

From: [Council](#)
To: [Cathy Halka](#); [Dana Brown-Davis](#); [Jill Nixon](#); [Kristi Felbinger](#); [NaDean Hanson](#)
Cc: [Mark Personius](#); [Matt Aamot](#); [Becky Boxx](#)
Subject: FW: Council needs to oversee air quality issues at Cherry Point
Date: Wednesday, August 07, 2019 8:08:59 AM
Attachments: [Phillips_66_Upset_7-8-19\(2\).pdf](#)
[P66_Inspection_Report_-_August_24_2017.pdf](#)
[4_complaints_from_residents_Odor_Complaints_6-1-2017_P66..pdf](#)

From: WENDY HARRIS [mailto:w.harris2007@comcast.net]
Sent: Wednesday, August 07, 2019 5:35 AM
To: Todd Donovan; Barbara Brenner; Barry Buchanan; Rud Browne; Satpal Sidhu; Tyler Byrd; Carol Frazey
Cc: Wendy Harris; Council
Subject: Council needs to oversee air quality issues at Cherry Point

Dear County Council Members:

Attached you will find an NWCAA Refinery Incidence Report issued early on July 9, 2019. Normally, two are issued each month. It is clear at this point, after reading these reports for a while, that the oil refineries have on-going emission problems and **the situation may be more serious than we are being advised** since problems are self-reported by refineries under the honor system. Based on personal experience, NWCAA will protect the refineries before it protects the public.

None of this is being factored into decisions regarding Cherry Point Comp. Plan amendments. This information is highly relevant and I request that council request and obtain the information available regarding flare-ups and excess emissions, in totality, over the last 5 years. The problem is always amplified during turnarounds. Council needs to have a fuller understanding of baseline total air quality impacts at Cherry Point before considering more growth and expansion.

Last year, in April, BP leaked 45 tons of sulfur over two days, 35 tons of that in the first day. Most people are unaware this occurred and no one knows what kind of health risk this created for residents. NWCAA issued the lowest fine permitted under law for a refinery emission. **There was a cover-up of a "hydrogen blob" that splashed 10-15 gallons of liquid onto the roof of Tank 300x35 at P66 on June 1, 2017, severely sickening Ferndale School children and area residents.** NWCAA claimed that because the leak occurred in the morning, and people were sickened at noon, it was not the same event. They did not tell us the time everyone was sickened, 12:30 PM, was the

same time that Tank 300x35 roof was being scrubbed and cleaned up, allowing emissions to escape and blow towards the middle school. (See attached notes from Ferndale Middle School investigation.) NWCAA said they could not determine a cause when it is all but admitted by P66. They never put their analysis in a written report which is highly unusual. They know that the tanker did not arrive until the next day and that the schools had been thoroughly checked and there was no gas leak. The alleged monitoring done at P66 involved employees sniffing with their noses and determining there was a strong sulfur smell but it stopped exactly at the P66 property line. **There is no public accountability whatsoever with this agency and it can not be relied upon to keep the public safe.**

Let us use the July 8, 2019 Incidence Report as another example of how the NWCAA leaves the public uninformed on important events. We were advised that the Phillips 66 refinery had, **“a 27 minute flaring event occurred during a process unit upset. It is possible that the 162 ppm 3-hour H2S limit for the flared gas was exceeded at 640 ppm. It is also possible the visible emission limits on the flare were exceeded. Will check the flare video camera data to verify.”** (Attached.)

These incident reports reflect possible, potential, maybe, it is conceivable but unconfirmed, “we will get back to you on that”, incidents. It is an attempt to avoid providing information to the public. In the next Refinery Incident Report, there was no follow up on this. There never is. NWCAA is very unhelpful if you ask for this information. I suspect that both the refinery and NWCAA know far more than they are willing to tell the public. For example, why wasn't the flare video camera data reviewed before this report was issued so they could confirm whether the visible emission limits were exceeded?

I have also recorded strange events that were never reported in any Refinery Incident Report. Flaring at both refineries has been increasing to the point it frightens people and is counterproductive to all the effects going into Birch Bay projects to increase tourism. All of this creates health risks for Northwest Whatcom residents.

Why are we are not told what kind of process unit was involved? What time did this occur? Was this flare-up from gas production or the new biofuel facility (and are synthetic biology experiments being conducted there now or planned for the future?). We are told that “the 162 ppm (parts per million) 3 hour H2S limit may have been exceeded at 640 ppm.” This suggests that P66 believes it is likely it was exceeded at 640. Is the 640ppm a national standard, or a limit for this facility, or the amount that the facility measured? This would be relevant information for the public. This report may

be written for others in the industry, but certainly, there should be a process for public notice that is drafted for the laymen. Why do we not have that?

It would be a better practice to routinely post these on the NWCAA website instead of using an email list few people know about.

