

STATE OF VERMONT

**SUPERIOR COURT
ADDISON UNIT**

**CIVIL DIVISION
Docket No. 72-4-20 Ancv**

**AERIE POINT HOLDINGS, LLC,
Plaintiff,**

v.

**VORSTEVELD FARM, LLP,
Defendant**

DECISION

In this suit, Plaintiff Aerie Point Holdings, LLC, is a downslope property owner that is suing Vorsteveld Farm, LLP, an adjacent upslope owner, based on common law claims of nuisance and trespass for claimed effects on the downslope property resulting from the upslope owner's farming operation.

Specifically, Plaintiff claims that Defendant has (1) increased the amount and velocity of water discharged from Defendant's land onto Plaintiff's land, causing damage, (2) released sediment and contaminants into water crossing Plaintiff's land causing shoreline and pond algae and muck, and (3) created an offensive odor from manure storage that interferes with use of property. Plaintiff is not seeking money damages but a court-ordered plan for reform of Defendant's land management practices.

A final hearing was held December 15, 16, and 17, 2021 and January 7, 10, and 11, 2022. Plaintiff is represented by Attorneys Robert Woolmington and Merrill E. Bent, and Defendant is represented by Attorneys James C. Foley and John M. Mazzuchi. Following the evidentiary hearing, the parties submitted proposed findings of fact and legal memos.

Findings of Fact and Conclusions of Law are set forth below. The court finds that the nuisance and trespass claims have been proved, but that the relief requested is not a remedy available in a suit between private owners based on common law claims. The court orders an injunctive remedy within the scope of remedies available in private lawsuits.

Findings of Fact

Based on the credible evidence, the court finds that the following facts have been proved by a preponderance of the evidence.

Both properties were previously in the unified ownership of Mr. Lowenstein, an absentee owner. He (and his daughter after his death) employed Dennis Mueller from 1985 to 2013 to manage a dairy farm on the property, which was one large parcel at that time. The land is on the shore of Lake Champlain in the Town of Panton, and slopes downward toward the water. There were two clusters of farm buildings in separate locations, one known as the Exline Farm and the other known as the Arnold Bay Farm. There were several fields, most of which were used for growing hay. Fields were separated by hedgerows and scattered groves of trees, and there were low spots and uneven terrain.

The soil was of the type found in that entire region and is known as “Vergennes soil.” It has a high clay content (70%) and is very slippery and greasy when wet, and hard when dry. It holds water well such that when wet, additional water cannot enter it and runs off across the surface until it channelizes. Water from the upland farm fields and lands drained west and south downhill toward Lake Champlain, except for one section on the northerly part of Exline Farm that drained to the north. To the extent that there was periodic runoff from the upslope fields, it collected in a ditch alongside Arnold Bay Road, which runs north-to-south parallel to the Lake Champlain shoreline. The runoff went through one of two culverts that ran under Arnold Bay Road, one to the north and one to the south, and then crossed the land west of Arnold Bay Road until it reached the lake.

These were not constantly running streams but shallow courses for runoff. There was runoff for a week or so during spring thaw, and for a few days after heavy rainfalls. At those times, the water was sometimes brown, indicating that it carried suspended particles of soil or sediment, although most often it was clear. The appearance and frequency was similar to brown runoff into Lake Champlain from other streams and rivers in Addison County that flowed into Lake Champlain. Except for those predictable times of runoff, water did not run through the streambeds. One could walk across the streambeds. The northern streambed ended by emptying into Arnold Bay, and the southern one emptied into White Bay.

In July of 2013, the upslope portion of the property, consisting of the Arnold Bay Farm (located east of Arnold Bay Road between Adams Ferry Road to the north and Pease Road to the south), and the Exline Farm (located north of Adams Ferry Road and east of Arnold Bay Road), was bought by the Vorstevelds.

In March of 2014, the Hoppers bought the first of three parcels they ultimately acquired (all by July of 2016), all downslope from the Vorstevelds and between Arnold Bay Road and the lake, and consisting of 108 acres of grassland and 30 acres of woodland. They knew that there was a heifer replacement farm across the street. In that same month during a rainy period, Gerard Vorsteveld observed Arnold Bay full of brown water, and since the Vorstevelds had farmed it for the last part of 2013, he was concerned that the sediment may have come off their fields.

The Vorstevelds

The Defendant Vorsteveld Farms, LLP, is owned by three brothers, Gerard, Hans, and Rudy Vorsteveld. The family was from the Netherlands and their parents, who had five boys, moved the family from Holland to a farm in Panton in 1979. Their father was an industrious and successful dairy farmer who enlarged his farm significantly. The boys worked on the farm and in 1998, the three brothers took over the farm from their father and subsequently created Vorsteveld Farms, LLP. They continue to run the “home farm” located on Jersey Street in Panton. They are hardworking and interested in innovative farming methods and new technologies. They like to “keep up with new practices.” They have coordinated with the UVM Extension Service to host events at the Jersey Street farm to introduce others to innovative and best farming practices such as growing good cover crops.

After they bought their portion of the Lowenstein land, they then had a total of 2500 acres between the home farm and the new land from the Exline and Arnold Bay Farms and rented acreage. In the fall of 2014, they built more barns at the new site. They now milk 1200-1500 cows and have 800-1,000 young stock. Milking cows are at the Jersey Street home farm where the milking parlor is. Heifers and dry cows are kept at Arnold Bay Farm, and yearlings and calves at Exline Farm. Many members of the extended family work in the family farming business. On the farm fields they primarily grow corn for silage feed but grow some grass. Their farm is one of 38 “large farms” statewide for purposes of regulations of the Agency of Agriculture.

The Hoppers

Vicki Hopper has an extensive background in farming. She was raised on a 5000 acre family farm in Kansas where they had at times between 1,000-2,500 head of cattle. She was involved in 4H and took beef cows to the fair. She values farming, the need for farming, and the importance of productivity. She respects the hard work and devotion farmers give to their farms. She does not wish to stop the Vorstevelds from farming on their property.

The land the Hoppers acquired was previously part of the Arnold Bay Farm and used for grass. There were a couple of houses on the purchased land, one previously occupied by the Lowenstein farm manager. The shorefront has a wide peninsula-like point that juts out into Lake Champlain. On the north side is Arnold Bay, and on the south side is White Bay. Arnold Bay has long been a site for water recreation for local residents. The Vorsteveld brothers grew up swimming there regularly, as did many other local residents. Middlebury College maintains a dock for its sailing team on Arnold Bay. There is also a local water treatment facility there that serves area residents.

The two streambeds described above cross the land bought by the Hoppers. They run from the culverts under Arnold Bay Road to Lake Champlain. There was also a farm pond

located on the land purchased by the Hoppers. It was situated midway along the course of the northern streambed, and had filled in with sediment at the time of their purchase.

2014-2016

The Vorstevelds continued their farming operations on their purchased land without changing the fields, which were mostly hayfields. The Vorstevelds added two large manure pits to their property to store manure until the time to apply it to the fields. (There was already one pit at Exline Farm.) The pits were dug into the soil, and use the natural clay soil as a liner. The design was approved by the Agency of Agriculture. The Exline pit holds 900,000 gallons; the north pit on the Arnold Bay Farm holds 1.1 million gallons, and the south pit there holds 1.5 million gallons. The Vorstevelds also increased the size of a barn and their herd size.

The Hoppers moved the houses that were on the property they bought to different locations, renovated them, and added a barn. From 2015 to the present, the Hoppers have spent from May to November at the property. They reside during the balance of the year at another residence in Texas. From the time they moved in, they walked the shoreline every day they were there. They maintained a dinghy in Arnold Bay. In 2015, their daughter Anna graduated from Middlebury College and later that year moved to a house on the southernmost portion of the Hopper holdings.

In 2016, the Hoppers created Aerie Point Holdings LLC as the owner of their Panton property. They dug out the farm pond and deepened it. There was no algae in it. They continued to walk the shoreline every day.

Anna Hopper attended a training program for farmers at the University of Vermont in sustainable agriculture. She and her husband created Scuttleship Farm, which leases agricultural land from Aerie Point Holdings LLC. This portion of the Aerie Point LLC land is in the current use program as land leased for agricultural purposes. It consists of fields and a farmhouse and is bordered by Arnold Bay Road on the east, Aerie Point land occupied by Anna's parents to the north, and Lake Champlain to the east. Scuttleship Farm raises grass-fed beef, sheep, and chickens. It manages 200-300 acres for grazing. The southern streambed crosses the land leased by Scuttleship Farm.

2017

Beginning in 2017, the Vorstevelds began a two year project of expanding and regrading their farm fields. As part of this project they cut down a large number of trees, also removing all the stumps, on a stretch of over a mile along Arnold Bay Road. This resulted in a lawsuit filed by the Town for wrongful cutting of trees in the Town right of way. The lawsuit eventually settled with the Vorstevelds paying \$30,000.

They also cut trees and vegetative growth at several other locations within their property to expand the area of usable fields. They regraded the fields to even out the terrain. The purpose

was to increase the usable area of the land area for raising crops and to make it easier and more efficient for their equipment to drive back and forth over larger and more level fields.

In March they also cut down trees and dug a ditch to drain a wet swale in a field north of Pease Road (which intersects with Arnold Bay Road). In doing so, they redirected water from the ditch to the culvert that leads to the southern streambed, thereby increasing the flow. The Agency of Natural Resources brought an action against them in Environmental Court for violation of wetland regulations based on the disturbance of the swale. The case was settled when they paid a fine and signed an Assurance of Discontinuance.

In May of 2017, Vicki Hopper first saw a plume of sediment fanning into White Bay from the mouth of the southern stream. The water coming through both the northern and southern streams became browner. The channel of the southern streambed became deeper. The banks of the northern streambed as it crossed the Aerie Point land began to erode and wash away. Vicki Hopper became concerned that these effects might be the result of Vorsteveld removal of vegetation. Thereafter, she took photos on a regular basis of changes the Hoppers observed on their property and on the shoreline and in the water of the bays on Lake Champlain.

