

AEROMARINE: Questions and Answers

I live only a few blocks from the former Aeromarine property, and I have lived here for more than a decade. Like many of my neighbors, I have become increasingly concerned about what may have happened there, what may still be happening there, and what it could mean for the people who live around it.

I approach this subject from several directions. I was educated in geophysics, so I have a working knowledge of geology, groundwater and the movement of water through soil and rock. I also have a background in journalism, which taught me to ask questions, check sources and distinguish between what has been proven and what is still being investigated.

I am concerned about Aeromarine, but I do not believe concern should become panic. There are things we know, things we strongly suspect, and things that remain unanswered. This document is an attempt to keep those categories separate.

These are the questions my neighbors, friends, reporters, and government leaders have asked me recently. The answers here reflect what we know as of August 2026.

Good luck!

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1. What exactly is Aeromarine?

Aeromarine began as an important early aviation enterprise in Keyport. The Aeromarine Plane and Motor Company manufactured aircraft, engines, seaplanes, and flying boats during the pioneering years of aviation and was gone by about 1930.

The property later had a very different life. Beginning in 1962, a large portion of it was used as the Keyport Sanitary Landfill, which operated until 1979. Today, when people refer to the “Aeromarine problem,” they are usually talking about the contaminated former industrial property and landfill rather than the historic airplane factory itself.

That distinction is important because the aviation and landfill histories are separated by decades and represent very different environmental concerns.

2. Which concerns me more, the airplane factory or the landfill?

Both deserve investigation, but based on what we know today, I am considerably more concerned about the landfill.

Aircraft manufacturing in the early twentieth century involved fuels, oils, paints, solvents, metals, and other industrial materials, so we should not automatically assume that the early Aeromarine operation left no environmental footprint.

However, from 1962 until 1979, enormous quantities of waste were placed on the property during a period when landfill regulation was nothing like it is today. Modern liners, leachate-collection systems, and sophisticated closure requirements were simply not part of the original operation.

We already know that groundwater contamination exists beneath the landfill, and NJDEP has said that the existing cap does not meet current closure requirements. For that reason, if I were deciding where to focus an environmental investigation first, I would focus on the landfill.

That does not prove that every contaminant found there came from the landfill. It simply makes the landfill the more obvious continuing concern.

3. What contaminants have actually been found?

Earlier environmental investigations found contaminants in groundwater beneath the property at levels above New Jersey groundwater standards. More recent testing and reporting have raised concerns about substances including arsenic, lead, benzene, vinyl chloride, PCBs, and other chemicals.

The important point is that a list of chemical names does not tell us enough. We need to know where each contaminant was found, at what concentration, at what depth, and whether it is present in soil, groundwater, sediment, surface water or soil gas.

Most importantly, we need to know whether any of those contaminants can migrate from the property to a location where people can be exposed.

4. How dangerous are these chemicals?

Some of the chemicals associated with the site are unquestionably hazardous. Benzene and vinyl chloride are known human carcinogens. Arsenic can increase cancer risk under certain exposure conditions. Lead can damage the nervous system and is particularly dangerous to children. PCBs are persistent pollutants that can remain in the environment for many years.

However, toxicity depends upon exposure. Finding a hazardous chemical in a monitoring well underneath a landfill does not automatically mean that somebody living several blocks away has been exposed to it.

The scientific question is not simply, “Is the chemical there?” It is, “Can it reach people, in what concentration, and for how long?”

5. What does it mean when officials say there is “no completed exposure pathway”?

This phrase has caused a great deal of confusion.

A completed exposure pathway means that there is a source of contamination, a way for the contamination to move, a point where a person can come into contact with it, and a route by which it can enter the body.

When officials say they have not identified a completed exposure pathway, they mean they have not yet established the entire chain.

That is not quite the same as saying that no pathway could possibly exist. In fact, the present testing is partly intended to determine whether contamination has migrated and whether additional pathways need to be considered.

I think the accurate statement is that **no completed residential exposure pathway has been demonstrated yet, but the investigation is continuing.**

6. John, you have raised questions about clay, groundwater and hidden pathways. What do you mean?

The geology beneath this region is not uniform. There are mixtures of sand, gravel, silt and clay, and each transmits water differently.

Clay is relatively impermeable, which can be helpful because it can slow the downward movement of contaminated water. However, clay can also cause water to move laterally above it. If sand or gravel channels cut through or around clay deposits, water may follow those more permeable routes.