It is difficult to understand what this flare-up emission of 640 ppm means. In fact, even the 162 ppm 3 hour limit that is allowed seems excessive. **Is this based on NWCAA's personal determination? Hydrogen sulfide in a confined space, in amounts less than released, have killed people. It is difficult to believe there would not be health impacts from 640ppm.**¹

This Incident Report reflects a rather casual attitude about a very hazardous chemical. Hydrogen Sulfide is a dangerous gas with the odor of rotten eggs.² The National Fire Protection Association (NFPA 1974) placed H₂S in the highest flammability classification. There are several sources for H₂S, but relevant here is the connection to petroleum production and refining and as a by-product of desulfurization processes in the oil and gas industries, which suggests that some of it may be transported off-site, traveling and/or idling in our community.

The EPA listed H₂S as a Hazardous Air Pollutant (HAP), but the industry went to Congress and the chemical was removed from the HAP list. The EPA then added H₂S to the Toxics Release Inventory (TRI) requiring reporting by industry, despite more industry protest. These companies always claim to put public safety first, but they fight every attempt to regulate and increase transparency.

I looked this chemical up in the PHMSA's 2016 Emergency Response Guidebook, which is the first responders' manual for hazmat accidents. Although this refers to spills and explosions rather than air emissions, it provides some framework for understanding the nature of the chemicals involved in these unplanned releases, as well as what to expect if there is transportation accident or spill while a train car with H₂S is traveling or idling in our county. Chemical spills and explosions were deemed the greatest Hazmat problem facing Whatcom County in its Hazards Mitigation plan.
<https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/ERG2016.pdf>.

Hydrogen sulfide has ID No. 1053 and Guide No. 117. (That is the same Guide number

for Hydrogen Cyanide and Methyl mercaptan). It told me this:

HEALTH • TOXIC; Extremely Hazardous. • May be fatal if inhaled or absorbed through the skin. • Initial odor may be irritating or foul and may deaden your sense of smell. • Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. • Fire will produce irritating, corrosive and/or toxic gases. • Runoff from fire control may cause pollution

FIRE OR EXPLOSION • These materials are extremely flammable. • May form explosive mixtures with air. • May be ignited by heat, sparks or flames. • Vapors from liquefied gas are initially heavier than air and spread along ground. • Vapors may travel to source of ignition and flashback. • Runoff may create fire or explosion hazard. • Cylinders exposed to fire may vent and release toxic and flammable gas through pressure relief devices. • Containers may explode when heated. • Ruptured cylinders may rocket

CALL EMERGENCY RESPONSE. • As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. • Keep unauthorized personnel away. • Stay upwind, uphill and/or upstream. • Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). • Ventilate closed spaces before entering.

EVACUATION Spill • See Table 1 - Initial Isolation and Protective Action Distances. Fire • If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

PROTECTIVE CLOTHING • Wear positive pressure self-contained breathing apparatus (SCBA). • Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. • Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Fully encapsulating, vapor-protective clothing should be worn for spills and leaks with no fire

As someone who lives in the North County coastal area, and is already quite ill with environmentally based pulmonary disease, this is frightening information. I have only recently learned that I am leaving in one of the primary areas to receive BP emissions. Why was I never advised of this when I purchased my home? It does not appear that the NWCAA does a cumulative impact analysis regarding the totality of flare-ups, or if they do, it is not made public, and there is rarely any consequence for the refinery. And nobody appears concerned about the types of chemicals idling on our trains, along with other explosive chemicals and LP.

These flare-ups are such a common occurrence now that they are changing the environment in which I live. The sky cover and color has changed at night recently, perhaps the last year or so. At night there is usually a heavy cloud inversion. The night sky is filled with white clouds and is sometimes colored with a pinkish/reddish hue. The clouds are not ordinary clouds because I have traced them back to BP, located up the road from me. I assume that P66 is behaving similarly. You can watch the cloud cover move in one ominous block at night as it spreads out. It does not feel normal or natural. Exactly what I am being exposed to that has made me so ill? How many children and adults have developed asthma, COPD or other diseases? We do not have monitors to tell us this information. The Incidence Report is normally the full extent of what I am told.

I attempted to advise the NWCAA Director that we are having nightly inversions where I live and he responded immediately with, “No, you are not.” That is not the response of an agency Director concerned with protecting public health and safety. I do not know what he knows or believes, but I do know he is ignoring my concerns. I find it highly improper that they refuse to accept my complaints, and this is not the first time it has happened. They can approve or reject my claim, but they cannot refuse to accept my claim. **This allows them to underestimate the actual number of complaints the received and look good.** Based on this, and other experiences, I assert that the NWCAA is underestimating the danger to the public from hazardous air emissions and doing an inadequate job protecting public health and safety.

For these reasons, I am asking you to consider the accidental emissions from the refineries, Alcoa and other Cherry Point industries in the comprehensive plan amendments.

- **Please make sure that each council member receives the Refinery Incident Reports.**
- **Please ask NWCAA for a total of all accidental emissions over the last 5 years for all Cherry Point industries, including the non-compliant Alcoa site, (this is not yet an official determination, but everyone has known it for some time and even the NWCAA director warned about harm to those in the local neighborhood.) (Although DOE has jurisdiction, NWCAA can obtain these records.)**
- **Add that to what is reported as having been released as well as how the approved air emissions from the AOPs have increased over the last 10 years.**
- **And it would be helpful to provide some community training on the basics of**

air quality. For too long, this county has ignored the issue despite it being our greatest environmental health risk.

