

April 29, 2019

Laurie Grandchamp
P.E., Chief
Office of Air Resources
RI Department of Environmental Management
235 Promenade Street, Providence RI 02908
ATTN: Ruth Gold, David Del Sesto

RE: Title V Operating Permit, Shell Oil Products US, 520 Allens Ave, Providence, RI 02905

To Whom It May Concern,

Per 250-RICR-120-05-29, No LNG in PVD and the Washington Park Neighborhood Association (WPNA) jointly request a public hearing on the Title V Operating Permit for Shell Oil Products US Terminal (Shell Terminal) at 520 Allens Ave, Providence RI 02905. Both organizations meet the requirement of “an association having not less than 10 members” to request a public hearing. This request is also supported by Climate Action RI, Nature’s Trust Rhode Island, Sierra Club – Rhode Island Chapter, and Sunrise RI.

WPNA is the official neighborhood association for the neighborhood of Washington Park, Providence, where the Shell Terminal is located. WPNA has a membership email list of over 250 people and represents the overall neighborhood of over 8,750 people. No LNG in PVD is a grassroots environmental justice campaign led by residents of Washington Park with an email list of over 1800 people and a core leadership team of 16 people. All of the additional supporting organizations are also associations with more than 10 members.

We request a public hearing that is fully accessible to the impacted community. It should occur in Washington Park and/or South Providence in a location that is welcoming to community members, such as a community center, church, or school. Past Rhode Island Department of Environmental Management (DEM) hearings on environmental justice problems in the community were held in a police station or a guarded theater venue that did not allow bags, food or drink inside. This is intimidating and discourages public participation, and is not acceptable for this or any public hearing. Interpretation should be provided in the languages spoken in the impacted community, and the space should be welcoming to families and children as well as accessible for community members with disabilities. The public hearing must be held at a time that is convenient for community members to attend – on a week day evening starting at 5:30 or 6pm or during the day on a weekend.

We also request an extension of the comment period past April 29, 2019 and request that the RI DEM conduct outreach and community engagement in Washington Park and South Providence. Because the area most directly impacted by the Shell Terminal is an Environmental Justice Community, DEM should conduct community outreach in order to obtain substantive

engagement in this decision making and permitting process. Community engagement can also inform the best time and location for a public hearing.

The following comments are an overview of some of the concerns about the environmental justice impacts of Shell Terminal. These comments are not comprehensive and more extensive comments are needed from both impacted community and technical experts.

Community Impacted

According to the EPA ECHO (Enforcement and Compliance History Online) website Detailed Facility Report (FRS ID 110000312894), the demographic profile of the community living within 1 mile of Shell Terminal is¹:

Total Persons	18,663
Population Density	7,832/sq.mi.
Percent Minority	83%
Households in Area	5,442
Housing Units in Area	6,227
Households on Public Assistance	484
Persons Below Poverty Level	10,072

Race Breakdown - Persons (%)	
White	5,927 (32%)
African-American	4,578 (25%)
Hispanic-Origin	10,150 (54%)
Asian/Pacific Islander	904 (5%)
American Indian	324 (2%)
Other/Multiracial	6,929 (37%)

Education Level (Persons 25 & older) - Persons (%)	
Less than 9th Grade	1,813 (19.2%)
9th through 12th Grade	1,331 (14.09%)
High School Diploma	2,861 (30.29%)
Some College/2-year	1,985 (21.02%)
B.S./B.A. or More	1,455 (15.4%)

¹ <https://echo.epa.gov/detailed-facility-report?fid=110000312894#summary>

The number of people living within 1 mile could be even greater than the 18,633 identified in the ECHO facility report. EPA's EJSCREEN tool provides the ability to draw the boundaries of a site and map the environmental and demographic data (ACS 2012-2016) within 1 mile of the boundaries. EJSCREEN identifies 28,676 people within 1 mile, 80% of whom are people of color. Communities of color are directly impacted and in very close proximity to the Shell Terminal. According to EJSCREEN, within a half mile of the Shell Terminal boundaries there are 9,992 people, 82% of whom are people of color, and within just one quarter mile, there are still 2,083 people, 89% of whom are people of color. The neighborhood is densely populated, at 7100 people per square mile.

