IN THE CIRCUIT COURT OF COOK COUNTY
COUNTY DEPARTMENT, CHANCERY DIVISION

PRESTIGE FEED PRODUCTS, LLC Plaintiff/Counterclaim Defendant, v. VILLAGE OF MOUNT PROSPECT, Defendant/Counterclaim Plaintiff.	Case No. 2023 CH 5147 Calendar 14 Hon. Clare J. Quish

Declaration of Angie Wanger

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned certifies that the statements set forth in this instrument are true:

1. I am over the age of 18 years and, if called to testify in this matter, could testify competently to the below facts from personal knowledge.

2. I am a managing consultant with Trinity Consultants, Inc.

3. Klein, Thorpe and Jenkins, Ltd. retained Trinity Consultants to collect odor measurement readings in the Village of Mount Prospect, Illinois near and upwind/downwind of the Prestige Feed Products, LLC facility located at 431 Lakeview Ct., Mount Prospect, Illinois.

4. Attached as Exhibit 1 to this declaration is Trinity's report related to its odor measurement readings.

DATED: August 23, 2024

Angie Wanger

Exhibit 1

Trinity Consultants
1801 S Meyers Rd, Ste 350, Oakbrook Terrace, IL 60181 / P 630.495.1470 / F 630.495.1414 / **trinityconsultants.com**

August 22, 2024

Lance C. Malina
Partner
Klein, Thorpe and Jenkins, Ltd.
120 S. LaSalle St., Suite 1710
Chicago, IL 60603
lcmalina@ktjlaw.com

RE: Village of Mount Prospect – Odor Observations

Dear Lance Malina:

Klein, Thorpe and Jenkins contracted Trinity Consultants, Inc. (Trinity) to collect odor measurement readings in the Village of Mount Prospect, Illinois near and upwind/downwind of the Prestige Feed Products facility located at 431 Lakeview Ct, Mount Prospect, Illinois. This letter provides a brief background on odor measurement, the methodology used and summarizes the data collected.

BACKGROUND

Smell is one of the five human senses. Odor is the perception experienced when one or more chemical substances come into contact with the human sensory systems. Therefore, odor is inherently complex because it is often caused by a mixture of chemical substances and has subjective components associated with its perception by the human sensory systems.

Because odor is subjective and based on the presence of multiple chemical compounds, it cannot be measured using standard units of concentration with a universal instrument. Instead, human noses are the best tools to observe odors. Scientists developed a way to objectively quantify odor by using "odor units" (OUs).

Odor units are a relative-strength scale, based on the concept of dilution principles. As a reference, 1 odor unit (or simply 1 OU) represents the level at which 50% of the population can begin to detect an odor. To better understand this relative scale, if an established odor were measured to be 7 OU, then the odors present in the air would be at a strength that would require 7 dilutions with "clean" air to meet the detection threshold. The detection threshold is defined as the point at which half the population can no longer sense the odor. Dilution-to-threshold (D/T) can be represented by the following equation:

$$D/T = \text{Volume of Carbon-Filtered Air} / \text{Volume of Odorous Air}$$

Numerical odor criteria in North America are typically established based on D/T values as measured in odor units. In jurisdictions that do utilize a numerical odor criteria, this value is typically 7 D/T or 8 D/T. In some jurisdictions, one measurement at or above 7 D/T constitutes a nuisance, whereas other jurisdictions require multiple observations within an hour to establish a nuisance. The location where odors are observed or measured can also vary by rule. The use of 7 D/T is based on scientific publications that have identified that odors above 7 D/T will often result in complaints (i.e., objectionable) with 15 D/T often described as a nuisance, and odors above 31 D/T described as a serious nuisance (i.e., nauseating). (McGinley, 2000 and Huey et al., 1960).

Odor measurements can be completed using the hand-held odor monitoring device such as the Nasal Ranger field olfactometer. Odor measurements can be collected at both a level of Detection Threshold (DT) and Recognition Threshold (RT). DT is the level at which an odor can be perceived but not identified. At this level, it would not be clear how to characterize the odor (i.e., cannot characterize the odor as "chemical" or "petroleum" or "earthy", etc.)—only that an odor is present, and the level of dilution is sufficient to perceive it. The RT is the level at which a detectable odor can be recognized and identified using word descriptors and occurs at an equal or more concentrated level compared to DT. RT is useful for characterizing odor properties and differentiating distinct odors. For consistency in identifying the character of a specific odor, an odor descriptor wheel is used to define the descriptors of possible scents.

There are other characteristics of odor, beyond the measured odor strength, that can influence the overall perception of an odor. For example, a very offensive odor observed once per year may not be an issue, whereas a very offensive odor observed multiple times per day could cause a nuisance. These characteristics are referred to as "FIDOL", as listed below.

- *Frequency* – how often the odor impacts occur
- *Intensity* – the relative strength (faint to overwhelming; sometimes numerical scale is used)
- *Duration* – the length of time for a given odor event
- *Offensiveness* – the character or description of the odor (word descriptors; sometimes numerical scale is used to describe hedonic tone, or the pleasantness, of an odor)
- *Location* – location of the perceived odor

To help illustrate how the FIDOL principles can be used to confirm a nuisance, the Texas Commission on Environmental Quality (TCEQ) procedures can be referenced. Investigators first categorize the observed odor as not unpleasant, unpleasant, offensive, or highly offensive. From there, the frequency, intensity, and duration are evaluated to determine if the observed odor is a nuisance. A very strong (intensity), highly offensive odor (offensiveness), which occurs for 1 hour (duration) in a single occurrence (frequency) is considered a nuisance. For recurring odors that occur on a weekly or daily basis, the intensity only needs to be strong or moderate, with a duration of only 1 minute, in order to be considered a nuisance. In other words, frequently recurring odors, even for short duration, when highly offensive, are considered a nuisance. (TCEQ, 2007).

