

535 Dock Street
Suite 213

Tacoma, WA 98402 Phone (253) 383-2429 chb@healthybay.org

www.healthybay.org

April 21, 2022

Shirley Schultz

City of Tacoma Planning and Development Services

747 Market Street, 3rd Floor

Tacoma, WA 98402

Submitted electronically to shirley.schultz@cityoftacoma.org

Re: Bridge Industrial BNSF Critical Area Development Permit and State Environmental Policy Act (SEPA) checklist - LU21-0125

Dear Ms. Schultz,

Executive Director

Melissa Malott

Thank you for providing the opportunity to review and comment on the Bridge Industrial BNSF Critical Area Development Permit and SEPA checklist for project number LU21-0125, hereinafter referred to as the "Project".

Board of Directors
Dana Coggon
Desiree Wilkins Finch
Barry Goldstein
Anders Ibsen
Candice Ruud

Sheri Tonn

Alan Varsik

Communities for a Healthy Bay (CHB) is a 31-year-old organization whose mission is to represent and engage people in the cleanup, restoration, and protection of Commencement Bay, its surrounding waters and natural habitat. We are a 501(c)3 nonprofit providing practical, solutions-based environmental leadership in the Puget Sound area. We work side-by-side with residents, businesses, and government to prevent and mitigate pollution and to make our community healthier and more vibrant.

A tax-exempt 501(c)(3) Washington nonprofit corporation We understand the Project involves the redevelopment of a 147.49-acre site in South Tacoma. The applicant is proposing to construct three double-loaded buildings and one single-loaded building totally approximately 2,500,000 square feet. This construction would occur after the site is cleared and graded, and after parking lots, truck courts, private access roads, and associated infrastructure for stormwater treatment, sanitary sewer, and water main extensions are built. The City of Tacoma is proposing to issue a Mitigated Determination of Non-significance (MDNS) for the Project.

CHB staff and members of our Policy and Technical Advisory Committee have spent many hours reviewing the permit application and associated documents. After our review, it is clear the Project will have measurable significant adverse impacts to both human and environmental health, which we will detail below. Further, the permit application provides an inadequate analysis of the Project's impacts, and omits significant amounts of information about the Project's activities that are required under SEPA.

Due to this missing significant information in the project proposal and inadequate analysis of impacts that are required under SEPA - and the known and measurable significant adverse human and environmental health impacts posed by the Project - we urge the City of Tacoma to issue a Determination of Significance for the Project, and prepare an Environmental Impact Statement (EIS).

Inadequate Description of Groundwater and Surface Water Impacts

The Project site sits on top of the South Tacoma aquifer, which at times supplies up to 40 percent of Tacoma's drinking water. 1 Groundwater flow below the site is recharged from as far southeast as Highway 161 and flow is generally to the west and north, eventually discharging to Puget Sound between the Narrows Bridge on the north to University Place on the south in the Tacoma Narrows region. Recharge amounts vary from 5-30 inches per year, largely controlled by the amount of urbanization. The SEPA checklist states that the site will become 75 percent impervious surface at project completion – we have strong concerns about the longevity and viability of this aguifer should this site become majority impervious surface. Given the annual average precipitation of nearly 40 inches, complete urbanization will reduce infiltration from about 23 inches (for those areas presently without trees) to about 5 inches per year. For the surfaces that are presently tree covered, the reduction will be from 18 inches to 5 inches, and for mixed (tree and non-tree covered) surfaces, complete urbanization will reduce infiltration from about 12 to 5 inches of recharge per year. With these facts in mind, we request the following questions be addressed through the lens of an EIS: How will the almost complete urbanization of this space impact the South Tacoma aquifer? How will the annual recharge rate change? How will this change impact Tacoma's access to clean drinking water? Given that we are already experiencing, and will continue to experience climate-change induced drought, what measures will be in place to protect the water budget of the aquifer?

The Stormwater Site Plan provided by the applicant describes routing of stormwater through an onsite conveyance system to four infiltration facilities and two detention ponds. It is not clear that the water will be adequately treated by these infiltration ponds to prevent the contamination of the underlying aquifers. In addition, some portions of the stormwater will be released at a discharge point into surface water after treatment, into the headwaters of part of Flett Creek. A general stormwater National Pollution Discharge Elimination System permit will be required under state law.

