

CASE STUDY SUMMARY by John Schneider (8-8-26)

East Palestine, Ohio: From Train Derailment to a Community Fight for Environmental Accountability



On the evening of February 3, 2023, Norfolk Southern freight train 32N was passing through the small village of East Palestine, Ohio, near the Pennsylvania border, when a wheel bearing on one of its cars overheated and failed. Thirty-eight railcars derailed. Eleven of the derailed cars were carrying hazardous materials. The accident immediately produced a major fire and released chemicals into the surrounding environment.

What followed turned East Palestine from a railroad accident into a national environmental controversy. It involved Norfolk Southern, local emergency officials, the EPA, Ohio and Pennsylvania agencies, federal investigators, residents, independent testers, whistleblowers, lawyers and advocacy organizations. It eventually produced more than a billion dollars in cleanup expenditures and settlements—but also years of arguments over whether the community had ever been adequately tested and whether residents had been told the whole truth.



The derailment was only the beginning

The train was carrying a variety of hazardous substances. Among them were vinyl chloride, butyl acrylate, ethylhexyl acrylate, ethylene glycol monobutyl ether, isobutylene and benzene residue. Vinyl chloride received the most immediate attention because five derailed tank cars contained the highly flammable chemical.

For several days following the wreck, emergency officials feared that one or more vinyl chloride cars might undergo a dangerous chemical reaction and

catastrophically rupture.

On February 6, the evacuation zone was enlarged and a decision was made to deliberately breach all five vinyl chloride tank cars and burn their contents in a trench.

The resulting fire produced the enormous black plume that became the defining image of East Palestine.

At the time, authorities described the operation as the safer of two dangerous choices. The public was told there was concern that a tank car could violently explode.

That explanation would later be seriously undermined.

After a 16-month investigation, the National Transportation Safety Board concluded in June 2024 that the vent-and-burn operation was unnecessary. The NTSB found that the tank cars were cooling, that evidence did not support the feared runaway chemical reaction, and that important contrary information from the vinyl chloride manufacturer, OxyVinyls, was not adequately conveyed to the local incident commander.

That was one of the most consequential findings in the entire case. It meant that the extraordinary chemical release over East Palestine was not simply an unavoidable consequence of the derailment.

Federal investigators concluded that the decision was based on incomplete and misleading information.

Residents were told they could return—but many did not feel well

Residents evacuated from the immediate area were eventually permitted to return. Federal and state authorities conducted extensive air and water monitoring and repeatedly said their data did not show contamination at levels requiring residents to remain away.

But a significant number of residents began reporting physical symptoms.

By March 2023, an Ohio Department of Health/ATSDR survey had collected responses from hundreds of residents. Among 446 community respondents at that stage:

- 76% reported headaches
- 62% reported anxiety
- 54% reported coughing
- 52% reported fatigue
- 50% reported skin irritation, pain or burning

The survey did not prove that the derailment caused every reported symptom. It was an exposure-assessment survey rather than a controlled epidemiological study. Nevertheless, the magnitude of the reported symptoms became impossible to dismiss as merely a handful of anecdotal complaints.

Residents also reported nosebleeds, respiratory problems, rashes, nausea and other symptoms. Pets and livestock became part of the concern as well.

This created one of the central conflicts of East Palestine:

Government testing was saying one thing, while many residents felt that their bodies and surroundings were saying something else.

That gap in trust created the opening for Scott Smith.

Scott Smith enters East Palestine

Scott Smith had already spent years visiting chemical disasters and contaminated communities. His involvement in environmental contamination began after his own business was affected by chemically contaminated floodwater in 2006. He later participated in investigations or responses involving the BP Deepwater Horizon spill, Flint and other environmental incidents.

Importantly, descriptions of Smith vary.

The Government Accountability Project frequently describes him as an independent scientist or independent testing expert. The Associated Press has pointed out that Smith is not formally trained as a scientist, but is an inventor and environmental-testing specialist who works with scientific advisers and uses laboratories accepted as reputable by environmental authorities. Even an EPA official who disagreed with Smith's conclusions acknowledged that he understood the use of appropriate laboratories and sample collection.

That distinction is worth preserving in a serious case study.

Smith should neither be dismissed as simply an activist nor presented as possessing credentials he does not have.

A resident asked him to come

According to Smith's chronology, East Palestine resident Courtney Miller Fish contacted him on February 17, 2023, asking for help.

Within days, Smith was in East Palestine collecting samples, including water from Sulphur Run.

