

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

MICHAEL LEESE, et al.,

Plaintiffs,

v.

LOCKHEED MARTIN CORP.,

Defendant.

HONORABLE JEROME B. SIMANDLE

Civil Action
No. 11-5091 (JBS/AMD)

OPINION

APPEARANCES:

Julie A. LaVan, Esq.
Alaina A. Gregorio, Esq.
Drew Chigounic, Esq.
LAVAN LAW
11 East Maine Street, 2nd Floor
Moorestown NJ 08057
Attorneys for Plaintiffs

Robert L. Ebby, Esq.
Steven T. Miano, Esq.
Robert A. Wiygul, Esq.
HANGLEY ARONCHICK SEGAL PUDLIN & SCHILLER
One Logan Square, 27th Floor
Philadelphia PA 19103
Attorneys for Defendant

SIMANDLE, Chief Judge:

I. INTRODUCTION

This action alleges that hazardous chemicals released on Defendant Lockheed Martin Corp.'s property in Moorestown, N.J., have migrated and contaminated adjacent residential properties. Plaintiffs -- Michael and Ashley Leese and their three children,

and Jay and Raquel Winkler -- who own homes across the street from the Lockheed Martin facility, bring four claims under federal and state environmental statutes and seek an injunction to implement certain environmental measures to prevent and remediate environmental contamination, as well as civil penalties and attorneys' fees. The Court previously granted summary judgment in favor of Defendant on claims alleging personal injury and loss of property value.

This matter is before the Court on two motions for summary judgment on the environmental claims. Plaintiffs have filed a motion for partial summary judgment on their claim under the Resource Conservation & Recovery Act ("RCRA"), 42 U.S.C. § 6901, et seq. [Docket Item 137.] Defendant opposes the motion and files its own motion for summary judgment on all remaining claims: RCRA (Count III); the New Jersey Spill Compensation & Control Act ("Spill Act"), N.J.S.A. 58:10-23.11, brought under the New Jersey Environmental Rights Act ("ERA"), N.J.S.A. 2A:35A-1, et seq. (Count I); the New Jersey Water Pollution Control Act ("WPCA"), N.J.S.A. 58:10A-1, et seq., brought under the ERA (Count II); and the Comprehensive Environmental Response, Compensation & Liability Act ("CERCLA"), 42 U.S.C. § 9601, et seq. (Count IV). In opposition to Defendant's motion, but without filing a cross-motion, Plaintiffs "ask the District Court to grant summary judgment in their favor on Counts I

through III." (Pl. Opp'n [Docket Item 145] at 1.) Plaintiffs do not request summary judgment on the CERCLA claim (Count IV) and offer no opposition to Defendant's motion on that claim. Thus, the portion of Defendant's motion for summary judgment pertaining to CERCLA is unopposed.

The Court heard oral argument on July 9, 2014. For the reasons explained below, the Court will deny Plaintiffs' motion for partial summary judgment and grant Defendant's motion for summary judgment. Plaintiffs concede that they did not satisfy the notice requirements of the ERA and offer no argument in favor of departing from Third Circuit and New Jersey precedent that describes the ERA notice requirements as a mandatory precondition to filing suit. Accordingly, Defendant is entitled to summary judgment on the Spill Act and WPCA claims. Defendant is entitled to summary judgment on the CERCLA claim, as injunctive relief for environmental cleanup is not available to private parties, and Plaintiffs have not demonstrated that they incurred any response costs under 42 U.S.C. § 9613(g)(2). Finally, Defendant is entitled to summary judgment on the RCRA claim because Plaintiffs fail to present evidence from which a reasonable factfinder could find that the contamination in the levels detected here may pose an "imminent and substantial endangerment" to health or the environment.

II. BACKGROUND

A. Property ownership and environmental background

Over the years, several different corporations have owned the property along Borton Landing Road on which the Defendant's research, development and manufacturing facility now sits, including RCA Corp., General Electric Co., and Martin Marietta Corp. (Def. Statement of Undisputed Material Facts ("Def. SMF") [Docket Item 140] ¶¶ 1-2.) In 1986, the New Jersey Department of Environmental Protection ("NJDEP") executed an Administrative Consent Order ("ACO") with RCA to clean up the facility and to monitor environmental conditions. (Id. ¶¶ 11-12.) When Martin Marietta acquired the facility, in 1993, it did so subject to requirements of an amended ACO. (Id. ¶¶ 13-14.)

In 1994, the property now known as the Wexford residential development, across Borton Landing Road from the facility, which contains the properties that Plaintiffs would purchase in 2003, was sold to Chesapeake Park, D.C., a division of Lockheed Martin. (Plaintiffs' Statements of Undisputed Material Facts ("Pl. SMF") [Docket Item 146] ¶ 10.) After Defendant's merger with Martin Marietta, Defendant monitored and sampled groundwater at and near the facility under NJDEP supervision. (Id. ¶¶ 36-37.)

In 1996, Chesapeake contracted with a firm to conduct a "Phase I" environmental assessment of Wexford. (Id. ¶ 11.) That

assessment included a report from 1990, known as the "Doremus Report," which stated that the Wexford property should not "presently" be developed for residential purposes. (Pl. Ex. 8 at LMC0197373.) After Defendant acquired what would become the Wexford property, Defendant sold the property to a developer. (Pl. SMF ¶ 22.)

In 2003, the Leeses purchased a home at 5 Victoria Court, and the Winklers purchased a home at 7 Victoria Court. (Id. ¶ 24.) At the time of purchase, Plaintiffs were informed that groundwater under their properties contained trichloroethylene ("TCE"), a volatile organic compound ("VOC") frequently used in metal cleaning operations. No similar disclosures were made about the presence of tetrachloroethylene, also known as perchloroethylene ("PCE"), which is a VOC used in dry-cleaning and metal-cleaning products and for textile processing. Plaintiffs' homes have been connected to municipal water since the time they were built (Def. SMF ¶ 6), and thus do not draw upon groundwater.

According to information from the U.S. Environmental Protection Agency ("EPA"), TCE has been measured in the ambient air at levels between 0.01 $\mu\text{g}/\text{m}^3$ (micrograms per cubic meter) and 3.9 $\mu\text{g}/\text{m}^3$, and "most municipal water supplies are in compliance

with the maximum contaminant level of 5 $\mu\text{g}/\text{L}$.¹ (Pl. Ex. 35 at 1.) The EPA primer describes acute and chronic effects of TCE exposure, and states that TCE "is a likely human carcinogen," but that the "EPA does not currently have a consensus classification for the carcinogenicity of trichloroethylene."
(Id. at 2-3.) The Agency for Toxic Substances and Disease Registry ("ATSDR"), referenced in the EPA primer,

has calculated an intermediate-duration inhalation minimal risk level (MRL) of 0.1 parts per million (ppm) (0.5 milligrams per cubic meter, mg/m^3)² for trichloroethylene based on neurological effects in rats. The MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse noncancer health effects over a specified duration of exposure. Exposure to a level above the MRL does not mean that adverse health effects will occur.

(Id. at 2.) The California Environmental Protection Agency "has calculated a chronic inhalation reference exposure level of 0.6 mg/m^3 based on neurological effects in humans. The CalEPA reference exposure level is a concentration at or below which adverse health effects are not likely to occur."³ (Id.)