Air Pollution: Toxic Release Inventory

According to the EPA's Toxic Release Inventory (TRI), Shell Terminal is the largest emitter of toxic air pollution in Providence with 2614 pounds of toxic air pollution.² In 2017 the facility reported 2641 pounds of total emissions of air toxics, which represents 62% of all of the air toxics released in Providence from facilities listed in TRI. The 2,641 pounds of air toxics released in 2017 was higher than the 2,450 pounds released in 2016 and the 1,984 pounds released in 2015, it was the highest amount of air pollution released in any year since 2009. In 2017 Shell Terminal reported releases of the following amounts of air toxics:

- 64 pounds of 1,2,4-TRIMETHYLBENZENE
- 332 pounds of Benzene
- 3 pounds Cumene
- 170 pounds Ethylbenzene
- 653 pounds N-Hexane
- 12 pounds Napthalene
- 7 pounds Styrene
- 650 pounds Toluene
- 842 pounds Xylene

While all of the chemicals listed above that were released by the Shell Terminal in 2017 pose a human health risk, Benzene is listed as carcinogenic by the Center for Disease Control (CDC). According to the CDC website, "People who breathe in high levels of benzene may develop the following signs and symptoms within minutes to several hours: drowsiness, dizziness, rapid or irregular heartbeat, headaches, tremors, confusion, unconsciousness, and death (at very high levels).³ Long-term exposure to benzene effects the ability of bone marrow to produce red blood cells, leading to anemia, excessive bleeding, effects on the immune system, and leukemia (cancer of the blood-forming organs).

² https://oaspub.epa.gov/enviro/multisys2_v2.get_list?facility_uin=110000312894

³ <https://emergency.cdc.gov/agent/benzene/basics/facts.asp>

The International Agency for Research on Cancer states that long-term exposure to ethylbenzene may cause cancer in humans. Even low concentrations of ethylbenzene causes irreversible damage to the inner ear and hearing and kidney damage in animals.⁴

The Department of Health and Human Services, National Toxicology Program lists styrene as “reasonably anticipated to be a human carcinogen and the International Agency for Research on Cancer lists it as a possible carcinogen. Styrene also impacts the nervous system.⁵

Asthma

As a state, Rhode Island is ranked ninth highest asthma rate in the country by having 10.9% of the population suffering from asthma compared to the national average of 8.4%.⁶ While Rhode Island as a whole is ranked ninth highest asthma rate in the nation, Providence has the highest asthma rate in the state with 13.7 asthma emergency department rates per 1000. Maps prepared by the Rhode Island Department of Health rank the neighborhoods directly impacted by Shell Terminal’s pollution, Washington Park and South Providence, as having the highest indices of asthma.⁷ Asthma impacts the health, education and income of families.

Risk and Incident History

The ongoing release of air toxics at Shell Terminal is not the only air quality impact affecting the community. There is additional risk from catastrophic incidents and accidental releases, and the facility has a history of concerning incidents.

The EPA’s Risk Screening Environmental Indicators (RSEI) score is based on factors that contribute to human health risk – the amounts of chemicals released, the toxicity of those chemicals, and the size of the population exposed to those chemical releases. According to the EPA’s RSEI score for Shell Terminal⁸, in the most recent year of available data (2017) Shell Terminal’s RSEI score was 1,870 compared to the industry average score of 496 for bulk petroleum terminals. In comparison, the national median average score is just 16 and Rhode Island’s state median average score is even lower at 8. This means that this facility’s score is 3.8 times higher than the industry average for comparable facilities. It is 117 times higher than the US average, and 234 times higher than Rhode Island’s statewide average.

4 <https://www.atsdr.cdc.gov/phs/phs.asp?id=381&tid=66>

5 <https://www.atsdr.cdc.gov/phs/phs.asp?id=419&tid=74>

6 <https://www.ecori.org/public-safety/2019/4/22/toxic-avenue-leads-to-ignored-neighborhood-problems>

7 <https://www.ecori.org/pollution-contamination/2019/2/14/rhode-island-ranks-9th-for-asthma-cities-suffer-most>

8 <https://oaspub.epa.gov/enviro/rsei.html?facid=02905MTVNT520AL>

Year	Facility Score	Industry Median (Petroleum Bulk Stations and Terminals)	County Median (PROVIDENCE)	State Median (RI)	U.S. Median
2008	2,209	956	5	4	24
2009	1,734	713	5	4	19
2010	1,898	586	5	4	22
2011	1,591	535	5	4	22
2012	1,584	604	5	5	22
2013	1,505	542	5	4	19
2014	1,494	494	5	5	17
2015	1,630	462	5	4	16
2016	1,982	561	6	4	15
2017	1,870	496	10	8	16