Research involving the Raritan Bay area has shown that our subsurface geology can include both low-permeability muds and more permeable buried sand-and-gravel channels.

I am not claiming that I have discovered an Aeromarine contamination pathway. I am saying that the geology is complicated enough that we should not dismiss possible pathways until the groundwater elevations, soil layers, and contaminant distribution have been properly mapped.

7. Could tides, flooding and storms move pollution?

I believe this deserves serious study.

Raritan Bay is a tidal estuary connected to the Raritan River, Arthur Kill, New York Harbor and the Atlantic Ocean. Water and sediment move through that system constantly.

During storms and unusually high tides, water can move onto streets and residential properties. When the water retreats, sediment can remain behind. Polluted sediments elsewhere in the Raritan system have been documented for many years.

That does not prove that Aeromarine contamination is washing into residential neighborhoods. However, it raises a reasonable question about whether pollutants from Aeromarine, or historical pollutants from elsewhere in the bay, could be redistributed during unusual flooding or storm conditions.

Instead of arguing about that possibility, I would like to see it tested.

8. Could some of the pollution come from somewhere other than Aeromarine?

Absolutely.

The Raritan River, Arthur Kill and surrounding industrial areas have a very long history of manufacturing, shipping, chemical use, sewage discharge and shoreline development. Historical contamination of sediments in the lower Raritan system has been documented.

Therefore, finding lead, arsenic, or PCBs near Keyport does not automatically establish Aeromarine as the source.

The scientific job is to determine whether the pattern of contamination points toward Aeromarine, another source, or several sources working together.

9. Can scientists determine where a contaminant came from?

Sometimes they can, although it is rarely as simple as matching fingerprints at a crime scene.

Scientists can compare concentrations, depths, groundwater direction, chemical forms, breakdown products, sediment layers, and historical records. They can also compare contamination close to a suspected source with contamination farther away.

If a chemical occurs at high levels near one property and decreases with distance in the direction groundwater moves, that pattern may tell us much more than a single isolated sample.

Environmental investigation is often a form of detective work. One measurement is interesting. A consistent pattern is much more valuable.

10. What is happening right now, in August 2026?

We are reaching an important point in the investigation. NJDEP has conducted groundwater sampling and has undertaken broader surface-water sampling around the landfill and surrounding tidal waterways. Private consultants associated with the property have also been conducting environmental testing.

The next major step is turning all of that sampling into understandable public information.

We already know contamination has existed at the site. The larger questions now are whether it has moved beyond the property, whether people have been exposed, and what needs to be done to properly close and remediate the landfill.

11. What are we waiting for?

We are waiting for the complete laboratory results and, just as importantly, their interpretation.

I want to know what was tested, what was found, the concentrations involved, and the exact locations. I also want to know the groundwater elevations and the probable flow direction, whether rainfall affected the results, and whether high and low tides affected what was detected in the surrounding waters.

A statement saying “we found contamination” is not enough, nor is one saying “there is no immediate danger.”

The public deserves to understand why those conclusions are being reached.

12. What should the community be demanding?

I think we should demand transparency and a timetable.

We should have access to sampling maps, laboratory results, groundwater data and clear explanations of what those results mean. We should know what finding would cause NJDEP to expand testing into surrounding neighborhoods.

If the state concludes that residential testing is unnecessary, I want to understand the science behind that decision. If the evidence shows that testing should be expanded, I want to know where and when it will occur.

We should also expect another public meeting after the major results are available so residents can question both environmental and health officials directly.

13. Who is involved on the government side?

NJDEP is the lead environmental agency and is responsible for investigating contamination and enforcing landfill closure requirements. The New Jersey Department of Health is responsible for evaluating possible health effects once it has sufficient environmental information.

Keyport officials, including Mayor Rose Araneo and Council President Kathleen McNamara, have been actively involved. Union Beach officials have also participated because contamination and waterways do not stop at municipal borders.

Congressman Frank Pallone has been one of the most visible elected officials pressing for investigation, testing and federal and state attention. State Senator Declan O'Scanlon, Assemblywoman Victoria Flynn and Assemblyman Gerry Scharfenberger have also pressed NJDEP for answers and greater action.

The important thing to me is not simply who attends meetings, but who continues to ask questions and presses for results.