According to the EPA, PCE in the air has a "Reference Concentration" of 0.04 milligrams per cubic meter, or 40 $\mu\text{g}/\text{m}^3$. (Pl. Ex. 36 at 2.) A Reference Concentration

¹ Five micrograms per liter is equivalent to 5000 $\mu\text{g}/\text{m}^3$.

² 0.5 milligrams per cubic meter is equivalent to 500 $\mu\text{g}/\text{m}^3$.

³ 0.6 milligrams per cubic meter is equivalent of 600 $\mu\text{g}/\text{m}^3$.

is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not an estimator of risk but rather a reference point to gauge the potential for effects. . . . Lifetime exposure above the RfC does not imply that an adverse effect would necessarily occur.

(Id.) The EPA estimates that the "Reference Dose" for PCE is 0.006 milligrams per kilogram body weight per day, or 6 $\mu\text{g}/\text{kg}/\text{d}$.

A Reference Dose

is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. . . . Lifetime exposure above the RfD does not imply that an adverse health effect would necessarily occur.

(Id.) The EPA has only "medium confidence" in both the Reference Concentration and the Reference Dose, because of problems with the data and studies from which the benchmarks were derived.

(Id.) The EPA estimates that

if an individual were to continuously breathe air containing tetrachloroethylene [PCE] at an average of 4 $\mu\text{g}/\text{m}^3$ [micrograms per cubic meter] over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing this chemical.

(Id. at 3.) An individual "continuously breathing air containing 40 $\mu\text{g}/\text{m}^3$. . . would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer"

(Id.)

Beginning in December 2008, Plaintiffs and Defendant tested soil, indoor air and groundwater samples from their properties to monitor TCE and PCE concentrations. These two contaminants were detected in less than half of all of the samples collected by the parties between 2008 and 2012.⁴ (Pl. Ex. 51.)

B. Screening levels

Because the presence and concentration of TCE and PCE on and around Plaintiffs' properties are critical facts in this litigation, and because the NJDEP "screening levels" put those numbers in context, the Court pauses for a brief aside. The parties appear to dispute whether the concentrations of TCE or PCE ever have been detected above NJDEP screening levels on Plaintiffs' properties. Screening levels are benchmark concentrations of contaminants which generally "dictate when certain concentrations of compounds require additional testing. The screening levels do not necessarily indicate levels at which

⁴ Approximately 23 of 54 samples contained measurable amounts of TCE or PCE. (Pl. Ex. 51.) Plaintiffs argue that other VOCs were detected on the property and should be considered in this analysis, but Magistrate Judge Donio previously denied Plaintiffs' request to withdraw their admission that "TCE and PCE are the only hazardous substances that plaintiffs were exposed to and only hazardous substances that the plaintiff[s] contend contaminated their properties." (Tr. of Tel. Conf. before the Hon. Ann Marie Donio on 4/4/13 [Docket Item 79] at 14:23-15:1, 16:10-25, 17:11-18:9.) Because Plaintiffs admitted that TCE and PCE were the only VOCs at issue in this case, and because Magistrate Judge Donio denied Plaintiffs' request to withdraw that admission, the Court will not consider any arguments concerning other VOCs.

compounds become hazardous to health." Leese v. Lockheed Martin, No. 11-5091, 2013 WL 5476415, at *2 n.6 (D.N.J. Sept. 30, 2013) (citation omitted).⁵ The use of NJDEP screening levels is not appropriate in all situations, however. (See, e.g., N.J. Dep't of Envtl. Protection, Vapor Intrusion Technical Guidance 7 (Mar. 2013) (Pl. Ex. 33A) [Docket Item 153-2] ("If the conditions above are not met, the Department's GWSL [Ground Water Screening Levels] should not be utilized in assessing the VI [Vapor Intrusion] pathway.").) Additionally, there are situations in which certain contamination that does not exceed screening levels may nonetheless trigger further investigation. (See id. ("Soil gas results that do not exceed the SGSLs [Soil Gas Screening Levels] may or may not suggest further investigation").)

The disagreement between the parties stems largely from the fact that in 2013, well after the samples were collected from Plaintiffs' properties, the NJDEP adjusted upward its statewide screening levels based on regional screening level data from the

⁵ NJDEP documents further illustrate the role screening levels play in environmental investigation. "If the contaminant concentration in any ground water sample exceeds its applicable GWSL [Ground Water Screening Level], the ground water may be resampled to confirm the presence of contamination provided the initial results do not exceed three times (3X) the GWSL. Two confirmation samples should be collected An exceedance of these screening levels will necessitate further evaluation and possible mitigation" (N.J. Dep't of Envtl. Protection, Vapor Intrusion Technical Guidance 5 (Mar. 2013) (Pl. Ex. 33A) [Docket Item 153-2]).)

U.S. Environmental Protection Agency ("EPA"), for the hazardous substance at issue, among others. (See Pl. Ex. 50 at 1.) For example, the NJDEP screening level for PCE in soil was adjusted from 34 $\mu\text{g}/\text{m}^3$ to 470 $\mu\text{g}/\text{m}^3$. Plaintiffs dispute whether the new screening levels apply to this analysis. They argue that the NJDEP's "implementation strategy" describes how the new guidelines should affect existing NJDEP cases and contend that Defendant has not met all of the new requirements. (See N.J. Dep't of Env'tl. Protection, NJDEP Implementation Strategy for Revised Vapor Intrusion Screening Levels (Mar. 2013), marked as Pl. Ex. 50.) However, the NJDEP's guidance to investigators about assessing environmental conditions for NJDEP purposes (when, for instance, mitigation processes are already in place or a party requests a reclassification) is not relevant to the questions before the Court. The ultimate inquiry for the Court, as explained below, is whether the VOCs may present an imminent and substantial endangerment to health or the environment, a question that does not turn on NJDEP screening guidelines, per se, or instructions by the NJDEP to investigators. Although the comparison of TCE and PCE concentrations to screening levels may tend to support or refute a claim that contamination poses a health or environmental risk, proof of contamination in excess of state standards is not an element of RCRA. See Interfaith Cmty. Org. v. Honeywell Int'l, Inc., 399 F.3d 248, 261 (3d Cir. 2005).

2005). Plaintiffs do not explain the significance of the old screening levels and do not articulate how the old NJDEP screening levels reflect the most current environmental science or policy, as expressed by the NJDEP or the EPA in the 2013 screening levels. The Court concludes that the most relevant benchmark with which to compare test results is the 2013 NJDEP screening levels, which reflect more recent data and guidance from the EPA than the previous screening levels. (See Pl. Ex. 50 at 1.)⁶ As will be explained below, in the absence of expert opinion testimony to the contrary, it is not a reasonable

⁶ The NJDEP periodically revises its screening levels for hazardous substances in water, soil vapor, and vapor inhalation ("VI"). For example, the NJDEP issued its updated "Vapor Intrusion Technical Guidance" document (Pl. Ex. 33) in March 2013. In explaining its updated screening standards for the investigation of vapor intrusion generally, the NJDEP stated:

This technical guidance incorporates a risk-based, staged approach to evaluate the potential for VI [Vapor Intrusion] associated with contaminated sites. The document has been developed after consideration of the latest state of the science procedures and methodologies currently included in the United States Environmental Protection Agency (USEPA), ASTM, Interstate Technology and Regulatory Council (ITRC), State and industry guidance that address the VI pathway.