In the fall of 2017, the Vorstevelds installed drain tiles in some of their fields in the Arnold Bay Farm, upslope from Aerie Point land and the Scuttleship Farm pasture land. The purpose and effects of drain tiles are described more fully below. Gerard Vorsteveld acknowledged in testimony that prior to installing drain tiles, they did not calculate impact on the downslope Aerie Land property.

2018

In January of 2018 there was a lot of rain, and the water coming through the northern and southern streambeds was a darker brown color than before and turbid, and foamy in the southern stream.

Prior to this year, the shoreline in Arnold Bay had been rocky. Vicki Hopper and another area resident observed algae blooms in Arnold Bay for the first time this year. Muck developed along the shoreline of Arnold Bay. Algae developed in White Bay from the tip of the peninsula to the point of outflow from the southern stream.

In July of 2018, the Vorstevelds removed more trees and stumps and brush and converted previously wooded areas to farm field. The Exline Farm land, which had previously had areas of scrubby growth and trees, became one large single field.

The Vorstevelds provided access to a drain-tiled field on the Arnold Bay Farm to Dr. Joshua Faulkner and Dr. Don Ross of the University of Vermont, who began a 2-year study of water samples taken at a point where water that has run through the drain tile system is discharged. Dr. Faulkner's conclusion from the study is described below.

In the fall of 2018, the Vorstevelds did a second installation of drain tiles in the now-enlarged and regraded fields, and in the process converted what had been mostly fields on which hay grass was grown to fields for growing corn. Grass is more expensive to grow and harvest than corn, and has a lower energy content for animal feed. They converted to growing primarily corn to have a higher quality feed, with high nutrient value needed for dairy cows, at lower cost and without having to purchase it. If they had left the Arnold Bay and Exline Farm fields in hay, they would have to spend \$300,000 per year to buy corn. Hay also requires more equipment and more harvests each year than corn, which is only harvested once a year.

The amount of water reaching the northern and southern streambeds increased, and it came faster than in the past. Ditches that had previously been little ditches by the side of the road now conveyed fast-moving brown water the color of chocolate milk that shot from discharge points from the tile system into larger ditches lined with rip rap. The water ran through a large corrugated pipe. There was also “pea soup” growth along the shoreline of Lake Champlain on Aerie Point land. There was black sludge coming from the stream into White Bay. As the flow in the northern stream passed through the Aerie Point farm pond, it caused part of the bank to erode and wash away.

A neighbor who grew up on an Addison County farm that was active until 1990, and who has been familiar with the specific area in question for 52 years, saw an increase in the water flow through the ditches and culverts and across the Aerie Point property in 2018 following the installation of the tile drains. She also observed the unusual brown color of the water, and foam on the surface of flowing water and on the lake shore.

2019

A video from March of 2019 shows fast running turbid water in the southern stream. The evidence shows that this was runoff from Vorsteveld land. The water in the grassy field at Scuttlship Farm and on Aerie Point land was clear in contrast to the turbid runoff flowing over the streambeds.

The northern stream carried significant amounts of sediment into Arnold Bay (Ex 17) , which became fully brown all across the bay (Ex. 18), with black sludge along the shoreline near the mouth of the stream. Exhibit 8, a photo taken in March of 2019, shows a stream running from a discharge point from the tile system down a brushy bank to the culvert under Arnold Bay Road that leads to the northern streambed. There had not previously been a stream on that bank.

The farm pond had a thin covering of “pea soup” all summer. (Ex. 16)

There was significant algae in White Bay, and sediment entered White Bay from the mouth of the southern stream. (Ex 19) The level of the lake dropped, and the algae dried up all over the shore. There was foam in the water of the southern stream.

In the fall of 2019, the Vorstevelds did their third installation of drain tiles, resulting in all of the fields, now enlarged, having drain tiles installed.

2020

This was a relatively dry year, and the shoreline on White Bay was clear.

Exhibit 20 shows turbid water from the north stream entering Arnold Bay and leaving sediment deposits. The neighbor referenced above testified credibly that the only other time she saw brown water like that in Arnold Bay, which she described as chocolate milk in color, was when Tropical Storm Irene brought extensive rain in 2011. Another resident familiar with the changes over time described the water coming through the culverts as “brown, brown, brown, dark brown, muddy.” By 2020, sediment deposits occurred frequently and did not correlate with heavy rains.

Exhibit 27 shows the bank of the southern stream falling in from erosion. Previously, it was a grassy streambed that one could walk across.

2021

Arnold Bay was full of algae all summer, and sediment was deposited into the bay from the northern stream. Ex. 21. The water quality was too poor for swimming or water recreation. In 2021 the Vermont Department of Health reported 14 blue-green algae alerts there, whereas there had been none from 2012-2016, 1 in 2017, and 3 in 2018.

The northern stream contained water at a high level. It was broad, overflowing the previously shallow streambed, and it surrounded trees that normally stood in a dry open field, causing the roots to be underwater. The northern stream channel had become two feet deep and had washed away a bed of day lilies. Exhibit 7 shows the course of the northern stream from Arnold Bay Road to Arnold Bay. It now runs almost constantly, rather than just during spring thaw and heavy rains. The Hoppers had the water in the farm pond tested and it showed high levels of E. coli and phosphorous.

The southern stream was also high and broad with water. Videos from October of 2021 show the amount of water from Vorsteveld Farm fields that wound up in the southern stream. The water covered perennials previously planted, and flowed constantly. The width of the southern streambed at the shoreline had previously been one foot; it had become eight feet wide. Its depth at the shoreline had gone from one foot to three feet. Whereas previously one could walk over it, it could not be crossed by a horse. The Hoppers had previously had beach fires at the mouth and kept a small boat there, but the area had become a muddy delta.

A wide swath of the field on Scuttleship Farm used for grazing animals was under water. It divided the Scuttleship grazing field into separate sections such that the livestock could not cross the water, thus impeding the ability of Scuttleship farm to use all of its field and preventing rotation of livestock from one portion of a field to another.

Rotational grazing through the use of portable fencing, which is moved every one or two days, is Scuttleship Farm's method of caring for their animals and fields. The animals are not allowed to eat all the grass down, and the manure they drop is scattered throughout the fields and worked into the soil by their hooves. Due to the water in the field, the Scuttleship sheep were unable to be moved around the field or cross the water from one dry side to the other dry side, and had to be either driven down the road or trucked. The water that runs off from Scuttleship Farm's managed pastures is clear, compared to the brown turbid water that comes through the culvert under Arnold Bay Road from the Vorsteveld Farm.

The surface of the farm pond was covered with green growth. The Hoppers were no longer able to walk the shoreline of the Aerie Point property because of the width and depth of the now constantly flowing northern and southern streams. This situation is not likely to change.

The smell of manure coming from the manure storage pits, which are located ½ mile away from the Hopper residence, is strong at the Hopper residence at times, apparently depending on the wind. Vicki Hopper is familiar with the smell of manure, but this smell is different. She described it as a strong odor of ammonia and rotten eggs. Experts confirmed that gases form on the surface of large manure storage pits and can develop a smell like rotten eggs. The pits need to be agitated periodically to maintain proper suspension of particles in the liquid manure, and the smell is worse during agitation, which occurs at intervals throughout the year. The smell particularly affects the Hopper residence as well as other nearby residences, but is not as bad at Scuttleship Farm.

Some witnesses who live at other locations or travel through the area did not consider it to be other than an ordinary manure smell. The court finds that wind and atmospheric conditions cause the gaseous smell of the manure stored in the manure pits to settle over the Hopper residence on a periodic but regular basis. When that happens, the Hoppers have to close their windows to keep the smell out, and are unable to enjoy the outdoors or use their screened in porch.

A neighbor who has lived on the shore of Lake Champlain just north of Arnold Bay for over 10 years, and has been familiar with the area since the late 1970's, no longer sits outside because of the odor of manure, and has installed an air conditioner because of it. He used to jump in the lake frequently for a variety of water sports prior to the installation of tile drains on the Vorsteveld Farm. Now, half the time the water is bad due to algae and is "disgusting" for swimming. The lake water flows north from the Aerie Point property past his house. He first saw blue-green algae in front of his property in 2017-2018. He is familiar with the culvert related to the northern stream. There used to be some water in it sometimes, but now the water rushes through it and is dark brown.

Another neighbor who has lived north of Arnold Bay close to Lake Champlain since 2002 and kayaks in Arnold Bay twice a week and walks along Arnold Bay Road and Adams Ferry Road 5-7 times a week has seen from her kayak, since 2017, a brown waterfall gushing into the lake from the northern stream. Prior to the changes on the Vorsteveld land, the runoff

water in the roadside ditches was clear. Now there is more water and it is brown. Beginning in 2017, she began to see algae blooms which have become larger and intensified over time. In May of 2021, she saw a sight in the lake she had not seen before: a swath of green water approximately 20-25 feet wide flowing north. She testified that she now has to close windows due to the pungent, fetid smell of manure, unlike the manure she was used to smelling growing up.

Vorsteveld Agricultural Practices

Manure application by injection. Application of manure by injection into the soil, as opposed to spreading it on the surface of the ground, is a state-of-the-art practice for fertilizing crop fields. The Vorstevels had started liquid manure injection at their home farm in roughly 2010-2012, and continued its use at the new location. The manure comes from the cows at the Jersey Street farm, and is taken to one of the three pits on the Arnold Bay and Exline Farms. The pits are open in order to collect rain water to make the manure liquid so that it can be injected. When ready for application, the liquid manure is extracted from the pit with a pump and dragged in hoses around the fields for the injection application in the corn fields. It is injected into slits made in the ground so that it penetrates several inches into the soil.