14. Who is involved on the community side?

This would not have received the attention it has without residents.

Keyport United, Union Beach United, and Aeromarine-focused social media groups have helped organize residents and circulate information. Sal Liguori has become a visible community advocate and has worked on health screening efforts. Rusty Morris helped document and map reported cancer cases, while Ginger Morris and other residents have spoken publicly about their concerns.

NY/NJ Baykeeper has a much longer record of environmental advocacy involving this shoreline, and other environmental organizations, including Waterspirit and the New Jersey Sierra Club, have become involved.

I have tried to contribute through historical research, communication, and my background in geology and journalism.

There is no single spokesman for everybody who lives here, nor should there be. This is a community issue.

15. Is there really an unusual amount of cancer around Aeromarine?

There is enough evidence to justify serious concern and a formal investigation.

The issue first received major attention when residents began documenting a substantial number of cancer cases. Subsequent reporting identified hundreds of cases from people living in the general area, and a preliminary statistical analysis commissioned by NJ Advance Media reported a higher occurrence of cancer in the study area than elsewhere in Monmouth County.

That is significant and deserves attention.

At the same time, the New Jersey Department of Health has not formally concluded that Aeromarine caused those cancers or established an Aeromarine-related cancer cluster.

Those are not contradictory statements. There may be an unusual pattern worth investigating, though its cause is not yet known.

16. What exactly is a cancer cluster?

A cancer cluster is not simply a neighborhood where many people have cancer.

Cancer is unfortunately common, particularly in an older population. Scientists therefore have to determine whether more cases are occurring than would statistically be expected in a defined population, place, and period of time.

They also look at the types of cancer, the ages of the patients, when the cancers occurred, how long people lived in the area, other risk factors and whether there is a plausible environmental exposure that could help explain the pattern.

A community map can raise an important alarm. The state cancer registry and formal epidemiological analysis are needed to determine what that alarm means.

17. Could people have been exposed years ago even if there is no exposure today?

Yes, and I think this is one of the most important questions.

Environmental conditions in 2026 may not be the same as conditions in 1976, 1986, or 1996. Landfills change, shorelines change, drainage changes, caps deteriorate, and major storms move water and sediment.

Some cancers also have long latency periods, meaning they may develop many years after an exposure.

Therefore, even if officials establish that there is no significant exposure pathway today, there remains a separate historical question about what conditions were like decades ago.

That question is much harder to answer, but it should not be ignored.

18. How can anyone investigate exposure from decades ago?

We cannot go back in time and take a water sample, but there are ways to reconstruct parts of the past.

Scientists and historians can use aerial photographs, environmental reports, well logs, old maps, landfill records, business records, flood history, sediment cores, and historical groundwater information. Cancer-registry data and residential histories can also help establish when and where people lived.

None of those sources is perfect, but several independent lines of evidence can sometimes tell us a great deal.

The past leaves evidence behind.

19. What should I do about my own health?

I would not panic, but I would take sensible precautions.

Talk with your physician and make sure you are current with the cancer screenings appropriate for your age, medical history, and personal risk factors. If you have persistent or unusual symptoms, have them evaluated rather than ignoring them.

I would not recommend that everyone in Keyport suddenly demand full-body scans or every available cancer test. Medical tests have limitations and can produce false positives and unnecessary follow-up procedures.

If you have had cancer, make sure that your diagnosis is properly documented. The New Jersey cancer registry will ultimately be much more useful scientifically than an informal neighborhood list alone.

20. Is Keyport's drinking water safe?

Based on the information currently available, there is no evidence that Aeromarine is contaminating Keyport's municipal drinking water supply.

The municipal wells draw from deeper, confined aquifers separate from the shallow groundwater being investigated beneath the landfill, and the system continues to be tested in accordance with state and federal drinking-water requirements.

That does not mean shallow groundwater around the landfill is clean. It means the municipal drinking-water source is a different hydrogeological system.

Anyone using a private well near an area of concern should ask the appropriate environmental or health agency whether individual testing is warranted.

21. What about eating fish, crabs or shellfish from Raritan Bay?

People should follow New Jersey's existing fish and shellfish consumption advisories.

It is important to understand that these advisories existed long before the current Aeromarine controversy and reflect the larger history of contamination in Raritan Bay and surrounding waterways.