- We need to get a citizen science review program started as many other communities have that live with oil refineries and trains. The NWCAA was given EPA money and is claims it is being used for school education. Shouldn't we understand the situation before we attempt to educate our young?**

I REQUEST THAT YOU DENY ANY EXPANSION AT CHERRY POINT FOR EXISTING AND PROPOSED FACILITIES INVOLVING FOSSIL FUEL AND BIOFUEL. THE PUBLIC IS NOT SAFE NOW AND THIS NEEDS TO BE ADDRESSED FIRST. THE COUNCIL NEEDS TO BE MORE INVOLVED IN AIR QUALITY MATTERS SO RESIDENTS, ESPECIALLY THE VULNERABLE, ARE PROTECTED.

Sincerely,

Wendy Harris

¹ <https://www.ncbi.nlm.nih.gov/books/NBK208170/>



NWCAA COMPLIANCE Inspection Report – August 24, 2017

Source Name: Phillips 66 Ferndale Refinery (P66)

Source Location: 3901 Unick Road, Ferndale WA 98248

Source Type: Title V Source

Description: Petroleum Refinery

Report Completed: August 30, 2017

Report Written By: Daniel A. Mahar. P.E.

Inspection Date: August 24, 2017

Arrival: 9:00 am **Departure:** 12:15 pm

Weather Conditions: Sunny, light winds, mid-60s.

Refinery Operations: Normal.

Inspection Focus: Storage tank program.

Inspection Personnel:

Dan Mahar, Engineer, NWCAA
Sandy Paris, P66 Environmental Supervisor, P66
Lauren Turner, P66 Environmental Specialist
Chris Robinson and Mike Cherochac, P66 operations – tank inspections

Inspection Details:

This inspection was a review of record in the office and we did not go into the refinery to observe any equipment.

9:00 – 12:15 pm Meeting in Conference Room

Summary; discussed progress of P66's review of their pre-draft AOP and then proceeded to a review of records and practices related to the refinery's air pollution control program for their liquid storage tanks. After the tank program review, we met with John Anderson and briefly discussed the June 1, 2017, Tank 300X35 odor incident that John was directly involved in. Review of the tank program is detailed below. In 2016, the refinery opted to meet Refinery MACT I compliance using 40 CFR 63 Subpart WW for MACT Group 1 storage tanks. In general the review is related to compliance with Subpart WW that is not yet in the AOP.

- Dimension and capacity records were reviewed for Tanks 6000X1 and 3000X1. The capacity is calculated from strapping tables were the diameter of the tank is measured a various

levels. For Tank 6000X1 the strapping table was completed in 2014 using laser measuring devices at 8 different levels. The maximum difference in diameter between levels was reported to be less than an inch (0.056' diff/280' ave. diameter). [63.1065(a)]

- EFR inspections are generally done at 50% or higher gauge due to confined space safety concerns and the tanks are locked out to prevent any roof movement during the inspections.
- Primary seal inspections are conducted with probes of varying diameter to measure the gap width. Secondary seal inspections are done with a tape measure to determine maximum seal gap width and the accumulated width is considered the maximum width times the visible length of the width. Measurement of the secondary seal gap is not consistent with the method to use probes (rods) that are increments of 1/8" in diameter. [63.1063(d)]

Follow-up: On August 29, 2017, I sent an email to Lauren Turner informing her of this discrepancy. This will be reviewed again during the next inspection.

- The refinery submits a list of tank failures and either out of service or repair dates in MACT semiannual reports. A review of the last two reports (2nd half 2016 and 1st half 2017) found that four of these dates were missing. It was also noted that the reports did not differentiate the date as being either the date the tank was taken out of service for the repair or if it was repaired while in service on that date. [63.1066(b)(2)]

Follow-up: On August 29, 2017, Lauren sent a table with supplemental information for the two semiannual reports that included missing dates and indicated she will be reformatting the table in the future semiannual reports to better clarify whether each failed tank was taken out of service to correct the problem or repaired while in service.

- MACT Semiannual reports include explanations for each delay of repair taken. Delays are most commonly used because the tank must be taken out of service for the repair and the refinery does not have alternative storage capacity available within 45 days of the failure being discovered. The lack of alternative storage capacity was cited for utilizing a delay of repair on Tank 6000x1 in October 2016. However, the repair did not require the tank to be taken out of service. The agency questioned the validity of this delay and Chris R. said that he suspected that the delay was needed because although the tank did not need to be emptied for the repair, it did need to be locked out so that the roof did not move during the repair action. [63.1063(e)]

Follow-up: I sent an email to Lauren on August 29, 2017 requesting further justification of why the delay of repair was utilized given the fact the tank did not need to be emptied and because Chris R. was not sure of the reason during the inspection.

