incidents Reported
Kidney Cancer	31
Testicular Cancer	11
Thyroid Disease	231
Pregnancy Induced Hypertension	35
Ulcerative Colitis	71

"PFOA has been associated with a number of serious illnesses. Residents of Hoosick Falls, Petersburgh, and Bennington were exposed to PFOA in the air and in their drinking water for an unknown period of time. People have the right to know if drinking contaminated water and breathing polluted air affected their health. The only way to do that is to establish a long-term medical monitoring program. Every resident needs to make sure their medical providers know about their exposures and that necessary tests are conducted, beyond the blood work being offered by the State Health Department," said Judith Enck, former EPA Regional Administrator. Ms. Enck blew the whistle on residents drinking contaminated water during her tenure at the EPA and is a resident of Rensselaer County.

Supported by the project "Understanding PFOA" at Bennington College, the questionnaire was designed to give residents knowledge of their own health more prominence in ongoing discussions about the long-term impacts of PFOA. By doing so, this questionnaire provides information that can suggest what direction future research and medical monitoring might take.

Faculty and students from Bennington College, together with local volunteers, went door-to-door in Hoosick Falls on weekends throughout the fall and winter, and distributed the questionnaire by mail, in newspapers, and at community gatherings in all three communities. The questionnaire was also available online.

"Every day we took the questionnaire into the community we were not only welcomed by residents, we also gained firsthand accounts of why local knowledge matters," said David Bond, Associate Director of the Center for the Advancement of Public Action (CAPA) at Bennington College. "Far too often the voices of

impacted communities are overlooked as key decisions are made from afar. This questionnaire shows just how important those voices are."

Hoosick Falls (pop. 3,420) fielded the most participants in this questionnaire, with 373 residents responding, including 47 former residents. From respondents living in the Village of Hoosick Falls, the questionnaire reported 17 cases of kidney cancer, 9 cases of testicular cancer, and 135 cases of thyroid disease. These numbers stand at odds with previous reports.

In May 2017, the New York State Department of Health (DOH) conducted a cancer incidence investigation related to PFOA in the Village of Hoosick Falls. Relying on archival data in the NYS Cancer Registry, the DOH survey reported 12 cases of kidney cancer and 0 cases of testicular cancer in the Village of Hoosick Falls between 1995–2014. The DOH report did not review data on thyroid disease.

Based on the rates of cancer occurrence in New York State (excluding NYC and minorities), the DOH study expected to find 13 cases of kidney cancer and 2 cases of testicular cancer in the Village of Hoosick Falls. With results below those thresholds, the DOH study concluded "no statistically significant elevations of cancer were found for any of the cancer types associated with PFOA exposure."

The 17 cases of kidney cancer and 9 cases of testicular cancer reported in the Village of Hoosick Falls by this community questionnaire rise above DOH's baseline for concern and warrant renewed attention.

Illnesses reported in Village of Hoosick Falls	Kidney Cancer	Testicular Cancer	Thyroid Disease
NYS DOH Cancer Incidence Investigation, 1995-2014	12	0	N/A
PFOA Community Health Questionnaire	17	9	135

For the 9 cases of testicular cancer in the Village of Hoosick Falls, we verbally confirmed the diagnosis of testicular cancer, the year of diagnosis, and the home community when diagnosed. In this, we identified 4 cases of testicular cancer that were diagnosed in Village of Hoosick Falls residents during the years of the NYS DOH cancer investigation, 1995–2014.

We were not able to verbally confirm all of the 17 cases of kidney cancer or the 135 cases of thyroid disease recorded by this questionnaire in the Village of Hoosick Falls, and there is a chance that this number could be revised with more detail. However, since only about 10% of the residents of Hoosick Falls responded to this questionnaire, these numbers may be an underestimate of the true number of these illnesses.

The discrepancy between NYS DOH's study and our questionnaire warrants further attention. It also demonstrates the need for a full disclosure of community health data from Hoosick Falls and Petersburgh that DOH has already collected. According to its website, DOH started sampling and analyzing the blood of residents in February 2016. DOH has also launched an online survey tool in a continued effort to gather information about the potential health impacts of PFOA/PFOS exposure. More than 1,700 current and former residents of the Hoosick Falls and Petersburgh area have already completed this community survey as of August 27, 2017. DOH stated it will use results of the surveys to study the reported prevalence of various health conditions in each impacted community and assess the relationship between disease prevalence and PFOA exposure levels for individuals in the community. It is time for NYS DOH to release all of its aggregate data on these important and urgent health concerns.