When the land is dry and the clay soil is hard, not all the manure gets into the ground; some remains on the surface. Gerard Vorsteveld estimates that 90% gets underground. Where manure does not get injected into the ground, it pools above ground, especially at turnaround spots at the end of fields. It can wind up being carried downhill with runoff.

Cover crop. Either before or after the injection of manure, the Vorstevels plant a cover crop by inserting the plants directly into the ground. The idea is to hold and stabilize the soil after the corn crop is harvested. In the spring, they do not turn the plant growth back into the soil, but use a chemical to kill the plants prior to planting corn.

Drain tiles. Installation of drain tiles in agricultural fields has not been a widespread historical practice in Addison County. Its purpose is to improve the quality of the Vergennes soil, which is difficult compact clay, by lowering the water table so that plant roots penetrate more deeply into the soil. The modern version of drain tiles is 4" perforated plastic piping that is buried three feet deep in rows 20-25 feet apart. It lowers the water table by removing the water to the 3-foot depth of the piping and diverts it away from the soil through discharge outlets.

There was significant initial expense for the piping and installation, but the Vorstevels have found that tiled fields have been beneficial to their operations in many ways: the soil is more resilient and produces a better corn crop. The yields are higher, with more corn and bigger ears, and thus better feed in quality and quantity for their dairy cows. The change in the texture of the soil improves "trafficability," i.e., the ability to move machinery on and off the fields, and to get on the fields sooner after a rain. The reason is that the water does not pond on the surface as much, so the top of the ground is drier. This allows corn to be planted up to 6 weeks earlier than otherwise, which allows for earlier and better growth of the plants, and earlier harvesting. As a result of the installation of drain tiles, the soil is more crumbly and resilient, which allows the roots to go deeper. Prior to drain tiles, roots went down 8-14" whereas roots in tiled fields

can go down up to 3 feet. Deeper roots increase access to moisture for the plants for enhanced growth.

An effect of drain tiles is to decrease the amount of water in fields by 10-25%. The purpose of the tiles is to remove, or 'drain,' water from the ground. While the corn plants consume some of the water, they do not take up all of the volume of drained water. Drain tiles allow more water to penetrate the soil and travel down to the tiles and through the piping, thus slowing down the water that seeps down into the soil. However, the quantity of water that leaves the fields is greater than without tiles. The water that is drained away by the underground tile piping travels to various discharge points around the farm where it collects and from which it is directed into the culverts under Arnold Bay Road and then toward the lake via the northern and southern streambeds. The installation of drain tiles on sloping land increases the velocity of the water leaving the fields, which would otherwise seep into groundwater.

As a result of the installation of drain tiles, both streambeds, which previously carried intermittent runoff close to the surface, have become constantly-running streams with increased volume and velocity of water and with enlarged channels and eroded banks. Approximately 250 acres of Vorsteveld Farms property drain through Aerie Point property. There are approximately 113 miles of drain tile piping in the Vorsteveld fields above the Aerie Point property, although a portion of the tiled land on the Exline Farm drains north away from Aerie Point land.

In addition to increasing the amount of water leaving the Vorsteveld fields and traveling downhill, the installation of drain tiles has the effect of concentrating the water. The piping directs all the water to specific discharge points. For example, at one discharge point, water from 9 miles of piping over 35 acres all drain to a single spot with an 8" outlet at the edge of a field that slopes downhill. During a storm, that water backs up into the pipe network, and the 8" pipe functions like a pressure valve, so that the water coming out of it comes out at higher velocity and looks like water bursting from a fire hose. This occurs at several discharge points throughout the farm.

No till. Having converted most of the land to fields for growing corn, the Vorstevelds do not use the traditional method of tilling their crop land. This had been the practice used by Dennis Mueller when he managed the farm. Now, most of the fields are planted to corn. A few days after harvesting the corn, the Vorstevelds apply manure by injecting it directly into the ground 6-8" deep into the soil. This locates the manure closer to where the roots of plants will be.

Regulatory requirements

As a "large farm" as defined by the Agency of Agriculture, Vorsteveld Farm is subject to various agricultural regulations. Farms are required to comply with Required Agricultural Practices (RAPs). These are base requirements for agricultural operations in Vermont. Some of the regulations are for the protection of water quality with the aims of keeping nutrients on the land for crop production and avoiding effects on water quality.

One is the requirement to file an annual Nutrient Management Plan. Matthew Kittredge is a certified crop advisor and certified nutrient management planner who has worked with the Vorstevelds since 2016. He prepares its annual Nutrient Management Plan. His role includes obtaining records from the last harvest and entering them into a computer program to determine if there has been compliance with required criteria.

Mr. Kittredge relies on data provided by the Vorstevelds to determine a score on the phosphorous index, which is a significant criterion: the resulting score determines risk of manure mobility. The score is designed to predict whether phosphorous will leave the fields and get into surface waters. The results of the process determine how much manure the farm is allowed to apply to its fields. He testified that the Vorsteveld Farm fields have scored medium or low, meaning that the farm is allowed to apply either an amount of manure limited to what amount of phosphorous the crop can use (medium score on a field), or an amount above the removal rate (field with low score).

He has visited the Vorsteveld Farm only 2-4 times within the last five years, and relies on the information provided by the Vorstevelds, sometimes by telephone. The evidence did not establish that all the records that the farm is required to keep, in order to give him accurate necessary information, have actually been kept. Mr. Kittredge has no knowledge of the amount of water that has been discharged from the Vorsteveld Farm onto Aerie Point land, or of its chemical or biological content. Mr. Kittredge testified that as to the aspect of the Vorsteveld Farm that he is concerned with, he was not aware of any noncompliance with Required Agricultural Practices (RAP). This was a general conclusion that he was “not aware” of noncompliance. The court did not hear evidence about what the RAPs actually require, and the court can reach no conclusions about compliance or not. Thus the evidence is insufficient to support a conclusion that the Farm has actually been in substantial compliance with RAPs.

Expert Testimony

Both parties presented expert testimony. Aerie Point’s expert, Harold Van Es, is a soil scientist who is a Professor of Soil and Water Management at Cornell University. He is the Chair of the Department of Crop and Soil Sciences. He studies the nature and science of soil with a focus on agriculture and soil health, and he teaches sustainable crop management. Dr. Van Es was contacted by the Hoppers in approximately 2018 to help evaluate the concerns they had about the changes they had observed on their land and the relationship between those changes and Vorsteveld farming practices. He has developed a set of recommendations for land management practices for the Vorsteveld farm that Aerie Point asks the court to require.

The Vorstevelds’ expert, Joshua Faulkner, is a hydrologist who is a Research Assistant Professor at the University of Vermont and the Farming and Climate Change Coordinator, meaning he does applied research regarding farming solutions in relation to climate change, and he provides education and technical assistance to farmers. As a hydrologist, his expertise is on the movement of water through a landscape. The focus of his water quality research is in Addison County. He was not hired specifically to be an expert witness but was drawn into the

situation involuntarily as a result of an independent research project he undertook pursuant to a grant.

The experts agreed on a few key points. One is that it is most likely that the drain tiles on Vorsteveld land have increased the volume of water that travels to Aerie Point land. They both acknowledge that drain tiles increase water runoff from fields by 10-25%, depending on the specific site and soil type. While some of the water may be taken up by the growing plants, both agree that the net volume of water leaving the land increases with the installation of drain tiles. Water running through drain tiles can carry phosphorous and be a vehicle for phosphorous loss from tiled fields. Another is that the Vergennes clay soil is “colloidal,” meaning that it is comprised of fine particles that remain in suspension in water and can turn water brown. Another is that vegetative buffer strips at the edge of fields do not reduce surface runoff, but they do act as a filter: they filter out sediment and manure from the runoff. These points are helpful in interpreting the effects of the changes that occurred over time, taking into account the on-the-ground contemporary observations of witnesses.

Outside of agreeing on these points, the experts had been consulted for somewhat different purposes and had different perspectives.

As noted above, Dr. Faulkner began a study on an Arnold Bay Farm drain-tiled field in 2018, based on the Vorstevelds’ cooperation with Dr. Faulkner’s research interests, before the Vorstevelds had received any notice from the Hoppers about alleged effects on their land. He worked with Dr. David Ross, a now-retired UVM Research Professor, on a grant to measure the water level at two discharge outlet points in the tile system. They abandoned one of the sites but they collected and analyzed samples of phosphorous in the other discharge site over a 2-year period. A 35 acre section of an Arnold Bay Farm field drained to the point of collection. As a result of the study, Mr. Faulkner’s opinion is that the level of phosphorous was not elevated relative to other tile-drained fields at other locations elsewhere. There was no comparison available with non-tile drained fields on the Vorsteveld Farm or in the local vicinity. Whatever the level of phosphorous discharge is, the evidence is clear that it flows downhill into the northern and southern streambeds.

He testified that he could not reach a conclusion as to whether erosion on Aerie Point land was caused by the way the Vorsteveld Farm fields were managed because there is no data from the years prior to when the Vorstevelds made changes to their fields. He also suggested that weather changes could have an effect. In general, his approach is that of a research hydrologist who prepares studies for publication. In doing so, he relies on comparative control data gathered from prior to changes being made in order to reach opinions on the effect of changes. Since there was no measured data from the period prior to the changes made by the Vorstevelds, he declined to give opinions about the effects of changes. While the court understands and appreciates his unwillingness to give opinions that are not up to the standards of his professional work, the standard applied by the court is whether the burden of proof is met by factual findings, for which the court uses a variety of evidentiary materials. Measured data from prior to changes is not required.

He provided helpful information on the relationship between phosphorous in water and algae blooms, which the court finds credible. He explained that algae blooms result from phosphorous that lies in sediment at the lake or pond bottom where it dissolves and later rises up and blooms. The phosphorous can remain at the bottom over time until conditions are ripe for it to rise up and cause blooms. The implication is that the timing of formation of algae blooms does not correlate with specific incidents of deposits of phosphorous. On the other hand, one can deduce that a general increase over time in the amount of phosphorous present in sediment and water is likely to result in increased incidents of algae growth.