- A review was made of in house records on seal gap and fitting inspections on Tanks 300X35, 11X92 and 900X2. They appeared to include sufficient detail to determine compliance. [63.1065(b)]
- The refinery reported that Tank 550x102 had exceeded the 11.1 psi TVP limit for the calendar month average for July 2017. I reviewed detailed records showing that the monthly average was 11.22 psi. This is based daily values including the actual liquid temperatures that are monitored. [AOP term 5.8.4]

Follow-up: I requested that a Part II excess emission report be submitted for the TPV exceedance that includes a statement as to whether it was reasonably preventable and that

includes an estimation of the amount of excess VOC that was emitted as a result. I also requested this in an email sent to Lauren on August 29, 2017.

- I asked about the frequency of finding hydrocarbon liquid on a floating roof. Chris R. said it is uncommon happening a few times every five years or so. If it is discovered the liquid is washed off with water and visually monitored to see if there was a problem with the roof or seals. The most common cause is vapor introduced into the tank that burbs at the seals splashing liquid onto the roof. This is what was thought to have happened to Tank 300X35 that caused odors around the refinery on June 1, 2017.
- Reviewed detailed records of the monthly TVP for each Group 1 tank for the last 12 months. No values close to the 11.1 psi TVP limit except for Tank 550X102 of which a deviation report was submitted. [Various AOP terms citing NWCAA 580.3]
- Reviewed work order logs for tanks 1340X111, 800X145 and 100X99 validating that required annual tank inspection were done on these tanks.
- Reviewed a record showing period when floating roofs were landed on their legs. The agency noted that the record did not include a statement that the roof refloating process was continuous. [63.1063(b)]
- Follow-up: I emailed Lauren on August 29, 2017 reiterating that the record is required to state that the refloating process was continuous. This in intended to ensure that that tanks are not operated with liquid levels rising and falling while the roof is on its legs.

This Inspection report amended on October 9, 2017 with the following.

On September 18, 2017 the NWCAA received a letter from Phillips 66 responding to three issued identified during the inspection.

1. NWCAA Request for reason for delay of repair on Tank 6000X1.

P66 Response: Seal repair required the tank to be stagnant and it could not be stagnant until other storage capacity was made available. This is what caused the delay.

2. NWCAA Request: Subpart WW requires that refilling tanks be documented as continuous.

P66 Response: Amended report submitted with required statement that refilling was continuous.

3. NWCAA Request that probes of 1/8 diameter be used for measuring secondary seal gaps as required under Subpart WW instead of the current use of a tape measure.

P66 Response: Probes will be used to measure all rim seal gaps.



COMPLAINT REPORT

#31947

COMPLAINANT INFORMATION:

Nora Weisenhorn
5710 N. Star Rd
Ferndale, WA 98248

Phone: 360-384-0974

COMPLAINT INFORMATION:

RECEIVED: 6/1/2017 2:19PM **TAKEN BY:** Caskey-Schreiber, Laurie **ANSWERING MACHINE:** N
IMPACT DATE: 6/1/2017 1:19PM **DURATION:** past hour

COMPLAINT TYPE: Odor

COMPLAINT DESCRIPTION:

She has been noticing a strong sulfur smell in the air. She thought her propane tank was leaking, but that wasn't the case. She is afraid to let her dog outside because the odor is so strong.

ALLEGED SOURCE INFORMATION:

Phillips 66 Company
3901 Unick Road
Ferndale, WA 98248

Contact(s):

R.F. (Sandy) Paris, Env. Supervisor ph:360-384-8375
Lauren Turner, Env Specialist (tanks, CEMS) ph:360-384-7888

INSPECTION INVESTIGATION ACTIONS:

ASSIGNED TO: Uhrich, Bob

INSPECTED BY: Uhrich, Bob

Date	Action	Staff	Comment
8/24/2017	Followup	Mahar, Dan	Meeting at Phillips 66 Refinery with the new HSE Manager John Anderson, Envir. Supervisor Sandy Paris, Envir. Specialist Lauren Turner and Tank Operations Chris Robinson. John Anderson led the operation to investigate an odor at the refinery during the morning of June 1, 2017. The group focused on the tank farm as the source of the odor. They sectioned off a portion of the tank farm during their investigation and climbed to the top of various tanks looking for any observable problems. After a few hours they figured out that the likely source of the odor was a burp of light hydrocarbon liquid onto the roof of recovered oil (slop oil) Tank 300X35. Arriving at the top of the tank they did not observe any liquid on the roof and dropped a sample line from a HC analyzer down into the tank above the external floating roof. The HC analyzer had high readings and they deduced that the liquid had evaporated by the time they reached to top of the tank. Burps in a tank that result in liquid getting past the floating roof seals are usually caused by vapors in the line where liquid enters the tank. The tank was determined to be undamaged with control systems including seals and fitting gaskets working properly as could be observed from the top of the tank, and they determined that no repairs to the tank were necessary. The liquid burp likely occurred during an interruption in operations at the Reformer Process Unit.