(Id. at 3.) Methodologically, the testing protocol suggests obtaining two follow-up samples evenly spaced within 60 days of the initial sampling, and then averaging the results to determine if the screening level is exceeded. (Id. at 5.) This supports that a single, unaveraged sample level may be a spike or outlier not representative of the substance concentration, and that such samples should be averaged over time before determining whether the screening level has been exceeded.

inference that the NJDEP screening levels for TCE and PCE, whether old or new, are meant to identify an exposure or dosage threshold associated with a measurable heightened risk of harm to humans or to the environment, in light of the much higher EPA Minimal Risk Level and reference dose standards associated with the absence of an identified risk for TCE or PCE.

C. Test results for TCE and PCE

For the sake of clarity and efficiency, Defendant compiled a summary chart of test results for TCE and PCE from 2008, 2009 and 2012. (Def. Ex. 10 [Docket Item 139-12].) Plaintiffs have repeatedly objected to the accuracy of Defendant's summary chart compiling test results for TCE and PCE, but have not pointed to any specific inaccuracies or material omissions in the data or specific evidence to the contrary. At oral argument, Plaintiffs supplied a modified summary chart purporting to highlight "the inaccuracies in Defendant's version." (Pl. Ex. 51.) However, Plaintiffs did not identify any inaccuracies or omissions in the reported test results: they merely added a column to the chart showing the NJDEP screening level that had been in place at the time the samples were taken, for the sake of comparison with the current NJDEP screening levels used in the Defendant's chart. As the Court will explain below, Plaintiffs have not cited any evidence that PCE or TCE have been detected on their properties

above currently applicable NJDEP screening levels at any point between 2008 and 2012.⁷

In 2008, the NJDEP directed Defendant to conduct precautionary soil vapor testing at nearby properties, including those owned by Plaintiffs. TCE was not detected at the Leeses' property, but PCE was detected at low levels in soil samples, including two samples above the then-applicable screening level.⁸

⁷ The Court has provided Plaintiffs ample opportunity to contest the accuracy of any data contained in the summary chart. [See Docket Item 154 (requesting that the parties "please be prepared to identify what evidence, if any, demonstrates inaccuracies in Defendant's summary chart of test results (Def. Ex. 10 [Docket Item 139-12]), or demonstrates that the chart contains material omissions" at oral argument).] The Court also has invited Plaintiffs, in writing and at oral argument, to identify with specificity any evidence in the record that demonstrates concentrations of contaminants above the currently applicable screening levels. [See *id.* (requesting that the parties "please be prepared to identify with specificity what evidence, if any, shows concentrations of contaminants on Plaintiffs' properties above currently applicable NJDEP screening levels").] Plaintiffs have not identified any specific data that show concentrations of contaminants above the current screening levels on Plaintiffs' properties. Defendant has relied on the summary chart for two rounds of summary judgment motions. See Leese, 2013 WL 5476415, at *3 n.7; (Def. Ex. 10). Plaintiffs have only ever contested whether Defendant included the relevant NJDEP screening level numbers. See Leese, 2013 WL 5476415, at *3 n.7; (Pl. Ex. 51). Because Plaintiffs have not identified any specific inaccuracies or material omissions in the test result data, the Court will rely on the summary as an accurate representation of test results. There is no genuine issue of fact as to the test results obtained for TCE and PCE herein. All citations to sample test results are drawn from Plaintiffs' Exhibit 51.

⁸ Two samples showed PCE in concentrations of 44 $\mu\text{g}/\text{m}^3$ and 71.9 $\mu\text{g}/\text{m}^3$, above the 2007 screening level of 34 $\mu\text{g}/\text{m}^3$, but below the current screening level of 470 $\mu\text{g}/\text{m}^3$.

Both PCE and TCE were detected at very low levels in soil samples from the Winklers' property, below the then-applicable screening levels. The NJDEP concluded that no further monitoring was warranted at the Winklers' home, but Defendant conducted additional testing of the Leeses' property in January and April 2009. (Pl. SMF ¶¶ 47 & 49; Pl. Ex. 51.)

One indoor air sample from the Leeses' home in January 2009 contained PCE at 5.3 $\mu\text{g}/\text{m}^3$, above the then-applicable screening level of 3 $\mu\text{g}/\text{m}^3$, but below the current screening level of 9 $\mu\text{g}/\text{m}^3$. No other tests in January or April 2009 detected PCE or TCE in the soil, indoor air or groundwater at levels above either the then-applicable or current screening levels at 5 Victoria Court.

Plaintiffs conducted their own testing in November 2012, and no tests have been conducted after that date. The 2012 testing did not reveal the presence of TCE in the indoor air or soil at 5 Victoria Court, but TCE was measured in the groundwater in concentrations of 0.59 $\mu\text{g}/\text{m}^3$ and 0.86 $\mu\text{g}/\text{m}^3$, below both the current screening level of 2 $\mu\text{g}/\text{m}^3$ and the previous screening level of 1 $\mu\text{g}/\text{m}^3$. PCE was not detected in the groundwater at 5 Victoria Court, but was detected in the indoor air (at concentrations of 0.43 $\mu\text{g}/\text{m}^3$ and 0.46 $\mu\text{g}/\text{m}^3$, below both the current screening level of 9 $\mu\text{g}/\text{m}^3$ and the previous screening level of 3 $\mu\text{g}/\text{m}^3$) and in the soil (at a concentration of 51

$\mu\text{g}/\text{m}^3$, well below the current screening level of $470 \mu\text{g}/\text{m}^3$, but above the previous screening level of $34 \mu\text{g}/\text{m}^3$).⁹ In sum, no samples from 5 Victoria Court in November 2012 contained either TCE or PCE in concentrations that approach the current NJDEP screening levels.

In fact, none of the sample results collected from 5 Victoria Court between 2008 and 2012 ever revealed concentrations of TCE or PCE at or above the current NJDEP screening levels. The concentrations of PCE in the indoor air and TCE in the soil were both lower in 2012 than they had been in previous samples.¹⁰ One soil sample from 2012 contained PCE at $51 \mu\text{g}/\text{m}^3$, which was higher than four previous sample results but below the $71.9 \mu\text{g}/\text{m}^3$ detected in December 2008, and well below the screening level of $470 \mu\text{g}/\text{m}^3$. The only other increase measured in 2012 was the level of TCE in the groundwater, at $0.86 \mu\text{g}/\text{m}^3$, up from a 2009 measurement of $0.77 \mu\text{g}/\text{m}^3$. Again, both of these results are below the current screening level of $2 \mu\text{g}/\text{m}^3$ and the previous screening level of $1 \mu\text{g}/\text{m}^3$.

A similar picture emerged at 7 Victoria Court. TCE was not detected in the indoor air or the soil in 2012 but was detected

⁹ PCE was not detected in a second soil sample from 5 Victoria Court in 2012.