ODORS CHARACTERIZED AS HIGHLY OFFENSIVE

		FREQUENCY				
		Single Occurrence	Quarterly	Monthly	Weekly	Daily
DURATION	1 minute	NA	NA	VS	S	M
	10 minutes	NA	VS	S	M	L
	1 hour	VS	S	M	L	VL
	4 hours	S	M	L	VL	VL
	12 hours+	M	L	VL	VL	VL

Note: Intensity – VS=Very Strong, S=Strong, M=Moderate, L=Light, VL=Very Light
Odor Complaint Investigation Procedures – FIDO Chart for Highly Offensive Odors from Texas Commission on Environmental Quality Odor Complaint Investigation Procedures, September 18, 2007.

METHODOLOGY

Three odor assessors pre-screened for odor sensitivity and trained to conduct odor field measurements were available to collect readings during business days August 5 through August 15. The objective of the study was to collect odor measurement readings near Prestige Feed Products and in commercial, industrial, and residential areas near Prestige Feed Products.

The odor assessors were pre-screened for odor sensitivity to ensure they were not overly sensitive or insensitive to odors. Testing was completed using an odor sensitivity test kit purchased from St. Croix Sensory. The test kit utilizes standard odorant n-butanol. The test administrator follows the test procedure by evaluating odor sensitivity of the individual through a 3-Alternative Forced-Choice test method in ascending concentration. The three odor assessors tested within the acceptable range of odor sensitivity.

The odor assessors adhered to best practices prior to their odor sensitivity test as well as whenever they were on-call to collect odor measurements. These best practices included:

- Refrain from eating, drinking, gum, or mints 30 minutes before sampling
- Refrain from consumption of spicy foods or caffeine
- Confirmed they did not have an illness or allergies

Trinity provided an on-call schedule to Bill Schroeder at the Village of Mount Prospect. One consultant was available each business day August 5 through August 15 on a rotating schedule. Bill Schroeder would complete independent observations of the area and would dispatch the team if he observed an odor and visually noticed that Prestige Feed Products was operating. On August 5, two of the three odor assessors met with Bill Schroeder to become familiar with the Village and places where he recommended odor measurements should be collected. Odor measurements collected on subsequent days considered these initial locations but were modified based on wind direction and the conditions observed by the odor assessor.

Odor measurements were collected near the Prestige Feed Products and downwind of the facility based on wind direction as measured with a Kestrel 5500 hand-held meteorological station. Bill Schroeder would also communicate with the odor assessor about locations where he observed and/or was made aware of observed odors by citizens and those locations were included when collecting odor measurements.

The odor assessor spent approximately one minute breathing into a "blank" setting of the Nasal Ranger field olfactometer to "zero out" their nose. Then the odor assessor began at level 60 and worked down to 30, 15, 7, 4, and 2 to determine the DT and/or RT. If an RT was observed, short hand descriptors from the odor descriptor wheel were also recorded. If a DT and/or RT was not recorded at level 2, the odor assessor removed the Nasal Ranger field olfactometer from their face; if DT or RT was observed when not breathing through the Nasal Ranger field olfactometer, the level was recorded as "< 2" (meaning the reading was less than the "2" on the Nasal Ranger field olfactometer). If neither a DT nor RT were measured, the reading was recorded as a "non detect" ("ND"). The odor assessor recorded the following information:

- Date
- Acknowledgement of best practices/quality measures
- Time of observation
- Location
- Wind direction (blowing from)
- Wind speed (miles per hour)
- Weather (e.g., sunny, cloudy, etc.)
- Temperature (degrees Fahrenheit)

- Humidity (%)
- DT (if measured)
- RT (if measured)
- Descriptors (if RT is measured; utilized odor descriptor wheel)
- Comments

Odor measurements were collected by a single assessor for up to two hours in a single business day.

RESULTS

Odor assessors collected odor measurements beyond the Prestige Feed Products facility property during the mornings of August 5-9 and August 12-14. The assessors detected a high frequency of strong odors described as "spoiled milk", "vomit", "rancid", and "cheese" off-property/downwind of the Prestige Feed Products facility on seven of these eight days (August 5-9 and August 12-13). The odor assessors noted the unique character of the odor emitted by Prestige Feed Products by standing at the property line/immediately downwind when the site was operating and determined that the "spoiled milk", "vomit", "rancid", and "cheese" odors appear to be attributed to their operations.

The odor assessors recorded odor observations at 26 outdoor locations, depicted on the map in Figure 1. Some of these locations represent multiple individual points (e.g., residences/businesses on the same/adjacent streets) but are consolidated on the map. Ten to fourteen locations were visited each day in a 2 hour period, so not all locations were visited each day. Winds were typically blowing from the NW, N, and NE; one day winds were blowing from the SE. On August 15 it was actively raining in the morning, so odor observations were recorded indoors at locations #27-29. These indoor readings are discussed later.

As previously noted, 7 D/T is often established as a nuisance threshold. On seven days (August 5-9 and August 12-13), the odor assessors recorded at least two observations of 7 D/T or higher. On five of these days, odor assessors recorded at least one 60 D/T, with some days recording as many as four 60 D/T observations which is nearly double the threshold of 31, identified as a serious nuisance. All three odor assessors observed odors as high as 60 D/T. Figure 2 shows a map combining data from all seven days where strong odors likely attributable to Prestige Feed Products were noted off property. As noted in the legend, different color markers are used to show locations where a 7 D/T or higher was recorded once, twice, or three or more times. Locations denoted with a bold red outline are where 60 D/T was recorded.

To provide another visual, a bar graph is included in Figure 3 which shows the maximum D/T recorded each day. A red horizontal line shows the 7 D/T threshold. For each of the seven days, the odor assessors recorded odor observations above 7 D/T, at levels of 30 or 60 D/T, which can be considered a serious nuisance.

On August 15 conditions were rainy such that the odor assessor could not collect odor measurements outdoors. Odor measurements were collected indoors at Mizkan and Park View Montessori. Odor measurements of 30 D/T and 7 D/T were recorded inside the Mizkan vinegar lab and inside the utility room near the vinegar lab, respectively. The odors observed were described as "spoiled milk" and "vomit". Mizkan was not operating when these measurements were collected.