Date	Action	Staff	Comment
6/8/2017	Followup	Mahar, Dan	<p>Telephone call with P66 officials: Jolie R. (Refinery Manager), Dan T. (HSE Manager), Sandy P. (Envir. Sup.), Tim J. (Envir. Spec.) and Josh S. (PR).</p> <p>On June 1, 2017 from 8:30 - 9:80 am, a non emergency, non routine safety trip at the #3 Reformer sent oil to recovered oil external floating roof Tank 300x35. The event resulted in about 10-15 gallons of oil getting onto the roof of Tank 300x35 and odors described as light-gasoil with sulfur were noticeable inside the refinery. H2S monitoring was done around the administration building when the odors were noticeable and found no detectable H2S.</p> <p>The tank was isolated and at about 11:30 am refinery personal inspected Tank300x35 from the top and found that only residue oil was left on the roof after most of it had drained off the roof and odors in the refinery dissipated.</p> <p>The refinery did not have any odor complaints on the June 1, 2017 that were received directly by the refinery. After receiving calls from the Whatcom Fire District #7 (Chief Larry Hoffman) and the NWCAA, refinery staff did an odor survey around the perimeter of the refinery and found no odors off-site.</p> <p>It was the refinery officials understanding that the odors in the Ferndale area were of a dead animal nature as opposed to petroleum based. Refinery officials expressed their opinion that the odors in Ferndale area were not from the Phillips 66 refinery and the express concern that their refinery was implicated in a recent Komo news report. I stated that I was investigating the events within the refinery and that management from NWCAA would contact them to address their concerns.</p> <p>On June 14, 2017, Mark Buford talked to Jolie R. on the phone and Seth Preston talked to Josh S. on the phone regarding the agency's Ferndale odor investigation and the media.</p>
6/2/2017	Followup	Mahar, Toby	<p>Called Tim Johnson, P66 to review and confirm our understanding of yesterdays events at the refinery: approx 9:30 AM upset in the reformer resulted in blowdown material that was sent to a slops tank. The tank released odorous vapors and some liquid onto the tank roof. Operations immediately began working the tank farm to move the materials - that work continued for several hours. Odors were noticeable onsite immediately (strong, sulfur based) and persisted until early afternoon. Refinery personnel were doing odor surveys at fence line throughout the period, but did not detect odors beyond the plant boundary.</p>
6/1/2017	Information call Only	Uhrich, Bob	<p>Paris called to inform me that a gas leak had been detected at one of the schools that was not related to the incident at P66.</p>
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	<p>@4:35 pm Arrived at complainant's address (5882 North Star Rd). No odor detected at the time. Wind SE (125 degrees) 0-1.2 mph.</p>
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	<p>@4:33 pm Arrived at complainant's address (5710 North Star Rd). No odor detected at the time. Wind SSW (198 degrees) 0-0.4 mph.</p>
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	<p>@4:23 pm Arrived at complainant's address (3106 Thornton Rd). No odor detected at the time. Wind SSE (164 degrees) 0-0.3 mph.</p>
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	<p>@4:12 pm Arrived at complainant's address (2671 Thorton RD -Horizon Middle School). No odor detected at the time. Wind SSW (194 degrees) 0-1.2 mph. Left at 4:19 pm.</p>

Date	Action	Staff	Comment
6/1/2017	Contacted Source	Uhrich, Bob	Contacted Paris with Toby Mahar. Explained a 3rd complaint was received and shared the information. Paris reported that there was some "slops" that got out of containment and they were cleaning it up now. Found out later that EMS had been at P66 since late morning, a school had been evacuated as well. P66 sent out an industrial hygienist to the school. In a following call with Paris I asked why she did not have the EMS info at the time of my call. She explained that she had an appointment and got back to the refinery at the time of my first call and was updating me as she herself was receiving information. NWCAA dispatched an inspector to survey the area. Mahar has been in contact with EMS and the school district was well.
6/1/2017	Followup	Uhrich, Bob	Paris called back to report that they know the potential cause and are mitigating it (voice mail message).
6/1/2017	Contacted Complainant	Uhrich, Bob	Jowdy called back to say that the odor was not at his residence now. He described the odor as similar to incompletely combusted hydrocarbon and sulfur. During our conversation, Paris called and left a message.
6/1/2017	Contacted Source	Uhrich, Bob	Left message with Paris about second complaint (Kim Brook).
6/1/2017	Contacted Complainant	Uhrich, Bob	Left message with complainant Kim Brooke asking that she contact me.
6/1/2017	Contacted Source	Uhrich, Bob	Contacted Sandy Paris at P66. Explained location and description of complaint and asked that she check on current operations. Also requested that they survey for odors.
6/1/2017	Contacted Complainant	Uhrich, Bob	Left message with complainant (Joe Jowdy) to contact me.



