

Bryan W. Shaw, Ph.D., P.E., *Chairman*
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Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 27, 2017

Mr. Mark Wahlstrom, Wastewater Treatment Superintendent
City of Pearland
3501 East Orange Street
Pearland, Texas 77581

Re: Investigation at:
City of Pearland Reflection Bay Wastewater Reclamation Facility, 1818 Reflection Bay
Drive, Pearland, Brazoria County, Texas 77584
Investigation No.: 1423301

Dear Mr. Wahlstrom:

The Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted a focused odor survey at the above-referenced facility. Ms. Nichole Batista Nunes and Mr. Isaiah Longoria of this office conducted an investigation on June 27, 2017. No violations are being alleged as a result of the investigation.

We appreciate your assistance in this matter and your interest in protecting the quality of our environment. If you have any questions concerning these findings, or if we can be of further assistance, please contact Mr. Isaiah Longoria at this office (713) 767-3698.

Sincerely,

A handwritten signature in black ink, appearing to read "Westin Massey".

Westin Massey, Team Leader
Water Section
Houston Region Office

WM/NBN/JM

MWD_WQ0010134008_CO_20170627_Final Report
Texas Commission on Environmental Quality
Investigation Report

The TCEQ is committed to accessibility. If you need assistance in accessing this document, please contact oce@tceq.texas.gov

Customer: City of Pearland
Customer Number: CN600595052

Regulated Entity Name: CITY OF PEARLAND

Regulated Entity Number: RN101920007

Investigation # 1423301

Investigator: ISALAH LONGORIA

Conducted: 06/27/2017 -- 06/27/2017

Program(s): WASTEWATER

Investigation Type: Compliance Investigation

Incident Numbers

Site Classification DOMESTIC MAJOR

SIC Code: 4952

NAIC Code: 221320

Location: LOCATED APPROX 1000 FT N OF
MCHARD RD APPROX 1.25 MI W OF THE INTERX
OF MCHARD RD AND SH 288 IN BRAZORIA
COUNTY

Additional ID(s): TX0117501
WQ0010134008

Address: ,
, ,

Local Unit: REGION 12 - HOUSTON

Activity Type(s): WWRECONMAJ - WW Major Recon

Principal(s):

Role	Name
RESPONDENT	CITY OF PEARLAND

Contact(s):

Role	Title	Name	Phone
REGULATED ENTITY MAIL CONTACT	WASTEWATER TREATMENT SUPERINTENDENT	MR MARK WAHLSTROM	Work (281) 652-1778 Cell (713) 775-4082
REGULATED ENTITY CONTACT	WASTEWATER TREATMENT SUPERINTENDENT	MR MARK WAHLSTROM	Cell (713) 775-4082 Work (281) 652-1778
PARTICIPATED IN	TREATMENT PLANT OPERATOR II	MR DYNNIE MITCHELL	Work (281) 924-8103

Other Staff Member(s):

Role	Name
Investigator	NICHOLE NUNES
Supervisor	WESTIN MASSEY
QA Reviewer	NICHOLE NUNES

Associated Check List

Checklist Name

WQ COMPLIANCE CHECK/RECONNAISSANCE
INVESTIGATION

Unit Name

RECON

Investigation Comments:

INTRODUCTION

On June 27, 2017, Ms. Nichole Batista Nunes and Mr. Isaiah Longoria, Environmental Investigators with the Texas Commission on Environmental Quality (TCEQ) Houston Region Office, conducted a focused odor survey investigation in Fort Bend, Brazoria, and Harris counties near the City of Pearland. The purpose of this investigation was to conduct odor surveys to determine if odors were present in the area and identify potential sources.