¹⁰ PCE was detected in the indoor air at $5.3 \mu\text{g}/\text{m}^3$ in January 2009 but only at $0.43 \mu\text{g}/\text{m}^3$ and $0.46 \mu\text{g}/\text{m}^3$ in 2012. TCE was detected in the soil at $4.8 \mu\text{g}/\text{m}^3$ in April 2009 but not detected in 2012.

in the groundwater in concentrations of 1 $\mu\text{g}/\text{m}^3$ and 1.3 $\mu\text{g}/\text{m}^3$, below the current screening level of 2 $\mu\text{g}/\text{m}^3$, but at or above the previous screening level of 1 $\mu\text{g}/\text{m}^3$. PCE was not detected in the groundwater or the soil, but was measured at concentrations of 0.37 $\mu\text{g}/\text{m}^3$ and 0.41 $\mu\text{g}/\text{m}^3$ in the indoor air, below both the current screening level of 9 $\mu\text{g}/\text{m}^3$ and the previous screening level of 3 $\mu\text{g}/\text{m}^3$. The concentrations of TCE and PCE both declined in 2012, compared with previous testing.¹¹ None of the sample results collected from 7 Victoria Court between 2008 and 2012 ever revealed concentrations of TCE or PCE at or above the current NJDEP screening levels.

Plaintiffs also provide evidence of two plumes of groundwater across Borton Landing Road, although the exact locations of those plumes in relation to Plaintiffs' properties is not explained in the exhibit cited. (Pl. Ex. 27 at 2.) TCE in the groundwater plumes across Borton Landing Road on Defendant's industrial property had been detected in concentrations ranging from "non-detect to 58 $\mu\text{g}/\text{m}^3$ " in 2008 or 2009, or up to 29 times the current groundwater screening level of 2 $\mu\text{g}/\text{m}^3$. (Id.)

¹¹ In December 2008, PCE was detected in the soil at 7 Victoria Court at concentrations of 14 $\mu\text{g}/\text{m}^3$ and 8.8 $\mu\text{g}/\text{m}^3$, below both the previous screening level of 34 $\mu\text{g}/\text{m}^3$ and the current screening level of 470 $\mu\text{g}/\text{m}^3$. PCE was not detected in soil samples collected in November 2012. In December 2008, TCE was detected in the soil at a concentration of 4.9 $\mu\text{g}/\text{m}^3$, below the screening level of 27 $\mu\text{g}/\text{m}^3$, but was not detected in samples in November 2012.

Overall, for both 5 Victoria Court and 7 Victoria Court, no sample of soil gas, groundwater or ambient air, in all the evidence in this case, exceeds the current NJDEP screening levels for TCE or PCE. The test results also show a general pattern of diminution from 2008 to 2012, suggesting that the situation for TCE and PCE at these properties is improving, with no reasonable inference that these concentrations of TCE and PCE will ever increase, let alone that an increase to levels risking health is "imminent."¹²

D. Remediation measures

The parties dispute what remediation measures Defendant currently has in place, although these disputes are not material facts, as explained below. Plaintiffs contend that "monitored natural attenuation," or "MNA," is "the only form of remedial action Defendant is conducting at the Facility, and only for TCE." (Pl. SMF ¶ 77.)¹³ Defendant counters that it has installed

¹² The scientific thresholds of TCE and PCE exposures that trigger concern for hazard to health are discussed in Part IV.C, below, in the context of the RCRA claim.

¹³ In support of this statement, Plaintiffs cite the declaration of David A. Sutton, Lockheed Martin's manager of environment, safety and health, in which he says "Lockheed Martin, under the supervision of the NJDEP, has, among other things, been monitoring and sampling groundwater at designated monitoring wells at and near the Facility and affected off-site areas." (Pl. Ex. 1 ¶ 12.) Plaintiffs also cite a prior memorandum of law by Defendant, in which Defendant states: "Based on the levels of TCE in the groundwater, the NJDEP has determined that

a groundwater treatment system and vapor extraction system at the facility, as well as a "Perimeter System" to remediate groundwater, which has been in operation since 1995. (Def. SMF ¶ 16.) Plaintiffs contend that Defendant has shut off the Perimeter System, potentially permitting contaminants to migrate once again through the groundwater to the Wexford development. (Decl. of David Farrington ¶ 8 (Pl. Ex. 49) [Docket Item 149-7].)

E. Farrington's expert report

David Farrington, a professional geologist, drafted an expert report for Plaintiffs on the subject of "environmental studies and remediation activities conducted at the Lockheed Martin property and nearby residential properties in Moorestown, New Jersey." (Pl. Ex. 18.) He opines that PCE and TCE were "discharged into the soil and groundwater" at Defendant's facility and "are classified as hazardous substances" under CERCLA and RCRA. (Id. at 7.) He concludes that the VOCs "migrated offsite" from the facility and contaminated groundwater "beneath the Wexford neighborhood, including 5 Victoria Court and 7 Victoria Court." (Id. at 8.) He also opines that the contamination migrated "through the vadose zone (unsaturated soils)." (Id.) He states that PCE continues to

monitored natural attenuation is the most appropriate means of continuing remediation." (Pl. Ex. 19 at 2.)

degrade into TCE and other compounds and "continues to migrate in soil vapor through the unsaturated soils in the vadose zone" (Id.) According to Farrington, the source of PCE detected in the indoor air at Plaintiffs' properties "was from sub-slab soil vapor migrating into the house" and that "the sub-slab soil vapor was not contaminated from indoor air migrating into the ground." (Id.) He explains that the "presence of chlorinated VOCs in groundwater and soil vapor on the LMC property acts as an ongoing source of chlorinated VOCs in soil vapor," which will "continue to migrate through the vadose zone," following the same migration path, below 5 and 7 Victoria Court. (Id. at 9.)

On the hazardous nature of TCE and PCE, Farrington states:

• . . . Human exposure to PCE affects developmental, neurological, and respiratory systems. PCE is reasonably anticipated to be a human carcinogen. (Agency for Toxic Substances and Disease Registry -- attached)

• . . . Human exposure to TCE affects developmental and neurological systems. TCE is reasonably anticipated to be a human carcinogen. (Agency for Toxic Substances and Disease Registry -- attached)

• The United States Environmental Protection Agency (EPA) characterizes TCE as carcinogenic to humans and as a human non-cancer health hazard. [citation omitted]

. . . • . . . These compounds are classified as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and hazardous wastes under the Resource Conservation and Recovery Act (RCRA).

. . . • Based on information from the Agency for Toxic Substances and Disease Registry, exposure to PCE

and/or TCE can affect developmental, neurological, and/or respiratory systems in humans.

(Id. at 7, 9.) The ATSDR attachments referenced in the report are not included as part of Plaintiffs' exhibit, but are included in other exhibits in these cross-motions.

III. STANDARD OF REVIEW

A court shall grant summary judgment "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). A dispute is "genuine" if, based on the evidence in the record, a reasonable factfinder could return a verdict for the non-moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). A fact is "material" if it might affect the outcome of the suit. Id. The court will view evidence in the light most favorable to the non-moving party and "all justifiable inferences are to be drawn in [that party's] favor." Hunt v. Cromartie, 526 U.S. 541, 552 (1999). Fed. R. Civ. P. 56 "mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Marten v. Godwin, 499 F.3d 290, 295 (3d Cir. 2007) (quoting Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986)).

Fed. R. Civ. P. 56(c) further provides that parties asserting that a fact is genuinely disputed, or cannot be, "must support the assertion" by citing to the record or by "showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Affidavits or declarations in support of or opposition to a motion for summary judgment "must be made on personal knowledge, set out facts that would be admissible in evidence, and show that the affiant or declarant is competent to testify on the matters stated." Fed. R. Civ. P. 56(c)(4). If a party "fails to properly support an assertion of fact or fails to properly address another party's assertion of fact," the Court may grant summary judgment, if the motion and supporting papers show the movant is entitled to it. Fed. R. Civ. P. 56(e).