COMPLAINT REPORT

#31946

COMPLAINANT INFORMATION:

Kim Brooke
5882 North Star Rd
Ferndale, WA 98248

Phone: 360-384-8989
Phone: 733-7799

COMPLAINT INFORMATION:

RECEIVED: 6/1/2017 1:50PM **TAKEN BY:** Caskey-Schreiber, Laurie **ANSWERING MACHINE:** Y
IMPACT DATE: 6/1/2017 1:00PM **DURATION:** past hour

COMPLAINT TYPE: Odor

COMPLAINT DESCRIPTION:

She is noticing a strong gas / sulfur like odor in the air. This has been going on for the past hour. Sometimes it smells like gas fumes mixed with sulfur and dead animals. Very strong. She believes it is coming from the Conoco refinery.

ALLEGED SOURCE INFORMATION:

Phillips 66 Company
3901 Unick Road
Ferndale, WA 98248

Contact(s):

R.F. (Sandy) Paris, Env. Supervisor ph:360-384-8375
Lauren Turner, Env Specialist (tanks, CEMS) ph:360-384-7888

INSPECTION INVESTIGATION ACTIONS:

ASSIGNED TO: Uhrich, Bob

INSPECTED BY: Uhrich, Bob

Date	Action	Staff	Comment
8/24/2017	Followup	Mahar, Dan	Meeting at Phillips 66 Refinery with the new HSE Manager John Anderson, Envir. Supervisor Sandy Paris, Envir. Specialist Lauren Turner and Tank Operations Chris Robinson. John Anderson led the operation to investigate an odor at the refinery during the morning of June 1, 2017. The group focused on the tank farm as the source of the odor. They sectioned off a portion of the tank farm during their investigation and climbed to the top of various tanks looking for any observable problems. After a few hours they figured out that the likely source of the odor was a burb of light hydrocarbon liquid onto the roof of recovered oil (slop oil) Tank 300X35. Arriving at the top of the tank they did not observe any liquid on the roof and dropped a sample line from a HC analyzer down into the tank above the external floating roof. The HC analyzer had high readings and they deduced that the liquid had evaporated by the time they reached to top of the tank. Burps in a tank that result in liquid getting past the floating roof seals are usually caused by vapors in the line where liquid enters the tank. The tank was determined to be undamaged with control systems including seals and fitting gaskets working properly as could be observed from the top of the tank, and they determined that no repairs to the tank were necessary. The liquid burp likely occurred during an interruption in operations at the Reformer Process Unit.

Date	Action	Staff	Comment
6/8/2017	Followup	Mahar, Dan	<p>Telephone call with P66 officials: Jolie R. (Refinery Manager), Dan T. (HSE Manager), Sandy P. (Envir. Sup.), Tim J. (Envir. Spec.) and Josh S. (PR).</p> <p>On June 1, 2017 from 8:30 - 9:80 am, a non emergency, non routine safety trip at the #3 Reformer sent oil to recovered oil external floating roof Tank 300x35. The event resulted in about 10-15 gallons of oil getting onto the roof of Tank 300x35 and odors described as light-gasoil with sulfur were noticeable inside the refinery. H2S monitoring was done around the administration building when the odors were noticeable and found no detectable H2S.</p> <p>The tank was isolated and at about 11:30 am refinery personal inspected Tank300x35 from the top and found that only residue oil was left on the roof after most of it had drained off the roof and odors in the refinery dissipated.</p> <p>The refinery did not have any odor complaints on the June 1, 2017 that were received directly by the refinery. After receiving calls from the Whatcom Fire District #7 (Chief Larry Hoffman) and the NWCAA, refinery staff did an odor survey around the perimeter of the refinery and found no odors off-site.</p> <p>It was the refinery officials understanding that the odors in the Ferndale area were of a dead animal nature as opposed to petroleum based. Refinery officials expressed their opinion that the odors in Ferndale area were not from the Phillips 66 refinery and the express concern that their refinery was implicated in a recent Komo news report. I stated that I was investigating the events within the refinery and that management from NWCAA would contact them to address their concerns.</p> <p>On June 14, 2017, Mark Buford talked to Jolie R. on the phone and Seth Preston talked to Josh S. on the phone regarding the agency's Ferndale odor investigation and the media.</p>
6/2/2017	Followup	Mahar, Toby	<p>Called Tim Johnson, P66 to review and confirm our understanding of yesterdays events at the refinery: approx 9:30 AM upset in the reformer resulted in blowdown material that was sent to a slops tank. The tank released odorous vapors and some liquid onto the tank roof. Operations immediately began working the tank farm to move the materials - that work continued for several hours. Odors were noticeable onsite immediately (strong, sulfur based) and persisted until early afternoon. Refinery personnel were doing odor surveys at fence line throughout the period, but did not detect odors beyond the plant boundary.</p>
6/1/2017	Information call Only	Uhrich, Bob	Paris called to inform me that a gas leak had been detected at one of the schools that was not related to the incident at P66.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:35 pm Arrived at complainant's address (5882 North Star Rd). No odor detected at the time. Wind SE (125 degrees) 0-1.2 mph.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:33 pm Arrived at complainant's address (5710 North Star Rd). No odor detected at the time. Wind SSW (198 degrees) 0-0.4 mph.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:23 pm Arrived at complainant's address (3106 Thornton Rd). No odor detected at the time. Wind SSE (164 degrees) 0-0.3 mph.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:12 pm Arrived at complainant's address (2671 Thornton RD -Horizon Middle School). No odor detected at the time. Wind SSW (194 degrees) 0-1.2 mph. Left at 4:19 pm.