INVESTIGATION

The investigation took place on June 27, 2017. The surrounding land use is a mix of residential, industrial, and commercial areas. The terrain is flat with sporadic forest. Meteorological conditions were as follows: Cloud Cover: scattered; Temperature: 72-84 degrees Fahrenheit; Wind Direction: East; Wind Speed: Approximately 5.8-11.5 miles per hour (mph); Precipitation: scattered showers; Humidity: 70-95% Source of Meteorological Conditions: Weather Underground (KAXH) Historical Weather Data for June 27, 2017 (Attachment 1). The primary odor survey activities were conducted in zip code 77584, some portions of the odor survey activities may have also included portions of zip codes 77053, 77545, 77583 and 77047.

The investigators arrived at the sewer lift station off Biscayne Bay Drive (Photograph 1 of Attachment 2) at approximately 9:28 AM, and conducted a 15 minute odor survey at the southwest corner of the station (Attachment 3). No odors were detected.

The investigators arrived at the Energy Transfer Odorizing Station (Photograph 2 of Attachment 2) at approximately 10:13 AM, and conducted a 15 minute odor survey on the west side of the station (Attachment 4). No odors were detected.

The investigators arrived at the north terminus of Nail Road (Photograph 3 of Attachment 2) at approximately 10:43 AM, and conducted a 15 minute odor survey (Attachment 5). The location was approximately southwest of the Blue Ridge Landfill in Fort Bend County, Texas. No odors were detected.

The investigators arrived approximately 370 yards north of Farm-To-Market Road 2234 on West Road (Photograph 4 of Attachment 2), at approximately 11:13 AM, and conducted a 15 minute odor survey (Attachment 6). The location is approximately 474 yards west of the Akzo Nobel facility in Fort Bend County, Texas. A very light odor was detected for less than a minute, but no odors were detected for the other fourteen minutes.

The investigators arrived at the northwest terminus of Hiram Clarke Road in Fort Bend County, Texas (Photograph 5 of Attachment 2) at approximately 11:37 AM, and conducted a 15 minute odor survey (Attachment 7). The location was approximately 324 yards from the Lonestar Recycling and Disposal Facility in Harris County, Texas. Light to moderated odors were detected for the first two minutes, strong odors were detected for approximately the third through fifth minutes of the odor survey, very light for the sixth and seventh minutes, and then the odors dissipated to non-detectable by the investigators for the remaining eight minutes of the odor survey. Garbage trucks were observed to be dumping into the receiving bay of the facility during the first seven minutes of the odor survey which is when the investigators documented the odors, but once the trucks left the area there were no detectable odors.

The investigators arrived at the outfall of the City of Pearland Reflection Bay Water Reclamation Facility (WRF) (Photograph 6 of Attachment 2), and conducted a 15 minute odor survey (Attachment 8). No odors were detected.

However, upon arrival to the outfall of the WRF, the investigators observed the effluent flowing from the outfall pipe to be a dark brown color. The receiving stream was fairly turbid and fast-flowing due to recent rainfall events. The investigators followed up with an inspection of the facility. The investigators met with an operator and were guided to the final treatment area and weir. The water flowing through the weir appeared to have a brown tint to it. The operator informed the investigators that there had been some timing issues in the decanting process in the sequence batch reactor (SBR) units that had occurred earlier in the day that may have caused an increase in solids

in the effluent. While the investigators were on site, the operator adjusted the timing and the flow adjusted. After a few minutes, the investigators went back to the outfall and the effluent appeared to be clearer than previously observed. Thus, it appeared the issue was resolved or in the process of being resolved. No alleged violations or additional issues were cited.

The investigators arrived at the Syntech Chemicals Inc. and Brenntag Southwest facilities in Harris County, Texas. The road in front of the two facilities, Hooper Road, was obstructed due to construction, so the investigators traveled to approximately 670 yards south of the Sam Houston Tollway in Harris County, Texas (Photograph 7 of Attachment 2), and conducted a 15 minute odor survey (Attachment 9). This location was approximately 1300 yards west of the Syntech Chemicals and Brenntag Southwest facilities. No odors were detected.

ADDITIONAL ISSUES

No additional issues were noted during this investigation.

