

IN THE DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX

COMMISSIONER OF THE DEPARTMENT : CIVIL ACTION
OF PLANNING AND NATURAL :
RESOURCES, ALICIA V. BARNES, :
et al. :
 :
 :
v. :
 :
CENTURY ALUMINUM COMPANY, :
et al. : NO. 05-062

MEMORANDUM

Bartle, J.

January 16, 2014

Plaintiffs, Commissioner of the U.S. Virgin Islands Department of Planning and Natural Resources, Alicia V. Barnes, in her capacity as Trustee of Natural Resources of the Territory of the United States Virgin Islands, and the Government of the Virgin Islands (together with Ms. Barnes, the "Government"), have filed this multi-count environmental lawsuit under federal and territorial law against a number of defendants, including Hess Oil Virgin Islands Corp. ("HOVIC") and HOVENSA L.L.C. ("HOVENSA" and, together with HOVIC, the "Refinery Defendants").¹

The Government alleges that the Refinery Defendants have damaged the natural resources of St. Croix by releasing hazardous substances from a petroleum refinery that these defendants owned and operated. The First Amended Complaint seeks damages for harm done to "ground water, surface water, land, air, cultural

¹ The remaining defendants are Virgin Islands Alumina Company and Lockheed Martin Corporation.

resources, recreational areas, wetlands, habitat, protected and endangered species, biota, fish, and the estuarine and marine environment."

Count One of the First Amended Complaint seeks damages against the Refinery Defendants under a theory of strict liability for abnormally dangerous activity. Now before the court is the motion of the Refinery Defendants for summary judgment on that count. The Refinery Defendants contend that their operations at the refinery were not an abnormally dangerous activity as a matter of law.

I.

Summary judgment is appropriate "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); see also Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). Rule 56(c) states:

A party asserting that a fact cannot be or is genuinely disputed must support the assertion by ... citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations ..., admissions, interrogatory answers, or other materials; or ... 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.

Fed. R. Civ. P. 56(c).

A dispute is genuine if the evidence is such that a reasonable jury could return a verdict for the non-moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 254 (1986). Summary judgment is granted where there is insufficient record evidence for a reasonable jury to find for the plaintiffs. Id. at 252. "The mere existence of a scintilla of evidence in support of the plaintiff's position will be insufficient; there must be evidence on which the jury could reasonably find for the plaintiff." Anderson, 477 U.S. at 252. We view the facts and draw all inferences in favor of the non-moving party. In re Flat Glass Antitrust Litig., 385 F.3d 350, 357 (3d Cir. 2004). When ruling on a motion for summary judgment, we may only rely on admissible evidence. See, e.g., Blackburn v. United Parcel Serv., Inc., 179 F.3d 81, 95 (3d Cir. 1999).

II.

The following facts for present purposes are undisputed or taken in the light most favorable to the Government. The petroleum refinery from which the Refinery Defendants are alleged to have released hazardous substances into the ground is situated in an area known as the South Shore Industrial Area, which is within the central plain on the south shore of St. Croix. It abuts the Caribbean Sea on its southern boundary, Route 68 on its northern boundary, and Route 62 on its eastern boundary. The refinery occupies the eastern tract of the Area, which is zoned as

I-1 for Heavy Industry. Beneath the South Shore Industrial Area is the Kingshill Aquifer. The Fairplains and Bethlehem Well Fields, which draw groundwater from the Kingshill Aquifer, are directly adjacent to the western border of the western tract. The Barren Spot Well Field is adjacent to the refinery on its northern border.

In 1965, the Legislature of the Virgin Islands determined "that the development and construction of an oil refinery and its related facilities ... will promote the public interest by economic development of the Virgin Islands and is vital to the prosperity of the entire region." In contemplation of the refinery that would become the subject of this litigation, the Legislature declared "that the advantages and benefits to the people of the Virgin Islands, to be directly derived from the [construction of the refinery], fully warrant and require the cooperation, encouragement and assistance of the Government." With the authorization of the Legislature, the Government and HOVIC entered into an agreement for the construction of the refinery on September 1, 1975. The agreement established the South Shore Industrial Area as the location for the facility, which the Legislature found to be in the public interest.² Construction went forward, and refinery operations commenced.