Dr. Van Es was hired for the specific purpose of evaluating the Vorsteveld farming practices and their effects on Aerie Point land. He reviewed a significant amount of data, documents, photos, maps, deposition transcripts, Dr. Faulkner's study and another water quality study, and he visited both the Vorsteveld and Aerie Point properties in October of 2020. He opined that the changes made by the Vorstevelds on their land have increased the volume and velocity of water flowing from their land to Aerie Point land, caused erosion of the northern and southern streambeds and the banks of the farm pond, and resulted in sediment plumes in Arnold and White Bays.

He compared sample data from both the northern stream and southern stream with offsite locations and reached the conclusion that both E. coli and phosphorous were being discharged from the Vorsteveld land above regulatory standards. He testified credibly that both a chocolate milk brown water color and foaming in runoff can indicate the presence of manure in the water. He opined that it was more likely than not that the water that drained into Arnold Bay through the northern stream contained organic material and phosphorous from 220 acres from the Exline Farm and 60 acres from the Arnold Bay Farm, and that sludge on the shore of Arnold Bay was likely from manure and sediment from those sources. His opinion is that rain events from climate change--increases in events of extreme precipitation--are not the primary cause of flow of organic matter and sediment through Aerie Point land into the lake although they could be an exacerbating factor. The court finds these opinions credible and finds the facts accordingly.

Dr. Van Es was specifically asked to develop a plan for farming practices on Vorsteveld land to reduce or minimize these effects on an ongoing basis. He acknowledged that removal of the drain tiles is not practical, but recommended a number of other measures to mitigate or reduce the impact of the effects of the drain tiles and other changes that have resulted in increased water flow, erosion, and contaminants. A primary recommendation was for the Vorstevelds to change from corn to perennial forage crops for 3 years to decrease the amount of runoff, followed by strip cropping corn with alfalfa or grass to reduce erosion and build soil health. He also recommended rotating perennial forage crops with corn, creating buffer strips along edges of fields and between fields, using rip rap to reduce channel scouring, and increasing the number of outlets to make them smaller and less concentrated. The Vorstevelds are not enthused about his recommendations.

Water flow

The evidence is clear that a greater volume of water is flowing downhill from the Vorsteveld Farm onto Aerie Point land than it did prior to the installation of tile drains, that it is a result of the tile drains, and that the concentration of water at the tile system discharge points causes the velocity and pressure of the water to be greater than it was prior to 2017-2019 when the tile system was installed. While the tile drainage system improves the soil on the Vorsteveld Farm and improves the economic productivity of the fields, the cost of that economic success has been externalized to Aerie Point in the form of eroded and enlarged stream gullies and water overflowing the streambeds and covering usable land.

Sediment/phosphorous/algae

There is no measured data to show changes over time in the amount or frequency of sediment that flows from the Vorsteveld Farm through the northern and southern streams into Lake Champlain. However, evidence in the form of credible observations of persons who have observed the sediment flows at those locations both prior to 2013 and since 2013 demonstrate that the sediment flows into the lake have increased in frequency, and that the extent of the sediment deposits are such as to cover a large area, turn the entirety of Arnold Bay brown, and create a muddy delta at the mouth of the southern stream as it enters White Bay.

Again, while there is no measured data to show changes over time in the amount or frequency of phosphorous from manure that originates on the Vorsteveld Farm and travels through the northern and southern streams, leaving deposits in the farm pond along the route of the northern stream and then leaving phosphorous deposits in both Arnold Bay and White Bay, evidence in the form of credible observations demonstrates that this has occurred, and shows that the farming practices of the Vorstevelds since 2017 have caused the amounts and the frequency of phosphorous deposits to have increased.

In addition, water sampled at discharge points in 2019 showed *E. coli* (which comes from animal waste) at levels higher than Vermont standards, and levels of phosphorous above EPA standards for fresh water quality. There is no question that some amount of phosphorous comes off Vorsteveld Farm onto Aerie Point land. The study of Dr. Faulkner confirms this. While it is true that due to the suspension of colloidal particles, runoff water can be brown even without the presence of phosphorous, foaming in runoff water indicates the presence of manure, and other evidence supports the finding that the Vorstevelds have increased the amount of phosphorous discharged from Vorsteveld land onto Aerie Point land. The indicators of phosphorous have been significantly more frequent since 2017.

In addition, the observations of not only Vicki and Anna Hopper but other local residents who have long-time familiarity with area runoff show that there has been a substantial increase in the frequency and extent of algae blooms in both the farm pond and the shoreline of Lake Champlain on Aerie Point land since the installation of the drain tiles in 2017-2019. While climate change, and specifically an increase in intense rain events, is most likely an exacerbating factor, it is not the primary cause. The timing of the escalation of the amount and the frequency of algae growth and the effect of both on the farm pond and on the shoreline are sufficient to

prove that the amount of phosphorous deposits has increased since the changes made by the Vorsteveld to their land and farming practices since 2017.¹ There is a clear causal link between the onset and development of the farming practices and the effects on Aerie Point land.

Smell

Anyone living near or passing through agricultural fields in Vermont can expect to catch a periodic odor of manure, as it is customary for manure to be used as a fertilizer on farm fields. Normally the smell is temporary and transitory and does not substantially interfere with activities or use of land. The evidence shows that when the Hoppers acquired their property, there was one manure pit on Vorsteveld land. The Vorstevelds installed two more pits, each larger than the preexisting one, and they agitate the pits from time to time for use in liquid manure injection.

A large concentration of manure which is stored for some time in a large pit forms gases, including ammonia, methane, and hydrogen sulfide, that create not an ordinary manure smell but a pervasive and offensive gaseous ammonia smell. As a result of the two additional large pits installed by the Vorstevelds, there are now three large pits located half a mile upslope from the Hopper residence. Rob Achilles, an engineer for the Agency of Agriculture who does inspections for the Agency, testified that the gaseous odor can smell like rotten eggs, and that it is worse during times of agitation of the pits. He also testified, and the court finds, that the gas is heavier than air, and can settle in low places.

Apparently atmospheric conditions are such that it is a regular occurrence that an offensive smell from those pits settles around the Hopper residence and remains until there is sufficient wind to remove it. The court finds that Vicki Hopper is not prone to be squeamish about ordinary or normal levels of manure odor associated with farming. The nature of the odor as unusually noxious and offensive is corroborated by neighbors who also have prior familiarity and tolerance of the smell of manure from traditional farming but find this particular smell unusually “pungent” and “fetid.” It was described by one witness as ‘burning the nostrils’ and as an odor that can be tasted. Another witness who disagreed that it burns the nostrils or smells like ammonia acknowledged that the smell can be intense and last for a few hours or overnight. The Hoppers cannot sleep with open windows or use their screened-in porch when the smell is present. A neighbor has installed an air conditioner because of the smell.²

¹ This finding does not rest on the single incident in October 2020 when Dr. Van Es observed a “significant amount” of manure that had not been successfully injected laying on the surface of a hard-packed corn field. The finding is based on the evidence of the progression of incidents beginning in 2017, when the Vorstevelds significantly increased the amount of water being discharged on to Aerie Point land. The number of incidents as well as the extent and timing of them show increased effects from the presence of phosphorous on the Aerie Point land and shoreline.

² No claims of neighbors are being adjudicated in this lawsuit. Their evidence on the issue of smell at their properties corroborates the testimony of Vicki Hopper on the noxious nature of the specific smell from the manure pits added by the Vorstevelds and its effect on outdoor use of land.

Summary of Factual Findings

Before 2013, after spring thaw or heavy rains, runoff could sometimes be brown and carry sediment plumes into Lake Champlain, although generally the runoff was clear. Brown water and sediment plumes happened occasionally at various locations at river and stream outlets all up and down the shoreline in Addison County. The presence of sediment did not necessarily indicate the presence of phosphorous or other contaminants, as water could also be brown as a result of suspension of clay soil particles in runoff water. The farm pond on now-Aerie Point land, which was located along the course of the northern runoff streambed, had filled in with sediment, presumably carried by the runoffs that occurred as a result of spring thaw and heavy rain events. There was also occasionally algae in the lake near the Aerie Point peninsula. These conditions generally were not frequent and did not last long. All this happened before the Vorstevelds bought their land and began to farm it, and continued after both the Vorstevelds and Hoppers purchased their parcels.

From 2013 to 2016, the activities on the Vorsteveld land did not change significantly, and the Hoppers did not experience the effects that have caused them to bring this lawsuit.

Beginning with the large-scale Vorsteveld tree removal and field enlargement projects that started in early 2017, there was an increase in the frequency of events in which runoff water from Vorsteveld Farm was brown in color and created sediment plumes in the lake where the northern and southern streams entered the lake. It was a moderate increase. It cannot be determined whether, when the runoff water was brown during this period, it contained manure and or phosphorous or other contaminants or simply suspended soil particles.

After the installation of drain tiles on Vorsteveld land that began in the fall of 2017 and was completed in 2019, there was a further significant increase in the intensity of the brown color of water as well as foam in the water, and in the creation of sediment plumes fanning into Lake Champlain from the northern and southern streams. There was also a significant increase in the amount and velocity of water in both the northern and southern streambeds, both of which became constantly running streams and resulted in erosion of Aerie Point land. In addition, there was an increase in the frequency of algae blooms in the Hopper farm pond and in Lake Champlain on the Aerie Point shoreline, and muck and sludge on the shoreline. These effects first became noticeable in 2017 and increased in intensity through 2021. The evidence supports a finding that it is highly likely that manure and phosphorous from the Vorsteveld farm fields travels to and through northern and southern streambeds and the shoreline and farm pond on Aerie Point land, and in significantly greater quantities than prior to 2017.