Odors likely attributable to Prestige Feed Products were observed at several locations off-property at a strength and frequency that would indicate nuisance conditions. Multiple readings per day at levels of 15, 30, 60 D/T, especially of a highly offensive odor, are unprecedented in my past 12 years conducting odor field studies.

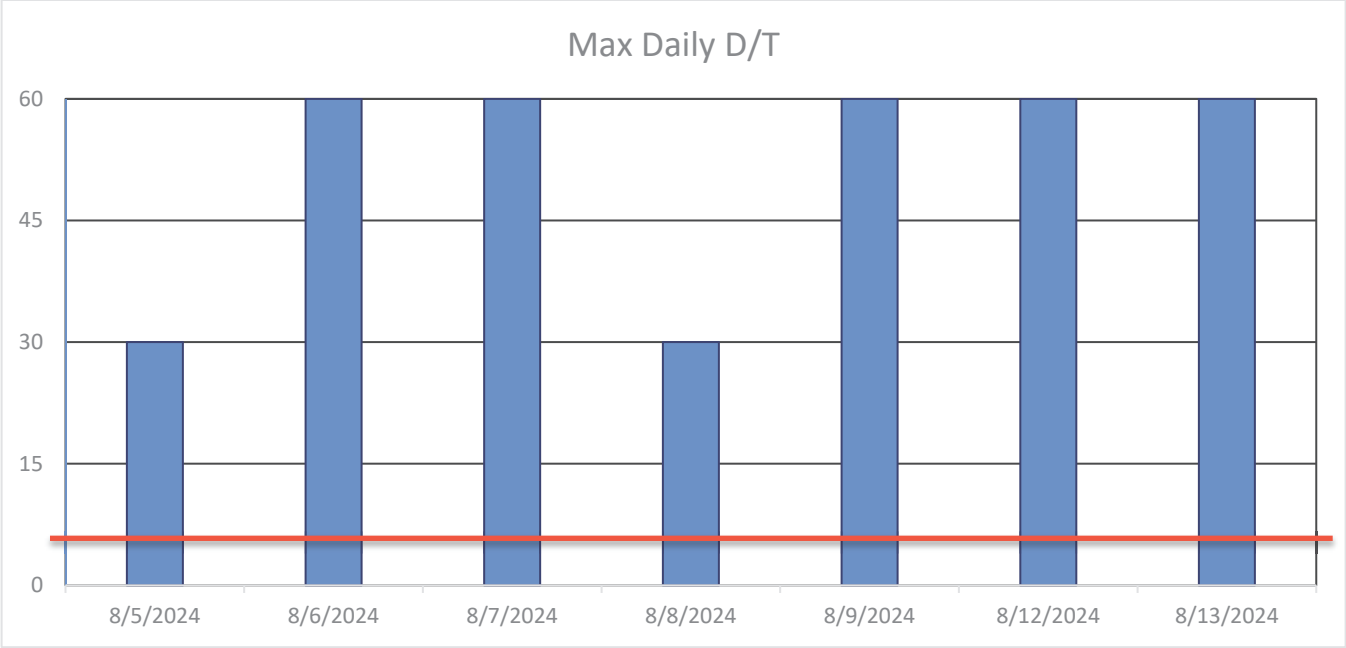
Figure 1 – Odor Monitoring Locations

Location #	Places
1	Mizkan SW parking lot (1661 Feehanville)
2	Back of Park View Montessori
3	On Trac parking lot
4	Mt Prospect Ice Arena, E Parking lot
5	640 Dursey Ln, 650 Dursey Ln, 684 Dursey Ln
6	640 Middleton Ln, 650 Middleton Ln, 651 Longford Dr
7	630 Longford Dr, 631 Longford Dr, 641 Longford Dr
8	651 Castlerea Ln
9	630 Kylemore Dr, 653 Kylemore Dr, 640 Kylemore Dr, 660 Kylemore Dr, 675 Kylemore Dr
10	Smiling patient dental care
11	690 Waterford Dr
12	1150 Wexford Ct
13	710 Kylemore Ln
14	750 Kenmare Dr
15	1504 E Lowden Ln, 1502 E Lowden Ln, 1513 E Lowden Ln, 1518 E Lowden Ln
16	Side of 1402 E Lowden Ln, 1404 E Lowden Ln
17	1418 E Lowden Ln, 1420 E Lowden Ln, 1414 E Lowden St, 1424 E Small Ln
18	209 N Marcella Rd, 309 N Marcella Rd, 1310 E Thayer St, 201 N Stratton Ln
19	220 N Stratton Ln, 1408 E Small Ln, 212 N Deneen Ln
20	Joe Donut
21	Walmart (930 Mt Prospect Plaza), 3 N Edward St, Walgreens (21 Rand Rd)
22	201 N Stevenson Ln, 209 N Stevenson Ln
23	1413 E Thayer St, 200 N Deneen Ln
24	1508 E Mitchell Ln
25	Andrews products visitor parking, Kitamura parking lot
26	Vogue Tyre and Rubber
27	Inside Mizkan vinegar lab
28	Inside Mizkan utility room off vinegar lab
29	Inside Park View Montessori

Figure 2 – Odor Measurements with Off-Property Odors Likely Attributable to Prestige Feed Products

Locations of 60 D/T Noted with Bold Red Outline

Figure 3 – Maximum Daily D/T Observations



Sincerely,

TRINITY CONSULTANTS

Angie Wanger
Managing Consultant

Attachments

References

McGinley, Charles M., Enforceable Permit Odor Limits, Presented at A&WMA Environmental Permitting Symposium II, Chicago IL, November 14-16, 2000.

Huey et al., Objective Odor Pollution Control Investigations, Journal of the Air Pollution Control Association, Volume 10, No. 6, December, 1960.

TCEQ, Texas Commission on Environmental Quality Odor Complaint Investigation Procedures, September 18, 2007.