IV. DISCUSSION

A. The Spill Act and WPCA claims

Plaintiffs bring claims under the Spill Act and the WPCA, via the New Jersey ERA. (See Second Am. Compl. ¶¶ 43-57.) The ERA contains a notice requirement, which provides:

No action may be commenced pursuant to this act unless the person seeking to commence such suit shall, at least 30 days prior to the commencement thereof, direct a written notice of such intention by certified mail, to the Attorney General, the Department of Environmental Protection, the governing body of the municipality in which the alleged conduct has, or is

likely to occur, and to the intended defendant; provided, however, that if the plaintiff in an action brought in accordance with the "N.J. Court Rules, 1969," can show that immediate and irreparable damage will probably result, the court may waive the foregoing requirement of notice.

N.J.S.A. 2A:35A-11.

While Plaintiffs provided written notice to Defendant and the DEP (see Pl. Ex. 42 [Docket Item 145-44]), Plaintiffs conceded at oral argument that they did not provide written notice to the Attorney General or the Township of Moorestown. Plaintiffs have not argued that the Court should waive the notice requirement or that immediate and irreparable damage will probably result if the notice requirement is not waived.

The text of the notice provision is unambiguous: no action under the ERA may be commenced unless certain authorities have been given the specified notification. N.J.S.A. 2A:35A-11. In Player v. Motiva Enters., LLC, 240 F. App'x 513, 523-24 (3d Cir. 2007), the Third Circuit predicted that the New Jersey Supreme Court would hold that the ERA's notice provision is "a mandatory precondition to a lawsuit" The New Jersey Appellate Division has subsequently cited Player with approval. See Dalton v. Shanna Lynn Corp., No. A-0048-10T1, 2012 WL 1345073, at *4 (N.J. Super. Ct. App. Div. Apr. 19, 2012) (observing that the notice requirement has been held to be "a mandatory condition precedent to commencing a private cause of action"); Panaccione

v. Holowiak, 2008 WL 4876577, at *5 (N.J. Super. Ct. App. Div. Nov. 12, 2008) ("Summary judgment is appropriate when a plaintiff fails to comply with this mandatory condition precedent."); see also Scott v. E.I. Dupont de Nemours & Co., No. 06-3080, 2009 WL 901135, at *1-*4 (D.N.J. Apr. 1, 2009) (analyzing the notice provision at length, concluding that its requirements are mandatory, and observing that the U.S. Supreme Court held that "requirements in an analogous notice provision in the Resource Conservation and Recovery Act are 'mandatory conditions precedent to commencing suit'" (citing Hallstrom v. Tillamook Cnty., 493 U.S. 20, 31 (1989))). The parties have not cited, and the Court's own research has not revealed, any New Jersey Supreme Court precedent addressing this issue.

At oral argument, Plaintiffs declined the opportunity to argue that the New Jersey Supreme Court would reach a conclusion contrary to Player or its progeny. In light of the text of the notice requirement itself and the foregoing precedent, the Court holds that the ERA notice requirement is a mandatory precondition to bringing suit under that act. Defendant is entitled to summary judgment on Counts I and II (Spill Act and WPCA claims), because Plaintiffs failed to comply with the notice requirements of the ERA.¹⁴

¹⁴ Because Plaintiffs' failure to provide proper notice is dispositive, the Court need not address Defendant's alternative

B. CERCLA

Defendant seeks summary judgment on the CERCLA claim because Plaintiffs, as private parties, are not entitled to injunctive relief under CERCLA, and because Plaintiffs are not entitled to, and did not incur, any "response costs" under 42 U.S.C. § 9607(a) prior to bringing suit. (Def. Mot. at 37-38.) Plaintiffs offer no support of this claim in their opposition brief. At oral argument, Plaintiffs confirmed that this portion of Defendant's motion is unopposed.

Defendant is correct that "CERCLA does not authorize private parties to seek injunctive relief" for environmental cleanup. (Def. Mot. at 37.) See Mayor & Council of Borough of Rockaway v. Klockner & Klockner, 811 F. Supp. 1039, 1046-47 (D.N.J. 1993) ("The conclusion that injunctive relief is not available under Section 107 is supported by the overwhelming weight of authority"); T&E Indus., Inc. v. Safety Light Corp., 680 F. Supp. 696, 704 (D.N.J. 1988) ("CERCLA does not provide a private party with the right to injunctive relief requiring cleanup of a hazardous waste site"); Cadillac Fairview/Calif.,

arguments that the ERA claims are preempted or that Plaintiffs fail to establish Spill Act and WPCA claims on the merits. To the extent Plaintiffs have moved for summary judgment on Count I and Count II, that motion is denied. The dismissal of Counts I and II is without prejudice to Plaintiffs' right to furnish proper notice under the ERA and pursue future claims in a court of competent jurisdiction, and this Court has not addressed the merits of any Spill Act or WPCA claims in this case.

Inc. v. Dow Chem. Co., 840 F.2d 691, 697 (9th Cir. 1988)

("CERCLA § 107(a) does not provide for a private right to injunctive relief against owners and operators"); New York v. Shore Realty Corp., 759 F.2d 1032, 1049 (2d Cir. 1985) (holding that "injunctive relief under CERCLA is not available to the State"). To the extent Plaintiffs seek injunctive relief under CERCLA, Defendant is entitled to summary judgment.

CERCLA does provide a private right of action to recover necessary costs incurred by parties in response to the release or threatened release of hazardous substances. See 42 U.S.C. § 9607(a)(4)(B) (providing that certain specified parties shall be liable for "any other necessary costs of response incurred by any other person consistent with the national contingency plan"). The statute specifies that "an action may be commenced under section 9607 of this title for recovery of costs at any time after such costs have been incurred." 42 U.S.C. § 9613(g)(2). Defendant asserts that the only "putative response cost[] is a May 2013 invoice to Plaintiffs' counsel regarding testing conducted at Plaintiffs' properties no earlier than November 2012." (Def. Mot. at 38.) Defendant observes that these costs were incurred after Plaintiffs added the CERCLA claim to the Second Amended Complaint, in violation of 42 U.S.C. § 9613(g)(2). (Id. at 38-39.) Defendant also argues that the costs were not incurred by Plaintiffs, but their counsel, which is not

a "response cost" under the statute. (*Id.* at 39.) According to Defendant, the Eighth Circuit has held that costs advanced by attorneys on a contingency basis (costs the plaintiffs would have to pay only if they succeeded on their claim) are not recoverable under CERCLA because the plaintiffs themselves had not "incurred" those expenses. (*Id.* at 39-40) (quoting Trimble v. Asarco, 232 F.3d 946, 956-58 (8th Cir. 2004), abrogated on other grounds, ExxonMobil Corp. v. Allapattah Servs., Inc., 545 U.S. 546 (2005)). Defendant also argues that the alleged costs are litigation costs, not response costs, and that if response costs are not recoverable, Plaintiffs are not entitled to declaratory relief under CERCLA. (Def. Mot. at 43-45.)