The Federal Emergency Management Agency (FEMA) map provided in the application materials shows a one percent chance of flooding along the entire western edge of the site. The modeling that informed this assumption was performed during a two-inch/day maximum rainfall event. Since there have been more significant precipitation events, even in 2022, it is not clear that the FEMA map delineates the extent of possible flooding, especially considering we know that climate change is causing more frequent and intense precipitation events in our area. Given these concerns, we request the following questions be addressed through the lens of an EIS: Will a general stormwater permit adequately characterize the stormwater from this site? How will a determination be made that infiltrated water entering groundwater is uncontaminated? How could flooding affect the site, the infiltration facilities, as well as the surface water entering Flett Creek?

Inadequate Description of Slope Activity and Stability Impacts

The SEPA checklist states that the steepest slope is approximately 25-40% and is along South Tyler Street. Soils on site are largely of a sandy-gravel mix. It is unclear from the Project descriptions what activities will occur on or near this slope, and what the impact of the activity could be. We are concerned that any excavation, grading, or denuding of vegetation that might occur along this slope could result in a landslide, posing a monumental risk to the residents that reside at the top of the bluff - or, at the very least, accelerated rates of soil creep and slumping. Removing native vegetation from the hillside would reduce the stability of the slope through loss of root stabilization, which will result in the loss of the slope's shear strength. Shear strength is one of the most important factors to consider when analyzing a project of this nature. Further, if the hillside is denuded of its native vegetation, the impact of direct rainfall on the bare slopes will exacerbate mechanical

erosion while increasing slope infiltration, which increases pore water pressure, clay swelling, and cohesion reduction through a drop in clay ion content. All of the aforementioned reduce slope shear strength and therefore stability.³ With these concerns in mind, we request the following questions be addressed through the lens of an EIS: What specific activities are planned on or near the vegetated slopes on site? If these slopes are denuded of their vegetation, what risk does this pose to the slope's stability, and the residential structures situated at the top of the slope? What Best Management Practices are in place to ensure the stability of the slope? What are the applicant's plans for slope stabilization?

Inadequate Description for Handling Contaminated Sediments

The Project site sits on top of the Commencement Bay, South Tacoma Channel Superfund site – specifically, the South Tacoma Field operable unit. The soils and groundwater at the site were left contaminated from industrial and commercial activities, spanning over a century, including "railroad equipment manufacturing, repair and maintenance; iron and brass foundry; aircraft maintenance and refueling operations; disposal area for foundry, construction, and domestic wastes; unauthorized dumping areas for household and commercial wastes; public utilities; and builders supply." Over 120,000 tons of contaminated sediments were consolidated and capped on-site. Based on the information from the Environmental Protection Agency's (EPA) last 5-year review, concentrations of contaminated sediments capped on-site are far above acceptable levels for any disturbance without a comprehensive soil management plan – this includes high concentrations of arsenic, lead, cPAHs (carcinogenic polycyclic aromatic hydrocarbons) and PCBs (polychlorinated biphenyls). The applicant needs to have an EPA approved plan for how they are going to manage and cap contaminated sediments during and after construction.

The SEPA checklist for the Project states that the applicant must show proof they can meet the requirements in the Record of Decision (ROD) for the site, including not disturbing contaminated sediments that have been left on-site. CHB requests documentation that the applicant understands the requirements from the ROD and provides a plan for sampling, excavating, and grading the soils on site in compliance with the ROD.

We are very concerned about the risk of disturbing the contaminated sediments left in place on-site, particularly dust becoming airborne and entering the adjacent residential areas. With these concerns in mind, we request the following questions be addressed through the lens of an EIS: What is the likelihood of contaminated dusts becoming airborne? If dusts become airborne during or after construction? What wind patterns can be observed on site that would demonstrate the transport pathways of the dust? How can this dust be controlled to prevent contamination in the adjacent residential area?

We are also very concerned about the risk of disturbing contaminated sediments left in place on-site mobilizing into the groundwater and surface water, particularly during excavation and grading activities. Surface water on-site ultimately feeds into Flett Creek, then Chambers Creek, and then Chambers Bay. These are all salmon-bearing streams that support Fall Chinook, Coho, Summer, Fall, and Winter Chum, and Winter Steelhead. With these concerns in mind, we request the following questions be addressed through the lens of an EIS: What Best Management Practices will be in place to ensure that contaminated soils and dust will not mobilize into the groundwater and surface water? What monitoring will occur to determine if contaminants of concern are entering the ground and/or surface water? What is the risk of acute toxicity to aquatic life should contaminants reach surface waters off-site?