Based on the credible evidence, including opinions of both Mr. Van Es and Mr. Faulkner and the observations of several witnesses familiar with the properties both before and after the changes made by the Vorstevelds, the court finds that the Vorstevelds'

- large scale removal of trees and vegetation from the land, roadsides, and edges of fields,
- creation of enlarged farm fields,
- transformation from growing primarily hay to extensive corn production in fields

- addition of two large manure pits for storage and preparation of liquid manure, and
- installation of drain tiles in all their fields, including the location of discharge points that direct water to Aerie Point land through the two culverts under Arnold Bay Road

Caused:

- an increase in the amount of water flowing from the Vorsteveld Farm to Aerie Point land, converting what had been intermittent runoffs from spring thaw or heavy rains in shallow streambeds to constantly flowing waters that significantly overflow the original streambeds
- an increase in the velocity of the water flowing through the culverts under Arnold Bay Road and across Aerie Point land at both the northern and southern stream locations in a manner that has caused serious erosion of banks in both locations as well as channels (2' deep in the north and 8' deep in the south)
- an increase in the duration of flow in both the northern and southern streams
- an increase in the amount and frequency of deposits of sediment and phosphorous in Lake Champlain at the mouths of the northern and southern streambeds, creating a muddy delta, algae growth and sludge in Arnold and White Bays, limiting the use of the shoreline of the Aerie Point land and the use of the bays for water recreation, and also causing sediment buildup and algae growth in the Aerie Point farm pond
- a widening and deepening of the southern stream to such an extent that it bisected Scuttleship Farm's grazing pastureland, interrupting its ability to carry out its agricultural practices of rotational animal grazing and field management
- an increase in the character and intensity of an offensive odor resulting from large concentrations of stored and agitated liquid manure at locations that caused such odors to periodically settle over a portion of Aerie Point land and affect the use and enjoyment of the outdoor air at the Hopper residence.

Conclusions of Law

Plaintiff's claimed causes of action are the private common law claims of trespass and nuisance. In Vermont case law, both have at times been treated as the basis for downslope owners' claims against upslope owners in relation to water flow. Defendant characterizes all Plaintiff's claims as essentially nuisance claims, and claims the benefit of statutory presumptions.

Because all claims can arguably be classified as nuisance claims under case law, and Defendant claims the benefit of an additional presumption related to agricultural activities, the analysis will begin with a review of whether Defendant is entitled to the statutory presumptions it claims.

Right-to-Farm Law presumption against nuisance

Chapter 195 of Title 12, commonly called the Right-to-Farm Law, is entitled “Nuisance Suits Against Agricultural Activities” and sets forth a legislative purpose “to protect reasonable agricultural activities conducted on the farm from nuisance lawsuits.” It also defines “agricultural activity.” 12 V.S.A. § 5753 is entitled “Agricultural activities; protection from nuisance lawsuits” and provides as follows:

(a)(1) Agricultural activities shall be entitled to a rebuttable presumption that the activity does not constitute a nuisance if the agricultural activity meets all of the following conditions:

- (A) it is conducted in conformity with federal, State, and local laws and regulations (including required agricultural practices);
- (B) it is consistent with good agricultural practices;
- (C) it is established prior to surrounding nonagricultural activities; and
- (D) it has not significantly changed since the commencement of the prior surrounding nonagricultural activity.

(2) The presumption that the agricultural activity does not constitute a nuisance may be rebutted by a showing that the activity has a substantial adverse effect on health, safety, or welfare, or has a noxious and significant interference with the use and enjoyment of the neighboring property.

(b) Nothing in this section shall be construed to limit the authority of State or local boards of health to abate nuisances affecting the public health.

12 V.S.A. § 5753.

The statute creates a presumption applicable in specified circumstances, and makes it a rebuttable presumption such that it can be overcome by pertinent evidence. In general, it prevents persons from acquiring property adjacent to a responsibly managed farm and then pursuing nuisance claims against the effects of the farming operation on their property. The concept is that people “coming to the nuisance” should not be able to complain about the effects of farming activities that had previously been established and were in operation prior to their arrival. It also assumes that agricultural practices will change over time and that farms may be enlarged. Section 5751 on “Legislative findings and purpose” specifically states:

In order for the agricultural industry to survive in this State, farms will likely change, adopt new technologies, and diversify into new products, which for some farms will mean increasing in size. . .[L]awsuits based on the theory of nuisance encourage and could force the premature removal of the farmlands and other farm resources from agricultural use. It is the purpose of this chapter to protect reasonable agricultural activities conducted on the farm from nuisance lawsuits.

12 V.S.A. § 5751.

Defendant claims the benefit of the presumption, while Plaintiff claims that the presumption does not apply because the changes Defendant made to farming practices constitute a “significant change” such that condition (D) cannot be met.

Compliance with the conditions required for applicability of the presumption

Plaintiff cites *Trickett v Ochs*, 2003 VT 9, 176 Vt. 89, and argues that by installing 113 miles of tile drains, constructing two large manure pits, removing trees, enlarging fields, and converting most of the crop land to corn fields, the Vorstevelds significantly changed the way the Exline and Arnold Bay Farms were managed. Those activities, alone and cumulatively, do not appear to constitute the type of “change” envisioned by the Legislature in enacting the presumption. In its statement of purpose, the Legislature specifically stated that it envisioned that farms would likely benefit from undertaking the kind of innovations that the Vorstevelds have instituted, and the statement of purpose shows that the Legislature clearly intended to protect innovative practices and enlargement of farms. Thus the fact that the Vorstevelds adopted such practices does not automatically constitute a significant change that triggers disqualification for the presumption under the statute. This is in contrast to the situation in *Trickett v Ochs*, in which the Court concluded that the defendant had changed the fundamental nature of the enterprise. *Id.* at ¶ 29.

Nonetheless, there is a significant change that *does* result in such disqualification. In implementing the above farming activities, Defendant removed 10-25% of the water from its land—water which contained sediment and phosphorous. Instead of collecting that water and disposing of it as a cost of its modified methods of farming, it disposed of it in concentrated streams that flowed onto Aerie Point land through two preexisting culverts under Arnold Bay Road. It shifted to the Aerie Point owners the consequential costs of its changed agricultural practices, thereby damaging Aerie Point land through erosion and contamination and flooding. It essentially discharged its waste onto Aerie Point land and let the consequences fall on Aerie Point as owner in a manner not done prior to 2017.

Similarly, it constructed two additional large manure pits to store manure, and stored manure produces gases that create a noxious smell. It then exported that smell downslope to Aerie Point land. In short, instead of absorbing the costs of the consequences of its improvements, it shifted those consequences to its neighboring landowner. Economists would describe this as causing the neighbor to be burdened by its negative externality costs.

It was a significant change for the Vorstevelds to remove from the land water that (a) would otherwise have remained in the soil and (b) contained dissolved particles of sediment and contaminants, and dispose of it onto Aerie Point land. Thus, because of this significant change, Defendant cannot meet condition (D) of the statute.

Condition (C) is met only if the agricultural activity in question was established prior to surrounding nonagricultural activity. There is no evidence that either the disposal of water from tiled fields nor the exportation of the gaseous ammonia smell had occurred prior to 2014 when Aerie Point first acquired ownership of adjacent land, or prior to 2017 when the Hoppers had established their residential use of the modified preexisting residences on Aerie Point land. The discharge of agricultural waste water in significant quantities did not start until 2017 at the earliest. Before 2017, the northern and southern streambeds had only intermittent runoff and no

erosion and only occasional brown water and sediment plumes from infrequent weather events, similar to that of other area streams.

The changes that had occurred by 2019 in the form of external disposal of agricultural waste water and noxious smell represented such a significant departure from the way fields and manure had been handled on the Vorsteveld Farm property up to 2017 that as of 2019, when this suit was filed, Defendant could no longer meet the criteria in 12 V.S.A. § 5753 (a)(1)(C) or (D) set forth above. The practices continue, and therefore Defendant does not qualify for the presumption.

In addition, the evidence does not show that the condition in (A), which requires that agricultural activities be “conducted in conformity with federal, State, and local laws and regulations (including required agricultural practices),” has been met. As stated in the Findings of Fact, the court cannot find that Defendant has complied with Required Agricultural Practices (RAPs) applicable to it by State agricultural regulations. The fact that there has been no enforcement of agricultural requirements does not mean that there has been compliance with agricultural regulations. **To benefit from the presumption, a defendant has to make a showing of at least substantial compliance with RAPs. Evidence of lack of enforcement of RAPs does not support an inference of compliance.**

In addition, Defendant settled regulatory enforcement actions in a manner that acknowledged noncompliance with both state and municipal regulations. By signing an Assurance of Discontinuance and paying a fine in an enforcement proceeding in Environmental Court, Defendant acknowledged noncompliance with State wetlands regulations as a consequence of draining a field. By paying a settlement in a lawsuit brought by the Town, Defendant implicitly acknowledged noncompliance with municipal regulations concerning rights to cut trees in a public right of way. The conduct underlying each of these situations was undertaken in connection with the changes that resulted in significant amounts of excess water, in which sediment and contaminants were dissolved, being discharged on to Aerie Point property. Individually and taken together, these instances of conduct show that the first condition for use of the presumption, (A), that farming be conducted in conformity with state and local regulations, cannot be met.

Because three of the four required conditions cannot be met, the court concludes that Defendant does not qualify for the presumption. This means that the presumption does not apply and the court will evaluate the claims based on the elements established by law for nuisance (and trespass) claims.

Rebuttal of the Right-to-Farm Presumption

Defendant argues that a nuisance claim against a farm can only succeed with proof “that the activity has a substantial adverse effect on health, safety, or welfare, or has a noxious and significant interference with the use and enjoyment of the neighboring property.” 12 V.S.A. § 5753 (a)(2). This provision identifies the type of “showing” necessary to rebut the presumption, if it otherwise would apply: “The presumption. . . may be rebutted by a *showing* that [the activity

has a substantial adverse effect on health, safety, or welfare, or has a noxious and significant interference with the use and enjoyment of the neighboring property].” *Id.* (Emphasis added.)