ATTACHMENT 1

Field Sheets, Odor Descriptor Wheel

Field Data Sheet

Client	KTJ Law	**Site**	Mount Prospect	**Quality**	☑ No food/drink/gum/mints 30 min before
Project		**Project #**	241401.0182		☑ No spicy foods or caffeine
Date	8/5/2024	**Observer**	1		☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	9:42 AM	640 Dursey Ln	5	W	1.5	cloudy	78.0	81.2	30	30		517 - Spoiled milk	Smelled like cheese, got stronger with wind
2	9:57 AM	Mizkan SW parking lot (1661 Feehanville)	1	W	0	cloudy	83.3	77.7			x		Smelled but went away when the wind stopped
3	10:05 AM	On Trac parking lot	3	W	0.8	cloudy	81.4	67.5	15				Couldn't recognize odor
4	10:12 AM	640 Middleton Ln	6	W	0	cloudy	80.4	74.8			x		
5	10:19 AM	630 Kylemore Dr	9	W	1	cloudy	82.8	69.5	4	2		517 - Spoiled milk	
6	10:25 AM	1504 E Lowden Ln	15	NW	1.3	cloudy	80.9	67.0			x		
7	10:29 AM	Side of 1402 E Lowden Ln	16	NW	0	cloudy	81.7	71.7			x		
8	10:35 AM	209 N Marcella Rd	18	NW	0.8	cloudy	82.7	72.5			x		
9	10:42 AM	Walmart Pharmacy Drive Thru	21	NW	2.1	cloudy	80.7	69.7			x		
10	10:49 AM	Joe Donut	20	NW	0	cloudy	81.9	71.0			x		

Field Data Sheet

Client	KTJ Law	**Site**	Mount Prospect	**Quality**	☑ No food/drink/gum/mints 30 min before
Project		**Project #**	241401.0182		☑ No spicy foods or caffeine
Date	8/6/2024	**Observer**	2		☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:12 AM	1504 E Lowden Ln	15	NNE	3.9	windy, cloudy	70.7	80.5	60	30		517 - Spoiled Milk 519- Vomit	Very cheesy, distinct smell
2	7:20 AM	Side of 1402 E Lowden Ln	16	NNE	2	windy, cloudy	70.9	76.4	15				Recent rain may have affected measurements
3	7:28 AM	1408 E Small Ln	19	NNE	1.4	windy, cloudy	70.9	77.2			x		Recent rain may have affected measurements
4	7:37 AM	1413 E Thayer St	23	NNE	3.9	windy, cloudy	70.2	67.0	7				Smelled as the wind blew stronger, then went away
5	7:45 AM	209 N Stevenson Ln	22	NNE	2.6	windy, cloudy	71.6	58.0	60	60		517 - Spoiled Milk 519- Vomit	Got very strong odor as wind blew
6	7:53 AM	630 Kylemore Dr	9	NNE	1.3	windy, cloudy	71.3	76.8			x		
7	8:01 AM	640 Middleton Ln	6	NNE	2.5	windy, cloudy	72.1	65.2			x		
8	8:12 AM	Back of Park View Montessori	2	NNE	5.1	windy, cloudy	69.9	75.9			x		
9	8:21 AM	Mizkan SW Parking lot (1661 Feehanville)	1	NNE	2.1	windy, cloudy	71.9	51.7			x		
10	8:29 AM	Smiling patient dental care	10	NNE	3.4	windy, cloudy	67.6	72.6			x		
11	8:39 AM	1418 E Lowden Ln	17	NNE	2.7	windy, cloudy	70.1	67.0	4	4		517 - Spoiled Milk 519- Vomit	Cheesy, could only smell when wind blew

Field Data Sheet

Client	KTJ Law	**Site**	Mount Prospect	**Quality**	☑ No food/drink/gum/mints 30 min before
Project		**Project #**	241401.0182		☑ No spicy foods or caffeine
Date	8/7/2024	**Observer**	2		☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:09 AM	1504 E Lowden Ln	15	ENE	2.6	sunny, clear sky	69.7	61.1			x		
2	7:18 AM	Side of 1402 E Lowden Ln	16	ENE	1.3	sunny, clear sky	70.6	61.1	60	60		517 - Spoiled Milk 519- Vomit	Same cheesy smell, overpowering even with weak wind
3	7:23 AM	309 N Marcella Rd	18	ENE	0.8	sunny, clear sky	73.6	57.3	4				Smelled as wind blew but couldn't recognize odor
4	7:30 AM	1408 E Small St	19	ENE	5.7	sunny, clear sky	71.0	54.5	4	<2		517 - Spoiled Milk 406 - Grassy	A little bit of odor but mostly smelled fresh-cut grass
5	7:42 AM	Mt Prospect Ice Arena, E Parking lot	4	ENE	1.6	sunny, clear sky	76.4	46.1	60	60		517 - Spoiled Milk 519- Vomit	Overpowering, even thtough blank setting
6	7:50 AM	Andrews products visitor parking	25	ENE	1.4	sunny, clear sky	78.0	40.1	60	60		517 - Spoiled Milk 519- Vomit	Couldn't smell through blank
7	7:57 AM	Vogue Tyre and Rubber	26	ENE	2	sunny, clear sky	76.7	46.9	30	4		517 - Spoiled Milk 519- Vomit	Stronger when wind blew
8	8:05 AM	Back of Joe Donut	20	ENE	1.3	sunny, clear sky	78.7	50.4	2	<2		517 - Spoiled Milk 519- Vomit	Could only recognize cheesy odor without Nasal Ranger
9	8:15 AM	Mizkan SW Parking Lot (1661 Feehanville)	1	ENE	2	sunny, clear sky	80.3	40.7			x		
10	8:21 AM	Back of Park View Montessori	2	ENE	1	sunny, clear sky	81.2	43.6	4	2		406 - Grassy	Smelled strongly of grass
11	8:28 AM	640 Middleton Ln	6	ENE	4.8	sunny, clear sky	71.0	50.4	2				Very small whiff of something
12	8:35 AM	630 Kylemore Dr	9	ENE	1.5	sunny, clear sky	80.9	37.9			x		
13	8:40 AM	Side of 1402 E Lowden Ln	16	ENE	3.2	sunny, clear sky	79.9	38.1	60	15		517 - Spoiled Milk 519- Vomit	Stronger when wind blew