Plaintiffs offer no arguments in support of their CERCLA claim. They do not present evidence that, prior to commencing suit, they incurred response costs within the meaning of CERCLA or that these costs were necessary and were not inconsistent with the national contingency plan published under Section 311(c) of the Federal Water Pollution Control Act or revised pursuant to 42 U.S.C. 9605. See 42 U.S.C. §§ 9601(31), 9607(a)(4)(B), & 9613(g)(2)(B); see also U.S. Virgin Islands Dep't of Planning & Natural Res. v. St. Croix Renaissance Grp., LLLP, 527 F. App'x 212, 214 (3d Cir. 2013) (affirming the district court's holding that water sampling and laboratory fees incurred after the lawsuit was initiated were not compensable

response costs under CERCLA). Accordingly, the Court will grant this unopposed portion of Defendant's motion for summary judgment related to the CERCLA claim (Count IV).

C. RCRA claim

RCRA provides that

any person may commence a civil action on his own behalf . . . against any person . . . who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment

42 U.S.C. § 6972(a)(1)(B). To prevail under this section, a plaintiff must prove

(1) that the defendant is a person, including, but not limited to, one who was or is a generator or transporter of solid or hazardous waste or one who was or is an owner or operator of a solid or hazardous waste treatment, storage, or disposal facility; (2) that the defendant has contributed to or is contributing to the handling, storage, treatment, transportation, or disposal of solid or hazardous waste; and (3) that the solid or hazardous waste may present an imminent and substantial endangerment to health or the environment.

Interfaith, 399 F.3d at 258 (quoting Parker v. Scrap Metal Processors, Inc., 386 F.3d 993, 1014-15 (11th Cir. 2004)).

RCRA does not require a showing of actual harm, but only "threatened or potential harm" Interfaith, 399 F.3d at 258. The endangerment must be "imminent," meaning that it "threaten[s] to occur immediately," although "'the impact of the threat may not be felt until later.'" Meghrig v. KFC W., Inc.,

516 U.S. 479, 485 (1996) (quoting Price v. U.S. Navy, 39 F.3d 1011, 1019 (9th Cir. 1994)). Endangerment is "substantial" if it is "serious." Interfaith, 399 F.3d at 258-59. In sum, "'the plaintiffs must [only] show that there is a potential for an imminent threat of serious harm . . . [as] an endangerment is substantial if it is 'serious' . . . to the environment or health.'" Id. at 258 (quoting Parker, 386 F.3d at 1014-15); see also Crandall v. City & Cnty. of Denver, 594 F.3d 1231, 1238 (10th Cir. 2010) ("there is no endangerment unless the present or imminent situation can be shown to present a risk of (later) harm").

Here, Plaintiffs raise at least a dispute of fact as to the first two elements of the RCRA claim: that Defendant is a "person" within the meaning of RCRA and that Defendant has contributed to the handling, storage, treatment, transportation, or disposal of hazardous waste. A reasonable fact finder could indeed conclude that TCE and PCE have migrated in the groundwater and soils from Defendant's factory onto Plaintiffs' properties in detectable amounts, and that Defendant is liable for this condition as the successor to RCA, GE and Martin Marietta at this site. However, Plaintiffs have failed to carry their burden on the "imminent and substantial endangerment" element. For reasons now discussed, Plaintiffs fail to adduce evidence from which a favorable inference could be drawn that

the contamination measured on and around their properties may present an imminent and substantial endangerment to health or the environment.

Plaintiff's evidence of "imminent and substantial endangerment" consists of (1) a federal regulation deeming TCE and PCE to be "hazardous waste"¹⁵; (2) the recorded presence of TCE and PCE on Plaintiffs' properties¹⁶; (3) printouts from the EPA website that summarize TCE and PCE and describe background exposure levels, reference concentrations, and "health hazard information" describing acute and chronic effects¹⁷; (4) David Farrington's opinions about the possible health effects of TCE and PCE¹⁸; and (5) a "Toxicological Profile for Tetrachloroethylene" prepared by the U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, which spans more than 300 pages.¹⁹

¹⁵ 40 C.F.R. § 261.31.

¹⁶ (See, e.g., Pl. Ex. 51 (collecting test results).)

¹⁷ (Pl. Exs. 35 & 36.)

¹⁸ (Pl. Ex. 18.)

¹⁹ (Pl. Ex. 37.) Plaintiffs' only citation to this voluminous exhibit is for the proposition that fetuses and children may be particularly susceptible to the toxic effects of PCE exposure. (Pl. Mot. at 13; Pl. Opp'n at 12.) Plaintiffs do not cite any specific pages or data within this exhibit to support their claim of an imminent and substantial endangerment. This ATSDR

This evidence, taken together and with all reasonable inferences drawn in favor of Plaintiffs, is insufficient to establish "imminent and substantial endangerment." Plaintiffs provide no evidence and no expert testimony that TCE or PCE may pose a substantial risk of harm to health or the environment at levels detected on and around Plaintiffs' properties. Significantly, Plaintiffs' only expert does not offer such an opinion. Farrington's report and testimony briefly summarize information from the EPA and the ATSDR for the general propositions that TCE and PCE are "reasonably anticipated" to be carcinogens and "can affect developmental, neurological, and/or respiratory systems in humans." (Pl. Ex. 18 at 7, 9.) He does not offer an opinion about the potential risks to health or the environment resulting from exposure to TCE and PCE at the levels detected on and around Plaintiffs' properties. In fact, he references no concentrations of any kind in his discussion of the toxicity of TCE and PCE. He never discusses what levels of TCE and PCE are potentially harmful to humans or the environment.

publication from 1997 created a profile of available toxicologic information and epidemiologic evaluations of PCE, assessed the sufficiency of available information in determining levels of exposure presenting a significant risk to human health, and identified toxicologic testing needed to identify exposure to PCE that may present significant risk of adverse health effects in humans. (Pl. Ex. 37 at v.)

Proof of the mere detection of some measurable amount of hazardous materials on a property is not enough to maintain a RCRA claim. See Two Rivers Terminal, L.P. v. Chevron USA, Inc., 96 F. Supp. 2d 432 (M.D. Pa. 2000) (rejecting the contention "that the mere presence of contaminants creates" an imminent and substantial endangerment); City of Fresno v. United States, 709 F. Supp. 2d 934, 943 (E.D. Cal. 2010) ("the plaintiff must do more than establish the presence of solid or hazardous wastes at a site"); see also Lewis v. FMC Corp., 786 F. Supp. 2d 690, 710 (W.D.N.Y. 2011) ("Without any evidence linking the cited standards to potential imminent and substantial risks to human health or wildlife, reliance on the standards alone presents merely a speculative prospect of future harm, the seriousness of which is equally hypothetical."); accord FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 638 (3d ed. 2011) ("in most specific causation issues involving exposure to a chemical known to be able to cause the observed effect, the primary issue will be whether there has been exposure to a sufficient dose to be a likely cause of the effect") (emphasis added).

At oral argument, Plaintiffs adopted the position that exposure to TCE and PCE at any levels poses a substantial endangerment to health or the environment. No evidence in the record supports such a position, and Plaintiffs' own evidence flatly contradicts this argument. For example, the EPA primer on

TCE discusses how "most municipal water supplies are in compliance with the maximum contaminant level of 5 $\mu\text{g}/\text{L}$ " (Pl. Ex. 35 at 1), strongly suggesting that lower concentrations of TCE in the water supply are tolerated and do not pose a serious health risk, even when the water is consumed as drinking water. Moreover, the California EPA has determined that "adverse health effects are not likely to occur" at or below the chronic inhalation reference exposure level for TCE of 600 $\mu\text{g}/\text{m}^3$. (Id. at 2.)²⁰ The Reference Concentrations, Reference Doses, and NJDEP screening levels all suggest that trace amounts of TCE and PCE do not pose a substantial risk of harm to humans or the environment. Plaintiffs cite no evidence to the contrary.