Date	Action	Staff	Comment
6/1/2017	Contacted Source	Uhrich, Bob	Contacted Paris with Toby Mahar. Explained a 3rd complaint was received and shared the information. Paris reported that there was some "slops" that got out of containment and they were cleaning it up now. Found out later that EMS had been at P66 since late morning, a school had been evacuated as well. P66 sent out an industrial hygienist to the school. In a following call with Paris I asked why she did not have the EMS info at the time of my call. She explained that she had an appointment and got back to the refinery at the time of my first call and was updating me as she herself was receiving information. NWCAA dispatched an inspector to survey the area. Mahar has been in contact with EMS and the school district was well.
6/1/2017	Followup	Uhrich, Bob	Paris called back to report that they know the potential cause and are mitigating it (voice mail message).
6/1/2017	Contacted Complainant	Uhrich, Bob	Jowdy called back to say that the odor was not at his residence now. He described the odor as similar to incompletely combusted hydrocarbon and sulfur. During our conversation, Paris called and left a message.
6/1/2017	Contacted Source	Uhrich, Bob	Left message with Paris about second complaint (Kim Brook).
6/1/2017	Contacted Complainant	Uhrich, Bob	Left message with complainant Kim Brooke asking that she contact me.
6/1/2017	Contacted Source	Uhrich, Bob	Contacted Sandy Paris at P66. Explained location and description of complaint and asked that she check on current operations. Also requested that they survey for odors.
6/1/2017	Contacted Complainant	Uhrich, Bob	Left message with complainant (Joe Jowdy) to contact me.



COMPLAINT REPORT

#31945

COMPLAINANT INFORMATION:

Joe Jowdy
3106 Thornton Road
Ferndale, WA 98248

Phone: 413 320-7607

COMPLAINT INFORMATION:

RECEIVED: 6/1/2017 1:37PM **TAKEN BY:** Caskey-Schreiber, Laurie **ANSWERING MACHINE:** N
IMPACT DATE: 6/1/2017 11:30AM **DURATION:** past 2 hours

COMPLAINT TYPE: Odor

COMPLAINT DESCRIPTION:

He was out walking his dog, on the corner of Thornton and Barr Roads, and he was hit with some very strong gas like fumes. The odor was so strong it made him physically sick. After he went home, he smelled it at his home and had to shut all of his windows. They live near Intalco or the P66 refinery.

ALLEGED SOURCE INFORMATION:

Phillips 66 Company
3901 Unick Road
Ferndale, WA 98248

Contact(s):

R.F. (Sandy) Paris, Env. Supervisor ph:360-384-8375
Lauren Turner, Env Specialist (tanks, CEMS) ph:360-384-7888

INSPECTION INVESTIGATION ACTIONS:

ASSIGNED TO: Uhrich, Bob

INSPECTED BY: Uhrich, Bob

Date	Action	Staff	Comment
8/24/2017	Followup	Mahar, Dan	Meeting at Phillips 66 Refinery with the new HSE Manager John Anderson, Envir. Supervisor Sandy Paris, Envir. Specialist Lauren Turner and Tank Operations Chris Robinson. John Anderson led the operation to investigate an odor at the refinery during the morning of June 1, 2017. The group focused on the tank farm as the source of the odor. They sectioned off a portion of the tank farm during their investigation and climbed to the top of various tanks looking for any observable problems. After a few hours they figured out that the likely source of the odor was a burp of light hydrocarbon liquid onto the roof of recovered oil (slop oil) Tank 300X35. Arriving at the top of the tank they did not observe any liquid on the roof and dropped a sample line from a HC analyzer down into the tank above the external floating roof. The HC analyzer had high readings and they deduced that the liquid had evaporated by the time they reached to top of the tank. Burps in a tank that result in liquid getting past the floating roof seals are usually caused by vapors in the line where liquid enters the tank. The tank was determined to be undamaged with control systems including seals and fitting gaskets working properly as could be observed from the top of the tank, and they determined that no repairs to the tank were necessary. The liquid burp likely occurred during an interruption in operations at the Reformer Process Unit.