Field Data Sheet

Client	KTJ Law	**Site**	Mount Prospect	**Quality**	☑ No food/drink/gum/mints 30 min before
Project		**Project #**	241401.0182		☑ No spicy foods or caffeine
Date	8/8/2024	**Observer**	1		☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:40 AM	653 Kylemore Dr	9	NW	3.1	clear	70.5	76.9	15	15		517 - Spoiled Milk	Cheesy, rancid odor
2	8:00 AM	690 Waterford Dr	11	NW	3.1	clear	73.3	72.5	4	4		517 - Spoiled Milk	Cheesy, rancid odor
3	8:07 AM	1513 E Lowden Ln	15	NW	3.3	clear	74.7	65			x		
4	8:18 AM	630 Longford Dr	7	NW	3.4	clear	75.7	63.8	30	15		517 - Spoiled Milk 519- Vomit	Cheesy, rancid odor
5	8:29 AM	OnTrac Parking Lot	3	WNW	3.1	clear	75.9	69.2			x		
6	8:48 AM	Back of Park View Montessori	2	WNW	3.2	clear	76.2	65.8			x		
7	8:58 AM	Mizkan SW Parking Lot (1661 Feehanville)	1	WNW	3.7	clear	83.5	56.1			x		
8	9:07 AM	Smiling patient dental care	10	WNW	3.5	clear	78.2	62.5			x		
9	9:21 AM	Walmart	21	WNW	4.2	clear	78.7	56.3			x		
10	9:30 AM	Joe Donut	20	WNW	4.8	clear	81.3	62.3			x		

Field Data Sheet

Client KTJ Law
Project
Date 8/9/2024

Site Mount Prospect
Project # 241401.0182
Observer 1

Quality
☑ No food/drink/gum/mints 30 min before
☑ No spicy foods or caffeine
☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:32 AM	1404 E Lowden Ln	16	NW	4.1	clear	64.7	59.5			x		
2	7:41 AM	1418 E Lowden Ln	17	NW	4.8	clear	65.1	63.1			x		
3	7:47 AM	1518 E Lowden Ln	15	NW	5.2	clear	66.9	59.2	30	30		517 - Spoiled Milk 519- Vomit	Strong cheesy smell
4	7:53 AM	640 Kylemore Dr	9	NW	3.7	clear	65.7	60.9	2	2		517 - Spoiled Milk 519- Vomit	Faint smell
5	8:01 AM	1150 Wexford Ct	12	NW	5.6	clear	65.5	57.4	15	15		517 - Spoiled Milk 519- Vomit	Some cheesy smell
6	8:09 AM	690 Waterford Dr	11	NW	2.9	clear	65.1	66.2			x		
7	8:20 AM	641 Longford Dr	7	NW	4.2	clear	65.0	72.2			x		
8	8:30 AM	651 Castlerea Ln	8	NW	4.7	clear	67.2	64.7			x		
9	8:56 AM	660 Kylemore Dr	9	NW	2.4	clear	68.1	53.7	<2	<2		517 - Spoiled Milk	Could only smell without Nasal Ranger
10	9:09 AM	Smiling patient dental care	10	NW	3.7	clear	66.5	54.1	60	60		517 - Spoiled Milk 519- Vomit	Very strong, started all of a sudden
11	9:14 AM	OnTrac Parking Lot	3	NW	0.9	clear	72.0	57.1	60	60		517 - Spoiled Milk 519- Vomit	Strong, smelled through blank
12	9:25 AM	650 Dursey Ln	5	NW	1.6	clear	74.5	45.1			x		

Field Data Sheet

Client KTJ Law
Project
Date 8/12/2024

Site Mount Prospect
Project # 241401.0182
Observer 3

Quality
☑ No food/drink/gum/mints 30 min before
☑ No spicy foods or caffeine
☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:49 AM	2 N Emerson St	-	WNW	2.3	Clear	68.6	60.8			x		
2	8:10 AM	3 N Edward St	21	WNW	3.6	Clear	71.3	59.7			x		
3	8:20 AM	Walgreens (21 Rand Rd)	21	NW	1.8	Clear	74.6	55.4			x		
4	8:32 AM	1310 E Thayer St	18	WNW	2	Clear	73.2	56.5			x		
5	8:40 AM	1414 E Lowden Ln	17	W	3.1	Clear	73.7	55.6			x		
6	8:51 AM	710 Kylemore Ln	13	NW	1.7	Clear	73.5	55.5			x		
7	8:53 AM	675 Kylemore Dr	9	NW	0.9	Clear	73.3	57.6	60	60			Smelled strongly of melted cheese
8	9:02 AM	650 Middleton Ln	6	W	1.9	Clear	76.5	54.3			x		
9	9:09 AM	684 Dursey Ln	5	W	0.5	Clear	74	50.9			x		
10	9:15 AM	Mizkan SW Parking Lot (1661 Feehanville)	1	NNW	1.8	Clear	73.2	52.5			x		
11	9:20 AM	631 Longford Dr	7	W	1.1	Clear	73.8	52.1	60	60			Smelled strongly of melted cheese
12	9:37 AM	750 Kenmare Dr	14	W	1.4	Clear	75.4	52.5	30	15			Smelled faintly of melted cheese