The statute does not go as far as changing the entire law of nuisance as it applies to farms. Normally, a presumption may be rebutted by a showing of some evidence, which need not rise to the level of proof of a claim by a preponderance of the evidence. *State v Giard*, 2005 VT 43 ¶¶ 8-9. Here, the statute defines the type of showing that must be made. Once the showing has been made, “the fact in question is to be established by evidence as are other questions of fact, without aid from the presumption.” *Id.*

The statute creates an alternative means of eliminating the presumption where it otherwise would apply if the conditions are met, but the law does not purport to override the necessary elements for proof of a cause of action for nuisance.³ The law of nuisance has been developed over many years by case law. Vermont has long been an agricultural state and has a hilly landscape and runoff water from both snow and rain. There is significant case law from the Vermont Supreme Court related to nuisance claims between adjacent owners, particularly related to water flow. Nothing in the lengthy statement of legislative purpose in 12 V.S.A. § 5751 suggests a legislative intent to abrogate that law entirely if the defendant happens to operate a farm.

Even if the statute is so interpreted, there has been a sufficient showing of a substantial adverse effect on health and welfare through the discharge of phosphorous and E. coli from manure onto Aerie Point land and into Lake Champlain and evidence that some forms of E. coli can make humans sick. There is also evidence of a noxious interference with the use of an Aerie Point residence through the offensive smell of gaseous stored manure that settles over the house.

In sum, conditions for the statutory presumption have not been met, and even if they were, Plaintiff has made a sufficient showing required by the statute to rebut the presumption. Before proceeding to analyze whether Plaintiff has proved its trespass and nuisance claims, the court will address the other presumption Defendant seeks to invoke.

Presumption in 6 V.S.A. §4810 (b) related to discharge of agricultural pollutants

Defendant also seeks to rely on the presumption in 6 V.S.A. §4810 (b). This statute is part of Chapter 215 of Title 6 on “Agricultural Water Quality” in which “agricultural waste” is defined⁴ and the Secretary of Agriculture is authorized “to implement and enforce land use practices in order to satisfy the requirements of 33 U.S.C. § 1329 that the State identify and

³ The statute applies to nuisance lawsuits only and does not purport to affect claims of trespass against owners of farmland.

⁴ “Waste” or “agricultural waste” means material originating or emanating from a farm that is determined by the Secretary or the Secretary of Natural Resources to be harmful to the waters of the State, including: sediments; minerals, including heavy metals; plant nutrients, pesticides, organic wastes, including livestock waste, animal mortalities, compost, feed and crop debris; waste oils, pathogenic bacteria and viruses; thermal pollution; silage runoff; untreated milk house waste; and any other farm waste as the term “waste” is defined in 10 V.S.A. §1251(12).” 6 V.S.A. §4802 (8).

implement best management practices to control nonpoint sources of agricultural waste to waters of the State.” 6 V.S.A. §4810 (a).

Two categories of agricultural land use practices are defined: Required Agricultural Practices (RAPs) and Best Management Practices (BMPs). *Id.* §4810 (b)-(c). The Required Agricultural Practices (RAPs)

shall be management standards to be followed by all persons engaged in farming in this State. These standards shall address activities which have a potential for causing agricultural pollutants to enter the groundwater and waters of the State, including dairy and other livestock operations plus all forms of crop and nursery operations. . .”

Persons engaged in farming who are in compliance with these practices shall be presumed to not have a discharge of agricultural pollutants to waters of the State.

6 V.S.A. §4810 (b).

Defendant seeks application of this presumption to Plaintiff’s claims. In the first instance, this presumption appears from its statutory context to apply to regulatory enforcement actions brought by the Secretary of Agriculture. It is not clear that it is applicable in a suit between adjacent landowners based on private common law claims. Even if it is, there is insufficient evidence of what the RAPs actually require of Vorsteveld Farm, and no affirmative evidence that the Farm is in compliance with those requirements, whatever they are. Testimonial evidence in the form of a statement that a person is “not aware” of any violations does not equate to proof of compliance.

Thus the court cannot conclude that the presumption set forth in 6 V.S.A. §4810 (b) operates in this case to mandate a conclusion that Defendant has not discharged agricultural waste into the northern and southern streambeds running across Aerie Point land and from there into Lake Champlain.

The Law of Trespass and Nuisance

The cause of action of trespass focuses on invasion of an owner’s exclusive possessory right. This is distinguished from nuisance, which focuses on interference with use, rather than possession, of property interests and does not require physical invasion. “[T]respass is an invasion of the plaintiff’s interest in the exclusive possession of his land, while nuisance is an interference with his use and enjoyment of it.” *John Larkin, Inc. v. Marceau*, 2008 VT 61, ¶ 8, 184 Vt. 207, 211 (quotation omitted). Therefore, “[l]iability for trespass arises when one intentionally enters or causes a thing to enter the land of another.” *Canton v. Graniteville Fire Dist. No. 4*, 171 Vt. 551, 552 (2000). Courts have traditionally held that a defendant’s act must cause an invasion of the plaintiff’s property in some tangible matter, although personal entry is unnecessary. *Marceau*, 2008 VT 61, ¶ 9 (citations omitted).

A “continuing trespass” is defined by the Restatement (Second) of Torts as follows: “[a] trespass may be committed by the *continued presence* on the land of a structure, chattel, or other

thing which the actor has tortiously placed there, whether or not the actor has the ability to remove it.” Restatement (Second) Torts § 161(1) (1965) (emphasis added).

Nuisance law focuses on interference with an owner’s use of property rather than exclusive possession. *Myrick v. Peck Elec. Co.*, 2017 VT 4, ¶¶ 4-5, 204 Vt. 128, 131-32. The Restatement (Second) of Torts distinguishes between private nuisance and public nuisance causes of action. See §§ 821A, 821B, 821D (1979). “A private nuisance is a nontrespassory invasion of another’s interest in the private use and enjoyment of land.” *Id.* § 821D. The material in the Restatement is premised on the underlying principle that private nuisance claims are based on instances in which one person’s property use is interfering with another’s property use. “One is subject to liability for a nuisance caused by an activity.” *Id.* § 834. An activity is defined, in part, as “those that create physical conditions that are harmful to *neighboring land* after the activity that created them has ceased—such as structures, excavations, cesspools, piles of refuse, bodies of water, oil and other substances.” *Id.* § 834 cmt. b (emphasis added).

“The law of private nuisance springs from the general principle that it is the duty of every person to make a reasonable use of his own property so as to occasion no unnecessary damage or annoyance to his neighbor.” *Myrick*, 2017 VT 4, ¶ 4 (quoting *Pestey v. Cushman*, 259 Conn. 345, 352 (2002)). Private nuisance “developed as a way to address ‘invasions of the plaintiff’s land due to conduct wholly on the land of the defendant.’” *Id.*

As stated by the Vermont Supreme Court, a private nuisance is “an interference with the use and enjoyment of another’s property” that is both “unreasonable and substantial.” *Coty v. Ramsey Assocs. Inc.*, 149 Vt. 451, 457 (1988); see also *Myrick*, 2017 VT 4, ¶ 4; *Marceau*, 2008 VT 61, ¶ 10 (requiring plaintiffs in a nuisance action to “demonstrate actual and substantial injury.”) (citation omitted).

In this case, the Findings of Fact show that Defendant has disposed of waste water from its agricultural activities by sending it through the culverts under Arnold Bay Road to flow onto the land of Aerie Point. The amount and velocity of the disposal is in excess of the preexisting level of natural drainage from the upgradient Vorsteveld Farm land. The natural level was established during several years prior to 2014 and continued until 2017. While climate change might have had an exacerbating effect by contributing an occasional portion of extra water, there is significant evidence from multiple sources that the majority of the excess water comes from the Vorsteveld Farm tile drainage system. Increased rain events from climate change are not the primary cause of the substantial increase in the amount of extra water, which now flows constantly rather than intermittently, nor of the presence of waste in the water.

The primary cause of the excess level of water is the manner in which drain tiles from the enlarged fields have caused the lowering of the water table by the removal of water, plus the disposal of that water through the culverts to Aerie Point land. Without the drain tiles the water would remain in the clay soil and some would seep slowly downhill through the ground. As a result of the installation of the drain tile system, water is removed from the fields and piped to specific discharge points where it is then forced under pressure through culverts to shoot out onto Aerie Point land. This has caused significant erosion at the edges of formerly shallow

streambeds, which previously accommodated only intermittent runoff, and in addition has caused flooding of agricultural grazing fields.

The invasion of material on to Aerie Point land is not only runoff water from upslope land, but sediment and phosphorous from the agricultural activities on Vorsteveld land that is carried by the water on to Aerie Point land.

Some of the effects are continuing and permanent in nature as shown by the following: eroded banks in the streambeds at both the northern and southern locations (an eight foot deep, three foot wide ditch in the southern streambed and a two foot deep channel in the northern streambed); sediment deposits in the muddy delta at the mouth of the southern stream bed; dried algae creating muck along the shoreline of Lake Champlain on the Aerie Point land, and phosphorous deposits that continue to result in algae blooms in the Aerie Point farm pond and along the shoreline when conditions stimulate such growth.

Water Discharge

The discharge of the excess water removed from Vorsteveld Farm fields into and through the drainage culverts, which is a result of the tile drainage system, can be characterized under Vermont law as both a trespass and a nuisance, and illustrates why both causes of action have been applied in prior case law. The disposal of excess water, over and above natural drainage, onto downgradient land constitutes an invasion of water by the upslope owner invading the downslope owner's land with water, and therefore constitutes a trespass. In this case, the volume and velocity of that invasion has created permanent channels (two feet deep in the northern stream, and eight feet deep in the southern stream) that represent the continued presence of gullies and constitute continuing trespasses.