No Violations Associated to this Investigation

Signed 
Environmental Investigator

Date 7/26/17

Signed 
Supervisor

Date 7/26/17

Attachments: (in order of final report submittal)

___ Enforcement Action Request (EAR)

☒ Letter to Facility (specify type) : No Action

___ Investigation Report

___ Sample Analysis Results

___ Manifests

___ Notice of Registration

___ Maps, Plans, Sketches

___ Photographs

___ Correspondence from the facility

☒ Other (specify) :

See list of Attachments

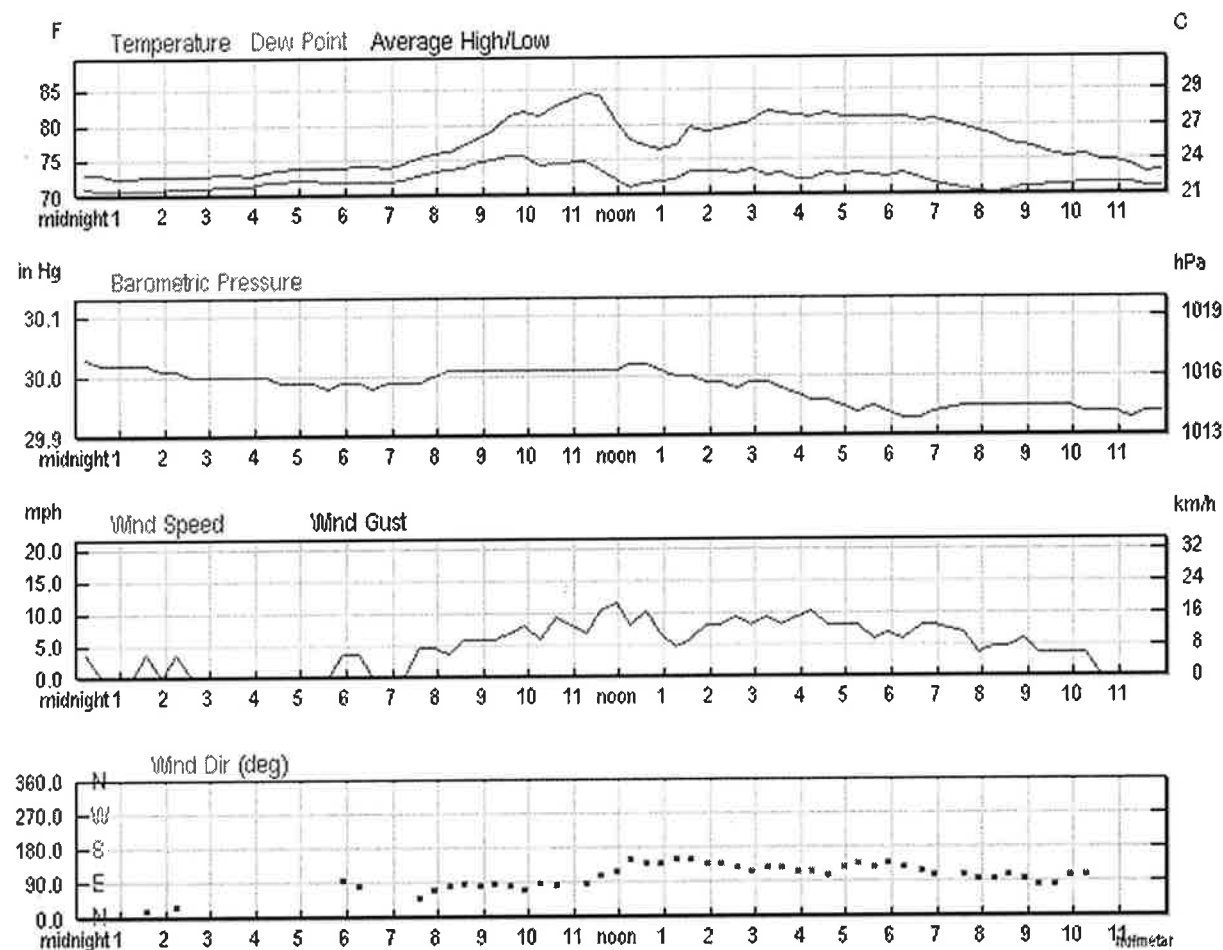
**City of Pearland Reflection Bay WRF
RN101920007
1818 Reflection Bay Drive, Pearland, Texas 77584
Investigation No.: 1423301
Odor Survey**