That was the beginning of what became dozens of visits to the community and repeated sampling of water, soil, household environments, vegetation and other materials. Government Accountability Project records say he ultimately conducted more than 30 rounds of sampling.

His guiding argument was very simple:

You cannot find a contaminant that you never test for.

Smith believed official testing was too narrow and concentrated too heavily on certain target compounds and locations.

He began looking for a much broader chemical fingerprint.

Smith's dioxin results changed the argument

Dioxins and related furans became particularly controversial because they can form during combustion involving chlorinated chemicals.

In May 2023, Smith collected soil from property on East Taggart Street near the derailment area and compared the results with samples from communities outside the immediate impact zone.

His testing showed extraordinarily large differences between the East Palestine sample and control samples. Local news organizations reported that some measurements were hundreds of times higher than comparison locations.

Smith did not simply declare the entire town uniformly unsafe. In fact, when asked whether East Palestine was safe to inhabit, he cautioned that individual circumstances and individual sampling mattered.

His principal demand became:

Test more. Test more locations. Test more substances. Make all the raw data public.

EPA disagreed with some of his methodology and conclusions. Agency officials argued that isolated individual samples could not substitute for a systematic sampling design and said its broader program showed residential contamination within expected ranges.

That disagreement continued for years.

The Government Accountability Project enters the fight

The turning point for Smith came in 2023 when the Government Accountability Project, commonly known as GAP, took an interest in his findings.

GAP is a nonprofit whistleblower-protection and government-accountability organization founded in 1977. Rather than functioning like the attorneys bringing the residents' class-action lawsuit, GAP's focus was whistleblowers, government transparency, public records and institutional accountability.

In September 2023 GAP formally announced that it considered Smith's allegations sufficiently credible and serious to investigate and that it would provide whistleblower protection for him.

That was enormously important.

Scott Smith was no longer simply one independent tester arguing with the EPA.

He now had a national whistleblower organization behind him.

GAP sued the EPA for records

GAP submitted Freedom of Information Act requests seeking EPA records concerning its response to East Palestine.

When the organization concluded that the EPA had failed to adequately respond, GAP filed a federal FOIA lawsuit in September 2023:

Government Accountability Project v. Environmental Protection Agency.

The lawsuit sought records concerning communications and testing surrounding the derailment.

The records campaign eventually became almost as significant as Smith's physical sampling.

Thousands of pages of documents were produced.

Smith and GAP said those documents demonstrated that testing for dioxins had occurred much earlier than many residents had understood.

In early 2024, Smith located more than 1,500 pages of dioxin-related test records among EPA-posted materials. GAP said the documents showed that Norfolk Southern contractor Arcadis was taking dioxin-related samples as early as February 9, 2023, only days after the burn.

EPA strongly disputed the accusation that it had hidden the information. It said the records had been publicly available and that characterizations of a cover-up misrepresented the agency's response.

That distinction matters:

The existence of the early testing is documented. Whether EPA deliberately concealed its significance is disputed.

Scott Smith's garlic test

One of the more unusual episodes became particularly effective in communicating the testing dispute.

Residents had been told that gardening and consuming locally grown produce were generally safe.

Smith tested locally grown garlic.

Some samples showed markedly higher dioxin concentrations than comparison garlic harvested before the derailment or grown elsewhere. GAP petitioned EPA to conduct additional testing and to reconsider the broad assurances being given about gardening.

EPA responded that its sampling program did not indicate a need for widespread residential garden restrictions and continued questioning Smith's sampling design.

Once again, the issue was not simply:

Who had the right number?

The larger issue became:

When an independent test raises a plausible red flag, should the regulator replicate that test?

GAP's position was that EPA should have done precisely that.

A second whistleblower changes the case: Robert Kroutil

Scott Smith was not the only whistleblower.

A potentially even more significant insider eventually approached GAP.

Dr. Robert Kroutil had worked for decades with EPA's specialized airborne chemical-detection program known as ASPECT — Airborne Spectral Photometric Environmental Collection Technology.

Kroutil had helped develop the program and served as a data-quality expert.

The aircraft carries sophisticated sensing equipment capable of detecting chemicals, thermal signatures and other hazards from the air.

Kroutil became disturbed by what he saw in the East Palestine mission.

According to his whistleblower disclosures, the aircraft was not used when it could have been most valuable—during the critical period before the February 6 vent-and-burn.