Field Data Sheet

Client KTJ Law
Project
Date 8/13/2024

Site Mount Prospect
Project # 241401.0182
Observer 3

Quality
☑ No food/drink/gum/mints 30 min before
☑ No spicy foods or caffeine
☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:52 AM	660 Kylemore Dr	9	N	2.8	Clear	73.1	70.7	15	7		517 - Spoiled Milk 519- Vomit	Some cheese smell
2	8:06 AM	651 Longford Dr	6	N	2.8	Clear	72.4	63.4			x		
3	8:15 AM	1502 E Lowden Ln	15	NNW	1.4	Clear	73.5	64.5	60	60		517 - Spoiled Milk 519- Vomit	Strong cheese smell
4	8:21 AM	1420 E Lowden Ln	17	NNW	1.9	Clear	74.1	64.1			x		
5	8:25 AM	1424 E Small Ln	17	N	1	Clear	76.7	58.4	15	7		517 - Spoiled Milk	Faded and returned quickly
6	8:36 AM	212 N Deneen Ln	19	N	1	Clear	77.2	55.8	15	4		517 - Spoiled Milk	Cheese smell present
7	8:45 AM	220 N Stratton Ln	19	NNW	1.1	Clear	74.3	58.5			x		
8	8:49 AM	201 N Stratton Ln	18	NNW	1.4	Clear	75.5	58.1			x		
9	8:53 AM	200 N Deneen Ln	23	N	1	Clear	74.2	60.5	7	4		517 - Spoiled Milk 519- Vomit	Cheese smell present
10	9:02 AM	201 N Stevenson Ln	22	N	0.9	Clear	76.5	56.6	15	7		517 - Spoiled Milk 519- Vomit	Cheese smell present
11	9:11 AM	1508 E Mitchell Ln	24	N	0.8	Clear	76.5	56.9	<2	<2			Could only smell odor without Nasal Ranger
12	9:27 AM	720 E Central Rd	-	NW	1	Clear	81.6	51			x		
13	9:37 AM	Walgreens (1701 E Kensington Rd)	-	N	2	Clear	80.3	47.3			x		
14	9:45 AM	Joe Donut	20	NW	1.8	Clear	83.8	43.6			x		

Field Data Sheet

Client KTJ Law
Project
Date 8/14/2024

Site Mount Prospect
Project # 241401.0182
Observer 2

Quality
☑ No food/drink/gum/mints 30 min before
☑ No spicy foods or caffeine
☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	8:25 AM	Back of Park View Montessori	2	SE	1	Sunny	79.1	55.0			x		
2	8:37 AM	Mt Prospect Ice Arena	4	SE	4.6	Sunny	76.7	53.0	7				Smelled something at 7 but don't think it was Prestige odor
3	8:44 AM	Kitamura parking lot	25	SE	2.1	Sunny	78.9	46.0			x		
4	8:53 AM	Mizkan SW Parking Lot (1661 Feehanville)	1	SE	0.8	Sunny	84.3	43.9	2				Smelled something but couldn't smell Prestige with mask off
5	9:01 AM	650 Dursey Ln	5	SE	1.5	Sunny	84.8	44.8			x		
6	9:08 AM	640 Middleton Ln	6	SE	2	Sunny	83.3	34.6	7	2		406 - Grassy	Smelled like grass
7	9:14 AM	630 Kylemore Dr	9	SE	2.6	Sunny	85.5	38.6			x		
8	9:20 AM	1502 E Lowden Ln	15	SE	2	Sunny	82.6	36.5	2	2		413 - Pine	Smelled like pine trees
9	9:26 AM	Side of 1402 E Lowden Ln	16	ESE	0.8	Sunny	88.6	35.1			x		
10	9:42 AM	Mt Prospect Ice Arena	4	ESE	1.6	Sunny	86.6	39.4			x		Very still day, could only strongly smell odor when I took a lap around the Prestige facility

Field Data Sheet

Client	KTJ Law	**Site**	Mount Prospect	**Quality**	☑ No food/drink/gum/mints 30 min before
Project		**Project #**	241401.0182		☑ No spicy foods or caffeine
Date	8/15/2024	**Observer**	2		☑ Free of illnesses, allergies

Item	Time	Exact Location	Location #	Wind Direction (from)	Wind Speed (mph)	Weather	Temp (F)	Humidity (%)	DT	RT	ND	Descriptors	Comments
1	7:50 AM	Inside Mizkan vinegar lab	27	SSE	0	Active rain	71.7	59.3	30	7		517 - Spoiled Milk 519- Vomit	Prestige odor strong inside testing lab, wind speed, temperature, and humidity were all taken inside the building for these, no cheese/dairy products are made here and vinegar production was not running
2	8:00 AM	Inside Mizkan utility room off vinegar lab	28	SSE	0	Active rain	73.5	64.6	7	4		517 - Spoiled Milk 519- Vomit	Same cheese smell, connected to same HVAC system as vinegar lab, odor not present anywhere else in Mizkan building
3	8:15 AM	Inside Park View Montessori	29	SSE	0	Active rain					x		Could smell in parking lot but couldn't take a real measurement outside due to rain

Odor Descriptors

Floral - 100

Almond - 101
Cinnamon - 102
Coconut - 103
Eucalyptus - 104
Fragrant - 105
Herbal - 106
Lavender - 107
Licorice - 108
Marigolds - 109
Perfumy - 110
Rose-like - 111
Spicy - 112
Vanilla - 113

Fruity - 200

Apple - 201
Cherry - 202
Citrus - 203
Cloves - 204
Grapes - 205
Lemon - 206
Maple - 207
Melon - 208
Minty - 209
Orange - 210
Strawberry - 211
Sweet - 212

Vegetable - 300

Celery - 301
Corn - 302
Cucmber - 303
Dill - 304
Garlic - 305
Green pepper - 306
Nutty - 307
Potato - 308
Tomato - 309
Onion - 310

Earthy - 400

Ashes - 401
Burnt Wood - 402
Chalk like - 403
Coffee - 404
Grain Silage - 405
Grassy - 406
Mold - 407
Mouse-like - 408
Mushroom - 409
Musky - 410
Musty - 411
Peat-like - 412
Pine - 413
Smokey - 414
Stale - 415
Swampy - 416
Woody - 417
Yeast - 418

Offensive - 500

Blood - 501
Burnt - 502
Burnt Rubber - 503
Decay - 504
Fecal - 505
Garbage - 506
Landfill Leachate - 507
Manure - 508
Mercaptan - 509
Putrid - 510
Rancid - 511
Raw Meat - 512
Rotten Eggs - 513
Septic - 514
Sewer - 515
Sour - 516
Spoiled Milk - 517
Urine - 518
Vomit - 519

