

**From:** [Council](#)  
**To:** [Cathy Halka](#); [Dana Brown-Davis](#); [Jill Nixon](#); [Kristi Felbinger](#); [NaDean Hanson](#)  
**Cc:** [Matt Aamot](#); [Mark Personius](#); [Becky Boxx](#)  
**Subject:** FW: Refinery Incident Reports  
**Date:** Wednesday, July 17, 2019 8:24:17 AM  
**Attachments:** [Phillips 66 Upset 7-8-19 \(1\).pdf](#)

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**From:** WENDY HARRIS [mailto:w.harris2007@comcast.net]  
**Sent:** Wednesday, July 17, 2019 8:21 AM  
**To:** Barbara Brenner; Barry Buchanan; Rud Browne; Satpal Sidhu; Tyler Byrd; Todd Donovan; Carol Frazey; Council  
**Subject:** Refinery Incident Reports

**Here is the latest Incidence Report issued twice a month by NWCAA for the refineries. 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 and NWCAA makes little effort to inform the public. This relevant information should be considered by the county council before it makes determinations regarding Cherry Point expansion. I request that council request and obtain information regarding flare-ups and excess emissions, in totality, over the last 5 years.**

Last year, in April, BP leaked 45 tons of sulfur over a two day period, 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. The year before there was a cover up of a flare-up at P66 involving a hydrogen blob that made its way to the top of the roof of a processing unit, sickening Ferndale middle school children. NWCAA said it could reach no conclusion but failed to produce a public report reflecting analysis of the incident, something that I have never seen before from a government office. There is no public accountability and that concerns me greatly.

This recent Incidence Report is an example of the types of issues that arise but are not addressed. We were advised that on July 8th, at the Phillips 66 refinery, "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."

These incident reports are usually worded in terms of "possible", "potential" etc. No follow up is provided, at least not to me. 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? The 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. It creates more risk for Ferndale middle school children and area residents.

Why are we 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?). There is much relevant information that is being withheld.

We are told that "the 162 ppm (parts per million) 3 hour H<sub>2</sub>S limit may have been exceeded at 640 ppm." How were these limits determined and by whom? 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 as an open emission

. Is any attempt ever made to assess these things?

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 a limited circulation email list. Where is the accountability and transparency?

**This Incident Report reflects a rather casual attitude about a very hazardous chemical. "H<sub>2</sub>S" is Hydrogen Sulfide.** It is a dangerous gas with the odor of rotten eggs. The National Fire Protection Association (NFPA 1974) placed H<sub>2</sub>S in the highest flammability classification. There are a number of sources for H<sub>2</sub>S, 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 H<sub>2</sub>S as a Hazardous Air Pollutant (HAP), but the industry took its case to Congress and had them pass a law removing it. The EPA then added H<sub>2</sub>S to the Toxics Release Inventory (TRI) requiring reporting by industry, despite more

industry protest. These companies claim to put public safety first, but if they did, they would not fight every attempt to regulate and reduce their profits.

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, which is the greatest Hazmat problem facing Whatcom County.

<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 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 flash back. • 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. 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. These types of emissions are unlikely to be picked up on the two public air monitors in the county. **No one takes action to better protect the public even though we live downhill of the refineries and idling trains, and there are many ground spreading toxic chemicals and gases that pose a particular risk.**

For these reasons, I am asking you to consider the accidental emissions from the refineries, Alcoa and other Cherry Point industries. 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 industry, 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.) 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. That should provide you with some understanding of the how much expansion has already occurred and the risks our residents currently carry.

**BASED ON A TOTALITY OF SAFETY FACTORS, I AM ASKING YOU TO CONFIRM THESE FACTS AND DENY ANY EXPANSION AT CHERRY POINT.**

Please post this with other comments for Cherry Point comp. plan amendments.

Sincerely,

Wendy Harris