He also alleged that chemical sensors were turned off during portions of later flights and that documentation connected with the mission was subsequently inaccurate or altered.

GAP represented Kroutil and took his disclosure to the EPA Inspector General.

The Inspector General opened an investigation

In July 2024, the EPA Office of Inspector General opened an investigation into the ASPECT response.

The Inspector General's eventual findings did not confirm every allegation Kroutil made.

But they validated a fundamental problem.

The OIG found that EPA emergency officials did not adequately understand the aircraft's capabilities and that the procedures for deployment were poorly understood. The Inspector General recommended improved training and clearer procedures.

This was highly significant because independent NTSB investigators separately concluded that the vent-and-burn itself had been unnecessary.

In other words, two separate investigative tracks converged around a similar question:

Could better information have prevented one of the most consequential decisions made during the disaster?

The answer increasingly appeared to be yes.

Stephen Petty and the baseline-testing dispute

Another technical expert, Stephen Petty, a chemical engineer and certified industrial hygienist with extensive expert-witness experience, became involved.

Petty reviewed issues surrounding the environmental testing.

Among the concerns later raised was the selection of supposedly unaffected “background” locations used for comparison with contaminated locations.

Petty argued that some baseline sampling locations may themselves have been affected by the plume because prevailing wind patterns had not been adequately considered. If true, comparing a

contaminated location against an already affected “control” could make the difference between the two appear artificially small.

His declaration later became evidence in federal litigation challenging whether the government's proposed settlement and remediation arrangements sufficiently protected residents.

What was the Blue Shirt Justice League?

This is where the chronology needs to be very precise.

Blue Shirt Justice League did not exist when Scott Smith first arrived in East Palestine.

Smith did much of his original East Palestine investigation in his own capacity and through his earlier environmental work.

The Blue Shirt Justice League, Inc. was formally organized as a Florida nonprofit in June 2024.

Its name grew from Smith's public identity as “the guy in the blue shirt.”

Smith became the organization's founder and president.

Blue Shirt Justice League describes its mission as assisting communities affected by chemical disasters through independent environmental testing, community education, watchdog activities and connections to legal assistance.

East Palestine became essentially its model case.

The organization's approach can be summarized as:

Listen to residents → collect independent samples → use certified laboratories → compare official and independent data → preserve records → publicize discrepancies → connect residents to whistleblower and legal resources → continue testing after government emergency operations end.

That model has since been applied or proposed in other chemically affected communities.

The lawyers: two very different kinds of legal work

The East Palestine story becomes confusing if all of the lawyers are placed in one group.

There were really two different legal strategies.

1. The class-action lawyers

Thousands of residents, workers, property owners and businesses sued Norfolk Southern.

The federal court appointed lead class counsel including:

Seth A. Katz — Burg Simpson Eldredge Hersh & Jardine

M. Elizabeth “Beth” Graham — Grant & Eisenhofer

Jayne Conroy — Simmons Hanly Conroy

and additional co-lead counsel

T. Michael Morgan — Morgan & Morgan.

Dozens of additional law firms participated.

According to filings supporting their fee request, the attorneys said the litigation involved nearly 60,000 hours of work, approximately 70 depositions and review of more than one million documents, as well as expert environmental investigation.

The result was a proposed \$600 million class-action settlement with Norfolk Southern.

It ultimately became final.

Where did the \$600 million go?

The distribution plan allocated approximately:

\$265 million — Direct/property-related payments

\$25 million — Business losses

\$120 million — Personal injury/exposure claims

\$10 million — Holdback

\$162 million — Attorneys' fees

\$18 million — Expenses and administration

Total: \$600 million.

That means the court-approved lawyers' fee represented 27% of the entire settlement fund.

This later became controversial, particularly because lawyers could receive fees while many residents were still waiting for payments.

A federal appeals court largely upheld the fee award but questioned aspects of how money was divided among the participating firms.

The personal-injury decision was especially difficult

Residents living within 10 miles could elect an additional exposure/personal-injury payment.

But that choice came with a serious consequence: accepting the personal-injury portion generally released Norfolk Southern from future claims arising from the exposure.

That frightened residents who were asking the obvious question:

What happens if I develop cancer or another disease 10 or 20 years from now?

Some residents accepted the settlement because they needed money immediately.

Others opted out.

Others objected after concluding there still was not enough information about long-term exposure to make an informed decision.

That disagreement actually split portions of the community.

The settlement was challenged all the way to the Supreme Court

Federal Judge Benita Pearson approved the \$600 million settlement in September 2024.