Fishy - 600

Amine - 601
Dead fish - 602
Perm Solution - 603

Chemical - 700

Burnt Plastic - 701
Car exhaust - 702
Cleaning fluid - 703
Coal - 704
Creosote - 705
Diesel - 706
Gasoline - 707
Grease - 708
Foundry - 709
Kerosine - 710
Molasses - 711
Mothball - 712
Oil - 713
Paint - 714
Petroleum - 715
Plastic - 716
Resins - 717
Rubber - 718
Solvent - 719
Styrene - 720
Sulfur - 721
Tar / Asphalt - 722
Turpentine - 723
Varnish - 724
Vinegar - 725
Vinyl - 726

Medicinal - 800

Alcohol - 801
Ammonia - 802
Anesthetic - 803
Camphor - 804
Chlorinou- 805
Disinfectant - 806
Menthol - 807
Soapy - 808
Vinegar - 809

ATTACHMENT 2

Angie Wanger CV

Angie Wanger, CM

Managing Consultant — **Minneapolis, MN**

AREAS OF SPECIALIZATION

- AERMOD Dispersion Modeling
- Nuisance Odor Monitoring and Management Plans
- Odor Complaint Response Plans
- Odor Monitoring and Modeling
- Operating Permitting and Exemptions
- State & Federal Air Quality Regulatory Applicability
- State & Federal Construction Permitting and Exemptions

EDUCATION

B.S., Meteorology, Minor Mathematics, Iowa State University

AFFILIATIONS

- American Meteorological Society
- Air & Waste Management Association – Odor Committee
- Air & Waste Management Association – Upper Midwest Section
- Minnesota Chamber of Commerce – Environmental and Natural Resources Policy Committee
- Minnesota Chamber of Commerce – Air Quality Subcommittee

CERTIFICATIONS

Certified Manager, No. 11973

TECHNICAL EXPERTISE

Odor Monitoring and Management – Designed and implemented odor monitoring programs to collect ambient air odor information in support of odor resolution projects. These projects include baseline studies, investigative analyses, and complaint response. Familiar with European field study methods described in EN16841. Developed best practice protocols for field odor assessors and experienced in administering odor sensitivity testing. Utilized the FIDOL principles and the Nasal Ranger field olfactometer for observing odor monitoring information. For a specific project, developed complaint response plan, including creation of odor complaint website and telephone hotline, to collect and respond to citizen odor complaints from surrounding communities for a two year period.

SUMMARY OF EXPERIENCE

Ms. Wanger is a Managing Consultant in Trinity's Minneapolis office. She assists clients in air and odor projects. Her air-related project work involves dispersion modeling analyses, permit applicability reviews, emissions quantification, and preparing permit applications. She is also recognized as an odor expert and odor services lead within Trinity.

She was initially hired due to her undergraduate research project with the Iowa DNR Air Quality Bureau. In her research, she investigated substitution methods for upper air meteorological data and evaluated the impacts of substituted data on AERMOD performance. She began her career with Trinity as an air dispersion modeling expert, experienced with U.S. EPA's preferred model AERMOD as well as SCREEN3 and the fogging module of CALPUFF. She has experience conducting air, odor, and fogging/icing modeling.

She has experience completing state and federal air permit applicability reviews for various industries. She has worked with chemical processing and manufacturing, concrete, electric power generation and utilities, electronics and appliance recycling, fiberglass products, hot mix asphalt, lime, medical device manufacturing, refined petroleum pipelines, and storage terminals.

Her odor project experience includes odor sampling, monitoring, modeling, complaint response and policy review/development. She is experienced utilizing the Nasal Ranger field olfactometer along with the FIDOL principles for gathering field observations. She has worked with private industry, government, tribal government, and attorneys, thereby approaching odor projects with a varied perspective. She teaches Trinity's odor courses and has presented at international conferences on odor topics as well as provided expert testimony.

Odor Sampling and Modeling – Authored and reviewed odor sampling test protocols and building envelope study plans. Collected odor air samples from point and area source locations into Tedlar bags using a vacuum chamber and field dilution probe, as well as summa canisters. Experienced in characterizing analytical laboratory results to literature detection threshold values and integrating detection and recognition threshold odor panel results, incorporating both into air dispersion modeling analyses via AERMOD to consider odor impacts from a facility. Evaluated multiple operating scenarios and incorporated stack height iterations/refinements into modeling analyses to mitigate predicted odor impacts.

Odor Policy and Global Recognition – Conducted international outreach to understand the revision status and content of changes to EN13725. Authored a paper on the misuse of odor units by regulators which was presented at two international conferences. Assisted a County in California in the development of a cannabis odor policy. Discussed benefits and consequences of different types of odor regulations, reviewed draft policy language, and assisted in responses to public comments on the ordinance. Provided ongoing support to the County during policy implementation. Provided technical comments on a recently published international odor modeling handbook authored by over 40 professionals in Asia, Australia, Europe, North America, and South America. Organized and led an international odor conference on odor management in spring 2024.

Expert Testimony & Litigation Support – Provided expert testimony focused on odor analysis, which was part of a class action lawsuit. Prepared an expert report as well as a supplemental report after deposition. Provided litigation support and/or peer review support for the following additional topics:

- Litigation support: researched international odor policies, practices, and regulations through a review of technical papers and interviews with international odor experts. Findings incorporated into technical arguments.
- Litigation support: reviewed third-party odor assessment for a concentrated animal feeding operation (CAFO) for swine. Prepared memorandum which critiqued odor emission rates and meteorological data utilized in the odor modeling assessment.
- Peer reviewer: reviewed expert report related to odor detection thresholds.
- Peer reviewer: reviewed expert report related to the appropriateness of an air permit for a surface lignite mine.

AERMOD Dispersion Modeling – Over a decade of experience performing air dispersion modeling analyses for state/federal permitting and compliance initiatives for several industries including ethanol, petroleum, lime, chemical processing, hot mix asphalt, steel, roofing products, and electric utilities. Conducted site visits to collect modeling information, including information to support fugitive source parameter characterization. Presented graphical webinars to depict model layout and model results for plant personnel to review. Managed air dispersion modeling projects for PSD permitting, state mandated modeling, and 1-hour SO2 State Implementation Plan (SIP) development. Experienced in negotiating modeling protocols with state agency modelers in Iowa, Michigan, Minnesota, North Dakota, and Wisconsin.