² On the shoreline and accompanied by navigational improvements in the adjacent waters, the refinery is situated to accept petroleum transported by ship. Like almost all of the Caribbean islands, the Virgin Islands is a net energy importer.

In April 1982, HOVIC put the United States Environmental Protection Agency on notice that hydrocarbons were present in the groundwater at the refinery. Remedial efforts went forward in response. Over 43 million gallons of oil had been recovered from underneath the refinery by the end of 2011, but it is not possible to retrieve all of the hydrocarbons released to the Kingshill Aquifer. A portion of the groundwater beneath the refinery has therefore suffered permanent contamination, and the drinking water supply in the area has been depleted by the loss of groundwater pumped out of the ground in the remediation process.

Witnesses on both sides of this litigation agree that some leaks to the environment are inevitable in a petroleum refining operation. Royce Stroud, manager at the HOVIC/HOVENSA refinery during the late 1980s, and Philip Steed, an expert for the Government, have both explained that it is impossible to eliminate all leaks. Rene Sagebien, a witness for HOVIC, concurs that it is "not likely" that a refinery can operate without some losses of hazardous materials to the environment.

However, there are several steps that a refinery operator might take in order to minimize these risks. For example, coatings and cathodic protection in underground piping and aboveground storage tank bottoms are industry-standard practices employed to prevent corrosion. The refining industry also uses a rigorous prophylactic inspection and replacement program in order

to stay ahead of leaks in storage and handling equipment. Finally, in underground sewers built to handle petroleum and other substances, ductile-iron piping encased in concrete is a superior technology to uncased, cast-iron piping. Reasonable care cannot eliminate all risk of leaks, but there exist best practices to reduce it.

The HOVIC/HOVENSA petroleum refinery had been a boon to the Virgin Islands economy and community before it closed in 2012. According to Governor John P. de Jongh, Jr., "the highest and best use of the refinery site is refining operations," and the refinery has brought "billions of dollars" to the area. In similar fashion, Vincent F. Frazer, Attorney General of the Virgin Islands, has recognized that the refinery is "a critical part of the Territorial economy" that: a) employed over two thousand people at its peak; b) "indirectly support[ed] thousands more jobs throughout the community"; and c) participated in scholarship and other philanthropic initiatives.

III.

In Count One of the First Amended Complaint, as noted above, the Government seeks damages based on strict liability against the Refinery Defendants because of pollution that occurred as a result of the escape of hazardous materials into the ground during the operation of the petroleum refinery on St. Croix. The Refinery Defendants argue that they are entitled to summary

judgment because strict liability applies only to an abnormally dangerous activity and their operation of a petroleum refinery does not fall under that category.³ Because there is no Virgin Islands decision directly on point, we must predict how the Supreme Court of the Virgin Islands would rule on this issue. Gares v. Willingboro Twp., 90 F.3d 720, 725 (3d Cir. 1996).

On the issue before the court, the Virgin Islands looks to the principles of law embodied in the Restatement (Second) of Torts, §§ 519 and 520. Henry v. St. Croix Alumina, LLC, Civil Action No. 99-036, 2009 WL 2778011, at *3 (D.V.I. Aug. 28, 2009); DeJesus v. V.I. Water & Power Auth., Civil Action No. ST-10-CV-205, 2011 WL 5864552, at *1 (V.I. Super. Ct. Oct. 26, 2011). Section 519 of the Restatement provides:

- (1) One who carries on an abnormally dangerous activity is subject to liability for harm to the person, land or chattels of another resulting from the activity, although he has exercised the utmost care to prevent the harm.
- (2) This strict liability is limited to the kind of harm, the possibility of which makes the activity abnormally dangerous.