The record evidence, viewed in the light most favorable to Plaintiffs, does not permit an inference that the concentrations of TCE or PCE detected at Plaintiffs' properties are potentially harmful. None of the samples of soil, indoor air or groundwater contained concentrations of contaminants that exceed the current NJDEP screening levels, which themselves are generally used as benchmarks for further investigation, not to demarcate the level

²⁰ Similarly, the EPA sets the inhalation minimal risk ("MRL") for TCE as of 2012 at 500 $\mu\text{g}/\text{m}^3$. (Id. at 2.) According to the EPA, "The MRL is an estimate of the daily exposure to a hazardous substance that is likely to be without appreciable risk of adverse noncancer health effects over a specified duration of exposure." (Id.) Plaintiffs, on the other hand, had no detectable amounts of TCE exposure by inhalation as measured in the 2008-2012 testing in their homes.

at which a serious risk of harm is possible. Only six of approximately 54 samples from Plaintiffs' properties ever detected TCE or PCE in concentrations above the old screening levels, and only one sample contained PCE at a concentration as high as twice the old screening level.²¹ Plaintiffs have not cited any other test results. Without other evidence, no factfinder could reasonably infer that when levels of TCE and PCE on Plaintiffs' properties are below current NJDEP screening levels, they may nonetheless present an imminent and substantial endangerment.²²

²¹ PCE was detected in the soil at 5 Victoria Court in December 2008 at 71.9 $\mu\text{g}/\text{m}^3$, which is approximately 2.1 times greater than the old 34 $\mu\text{g}/\text{m}^3$ screening level. (Pl. Ex. 51.)

²² Plaintiffs point to a letter written by David Sutton to the NJDEP in March 2009, in which he references TCE levels in groundwater plumes across Borton Landing Road that have been measured as high as 58 $\mu\text{g}/\text{m}^3$ in "recent investigation," which is 29 times the current NJDEP screening level of 2 $\mu\text{g}/\text{m}^3$. (Pl. Ex. 27 at 2; Pl. Ex. 51.) There is no evidence or expert opinion testimony about what concentrations of TCE ultimately are likely to reach Plaintiffs' properties or the potential hazard posed by TCE at those concentrations. Although Sutton's letter references historical levels of TCE in groundwater plumes in monitoring wells along Borton Landing Road as high as 188 $\mu\text{g}/\text{m}^3$ (Pl. Ex. 27 at 2), no measurement to date has ever detected TCE in the groundwater at Plaintiffs' properties at levels higher than 1.3 $\mu\text{g}/\text{m}^3$. Therefore, Plaintiffs ask the factfinder to make a substantial conjecture that the relatively high levels of TCE in the plumes would result in high levels of TCE on Plaintiffs' properties, and that TCE may pose an imminent and substantial endangerment at those levels. Neither Farrington's report nor his declaration contains any opinions about how high TCE or PCE levels could or probably would rise on Plaintiffs' properties, or the toxicity of the contaminants at those levels, even if, as Plaintiffs argue, some of Defendant's remediation efforts have

Plaintiffs' evidence from the EPA further precludes any inference in Plaintiffs' favor. For instance, the primer states that the inhalation minimal risk level for TCE is 500 $\mu\text{g}/\text{m}^3$. (Pl. Ex. 35 at 2.) TCE has never been detected in the indoor air at either of Plaintiffs' properties. (Pl. Ex. 51.) The EPA primer also seems to suggest that the "maximum contaminant level" in municipal water supplies is 5 $\mu\text{g}/\text{L}$, which is the equivalent of 5000 $\mu\text{g}/\text{m}^3$. (Pl. Ex. 31 at 1.) TCE has never been measured above 1.3 $\mu\text{g}/\text{m}^3$ in the groundwater at either of the Plaintiffs' properties.

Turning to PCE, although the EPA expressed considerable uncertainty about its benchmarks for PCE, the numbers suggest that "continuous inhalation" of PCE at or below 40 $\mu\text{g}/\text{m}^3$ is "likely to be without appreciable risk of deleterious noncancer effects during a lifetime." (Pl. Ex. 36 at 2.) Daily oral exposure to PCE at 6 $\mu\text{g}/\text{kg}/\text{d}$ is "likely to be without

ceased. Against such conjecture about future levels of TCE, the record reflects that in the years of monitoring to date, the plume has brought only traces of TCE to groundwater below Plaintiffs' properties and no TCE vapor to their homes. Any inference of imminent and substantial endangerment to Plaintiffs would be purely speculative on this record -- particularly in light of the maximum contaminant level for municipal water sources of 5 $\mu\text{g}/\text{L}$, or 5000 $\mu\text{g}/\text{m}^3$, that is referenced in the EPA primer on TCE (Pl. Ex. 35 at 1), and the fact that Plaintiffs' homes are connected to the municipal water system, reducing the potential to ingest the contaminated groundwater. The record likewise contains no evidence that the groundwater on Plaintiffs' properties becomes surface water at any point, such as by a spring, pond, or wetland, so there is no threat of TCE ingestion from groundwater on Plaintiffs' properties.

appreciable risk of deleterious noncancer effects during a lifetime." (Id.)²³

Plaintiffs have never provided any test results showing a concentration of PCE in the indoor air at concentrations above 5.3 $\mu\text{g}/\text{m}^3$, and no results show PCE above even 1 $\mu\text{g}/\text{m}^3$ in the indoor air since April 2009. (Pl. Ex. 51.) As for the potential for increased risk of cancer, the EPA estimates that continuously breathing air containing 4 $\mu\text{g}/\text{m}^3$ of PCE over an "entire lifetime" would increase the chance of developing cancer not more than one in a million. (Pl. Ex. 36 at 3.)

These scientific risk levels and screening standards for TCE and PCE are summarized below in Table 1 (TCE) and Table 2 (PCE) for indoor vapor exposure testing in Plaintiffs' homes.

TABLE 1: Summary of TCE Inhalation Vapor Risk Level Thresholds

EPA inhalation Minimal Risk Level (MRL)	500 $\mu\text{g}/\text{m}^3$
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²³ If this PCE inhalation exposure threshold of 6 $\mu\text{g}/\text{kg}/\text{d}$ is applied to a young child weighing 20 kg (44 lb.), it would say that exposure of that child to 120 $\mu\text{g}/\text{d}$ is likely to be without appreciable risk of noncancer effects.