Different species have different recommendations, and some restrictions are more important for children, pregnant women, and other sensitive groups.

Aeromarine may eventually prove to be part of the larger pollution story, but it should not automatically be blamed for every longstanding Raritan Bay advisory.

22. Should I worry about swimming or recreating near the site?

I would stay off the landfill property and obey all fencing and warning signs. I would not deliberately enter water immediately adjacent to the site or handle suspicious waste or debris.

At the same time, I would not declare all of Raritan Bay unsafe without evidence or an official advisory.

The sensible approach is to follow current environmental and recreational advisories and avoid unnecessary contact with areas already under investigation.

23. Should I worry about my children, grandchildren or pets playing in the yard?

At this time, the state has not established that ordinary residential yards in Keyport are contaminated by Aeromarine.

That is an important fact.

I would still use reasonable precautions. Children and pets should never enter the landfill. Suspicious debris should not be handled, and floodwater should always be treated with caution because it can contain bacteria, sewage, petroleum products, and other contaminants, whether or not Aeromarine is involved.

If future testing identifies a specific residential pathway, the advice may change.

24. Should I have my own property tested?

Maybe, but testing should be done for a reason.

A random soil sample can produce numbers without answering a useful question. Before spending substantial money, I would want to know which contaminants I am looking for, why, where the samples should be collected, and how the results will be interpreted.

If your property is very close to a suspected pathway, has experienced repeated flooding, uses a private well, or lies in an area where future state testing indicates migration, then professional property-specific testing may make good sense.

Testing should answer a question rather than simply create another one.

25. I am thinking of buying near Aeromarine. Should I?

I would not tell someone automatically to buy or not to buy.

I would tell them to investigate carefully before committing themselves financially.

Find out exactly where the property is in relation to the landfill, waterways and areas being tested. Review environmental records, flood history and the seller's disclosure. Ask whether the property or adjacent properties have ever been tested or involved in environmental investigation.

If the property is particularly close to an area of concern, talk with an environmental professional and a real estate attorney before the inspection and environmental contingencies expire.

“Near Aeromarine” and “contaminated by Aeromarine” are not automatically the same thing.

26. I already own a home here. Should I sell?

I would not panic-sell based upon what we know today.

A home is often someone's largest financial asset, and selling during a period of fear and uncertainty could have serious consequences.

At the same time, every homeowner has a different financial situation, health history and tolerance for uncertainty. I would watch the environmental results closely and make my decision based upon the individual property rather than the neighborhood rumor mill.

If future evidence shows that a particular property is affected, that changes the discussion. We are not at the point where I would tell the entire community to leave.

27. If I am selling, what should I disclose?

Be truthful and obtain legal advice.

New Jersey property transactions include disclosure requirements involving known environmental conditions. A seller should not conceal information that is legally required to be disclosed, but neither should a seller describe a property as contaminated merely because it is located somewhere near Aeromarine.

Because this has become such a visible environmental issue, I would have a New Jersey real estate attorney advise me on the particular transaction.

Transparency is safer than trying to guess where the legal line is.

28. Could cleanup or redevelopment actually make the situation worse?

If improperly handled, disturbing contaminated material can create new exposure problems. Excavation can move soil, generate dust, alter drainage, or disturb buried waste.

That is exactly why remediation and redevelopment of contaminated property have to be carefully engineered and regulated.

Cleanup does not mean simply bringing in bulldozers.

If the landfill is disturbed, I would expect plans for dust control, soil handling, stormwater management, monitoring and protection of surrounding waterways and neighborhoods.

The goal should be to reduce risk, not rearrange it.

29. Should anything ever be built on the property?

I don't think that question can responsibly be answered until we know more.

Contaminated properties can sometimes be remediated and reused safely. Other properties are better suited to limited uses, open space, or uses that require little disturbance of the underlying waste.

What ultimately happens at Aeromarine should depend on the contamination, engineering, hydrology, future flood risk, and the long-term ability to protect the community.

Development should follow remediation.

Remediation should not be designed simply to make development easier.

30. What role should climate change and future flooding play?

A major one.

This property sits beside tidal wetlands and Raritan Bay. Whatever closure system is eventually designed should not be based only upon today's ordinary tide.

Engineers should consider future sea-level conditions, storm surge, extreme rainfall, erosion and the possibility that storms may become more damaging over the lifetime of the closure system.