Objectors appealed.

The litigation delayed portions of the payments for more than a year.

Eventually the Sixth Circuit upheld the settlement, and in March 2026 the U.S. Supreme Court declined to hear the challenge, effectively ending the principal attack on the class settlement.

Payments then moved forward.

By June 30, 2026, the substitute settlement administrator reported mailing final direct-property payments. Roughly 55,000 claims had been associated with the settlement.

So the \$600 million class action is, for practical purposes, resolved.

But that did not resolve the environmental controversy.

The second group of lawyers: fighting over the environmental settlement

Another federal case involved the United States, Ohio and Norfolk Southern.

The Justice Department and EPA had sued Norfolk Southern under federal environmental laws.

In 2024, the government announced a proposed settlement valued at more than \$310 million.

Among other things, it required Norfolk Southern to pay cleanup costs, fund safety improvements, contribute \$25 million toward a 20-year community health program, fund long-term water monitoring and pay a \$15 million civil penalty.

But some East Palestine residents and advocates argued the agreement was being finalized before the contamination questions had truly been resolved.

This is where the lawyers associated with the whistleblower effort became particularly important.

Melinda Young, Mindy Bish and Jedidiah Bressman

Attorneys Melinda Young, Mindy Bish and Jedidiah Bressman of the Keenan Law Group supported a motion on behalf of East Palestine residents Robert Figley and Barbara Adams seeking permission to intervene in the government's environmental lawsuit against Norfolk Southern.

GAP supplied supporting evidence from its whistleblower investigation, including material from Scott Smith and Stephen Petty.

The residents essentially argued:

Do not close the environmental case without allowing the people actually living there to challenge whether the cleanup, testing and health protections are adequate.

The United States, Ohio and Norfolk Southern opposed the intervention.

But on March 9, 2026, Federal Judge John R. Adams granted Figley and Adams permission to intervene.

That was a major victory for the whistleblower/community side.

It did not mean the judge had ruled that Scott Smith was correct about every contamination claim.

It meant something procedurally very important:

Residents were permitted to get inside the case rather than simply comment from outside it.

And because the federal consent decree was still awaiting final judicial resolution, this legal fight remained alive in 2026. EPA's own website still described the proposed decree as pending before the court as of May 2026.

What did East Palestine residents actually endure?

Looking only at the settlements misses much of the story.

Residents lived through the derailment and fire, a mandatory evacuation, the enormous chemical burn, weeks and months of uncertainty, repeated environmental testing, excavation of contaminated material, truck traffic and cleanup operations.

EPA reports that approximately 175,000 tons of contaminated soil were ultimately excavated and shipped from the derailment area.

Families questioned whether children could play outside.

People wondered whether they could drink from private wells.

Gardeners questioned whether they should eat their vegetables.

Some residents temporarily relocated.

Some considered leaving permanently.

Property owners wondered whether homes that represented their life's savings had suddenly acquired an environmental stigma.

Business owners worried customers would stop coming.

And people experiencing illnesses were placed in a particularly painful situation: officials were telling them the community met applicable safety standards while some of them continued to feel sick.

The community also became divided.

Some residents wanted the settlement accepted so they could finally obtain compensation and move forward.

Others believed accepting money before the long-term medical science was known could permanently extinguish important legal rights.

That tension lasted for years.

The federal health response eventually changed

One of the most important developments occurred much later.

In June 2025, the National Institutes of Health announced a five-year, \$10 million program to study long-term health outcomes in East Palestine.

In February 2026, NIH went further and opened an East Palestine Train Derailment Health Research Program Office in the community itself.

Researchers are now examining areas including respiratory, cardiovascular, maternal and child health, immune-system effects and other possible consequences of chemical exposure.

A 2026 pilot study also reported biological differences—including inflammatory and immune-system markers—in some exposed East Palestine residents, although researchers emphasized that a small pilot study cannot by itself prove causation or predict an individual's future illness.

That is a critical distinction.

Three years after residents first began demanding long-term study, the federal government was now conducting precisely that kind of long-term research.

What Scott Smith and the whistleblowers accomplished

It would be inaccurate to say that Scott Smith and Blue Shirt Justice League “won the East Palestine case.”

There was no single case to win.

What they did was arguably more interesting.

Scott Smith kept the testing question alive.

When official cleanup operations were moving toward completion, he continued returning and collecting samples.