LIST OF ATTACHMENTS

1. Historical Weather Data for June 27, 2017
2. Photograph Attachments
3. Investigators' Odor Logs for Survey Point 1
4. Investigators' Odor Logs for Survey Point 2
5. Investigators' Odor Logs for Survey Point 3
6. Investigators' Odor Logs for Survey Point 4
7. Investigators' Odor Logs for Survey Point 5
8. Investigators' Odor Logs for Survey Point 6
9. Investigators' Odor Logs for Survey Point 7

Attachment 1

Historical Weather Data for Pearland, Texas: June 27, 2017



8:35 AM	77.0 °F	-	73.9 °F	90%	30.01 in	10.0 mi	East	5.8 mph	-	N/A	Clear
8:55 AM	78.3 °F	-	74.7 °F	89%	30.01 in	10.0 mi	East	5.8 mph	-	N/A	Clear
9:15 AM	79.3 °F	-	75.0 °F	87%	30.01 in	10.0 mi	East	5.8 mph	-	N/A	Clear
9:35 AM	81.5 °F	88.3 °F	75.7 °F	83%	30.01 in	10.0 mi	East	6.9 mph	-	N/A	Scattered Clouds
9:55 AM	81.9 °F	88.7 °F	75.6 °F	81%	30.01 in	10.0 mi	ENE	8.1 mph	-	N/A	Mostly Cloudy
10:15 AM	81.5 °F	87.4 °F	74.3 °F	79%	30.01 in	10.0 mi	East	5.8 mph	-	N/A	Mostly Cloudy
10:35 AM	82.9 °F	89.7 °F	74.5 °F	75%	30.01 in	10.0 mi	East	9.2 mph	-	N/A	Mostly Cloudy
11:15 AM	84.6 °F	92.4 °F	74.7 °F	72%	30.01 in	10.0 mi	East	6.9 mph	-	N/A	Scattered Clouds
11:35 AM	84.4 °F	91.3 °F	73.6 °F	70%	30.01 in	10.0 mi	ESE	10.4 mph	-	N/A	Mostly Cloudy

11:55 AM	80.6 °F	84.7 °F	72.1 °F	75%	30.01 in	10.0 mi	ESE	11.5 mph	-	N/A	Thunderstorm	Overcast
12:15 PM	77.9 °F	-	71.1 °F	79%	30.02 in	10.0 mi	SSE	8.1 mph	-	N/A		Mostly Cloudy
12:35 PM	77.2 °F	-	71.6 °F	83%	30.02 in	10.0 mi	SE	10.4 mph	-	N/A		Mostly Cloudy
12:55 PM	76.5 °F	-	71.8 °F	85%	30.01 in	10.0 mi	SE	6.9 mph	-	N/A		Mostly Cloudy
1:15 PM	77.0 °F	-	72.3 °F	85%	30.00 in	10.0 mi	SSE	4.6 mph	-	N/A		Scattered Clouds
1:35 PM	79.7 °F	-	73.2 °F	80%	30.00 in	10.0 mi	SSE	5.8 mph	-	N/A		Clear
1:55 PM	79.2 °F	-	73.2 °F	82%	29.99 in	10.0 mi	SE	8.1 mph	-	N/A		Clear
2:15 PM	79.5 °F	-	73.4 °F	81%	29.99 in	10.0 mi	SE	8.1 mph	-	N/A		Scattered Clouds
2:35 PM	79.9 °F	-	73.0 °F	80%	29.98 in	10.0 mi	SE	9.2 mph	-	N/A		Scattered Clouds