A landfill that may remain in place for generations has to be designed for the future, not simply for the afternoon when the cap is completed.

31. What if all the new tests come back within acceptable limits?

I would be pleased, but I would still want to understand exactly what "acceptable" means.

Environmental standards differ depending upon whether we are talking about drinking water, groundwater, residential soil, industrial soil, sediment or surface water.

I would also want to know whether the correct locations were tested and whether sampling was done under conditions likely to reveal contamination if it is moving.

If comprehensive testing ultimately demonstrates that the landfill contamination is contained and surrounding neighborhoods are not being exposed, that would be very good news.

I do not want bad results.

I want reliable results.

32. What happens if contamination is found beyond the landfill?

Then the investigation has to follow it.

Officials would need to determine how far it extends, what concentrations are present and whether people can come into contact with it.

Depending on what is found, this could lead to additional monitoring wells, residential sampling, sediment testing, vapor investigations, removal of contaminated material, or other forms of remediation.

The exact response depends upon the contaminant and the pathway.

But the fundamental rule is simple: if contamination has moved, the investigation cannot stop at the property line.

33. Why should we trust the testing?

We should not be expected simply to trust it because somebody tells us to.

Environmental sampling should be documented, repeatable, and subject to quality control. Samples should have proper chain of custody, certified laboratory analysis, appropriate blanks and duplicates, and clear reporting of detection limits.

It is encouraging that NJDEP has conducted independent sampling rather than relying entirely upon private consultants working in connection with the property.

Ultimately, public confidence will depend on seeing enough information to understand how conclusions were reached.

Good science should survive scrutiny.

34. What information should be made public?

I would like to see the sampling locations, well depths, groundwater elevations, laboratory results, contaminants that were not detected, applicable standards, tide and weather conditions, and the state's interpretation of the findings.

The public does not need to become a roomful of environmental chemists, but residents should be able to look at a map and understand where samples were collected and what they showed.

The best form of transparency provides both the raw information and an understandable explanation.

35. What should residents not do?

We should not trespass onto the landfill or collect hazardous material ourselves.

We should not publish another person's medical history without permission.

We should not turn every rumor into a fact simply because it supports what we already believe.

We should also resist the temptation to blame every illness or every chemical found in Raritan Bay on one property before the evidence establishes that connection.

Being skeptical of government conclusions is healthy. Being skeptical of our own assumptions is just as important.

36. John, you live here. Are you worried?

Yes, I am concerned. I would be foolish to pretend otherwise.

I live only a few blocks away and have been here for more than a decade. I know contamination exists at the property, and I know there are legitimate questions about cancer and possible environmental exposure.

But I am concerned, not panicked.

I will continue with appropriate medical care and screenings. I will read the environmental results, ask questions about groundwater and possible exposure pathways and continue pressing for complete information.

Would I move tomorrow based upon what we know today? No.

Would I ignore the issue because the answers might make me uncomfortable? Absolutely not.

I have spent much of my life studying geology and asking questions as a journalist. Both taught me the same lesson: **do not decide what the answer is before you have collected the evidence.**

I am going to let the science tell me how worried I should be.

37. John, what would convince you that the neighborhood is safe?

Not simply somebody saying it is safe.

I would want enough well-designed testing to show that contamination is contained or that any off-site concentrations are below levels of concern. I would want to understand groundwater flow. I would want surface-water and sediment questions addressed. I would want areas subject to flooding investigated where the science indicates that is appropriate.

I would also want the Department of Health to examine the cancer information independently and explain its conclusions.

If all of that work shows that there is no meaningful exposure affecting residents, I will be very happy to say so.

My purpose is not to prove that the community is contaminated.

My purpose is to find out whether it is.

38. What do you ultimately want to see happen at Aeromarine?

I want the truth.

I want us to determine what contamination exists, where it came from, where it has gone and whether anyone has been exposed to it.

I want the landfill properly closed and remediated so that future generations do not have to reopen the same investigation twenty or thirty years from now.

I want the people who live here to receive clear information rather than rumors, incomplete answers or reassurances they cannot evaluate for themselves.

If the science tells us that our neighborhoods are safe, I want the community to have enough evidence to believe it.

If the science tells us there is a problem, I want that problem addressed.

I am not looking for a predetermined answer.

I am looking for an answer we can trust.