At the same time, such discharge is a consequence of activity on the upslope owner's land that results in interference with the downslope owner's use and enjoyment of its land, and therefore constitutes a nuisance. In this case, the interference caused by Defendant's disposal of excess water results in the following: flooding in both the northern and southern streams, erosion of the banks in both streams, and flooding of the Scuttleship Farm grazing fields in a manner that bisects the field and interferes with the use of Scuttleship Farm fields for its own agricultural purposes.

Sediment & Phosphorous

The findings of fact show that the excess water that flows across Aerie Point land carries with it sediment in excess of the amount that would be carried by natural intermittent drainage from spring thaws and heavy rains, and also carries phosphorous from the upland tile-drained fields. The disposal by Vorsteveld Farm of its agricultural waste onto Aerie Point land constitutes an invasion of sediment and phosphorous that amounts to a trespass on Aerie Point land.

The conduct of Defendant in failing to collect and dispose of agricultural waste it generates, over and above normal runoff, is an activity on its own land that interferes with the

use and enjoyment of Aerie Point land in the following ways. The sediment settles in the farm pond, filling it in, and along the shorelines of Arnold Bay and White Bay, creating a muddy delta and muck that interferes with the use of the property as lakefront property. The phosphorous settles at the bottom in both locations and produces algae blooms when conditions are right in both the farm pond and the bays, again preventing the use of the farm pond (from which the Hoppers had cleaned out accumulated sediment) and the waterfront and bays for recreational purposes. The activities of Defendant on its own land thus interferes with the use and enjoyment of Aerie Point land by its owners and occupants and constitutes a nuisance as well as a trespass.

Smell

The noxious smell that settles over the Hoppers' Aerie Point residence is the result of the Vorstevelds' concentration of a significant amount of manure in large pits, its storage in a manner that produces gases resulting in an offensive smell that consists of ammonia and smells like rotten eggs, the periodic agitation of the pits in order to prepare the liquid manure for application by injection, and the weight of the gases that cause the smell to settle downslope at the location of the residence on Aerie Point land. The smell is not transitory but settles for periods of hours in the evening and overnight and interferes with the use and enjoyment of air. Specifically, it interferes with the Hoppers' ability to use the outdoors around their house and the use of a screened-in porch, and it prevents them from being able to have the windows of their house open when they sleep.

Summary of Trespass and Nuisance Claims related to Water and Sediment/Phosphorous

Proof of trespass does not require proof of any additional elements other than invasion in order for a claimant to be entitled to a remedy. Defendant acknowledges this in its Post Trial Brief: "A landowner who suffers a trespass is almost 'automatically' entitled to relief of some kind—he or she is entitled to injunctive relief and nominal damages even without showing he or she suffered any actual injury (*e.g.* in the form of damage to property)." Defendant's Post Trial Brief at 3.

Proof of nuisance requires proof of the additional elements that the interference with use and enjoyment must be "unreasonable and substantial." *Coty*, 149 Vt. at 457; *Myrick*, 2017 VT 4, ¶ 4; *Jones v Hart*, 2021 VT 61 ¶26, 261 A.3d 1126, 1136; see *Marceau*, 2008 VT 61 ¶9.

Defendant argues that its harm is not "unreasonable" because all the claims should be treated as "riparian nuisance" claims, that the court should "balance the equities" as between the parties, and that the social value of Defendant's farming outweighs any inconvenience to Plaintiff and therefore any harm does not meet the "unreasonableness" requirement.

Defendant is correct that the Vermont Supreme Court has a string of cases involving water drainage rights between upslope and downslope owners, and that the cases do not always make specific reference to either trespass or nuisance as the basis for decision.

In the 1988 case of *Powers v. Judd*, the Court set forth a summary of the rights and obligations of adjoining upslope and downslope landowners with respect to surface water drainage, citing case law back to 1937.

The injunctive relief ordered by the trial court accords with existing law. The law regarding the natural drainage of surface waters may be summarized briefly. Upper and lower property owners have reciprocal rights and duties as to surface water drainage. *Scanlan v. Hopkins*, 128 Vt. 626, 631, 270 A.2d 352, 356 (1970). The upper owner has the right to have the surface water pass to lower lands in its natural condition. *Id.* The lower owner must accept the natural flow of such waters upon his land. *Id.* As a general proposition, an upper property owner cannot artificially increase the natural flow of water to a lower property owner or change its manner of flow by discharging it onto the lower land at a different place from its natural discharge. *Id.* But, in cases involving only increased flowage and not a change in the place of discharge, an upper owner may increase the flow as long as it causes no injury to the lower property. *Kasuba v. Graves*, 109 Vt. 191, 207, 194 A. 455, 462 (1937).

Swanson v. Bishop Farm, Inc., 140 Vt. 606, 610, 443 A.2d 464, 465–66 (1982) (emphasis added), *overruled on other grounds*, *Soucy v. Soucy Motors, Inc.*, 143 Vt. 615, 619, 471 A.2d 224, 226 (1983).

Powers v. Judd, 150 Vt. 290, 291–93, 553 A.2d 139, 140–41 (1988)

The Court in *Powers* specifically cites the 1937 case of *Kasuba v. Graves* in which it reversed the trial court’s denial of an injunction for the benefit the downslope owner, stating that the defendant’s discharge of water pumped from its quarries into the stream flowing onto plaintiff’s land “increased the natural flow of the brook running through the lands of plaintiffs to such an extent as to overflow portions of it, interfered with plaintiffs going from their house to their barn, carried sand and gravel onto tillage land, necessitated replowing of some tillage land, and cut new water courses in their meadows.” 109 Vt. at 201.

The Court declined to apply the “doctrine of comparative equities,” stating that “we hold that, unless he acquires the right from the plaintiffs, he has no right to discharge the water from his quarries in such a manner and in such quantities as to increase the natural flow of the stream to the extent that it overflows onto lands of plaintiffs, cuts new channels therein, or damages their crops, and the order previously issued [denial of injunction] should be changed accordingly.” *Id.* at 207.

The facts in *Kasuba* are remarkably similar to the facts of this case: the upgradient defendant discharged water naturally occurring on its own land into a waterway that carried it to the land of the downgradient plaintiff, resulting in increased flow and damage to the plaintiff’s

land. The Court rejected the “doctrine of comparative equities” advocated by Vorsteveld Farm in this case, and instead held that the upgradient owner had no right to damage plaintiff’s land by discharging water onto its neighbor’s land for its own economic purposes, and that the plaintiff was therefore entitled to an injunction.

In 2000, the Court continued this line of cases and affirmed a recovery for continuing trespass and nuisance due to water flooding from the defendant’s water district operation into plaintiff’s backyard, causing damage. *Canton v. Graniteville Fire District*, 171 Vt. 551 (2000). This time the Court specifically stated that “interference with the flow of surface water is a form of conduct that may result in a trespass or nuisance.” *Id.* at 552.

“[O]ne who causes water to enter the land of another is liable for trespass. . . . Because defendant repeatedly causes water to enter plaintiff’s land, it is liable for continuing trespass. . . . Even assuming water flow is an indirect invasion of property, and therefore not a trespass, interference with surface water may constitute a nuisance. . . . An upper property owner creates a nuisance when he or she causes water to flow onto lower lands *in a manner* or place different from its natural state, harming the lower property owner’s interest in the use and enjoyment of that land.”

Id. (citations omitted)(emphasis added).

In 2016 the Court cited the law set forth in *Canton* as applicable law in a decision denying appellant’s claim for relief from water damage. *Regan v. Spector*, 2016 VT 116, 203 Vt. 463, The Court did not change the law but applied it and found that the elements of the claim were not supported by the factual findings of the trial court. *Id.* at ¶ 20.

There has long been scholarly debate as to whether nuisance law protects a property interest or constitutes a tort. See Kinyon & R. McClure, *Interferences with Surface Waters*, 24 MINN. L. REV. 891, 936 (1940) (arguing that rules relative to surface waters be classified under tort law as trespass or nuisance, rather than property law); J. Fraley, *Liability for Unintentional Nuisances: How the Restatement of Torts Almost Negligently Killed the Right to Exclude in Property Law*, 121 W. VA. L. REV. 419 (2018) (describing the foundations of nuisance law as a property law remedy allowing owners to exclude others and their activities from one’s own private property and arguing that the Restatement Second of Torts, which characterizes nuisance as more of a tort and calls for courts to value and balance incompatible interests of the parties, is out of step with the law of a significant number of states, which have tended to retain protection of property rights as a principle of nuisance law after the Restatement shifted to recommending a balancing of interests). See also Francis S. Philbrick, *Changing Conceptions of Property in Law*, 86 U. PA. L. REV. 691, 723-24 (1938).

The Vermont Supreme Court has been consistent for decades in holding that with or without the trespass or nuisance label, an upslope owner who causes water to enter the land of a

downslope owner in amounts in excess of the natural flow of drainage, or in a manner or location other than the natural flow of drainage, is liable for damage caused and may be enjoined from continuing such action.

Vorsteveld Farm has discharged excess amounts of water over and above the natural drainage amount and has increased the velocity and effect of the flow, and in doing so has damaged Aerie Point's land and interfered with the use and enjoyment of Aerie Point land in the ways described in the findings (the damage occurring not only from the water but from the sediment and phosphorous dissolved in it). To the extent that such conduct is viewed as nuisance rather than trespass, the only remaining issue is whether the interference with use and enjoyment is "substantial and unreasonable."