GAP transformed a scientific dispute into an accountability investigation.

It used FOIA requests, litigation, whistleblower representation, petitions and public disclosure to obtain internal government records.

Robert Kroutil exposed weaknesses in the deployment of EPA's most sophisticated airborne detection system.

The EPA Inspector General subsequently confirmed significant procedural and training shortcomings.

Stephen Petty supplied an independent technical critique of the sampling program.

His evidence eventually reached federal court.

The Keenan Law Group attorneys created a legal vehicle for residents to challenge the government's proposed environmental settlement.

And the judge allowed them into the case.

Meanwhile, the NTSB independently confirmed one of the most serious criticisms surrounding the disaster: the massive vent-and-burn of vinyl chloride was unnecessary and was ordered after decision-makers received incomplete or misleading information.

That NTSB conclusion is particularly important because it did not come from Scott Smith, Blue Shirt Justice League, residents or their lawyers.

It came from the federal agency legally charged with determining how the derailment happened.

What did not happen

There are also several things the record does not justify saying.

It has not been conclusively established that every illness reported in East Palestine was caused by derailment chemicals.

It has not been established that every portion of East Palestine remains dangerously contaminated.

Scott Smith's individual results should not automatically be generalized to every property.

EPA continues to maintain that its systematic testing and cleanup support the conclusion that the community's air, drinking water and remediated areas meet applicable safety standards. Norfolk Southern likewise maintains that remediation has been completed successfully and denies wrongdoing in the private settlement.

Nor has a court ruled that EPA intentionally conspired to poison East Palestine or deliberately falsified its entire environmental investigation.

Some whistleblower allegations concerning EPA records and conduct remain disputed or unresolved.

A responsible case study should say that plainly.

But it is equally incorrect to say that the original response was vindicated.

The NTSB's vent-and-burn conclusion, the Inspector General's findings regarding the ASPECT program, the creation of federal long-term health studies, continuing litigation over the environmental consent decree and the sheer volume of contamination removed from the site demonstrate that residents' concerns were not frivolous.

The result, as of August 2026

East Palestine therefore ends not with one verdict but with several different results.

The railroad accident investigation is essentially complete.

A failed overheated wheel bearing caused the derailment, and the NTSB concluded that the later vent-and-burn was unnecessary.

The major private class action is essentially complete.

Norfolk Southern agreed to the \$600 million settlement. It survived appeals and a request for Supreme Court review, and payments were being distributed in 2026. Attorneys received approximately \$162 million in fees.

The cleanup has removed enormous quantities of contaminated material.

EPA reports roughly 175,000 tons of contaminated soil were removed from the derailment zone.

The long-term health question remains open.

NIH is now undertaking a five-year research program specifically addressing East Palestine.

The whistleblower investigation remains consequential.

GAP continues obtaining records and pursuing transparency, including a 2026 lawsuit against USDA seeking records involving possible food contamination after the disaster.

And the government environmental settlement is not simply a closed chapter.

Residents Robert Figley and Barbara Adams were granted intervention in the federal environmental lawsuit in March 2026, with assistance from Melinda Young, Mindy Bish and Jedidiah Bressman and evidence developed through the GAP whistleblower investigation.

The real lesson of East Palestine

East Palestine shows that environmental disasters often have two timelines.

The first moves very quickly.

The fire is extinguished. Air monitors are installed. Samples are taken. Roads reopen. Officials reassure residents. Contractors excavate contaminated material. Eventually agencies and responsible companies want to declare the emergency phase completed.

The second timeline can take years.

People become sick—or fear becoming sick. Chemicals migrate through soil and sediment.

Residents question whether the right substances were tested. FOIA requests uncover documents.

Independent scientists challenge sampling methods. Whistleblowers come forward. Lawyers obtain discovery. Long-term health studies finally begin.

East Palestine also demonstrates why independent testing matters even when government testing exists.

Independent testing does not automatically prove government testing wrong.

Its value is that it provides a comparison.

When both sets of results agree, confidence increases.

When they disagree, the scientifically responsible response is not to attack either side personally. It is to determine why the results differ and replicate the work.

And perhaps the most important lesson is this:

Residents should not be forced to choose between believing everything government and corporate officials tell them and believing every worst-case claim made by activists. They are entitled to complete data, truly independent testing, transparent methods, long-term medical monitoring and enough time to understand their exposure before permanently surrendering legal rights.

That, more than the \$600 million settlement, may ultimately be the lasting significance of East Palestine.