This community questionnaire used the findings of the C-8 Science Panel — widely regarded as the premier epidemiological study of PFOA — as a prompt to elicit insight about the local health impacts of PFOA. Funded by the DuPont Corporation and published in 2012, the C-8 study concluded there is a "probable link" between exposure to PFOA and kidney cancer, testicular cancer, thyroid disease, diagnosed high cholesterol, ulcerative colitis, and pregnancy-induced hypertension. The questionnaire asked residents to indicate if they,

anyone in their household, or if anyone in their family (including those now deceased) suffered from any of the six illnesses identified by the C-8 study.

This questionnaire was not designed to prove these illnesses were caused by PFOA but only to record the residents' knowledge of local incidents of these illnesses. This questionnaire was also designed to record exposure to PFOA, and every single one of the 42 cancers reported on this questionnaire recorded having PFOA in their drinking water above the Vermont health guidance level of 20 ppt. (While Vermont has set a health guidance level for drinking water of 20 ppt, the EPA's health guidance level is 70 ppt. New York State has not set a specific health guidance level for PFOA in drinking water).

"It is worth emphasizing: this health questionnaire was not a formal epidemiological study but a preliminary snapshot of the community's understanding of its own health," noted Dr. Howard Freed. "A formal epidemiological study requires a random sample of people who had PFOA contamination of their drinking water. The residents who filled out this questionnaire were not a random community sample — it was a sample of residents who wanted to fill out the questionnaire. Nonetheless, the results demonstrate the presence of health problems associated with PFOA in Hoosick Falls, Petersburgh, and Bennington, and the need for a formal medical monitoring of these communities."

The results of this questionnaire give credence to the health concerns of residents and their healthcare needs.

"This questionnaire introduced us to several local residents diagnosed with PFOA-associated cancers struggling to keep up with mounting medical bills. Juggling chemotherapy and visits to specialized clinics on top of family and work, these individuals are now working second jobs and relying on GoFundMe campaigns to get the healthcare they need. This is unacceptable. Victims of toxic pollution should never have to pay for their own medical treatment," said David Bond. "Polluters should be required to fund the new healthcare needs PFOA has introduced."

New York State and the EPA designated the Hoosick Falls plant a Superfund site. Superfund requires that a comprehensive cleanup take place and that polluters, not taxpayers, pay the full cost of the cleanup. The Superfund laws, however, do not fully address health problems associated with the contamination. By providing a snapshot of the community's health, this questionnaire suggests much work remains to be done to fully understand the health impacts of PFOA contamination in our region.

This questionnaire was designed and the results analyzed by Dr. Zeke Bernstein and Dr. David Bond of Bennington College, environmental engineer Robert Chinery, physician and former Director of NY State Department of Health's Center for Environmental Health Dr. Howard Freed, and former EPA Regional Administrator Judith Enck. Dr. David Carpenter, Director of the Institute for Health and the Environment at SUNY Albany, joined the research team in January 2018.

-- 30 --

FACT SHEET: **Results of PFOA Community Health Questionnaire** (The number of positive responses is noted in parenthesis)

1) Name and Address (unique responses: 443)			
 2) Including your current residence, which of the following comr Bennington, VT (87) Hoosick Falls, NY (373) 	nunities have you lived in? Petersburgh, NY (43)		
3) For how many years has your family lived in one of these co	ommunities?		
Less than 1 year (6)	5 to 10 years (41)		
1 to 5 years (27)	More than 10 years (335)		
4) While residing in this community, please check whether you got your drinking water from a public system of private well?			
Public System (308)	Private Well (132)		
	c 1·1·		
5) Please check the approximate level of PFOA in the source of your drinking water. Non-detect – 19 ppt (41) 401 ppt + (142)			
Non-detect – 19 ppt (41) 20 ppt – 69 ppt (26)	Don't know (64)		
70 ppt - 400 ppt (42)	Doil t kilow (04)		
/o ppr +oo ppr (+2)			
6) Has anyone in your household ever worked at a facility that Yes (110)	stored or used perfluorinated chemicals like PFOA? No (409)		
7) Have you been diagnosed with one or more of the following	illnesses? If so please check which one(s)		
Kidney Cancer (7)	Pregnancy Induced Hypertension (15)		
Testicular Cancer (6)	Ulcerative Colitis (18)		
Thyroid Disease (81)			
8) Other than yourself, has anyone in your household been diag			
so, please check which one(s). [Please skip this question if it do			
Kidney Cancer (6)	Pregnancy Induced Hypertension (13)		
Testicular Cancer (5)	Ulcerative Colitis (20)		
Thyroid Disease (67)			
 9) Are there any members of your extended family who are no diagnosed with one or more of the following illnesses? If so, p grandparents, parents, siblings, and children. Please skip this qu Kidney Cancer (12) Testicular Cancer (7) Thyroid Disease (52) 	lease check which one(s). [Extended family includes:		
10) Are there any members of your extended family <u>who are deceased</u> but who lived in Hoosick Falls, Petersburgh, and/or Bennington and were diagnosed with one or more of the following illnesses? If so, please check which one(s). [Extended family includes: grandparents, parents, siblings, and children. Please skip this question if it does not apply to you.]			
Kidney Cancer (14)	Pregnancy Induced Hypertension (2)		
Testicular Cancer (12)	Ulcerative Colitis (14)		
Thyroid Disease (31)			
TOTAL REPORTED INCIDENTS : (note: duplicates have been removed from these aggregate num Kidney Cancer (31)	<i>abers)</i> Pregnancy Induced Hypertension (35) Ulcerative Colitis (71)		