Date	Action	Staff	Comment
6/8/2017	Followup	Mahar, Dan	<p>Telephone call with P66 officials: Jolie R. (Refinery Manager), Dan T. (HSE Manager), Sandy P. (Envir. Sup.), Tim J. (Envir. Spec.) and Josh S. (PR).</p> <p>On June 1, 2017 from 8:30 - 9:80 am, a non emergency, non routine safety trip at the #3 Reformer sent oil to recovered oil external floating roof Tank 300x35. The event resulted in about 10-15 gallons of oil getting onto the roof of Tank 300x35 and odors described as light-gasoil with sulfur were noticeable inside the refinery. H2S monitoring was done around the administration building when the odors were noticeable and found no detectable H2S.</p> <p>The tank was isolated and at about 11:30 am refinery personal inspected Tank300x35 from the top and found that only residue oil was left on the roof after most of it had drained off the roof and odors in the refinery dissipated.</p> <p>The refinery did not have any odor complaints on the June 1, 2017 that were received directly by the refinery. After receiving calls from the Whatcom Fire District #7 (Chief Larry Hoffman) and the NWCAA, refinery staff did an odor survey around the perimeter of the refinery and found no odors off-site.</p> <p>It was the refinery officials understanding that the odors in the Ferndale area were of a dead animal nature as opposed to petroleum based. Refinery officials expressed their opinion that the odors in Ferndale area were not from the Phillips 66 refinery and the express concern that their refinery was implicated in a recent Komo news report. I stated that I was investigating the events within the refinery and that management from NWCAA would contact them to address their concerns.</p> <p>On June 14, 2017, Mark Buford talked to Jolie R. on the phone and Seth Preston talked to Josh S. on the phone regarding the agency's Ferndale odor investigation and the media.</p>
6/2/2017	Followup	Mahar, Toby	<p>Called Tim Johnson, P66 to review and confirm our understanding of yesterdays events at the refinery: approx 9:30 AM upset in the reformer resulted in blowdown material that was sent to a slops tank. The tank released odorous vapors and some liquid onto the tank roof. Operations immediately began working the tank farm to move the materials - that work continued for several hours. Odors were noticeable onsite immediately (strong, sulfur based) and persisted until early afternoon. Refinery personnel were doing odor surveys at fence line throughout the period, but did not detect odors beyond the plant boundary.</p>
6/1/2017	Information call Only	Uhrich, Bob	Paris called to inform me that a gas leak had been detected at one of the schools that was not related to the incident at P66.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:35 pm Arrived at complainant's address (5882 North Star Rd). No odor detected at the time. Wind SE (125 degrees) 0-1.2 mph.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:33 pm Arrived at complainant's address (5710 North Star Rd). No odor detected at the time. Wind SSW (198 degrees) 0-0.4 mph.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:23 pm Arrived at complainant's address (3106 Thornton Rd). No odor detected at the time. Wind SSE (164 degrees) 0-0.3 mph.
6/1/2017	Site visit in response to complaint(s)	Brown, Rebecca	@4:12 pm Arrived at complainant's address (2671 Thorton RD -Horizon Middle School). No odor detected at the time. Wind SSW (194 degrees) 0-1.2 mph. Left at 4:19 pm.

Date	Action	Staff	Comment
6/1/2017	Contacted Source	Uhrich, Bob	Contacted Paris with Toby Mahar. Explained a 3rd complaint was received and shared the information. Paris reported that there was some "slops" that got out of containment and they were cleaning it up now. Found out later that EMS had been at P66 since late morning, a school had been evacuated as well. P66 sent out an industrial hygienist to the school. In a following call with Paris I asked why she did not have the EMS info at the time of my call. She explained that she had an appointment and got back to the refinery at the time of my first call and was updating me as she herself was receiving information. NWCAA dispatched an inspector to survey the area. Mahar has been in contact with EMS and the school district was well.
6/1/2017	Followup	Uhrich, Bob	Paris called back to report that they know the potential cause and are mitigating it (voice mail message).
6/1/2017	Contacted Complainant	Uhrich, Bob	Jowdy called back to say that the odor was not at his residence now. He described the odor as similar to incompletely combusted hydrocarbon and sulfur. During our conversation, Paris called and left a message.
6/1/2017	Contacted Source	Uhrich, Bob	Left message with Paris about second complaint (Kim Brook).
6/1/2017	Contacted Complainant	Uhrich, Bob	Left message with complainant Kim Brooke asking that she contact me.
6/1/2017	Contacted Source	Uhrich, Bob	Contacted Sandy Paris at P66. Explained location and description of complaint and asked that she check on current operations. Also requested that they survey for odors.
6/1/2017	Contacted Complainant	Uhrich, Bob	Left message with complainant (Joe Jowdy) to contact me.



INCIDENT REPORT

Phillips 66 Company, Upset 7/9/2019

REG NO: 1004

DATE OF REPORT: 7/9/2019

SOURCE: Phillips 66 Company
3901 Unick Road
Ferndale, WA 98248

INCIDENT START: 7/9/2019 11:28

INCIDENT END: 7/9/2019 11:55

TYPE OF INCIDENT: Upset

REPORTED BY:

PHONE:

SUMMARY: Flaring from process unit upset

DESCRIPTION: A 27 minute flaring event occurred during a process unit upset. It is possible that the 162 ppm 3-hour H2S limit for the flared gas was exceeded at 640 ppm. It is also possible the visible emission limits on the flare were exceeded. Will check the flare video camera data to verify.

EQUIPMENT: Flare

ESTIMATED EMISSIONS:

TAKEN BY: Mahar, Dan

ASSIGNED TO: Mahar, Dan

INVESTIGATION SUMMARY