Restatement (Second) of Torts § 519 (1977). Section 520 of the Restatement lists six non-dispositive factors for a court to consider in determining whether an activity is abnormally

³ The Government argues that these operations include "the storage and handling of petroleum and toxic material." We agree, and our analysis focuses on this aspect of refining activity.

dangerous. Restatement (Second) of Torts § 520; § 520 cmt. f.

Those factors are:

- (a) existence of a high degree of risk of some harm to the person, land or chattels of others;
- (b) likelihood that the harm that results from it will be great;
- (c) inability to eliminate the risk by the exercise of reasonable care;
- (d) extent to which the activity is not a matter of common usage;
- (e) inappropriateness of the activity to the place where it is carried on; and
- (f) extent to which its value to the community is outweighed by its dangerous attributes.

Id. § 520. "Whether the activity is an abnormally dangerous one is to be determined by the court, upon consideration of all the factors listed." Id. § 520 cmt. 1.

Even though the first and second factors are often analyzed together, the two concepts are distinct. See Bella v. Aurora Air, Inc., 566 P.2d 489, 495 (Or. 1977); Henry v. St. Croix Alumina, LLC, Civil Action No. 99-036, 2009 WL 2778011, at *4 (D.V.I. Aug. 28, 2009). The first factor requires the court to consider whether there is a "high degree of risk of some harm." Id. § 520 (emphasis added). The focus here is on the likelihood or frequency with which the activity in question may cause damage, however slight. Id. § 520 (emphasis added).

The second factor, in contrast, deals with the likelihood that the harm that results from the high degree of risk

will be great. Id. The analysis involves the severity of harm rather than the probability that harm of any sort will flow from the scrutinized activity. Id. As the Supreme Court of Oregon has clarified:

The terms "hazard," "risk," or "danger" are themselves some hazard to clarity, since they combine in a single conclusion the two distinct variables of the probability of the threatened harm, a judgment about facts, and its gravity, which is a value judgment. When the harm threatened by the activity is very serious, even a low probability of its occurrence can suffice to invoke the standard.... Likewise, even when the risk only moderately threatens economic activities rather than harm to life, health, or property or environment, ... the activity may nevertheless be "abnormally dangerous" if it can be carried on only with a substantially uncontrollable likelihood that the damage will sometimes occur.

Bella, 566 P.2d at 495 (citations omitted). We will consider the first and second factors separately.

As to the first factor, witnesses for the Refinery Defendants and for the Government have explained that leaks are a fact of life in the storage and handling of petroleum and other substances at a petroleum refinery. Losses of these materials to the ground cannot be totally prevented. When leaks of petroleum and other toxic substances occur above a significant source of drinking water, there is a high degree of risk that they will result in some harm to others. The first factor thus weighs in

favor of finding such storage and handling to be abnormally dangerous for the purpose of imposing strict liability.

The second factor requires us to analyze whether the harm that would result from the leaks will be great. On this issue, we believe that In re Tutu Wells is persuasive. In re Tutu Wells Contamination Litig., 846 F. Supp. 1243, 1268-70 (D.V.I. 1993). That case concerned the maintenance and storage of petroleum and other substances above the Turpentine Run Aquifer at several gasoline service stations. In re Tutu Wells, 846 F. Supp. at 1249-50; 1268. While the court did not consider the second Restatement factor separately, it emphasized the importance of groundwater resources to the Virgin Islands: "the protection of rapidly diminishing and irreplaceable natural resources (the environment), as opposed to protection of developing industry and embryonic businesses, is of current public concern." Id. at 1269.

The scarcity of groundwater is of no less consequence in this case. When an aquifer that supplies drinking water is jeopardized by the presence of large amounts of toxins, which will leak to some extent regardless of whether reasonable care is used, the harm from "contamination of the area's precious and limited water supply" is likely to be serious. Id. The release of tens of millions of gallons of petroleum and other substances at the HOVIC/HOVENSA refinery and the concomitant depletion of the

Kingshill Aquifer demonstrate the gravity of the potential harm.⁴ We agree that it is likely that the harm to others will be great when there are leaks from the storage and handling of petroleum and other toxic materials at a refinery above an aquifer. See id. at 1270. The second factor weighs in favor of finding these activities to be abnormally dangerous.