The risk from Shell Terminal isn't just an abstract RSEI score – there have been a history of incidents at the facility. In July 2006 lighting struck a tanker ship docked at the facility (then Motiva, co-owned by Shell and Saudi Aramco) that caused a fire and major damage, closing the facility for months⁹. In January 2015 a small fire broke out at the facility¹⁰. In March 2017 a train carrying ethanol to the facility derailed on Allens Ave¹¹. In October 2018 a gasoline tanker that had just filled up at the facility overturned and spilled its contents down the I-95 on ramp onto Allens Ave next to the Shell Terminal¹².

Many of these incidents could have easily been much worse. The recent ITC Terminals tank farm fire in Deer Park TX burned for days shows the danger and potential impact if the storage tanks at this facility were to ignite. And yet this facility, and other dangerous fuel terminals like it, are not required to have Risk Management Plans because they have been exempted due to industry loophole in the Clean Air Act Section 112(r) Risk Management Plan (RMP) regulations.

The word “risk” is not mentioned once in the draft permit, and the word “accident” is only referenced in one short paragraph. In the draft permit Section III Special Provisions, part A: Prevention of Accidental Releases, there is a single reference to the Clean Air Act’s Section 112(r) General Duty Clause “to prevent releases and to minimize consequences of accidental releases.” But there are no explicit requirements in the draft permit requiring a Risk Management Plan to assess and prepare for worst cast scenarios. Given the history of accidents at the facility and the vulnerability to storm surges, this is unacceptable.

9 <https://www.cspdailynews.com/fuels/motiva-fire-sparks-supply-questions>

10 <https://www.wpri.com/news/fire-at-motiva-facility-quickly-extinguished/1043946679>

11 <https://www.wpri.com/news/local-news/site-of-derailment-stores-up-to-80-tanker-cars-full-of-ethanol/1044384057>

12 <https://www.providencejournal.com/news/20181003/tanker-rolls-spills-gasinto-providence-river>

Sea Level Rise and Storm Surge

The STORMTOOLS map for a 100-year storm shows that almost the entire Shell Terminal would be impacted, even before adding the sea level rise expected in the years to come:

- Is my property vulnerable to a 100-year return period (1% annual chance) COASTAL STORM, and how DEEP will the water be?



	<= 1
	2
	4
	6
	8
	10
	>10
	Adjacent Lowlying Area



Shell is one the largest fossil fuel companies in the world and is responsible for a large amount of the global greenhouse gas emissions that are causing climate change and generating the climate impacts and risks that are now threatening this facility. The operation of the facility and air pollution released has caused harm to the neighboring community, and any future incident caused by climate-related impacts will also disproportionately harm the neighboring community.

Conclusion

Business as usual at Shell Terminal is not acceptable to our community. Air pollution from this facility is an ongoing environmental injustice. The draft permit should not be approved, and ideally a large high-risk fuel storage facility and major air polluter should not be allowed to operate in a high-density residential area that is also at risk of sea level rise and storm surge.

Significant changes are needed to improve air quality and address environmental justice issues, and the impacted community needs to be meaningfully involved in all decision-making.

Emission standards should be made much more stringent. Compliance and enforcement operations should actively inspect enforce those standards, and high fines and penalties should be incurred for any emissions that risk causing health impacts. The funds generated from these fines should support community-based projects for disaster preparedness, climate resilience, and environmental improvements in Washington Park and South Providence.

DEM should also require that Shell Terminal immediately commence actions to protect the hazardous facility from sea level rise and storm surge, using the highest range scientific projections for sea level rise and based on a 500 or 1000 year storm event. A Risk Management Plan for worst case scenarios should be required, and shared with the impacted community to inform the community's emergency response and disaster preparedness plans. As the party responsible for the risk, Shell should be required to pay into a community-controlled neighborhood fund for multilingual and culturally relevant community preparedness activities.

It is a part of DEM's mission to build healthy and more resilient communities, now is the time for DEM to protect Washington Park and South Providence residence from the exposure to toxic chemicals, carcinogens, asthma causing pollution and an increased danger during a disaster.

Signed:

Monica Huertas
No LNG in PVD

Linda Perri
Washington Park Neighborhood Association

With the endorsement and support of:

Climate Action RI
Nature's Trust Rhode Island
Sierra Club – Rhode Island Chapter
Sunrise RI