Conclusions

- 1) Years after the discovery of PFOA in their drinking water, many residents of Hoosick Falls, Petersburgh, and Bennington continue to have very legitimate concerns about the health effects of PFOA, and what they can do now that the contamination has occurred.
- 2) Utilizing the communities knowledge of its own health, this questionnaire identified previously unreported cases of cancer and illnesses associated with PFOA exposure in Hoosick Falls and Petersburgh, NY and Bennington, VT.
- 3) With 443 unique responses that provided health information about individuals and members of their family, this questionnaire reported 31 instances of kidney cancer, 11 instances of testicular cancer, and over 230 instances of thyroid disease in Hoosick Falls, Petersburgh, and Bennington.
- 4) This questionnaire shows the need for serious and sustained medical monitoring in the communities of Bennington, Hoosick Falls, and Petersburgh. Residents should not have to pay for medical care related to their legitimate concerns about the long-term health impact of PFOA.

Recommendations

- 1) **Release the data**. DOH should complete their analysis of their own PFOA health survey, and release the results to the public. The results from the NYS DOH health survey filled out when over 1,700 residents had their blood tested for PFOA likely contains important information that residents are entitled both individual data and aggregate data from the community regarding the impacts of PFOA on their lives.
- 2) **Medical monitoring**. Work should begin now on the design and implementation of a long term medical monitoring program for the adults and children with proven levels of PFOA in their blood. Outside experts should be consulted, and the program should be designed and ready to be implemented within six months.
- 3) **Information sessions and guides**. The informational sessions run by DOH in the Hoosick Falls armory were very helpful to the residents who attended. An enhanced and coordinated PFOA communications strategy should be designed and implemented by both NY and VT DOH with input from concerned residents and local physicians. The goal is to widely distribute to the people and their physicians in the community what is currently known, and not known, about the health effects of drinking low concentrations of PFOA for an extended period of time, what the patient can do about it, and, as it related to the six illnesses linked to PFOA, what signs and symptoms physicians should watch out for now. This should not take longer than six weeks to develop.
- 4) **Continued blood testing**. PFOA blood testing should be made available at no charge to any resident concerned that they were, or may have been, exposed to PFOA through drinking water.
- 5) **Citizens Advisory Group**. EPA Region 1, VT DEC, EPA Region 2, and NYS DEC should establish a Citizens Advisory Group (CAG) to provide residents an opportunity to stay more easily informed and up to date on the myriad of issues surrounding the contamination of these communities.

Comparison with DOH Cancer Incidence Investigation

- 1) The DOH study only looked at the Village of Hoosick Falls. This questionnaire included the Village of Hoosick Falls, but also looked at other PFOA impacted communities in our region.
- The DOH study only looked at cancer incidents. This questionnaire included six illnesses correlated to exposure to PFOA: kidney cancer, testicular cancer, thyroid disease, pregnancy induced hypertension, and Ulcerative Colitis.
- 3) The DOH study only looked at cancers diagnosed in residents of the Village of Hoosick Falls between 1995-2014. This questionnaire included any incidents of testicular cancer and kidney cancer within the Village of Hoosick Falls, including those from former residents of the Village of Hoosick Falls who moved away before they were diagnosed.
- 4) The DOH study relied on archival data in the NYS Cancer Registry to document incidents of cancer. By polling local residents, this questionnaire relied on the knowledge communities have of their own health.
- 5) In the Village of Hoosick Falls, this questionnaire recorded 17 cases of kidney cancer and 9 cases of testicular cancer. The NYS DOH study reported 12 cases of kidney cancer and 0 cases of testicular cancer in the Village of Hoosick Falls. In the years covered by the DOH study (1995-2014), this questionnaire recorded 4 testicular cancers in residents living in the Village of Hoosick Falls at the time of their diagnosis.
- 6) Regarding the DOH Cancer Incident Investigation, it is not known if the results would be the same if the DOH report included everyone who was exposed to PFOA in drinking water, and if the report took into account that cancer can take between five and 30 or more years after exposure to develop.