The "substantial and unreasonable" elements if Plaintiff's claims are viewed as nuisance claims

The court concludes that the interference from the discharge of excess water has caused substantial damage: erosion of land in the banks of both streams and the farm pond; creation of a two foot deep ditch in the northern stream where none had existed and an eight foot deep and three foot wide ditch in the southern stream where none had existed; flooding of the pasture field used by Scuttlehip Farms for rotational grazing of livestock; preclusion of the ability to walk the shoreline due to deep ditches and mucky sediment; and growth of algae blooms in the farm pond and on the water near the shoreline, resulting also in deposits of muck.

These damages are comparable to those in *Kasuba*. With respect to the 'unreasonableness' element, the Court in that case stated, "we think the use shown was unreasonable as a matter of law, and that an inference otherwise would not be justifiable." *Kasuba* at 203. Where land has been damaged to the extent that the owner, or owner's tenant, is unable to use the land for its traditional agricultural use because it is flooded, and where water has created two deep ditches in a manner that cannot be reversed, the court concludes that, as in *Kasuba*, the extent of the damage requires a conclusion that the interference with Aerie Point's use and enjoyment of its own land was unreasonable.

Moreover, even if the court were to "balance the equities," the court still concludes that the nuisance is unreasonable for the following reason. At trial there was evidence tending to suggest that removal of the drain tiles would be enormously expensive and/or not feasible, and that the cost of purchasing corn feed for the Vorsteveld herd would be unreasonably high. The suggestion was that the remedy requested by Plaintiff would, due to prohibitive costs, cripple a farming enterprise that has social value for the State of Vermont, and that compared to that, the impact on Aerie Point is relatively minor.

Some courts have sought to enable the continuation of ongoing economic enterprises with apparent social value if the cost of an injunction appears out of proportion to the extent of harm to plaintiffs. In *Boomer v. Atlantic Cement Co.*, a cement plant had maintained a nuisance through air pollution that resulted in damage to neighbors. *Boomer v. Atlantic Cement Co.*, 26 N.Y. 2d 219 (1970). The defendant had invested \$45 million in the plant and employed 300 people. *Id.* Eight households were affected with a calculated aggregate reduction in market values of properties of \$185,000. *Id.* The New York Court of Appeals acknowledged that the

nuisance was substantial and that the law would require an injunction, but concluded that “to follow the rule literally in these cases would be to close down the plant at once. This court is fully agreed to avoid that immediately drastic remedy; the difference in view is how best to avoid it.” The court ruled that an injunction would be lifted upon payment to plaintiffs of the value of permanent damages. *Id.* at 228.

In *Kasuba*, the Vermont trial court took the approach used by the New York Court of Appeals in *Boomer* and denied an injunction because the defendant quarry business employed fifty people and intended to employ seven more, and “about thirty men were taken off the relief rolls in the town of Poultney.” *Kasuba*, 109 at 197. The trial court weighed the value of the overall societal benefit against the harm to the damaged neighboring landowner. On appeal, however, the Vermont Supreme Court concluded that nonetheless, the plaintiff had no obligation to accommodate the unnatural flow created by the defendant’s business activities and specifically held that “the doctrine of comparative equities. . .is not applicable in this case.” *Id.* at 206.

Defendant in this case urges the court to balance the relative hardships to the parties and to “hesitate to enjoin Vorsteveld Farm from the Hoppers’ requested injunction.” Defendant’s Post Trial Brief at 39. However, the court has determined that the nuisance is caused not by the use of drain tiles *per se* but by the failure of the farm to dispose of the excess water containing farm waste that its system produces and discharges onto Aerie Point land. There is no need to enjoin the entire enterprise--only the disposal of the water that is in excess of normal drainage amounts and that contains the byproducts of its drainage system, i.e. sediment and contaminants.

In other words, the Farm should meet the obligation of every business or property owner to dispose of its own waste products responsibly rather than discharge them onto their neighbor’s land. In this case, the evidence shows that the water can be collected at a limited number of discharge points for responsible disposal. To prevent future trespasses and damage from nuisance, it is not necessary for Vorsteveld Farm to change its farming practices; it is only necessary that it manage its own waste.

For the foregoing reasons, the court concludes that Defendant’s excess discharge of water from its land onto Plaintiff’s land is both substantial and unreasonable, and Plaintiff has proved the elements of both trespass and nuisance claims related to damage from water containing sediments and contaminants.

Nuisance Claim Related to Smell

The court has already concluded that the smell emanating from the manure pits is noxious and offensive, as established in the Findings of Fact, and interferes with the use and enjoyment of the Hoppers’ residence on Aerie Point property.

The next issue is whether the interference with use and enjoyment is “substantial and unreasonable.” The interference of use as substantial is established by those facts: the Hoppers cannot open the windows in their house when the smell is present or use their screened-in porch or the outdoors, and a neighbor who experiences the same smell has invested in an air conditioner to combat the smell. The damage is “substantial” because it causes the occupants of a

house on the property not to be able to use it for the normal activities for which it was designed. While the Hoppers moved the location of the house they now occupy, two residential houses had long been situated on the Aerie Point property prior to the Vorstevelds' purchase.

The remaining issue is whether the imposition of the smell on Aerie Point land is “unreasonable” given two circumstances: (1) that some level of manure smell is normal and to be expected in the agricultural community of Pantown, and (2) that the smell is not constant but only settles over the house on Aerie Point at times.

In 1988 in *Coty*, the Vermont Supreme Court upheld a nuisance claim and issued an injunction against a neighboring landowner who maintained two hundred cubic yards of chicken manure for extended periods of time, requiring the plaintiff to use an air conditioner to counteract the presence of the smell. *Coty*, 149 Vt. 451.

The court concludes that the noxious manure smell is unreasonable for two reasons. First, the amount of manure, stored in a manner that produces gases with an offensive smell, especially when agitated such that the smell becomes intense, was more than tripled by the addition of the two large pits installed upslope from previously existing and occupied residential houses. The intensity and location of the smell are above and beyond normal community standards even within an agricultural neighborhood, as established by the testimony of several pro-farming witnesses. Secondly, due to the heaviness of the gases and recurring air flow patterns, even though the smell is not constant, it has now become clear that it occurs on a regular basis such that it can be expected to continue and affect Plaintiff's use of their property on a routine and regular basis in the future.

Again, even if the court uses the “balancing of the equities” approach, it is not clear at this time that the solution requires the expense of relocating the pits or covering them, both of which would involve costs and complications shown by testimony at trial. The evidence shows that the settling occurs based on the effect of transitory air currents. When atmospheric conditions are such that the settling of the gaseous odor downslope is likely to occur, the Farm may be able to eliminate the intensity and noxiousness of the smell at reasonable cost by dispersing it through the use of fans or other technology solutions so as to avoid the interference effect on Plaintiff's property.

In sum, the smell of Defendant's manure pits creates a substantial and unreasonable interference with the Hoppers' use and enjoyment of Aerie Point land, and therefore the claim of nuisance from the smell of the manure storage pits has been proved.

Overall Conclusions as to Liability

For the foregoing reasons, Plaintiff has proved claims of trespass and nuisance sufficient to warrant relief with respect to water flow and sediment and contaminants, and has proved a nuisance claim sufficient to warrant relief with respect to noxious smell.

Remedy

Plaintiff has proved claims of trespass and nuisance based on the disposal of waste water from the tile drain system onto Aerie Point land and nuisance based on the noxious smell on Aerie Point land. Plaintiff is entitled to an injunction enjoining the continuation of these activities based on the law set forth above.

The remedy Plaintiff seeks, however, is much more extensive. It is not merely an injunction but a court order requiring a remedial plan. The proposed remedial plan specifies that certain crops be grown or not grown in specific fields over specified time periods, that vegetative buffers be planted in identified areas according to specified standards, that a water quality monitoring program involving collection of samples be ordered that is approved by the University of Vermont Extension Service (or a water quality specialist with specific credentials), that Plaintiff has the right to inspect Defendant's land to assess compliance, and that the court order various other dispute resolution, oversight, and enforcement provisions.

The court is unaware of any precedent for the court to mandate, in a private lawsuit between parties based on private law claims, that a defendant conduct its business or agricultural activities in specific ways subject to such oversight by the opposing party or third parties, however beneficial the requested practices may be. Farmers are entitled to use their land in the manner they wish as long as their activities are in compliance with legal requirements and regulations.

In *State of Vermont Agency of Natural Resources v. Parkway Cleaners*, the Vermont Supreme Court upheld an injunctive order compelling the defendant to undertake investigation and remediation related to PERC contamination and authorizing the Secretary to monitor results, but that was based on specific statutory authorization applicable in civil enforcement proceedings brought by the Agency. *State of Vermont Agency of Natural Resources v. Parkway Cleaners*, 2019 VT 21, ¶¶29-44.

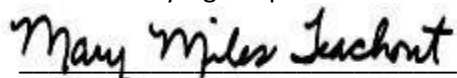
Whether a farmer might be required to engage in specified activities in a regulatory enforcement action brought by the Secretary of Agriculture was not part of this case. Civil regulatory enforcement actions brought by the Secretary are authorized and governed by the provisions of 6 V.S.A. § 4995. In this case, the court is limited to private law remedies.

Plaintiff does not seek money damages but only injunctive relief. Under prior case law the role of the court is to enjoin future trespasses and nuisance activities, leaving it up to the defendant to determine how to implement the injunction.”[T]he trial court’s injunction does not exceed the proper bounds of the law. The injunction only requires that defendants not disturb the natural flow of water onto plaintiff’s land. . . . [T]he injunction correctly seeks to end this injury.” *Powers* at 292. See also *Kasuba* at 207.

Order

Plaintiff's counsel shall prepare an injunctive order based on the foregoing Findings of Fact and Conclusions of Law. Defendant's counsel shall have five business days to file any objection to the proposed terms.

Electronically signed pursuant to V.R.E.F. 9(d) on March 28, 2022 at 1:20 PM.

A handwritten signature in black ink that reads "Mary Miles Teachout". The signature is written in a cursive style and is positioned above a horizontal line.

Mary Miles Teachout
Superior Court Judge