California EPA inhalation Reference Level	600 $\mu\text{g}/\text{m}^3$
NJDEP Vapor Screening Standard (2008-2012)	1 $\mu\text{g}/\text{m}^3$
NJDEP Vapor Screening Standard (2013)	2 $\mu\text{g}/\text{m}^3$
Plaintiffs' TCE inhalation vapor tests (2008-2012) (8 tests)	0 $\mu\text{g}/\text{m}^3$ [not detected]

TABLE 2: Summary of PCE Inhalation Vapor Risk Level Thresholds

EPA continuous inhalation threshold	40 $\mu\text{g}/\text{m}^3$
EPA reference dose [6 $\mu\text{g}/\text{k/d}$ for 20 kg child]	120 $\mu\text{g}/\text{d}$
NJDEP Vapor Screening Standard (2008-2012)	3 $\mu\text{g}/\text{m}^3$
NJDEP Vapor Screening Standard (2013)	9 $\mu\text{g}/\text{m}^3$
Plaintiffs' PCE inhalation vapor tests (2008-2009) (5 tests)	5.3, 1.6, 1.2, 0.95, ND [not detected] $\mu\text{g}/\text{m}^3$
Plaintiffs' PCE inhalation vapor tests (2012) (4 tests)	0.46, 0.43, 0.41, 0.37 $\mu\text{g}/\text{m}^3$

It is apparent that these scientific benchmarks provide no reasonable basis for the inference that the low levels of TCE

and PCE measured on occasion at and around Plaintiffs' properties may pose an imminent and substantial endangerment to health or the environment. Further, the general reduction in such concentrations in the more recent years gives no support to an inference that an increase in risks posed by TCE or PCE to Plaintiffs' families or homes or the environment may be "imminent."

The Court may be excused if it is misreading the data or benchmarks contained in Plaintiffs' evidence. Plaintiffs have not provided testimony from a toxicologist or any other expert to aid the Court's comprehension of the data or the complicated science at the heart of this case. Plaintiffs seem to take the position that the numbers speak for themselves. In light of the NJDEP screening levels and the threshold concentration levels referenced in the EPA primers, the undisputed evidence plainly suggests that the very low levels of TCE and PCE detected at Plaintiffs' properties do not pose a substantial threat to health or the environment. As discussed above, the detected levels of TCE and PCE are several orders of magnitude below the EPA's scientific benchmarks for the threshold of concern for harm to humans. In order for Plaintiffs to survive summary judgment, they need to provide some evidence to enable a factfinder to reasonably infer that TCE and PCE may pose an imminent and substantial threat to health or the environment at

the levels existing in this case. Plaintiffs have failed to do so.

In the cases cited in the briefing, the claims that survived summary judgment were supported by expert testimony linking the contamination to potential harm, or evidence of actual harm. For example, both parties rely heavily on Interfaith, 399 F.3d at 248, in which the defendant appealed the entry of an injunction against it for violating RCRA. In that case, the district court found that contamination "far exceeded all applicable NJDEP contamination standards for soil, groundwater, surface water, and river sediments," reaching between 30 and 2,000 times the acceptable levels. Interfaith, 399 F.3d at 261. The NJDEP itself concluded in that case that the site "posed a risk of human exposure" to chromium waste and that there was a "substantial risk of imminent damage to public health and safety and imminent and severe damage to the environment." Id. at 262-63. The plaintiffs presented "testimony of ten exceptionally qualified experts in the fields of health and environmental risk, ecological and aquatic toxicology, hydrogeology, environmental engineering and geochemistry, environmental remediation, dermatology, and 'heaving.'" Id. at 263-64. The experts testified that the contamination existed at "unusually high levels" and that the effects were

"unpredictable" and that the defendant's remedy was not viable to prevent harm. Id. at 264.

Similarly, in Parker, 386 F.3d at 1014-15, the plaintiffs survived a motion for summary judgment on a RCRA claim because they showed evidence of actual harm to the environment. There, the plaintiffs produced evidence that (1) contaminants were detected at levels that required notification to the state department of environmental protection, (2) defendants disposed of 1,000 drums of hazardous waste, (3) trees had been killed by spilled waste, and (4) materials found at the site "were explosive, and . . . could affect the central nervous system and cause problems in the upper respiratory system." Id. at 1015.

Here, unlike in Interfaith or Parker, Plaintiffs do not have any evidence of actual harm or the testimony of qualified experts to opine that the levels of contamination are potentially harmful to health or the environment at these low concentrations.

Several federal courts have granted summary judgment for the defendants even when contamination was detected at levels above state screening levels, because the plaintiffs did not produce sufficient evidence of the possibility of imminent and substantial endangerment. See H&H Holding, L.P. v. Chi Choul Lee, No. 12-5433, 2014 WL 958878 (E.D. Pa. Mar. 6, 2014) (granting summary judgment for the defendant because, even

though 17 of 36 samples exceeded state levels by up to 15 times the standard, the plaintiff did not establish imminent and substantial endangerment); Lewis, 786 F. Supp. 2d at 710 (holding that the plaintiff failed to show an imminent and substantial endangerment, even though the plaintiff presented evidence that contaminants were present in concentrations that exceeded upper limit background levels); City of Fresno v. United States, 709 F. Supp. 2d 934, 940 (E.D. Cal. 2010) (holding that plaintiff did not establish imminent and substantial endangerment, even though contaminant levels exceeded California's non-binding public health goals); see also Cordiano v. Metacon Gun Club, Inc., 575 F.3d 199, 212-14 (2d Cir. 2009) (finding insufficient evidence to support a reasonable inference of an imminent and substantial endangerment, despite samples exceeding state health standards); accord Interfaith, 399 F.3d at 261 ("Proof of contamination in excess of state standards may support a finding of liability, and may alone suffice for liability in some cases, but its required use is without justification in the statute."). Whether or not contamination here is below screening levels, or slightly exceeds the screening levels, Plaintiffs have not presented any testimony or evidence from which a reasonable jury could conclude that the contamination at Plaintiffs' properties has

the potential to cause substantial and imminent harm to health or the environment.

With respect to Plaintiffs' motion for summary judgment on their RCRA claim, the evidence does not permit entry of summary judgment in favor of Plaintiffs, because Defendant has adduced evidence that would permit a reasonable factfinder to conclude that TCE and PCE pose neither an imminent nor substantial endangerment to health or the environment at the levels measured on and around Plaintiffs' properties. Accordingly, Plaintiffs' motion for partial summary judgment is denied. Viewed in the light most favorable to the Plaintiffs, the evidence is insufficient to establish the "imminent and substantial endangerment" element of the RCRA claim for which Plaintiffs have the burden. On this record, Defendant is entitled to summary judgment on the RCRA claim.

In so holding, the Court does not find as a matter of law that TCE and PCE at levels below the NJDEP screening levels could never pose a threat to health or the environment. Similarly, the Court does not hold that concentrations of TCE and PCE below the EPA or other risk level thresholds could never be potentially harmful to health or the environment. Plaintiffs simply have not carried their burden to adduce evidence to permit a reasonable inference that this is so, and the Court is aware of no basis for assuming that the mere presence of these

low levels of TCE and PCE may pose a risk of substantial and imminent harm, given that the present EPA risk thresholds are set at much higher concentrations before concern for potential health effects is justified. Plaintiffs have not cited any evidence that could be presented at trial to establish this necessary element, despite having had every opportunity to do so in this three-year-old case. Accordingly, Defendant is entitled to summary judgment in its favor on the RCRA claim. See Fed. R. Civ. P. 56(c)(1)(A); Fed. R. Civ. P. 56(e)(3).

V. CONCLUSION

For the reasons explained above, Plaintiffs' motion for partial summary judgment is denied. Defendant's motion for summary judgment is granted. An accompanying Order will be entered.

August 12, 2014

Date

s/ Jerome B. Simandle

JEROME B. SIMANDLE

Chief U.S. District Judge