Prevention of Significant Deterioration Permitting – Participated as a lead consultant in three Prevention of Significant Deterioration (PSD) permitting projects and managed three PSD permitting projects in Wisconsin and Michigan in the power, lime, and chemical processing industries. In support of PSD applications, conducted complex regulatory air dispersion modeling in comparison to the Significant Impact Levels (SILs), National Ambient Air Quality Standards (NAAQS), Class II PSD Increment, and state toxics (Wisconsin's NR445, Michigan's Rule 225). Authored and reviewed permit application components including

emissions quantification, state and federal regulatory applicability reviews, Best Available Control Technology (BACT), air dispersion modeling, additional impacts, and state application forms.

State Construction and Operating Permits – Assessed the applicability of state and federal construction and operating permits for existing sites without a permit as well as proposed sites. Completed applicability determinations for state permitting exemptions for proposed projects in various industries. Authored a variety of state construction and operating permit applications (registration, general, individual state permits, permit amendments) for Michigan, Minnesota, and Wisconsin sources. Evaluated whether operating procedures and plans conform to new and revised permit conditions. Incorporated regulatory changes and proposed conditions in Title V renewal submittals.

Multimedia Modeling – Completed multimedia modeling analyses via AERMOD including fugitive dust optimization from coal piles and material transfer equipment. Evaluated mitigation measures using modeling. As part of a facility-driven safety directive, conducted fogging/icing modeling for three facilities in cold climates (Wisconsin; Alberta, Canada; British Columbia, Canada) via fogging module of CALPUFF. Assessed potential fogging and icing impacts from process stacks located at nearby roadways, including an assessment of a proposed elevated roadway near a facility property.

Annual Emissions and TRI Reporting – Participated in site visits to develop source emissions inventories incorporating existing plans and permit conditions. Gathered information for the quantification of fugitive emissions from material handling. Quantified emissions inventories for power, chemical processing, lime, sandblasting, aggregates, electronics and appliance recycling, and general manufacturing industries. Developed and optimized emissions inventory spreadsheets for state reporting in Michigan, Minnesota, and Wisconsin. Extensive experience with Wisconsin's Air Reporting System Internet Reporting Software. Prepared Toxics Release Inventory (TRI) submittals for chemical processing and sandblasting facilities using EPA TRI-ME software. Assisted in increasing the accuracy of emissions estimates through use of Water9 and various LDAR programs for emissions inventory and TRI reporting for a chemical manufacturing facility.

SELECT PUBLICATIONS AND PRESENTATIONS

Wanger, A., "Bridging the Gap Between Industry and the Community: Managing Community Engagement," Presented at the Air & Waste Management, Upper Midwest Section/Central States Water Environment Association Conference on the Environment, Virtual Conference, November 9, 2021.

Gregory, J., Wanger, A., "Managing Odour Emissions in the COVID Era," Published conference paper. Presented by Angie Wanger at Clean Air Society of Australia and New Zealand (CASANZ), Virtual Conference, May 19, 2021.

Wanger, A., "Managing Environmental Nuisances: Odor & Noise," Presented at the Air & Waste Management/Solid Waste Association of North America Arrowhead Environmental Conference, Duluth, Minnesota, August 19, 2019.

Scullion, C., Wanger, A., "The Frailty of Odour Units as a Compliance Measure," Published conference paper. Presented by Angie Wanger at Air & Waste Management Association-Annual Conference and Exhibition, Québec City, Québec, June 28, 2019.

Scullion, C., Wanger, A., "10-Years Later: British Columbia's EAB Decision and the Frailty of Odour Units as a Compliance Measure," Presented at Canadian Odour Conference, Calgary, Alberta, December 4, 2018.

Wanger, A., "Managing Environmental Nuisances: Odor & Noise," Presented by Angie Wanger at the Air & Waste Management, Upper Midwest Section/Central States Water Environment Association Conference on the Environment, Minneapolis, Minnesota, November 8, 2017.

Scullion, C., Wanger, A., "Nuisance Pollutants and the Megaphone of Social Media: New Challenges for Industry," *Environmental Quarterly*, Spring 2017, Issue No. 30.

Scullion, C., Wanger, A., "Quantifying Nuisance Odor: Only the Nose Knows," Presented via online webinar, June 15, 2016.

Dubbs, K., Wanger, A., "New Downwash Calculations Change the Playing Field," *Environmental Quarterly*, Fall 2011, Issue No. 11.

Wanger, A., "Effect of Technical Policy Changes: Multivariable Case Study," Presented at Air & Waste Management, Upper Midwest Section Dispersion Modeling Workshop: NAAQS Adaptation Strategies, Oakdale, Minnesota, September 14, 2011.

Raasch, C., Wanger, A. (Uncredited), "The Latest Developments Regarding NSR Aggregation," *Environmental Quarterly*, Spring 2009, Issue No. 1.

Raasch, C., Schroeder, A., Wanger A., "Blowing the Lid Off Dispersion Modeling: Top 10 Questions You Should Be Asking Your Dispersion Modeler Now," Presented by Clay Raasch at Federation of Environmental Technologists Inc. (FET) Environment 2008 Annual Conference & Exhibition, Milwaukee, Wisconsin, March 2008.

Wanger (née Mowrer), A., "An Analysis of Methods of Substitution of Upper Air Data in the Application of the Gaussian Dispersion Model AERMOD," Presented at the Meteorology Undergraduate Senior Symposium, Ames, Iowa, December 4, 2006.

EMPLOYMENT HISTORY

2014 – Present	Trinity Consultants – Managing Consultant
2010 – 2014	Trinity Consultants – Senior Consultant
2007 – 2010	Trinity Consultants – Consultant

HONORS AND AWARDS

Graduated with Distinction, Iowa State University
Dean's List, College of Liberal Arts and Sciences, Iowa State University
Pi Mu Epsilon, National Mathematics Honor Society
Dean's List, College of Engineering, Iowa State University