The third factor, that is, whether the risk can be eliminated by the exercise of reasonable care, deserves particular weight. See Restatement (Second) of Torts § 520 cmt. h; Anderson v. Farmland Indus., Inc., 136 F. Supp. 2d 1192, 1199 (D. Kan. 2001). As to this factor, the courts are not in agreement that the inability to eliminate all risk warrants the imposition of strict liability.

On one hand, the court explained in In re Tutu Wells that “[s]ociety’s problem with the disposal and storage of toxic substances is well documented, and this court is aware of no ‘fail safe’ solution.” In re Tutu Wells, 846 F. Supp. at 1269. This weighed in favor of imposing strict liability in that case. Id. at 1270.

On the other hand, other courts have concluded that under the Restatement, the “inability to eliminate the risk by the

⁴ The Refinery Defendants are correct that the experience at their refinery does not conclusively prove a potential for great harm in the abstract. However, it does provide an example of the sort of harm that can occur when stored petroleum and other toxic substances at a refinery leak into an aquifer.

exercise of reasonable care" means only the inability to eliminate the high risk of harm described in § 520(a). Thus, if high risk can reasonably be removed, the remaining residual danger of leaks in the storage of petrochemicals would not support strict liability. See, e.g., Arlington Forest Assocs. v. Exxon Corp., 774 F. Supp. 387, 390 (E.D. Va. 1991). As the court explained in Arlington Forest, the third factor of § 520 "does not contemplate that all risk be capable of elimination by due care." Arlington Forest, 774 F. Supp. at 390. "Rather, the risk must be reducible by due care to a point where the likelihood of harm is no longer high." Id. Applying this standard to gasoline storage tanks beneath a service station, the court held that the activity was not abnormally dangerous under the Restatement. Id. at 390-91.

Looking to the Restatement for further guidance on this question, comment h to § 520 offers atomic energy and the manufacture of explosives in a city as activities for which the high degree of risk of harm cannot likely be eliminated through reasonable care. Restatement (Second) of Torts § 520 cmt. h. Precautions taken in the generation of nuclear energy or the manufacture of explosives cannot remove the danger of swift and large-scale damage should even a small accident occur. See id.

Unlike these activities, the severity of the potential harm from leaks to groundwater in the handling and storage of petroleum and toxic materials decreases in direct relation to the

degree of risk that spills will occur.⁵ That risk cannot be completely eliminated, but it can be significantly reduced with reasonable care in the selection, maintenance, and replacement of equipment. The Government's experts have put forward a number of industry practices, including the coating of pipes and storage tanks, cathodic protection, the use of ductile-iron pipes and concrete casing, and aggressive equipment monitoring programs, which can minimize leaks to the environment. These measures bring the risk of harm within tolerable levels. As a result, the third Restatement factor weighs against concluding that the storage and handling of hazardous substances at a petroleum refinery above an aquifer constitutes an abnormally dangerous activity. See Arlington Forest, 774 F. Supp. at 390.

The fourth factor requires analysis of the extent to which the activity is not a matter of common usage. The less common an activity is, the more this factor weighs in favor of imposing liability without fault. The Refinery Defendants maintain that oil refining is a matter of common usage because there are several refineries situated throughout the Caribbean and refinery products are essential to modern life. We are not persuaded. The Restatement instructs that "[a]n activity is a matter of common

⁵ The risk of significant harm to others from fire or explosion in the course of refining activity cannot be mitigated in the same fashion, but "strict liability is limited to the kind of harm, the possibility of which makes the activity abnormally dangerous." Restatement (Second) of Torts § 519(2).

usage if it is customarily carried on by the great mass of mankind or by many people in the community." Id. § 520 cmt. i. The operation of oil refineries and the use of "large gas storage tanks" are simply not matters "carried on by the great mass of mankind," or activities in which "many people in the community" are engaged. Id. The fourth factor weighs in favor of a determination that the activity in question is abnormally dangerous.