Attachment 2

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER QUALITY REPORT

Facility Permit/ID No.	WQ0010134008	Facility/System Name:	Reflection Bay Water Reclamation Facility (WRF)
Regulated Entity No.:	RN101920007	Address:	1818 Reflection Bay Drive, Pearland, Texas 77584
Investigation No.:	1423301		



Description: Odor Survey Location 1

1



Description: Odor Survey Location 2

2

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER QUALITY REPORT

Facility Permit/ID No.	WQ0010134008	Facility/System Name:	Reflection Bay Water Reclamation Facility (WRF)
Regulated Entity No.:	RN101920007	Address:	1818 Reflection Bay Drive, Pearland, Texas 77584
Investigation No.:	1423301		

		3
Description:	Odor Survey Location 3	

		4
Description:	Odor Survey Location 4	

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER QUALITY REPORT**

Facility Permit/ID No.	WQ0010134008	Facility/System Name:	Reflection Bay Water Reclamation Facility (WRF)
Regulated Entity No.:	RN101920007	Address:	1818 Reflection Bay Drive, Pearland, Texas 77584
Investigation No.:	1423301		



Description: Odor Survey Location 5

5



Description: Odor Survey Location 6

6

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER QUALITY REPORT**

Facility Permit/ID No.	WQ0010134008	Facility/System Name:	Reflection Bay Water Reclamation Facility (WRF)
Regulated Entity No.:	RN101920007	Address:	1818 Reflection Bay Drive, Pearland, Texas 77584
Investigation No.:	1423301		



Description:	Odor Survey Location 7	7
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Attachment 3

[LIFT STATION]

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 0928AM - 0943AM

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	ND
3	ND
4	ND
5	ND
6	ND
7	ND
8	ND
9	ND
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
16	
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Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
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Offensiveness: Highly _____ Offensive _____ Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min						
1 Hour						✓

~~total~~

Attachment 4

[ODORIZING STATION]

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 1013AM - 1028AM

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	ND
3	ND
4	ND
5	ND
6	ND
7	ND
8	ND
9	ND
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
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Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
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42	
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Offensiveness: Highly _____ Offensive _____ Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min						
1 Hour						

Attachment 5

[BLUE RIDGE LANDFILL]

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 1043AM - 1058AM

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	ND
3	ND
4	ND
5	ND
6	ND
7	ND
8	ND
9	ND
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
16	
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Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
35	
36	
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42	
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Offensiveness: Highly _____ Offensive _____ Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min 15 min						✓
1 Hour						

Attachment 6

Attachment 6

[AKZO NOBEL]

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 11:30 AM - 12:30 PM

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	ND
3	ND
4	ND
5	ND
6	ND
7	ND
8	ND
9	VL
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
16	
17	
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Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
35	
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42	
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Offensiveness: Highly _____ Offensive _____ Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min					✓	✓
1 Hour						

Attachment 7

LOWESTAR RECYCLING
AND
DISPOSAL FACILITY

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 11:37 AM - 11:52 AM

Minutes	Odor Intensity VL, L, M, S, VS
1 min	L
2	M
3	S
4	S
5	S
6	L
7	L
8	ND
9	ND
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
16	
17	
18	
19	
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22	
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Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
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42	
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Offensiveness: Highly _____ Offensive X Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min 5 min					✓	
1 Hour						

Attachment 8

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 12:35 PM - 12:52 PM

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	ND
3	ND
4	ND
5	ND
6	ND
7	ND
8	ND
9	ND
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
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Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
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42	
43	
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Offensiveness: Highly _____ Offensive _____ Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min						
1 Hour						

Attachment 9

Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: JUNE 27, 2017 Start Time: 0217pm - 0232pm

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	ND
3	ND
4	ND
5	ND
6	ND
7	ND
8	ND
9	ND
10	ND
11	ND
12	ND
13	ND
14	ND
15	ND
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27	
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29	
30	

Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
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Offensiveness: Highly _____ Offensive _____ Unpleasant _____ Not Unpleasant _____

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min 15 min						✓
1 Hour						