The fifth factor under § 520 of the Restatement calls upon the court to inquire whether the activity is appropriate to the place where it is carried on. For three reasons, we conclude that the location of the refinery in this case is fitting and thus weighs heavily against the imposition of strict liability. First, the South Shore Industrial Area is zoned I-1 for Heavy Industry, which permits "Petroleum Refining & Related Industries." V.I. Code Ann. tit. 29, § 228. Second, the refinery site was selected with the encouragement and approval of both the Governor and the Legislature of the Virgin Islands. Public officials, who are also charged with the protection of the Territory's natural resources, "determined that the highest and best use of the refinery site is refining operations."

Third, the Restatement acknowledges that some activities "can be carried on only in a particular place," and as such, the sensitive character of the location may weigh less heavily than it otherwise might. Restatement (Second) of Torts § 520 cmt. j.

Petroleum refineries in localities without meaningful domestic crude oil production such as the Virgin Islands can be situated only where there is access to petroleum imports. See id. The refinery here was placed along the shoreline by necessity. The record contains no evidence to suggest that there is a site in the Virgin Islands where a refining operation with its related storage might enjoy the same access to the sea without the same danger to groundwater.

The sixth and final factor for the court to consider in deciding whether strict liability applies is the extent to which the activity's value to the community is outweighed by its dangerous attributes. The greater the value to the community of an activity, the less compelling is the imposition of strict liability. Id. § 520 cmt. k.

Here, again, the facts weigh substantially in favor of the Refinery Defendants and against the application of the standard of strict liability. The Legislature of the Virgin Islands declared at the outset that a refinery would be "vital to the prosperity of the entire region," and it went on to find the proposed HOVIC/HOVENSA facility to be in the public interest. The Governor of the Virgin Islands has stated that, as promised, the refinery brought billions of dollars to the community. Indeed, according to the Territory's Attorney General, the refinery, at its peak, was a "critical part of the Territorial economy" that

employed thousands and conferred a wealth of civic benefits to the broader Virgin Islands. "It was an integral part of [the Virgin Islands] community." In sum, the value of the refinery in supporting the economy and creating jobs has been very significant.

The In re Tutu Wells and Henry cases, though they imposed strict liability, are distinguishable on this factor. Isolated gasoline service stations are important to modern life, but they cannot provide as compelling an economic benefit as a large-scale petroleum refinery. See In re Tutu Wells, 846 F. Supp. at 1269. Similarly, the activity at issue here is unlike that at issue in the Henry decision. In Henry, we were concerned about the storage of toxic waste products in open-air sheds at an alumina facility in the South Shore Industrial Area, a locality prone to hurricanes. Henry v. St. Croix Alumina, LLC, Civil Action No. 99-036, 2009 WL 2778011, at *1-*2 (D.V.I. Aug. 28, 2009). The economic benefits of the alumina facility were important, but they did not outweigh the dangerous attributes of caustic "red mud" exposed to dispersion over residential communities by hurricane-force winds. Henry, 2009 WL 2778011, at *5. While we do not minimize the dangerous attributes of a refinery and its storage facilities, they do not outweigh the substantial benefit and value the refinery and its storage facilities brought to the community of the Virgin Islands. The sixth factor weighs against strict liability.

Weighing all six factors as a whole, we predict that the Supreme Court of the Virgin Islands would conclude that the storage and handling of petroleum and toxic material under the circumstances presented do not constitute an abnormally dangerous activity so as to allow the imposition of strict liability. Of course, this conclusion does not affect the Government's claims for relief founded on other bases of liability.

IV.

Accordingly, we will grant the motion of the Refinery Defendants for summary judgment against the Government on Count One of the First Amended Complaint.