Inadequate Analysis of Air Pollution Impacts

The SEPA checklist states, "The completed project is estimated to generate approximately 4,980 new weekday daily trips.... Truck traffic is estimated to be about 28 percent of overall site-generated traffic." An analysis of the emissions from these new vehicle trips has not been quantified. It is widely known that warehousing and distribution centers such as what is being proposed pose significant adverse impacts to the residents that live near them. According to the 2014 National Emissions Inventory data for Los Angeles, heavy-duty trucks account for 21 percent of the PM_{10} (particulate matter of 10 microns or less) and 51 percent of the NO_x (nitrous oxides) among all on-road emissions sources — meaning heavy-duty vehicles' contribution to air pollution is significant relative to the whole inventory of vehicles observed. Residents who are exposed to truck-related emissions have a higher likelihood of experiencing asthma, cardiovascular disease, cancer, decreased lung functioning and capacity, reproductive problems including infant mortality and low birth weight, and premature death. 9

Not only will the residents living directly adjacent to the Project sight be adversely impacted, but so will the residents who live along I-5, who already face a disproportionately high level of exposure to transportation emissions. Residents who live directly west of the Project site and along much of the I-5 corridor in Tacoma rank 10 out of 10 on the Environmental Health Disparities scale – meaning these residents experience worse health outcomes because of where they live. People of color make up the majority of the demographic of this neighborhood, and residents living in this area experience poverty at the highest rate compared to other areas of the City. At the present, and for the projected life of the proposed project, there are no technologies that will mitigate the harms caused by the emissions from diesel engines. The air quality impacts of the proposed project cannot be mitigated.

Reducing harm in these neighborhoods should be a top priority for the City of Tacoma. We understand that the Project area sits on a parcel that is zoned for Heavy Industrial. As the lead agency for this Project, we ask the City of Tacoma to use its discretion in making their determination – zoning classifications in the project area are outdated and do not appropriately consider the impacts on- and needs of the surrounding community.

Beyond the increase in air pollution that will come from increased vehicular traffic, the Project will also cause an increase in air pollution from the production and installation of concrete – which is listed as the primary building material for the structures. The production of concrete emits large amounts of greenhouse gases (GHGs) and other air pollutants. Once the structures are built, energy will be required daily operations. Energy demands from warehousing/distribution centers can be significant, with national inventories showing that the demand can equal as much as 25 percent of the related transportation emissions. ¹¹ The SEPA checklist for the project indicates that the structures would be powered by natural gas and electricity. As we know, the production, transport, and combustion of natural gas has a global warming potential of 82.5 over a 20-year timeline – natural gas is a GHG 82.5-times more potent than carbon dioxide. ¹²

Ultimately, the Project will have an enormous GHG and air pollution impact. Failure to fully analyze these impacts is an unacceptable oversight. To accurately quantify these impacts, a full Lifecycle Assessment must be done as part of an EIS.

With these concerns in mind, we request the following questions be addressed through the lens of an EIS: What is the amount of GHGs, toxic air pollutants, and hazardous air pollutants — cradle-to-grave - that will be generated for the life of the Project? How will these emissions impact the health and welfare of people residing adjacent to the site and along I-5? What types of trucks are part of the "28 percent of overall site-

generated traffic?" What are the emissions impacts from the different types of trucks that will be on-site? What will be the traffic impact to I-5, specifically; which exit will most likely be used, and what will be the increase in idling time along I-5 and on internal throughways?

Inadequate Analysis of Light and Noise Pollution

The applicant acknowledges in the SEPA checklist that, "noise from vehicular traffic to and from the site would be present daily" on a long-term basis and "on a short-term basis, noise from construction equipment would be present from approximately 6am to 6pm Monday through Friday." Given the duration of construction activities, the potential life-span of the completed Project, and the proximity to a residential area, we are very concerned that Project activities and operations would violate the purpose of the City's Noise Ordinance, which is, "to mitigate the adverse impact of noise so as to preserve, protect, and promote the public health, safety and welfare, and the peace and quiet for the citizens of the City, while recognizing the economic value of construction, industry and commercial enterprise." 13 Studies show that trucking generates a high level of noise, and that one heavy truck can generate noise equivalent to that of over 22 passenger vehicles.8 Air brake pressure releases, tonal backup alarms, and loading dock activities have a high probability of disturbance to nearby residents.¹⁴ It is our understanding that an ambient noise study in the adjacent residential neighborhood has not been completed. With these concerns in mind, we request the following questions be addressed through the lens of an EIS: How long will construction activities be taking place? How can the applicant ensure that noise from on-site will not significantly increase noise in the adjacent residential area compared to current ambient levels? How will noise on-site from ongoing trucking and warehousing operations impact the public health of nearby residents, up to and including their ability for consistent sleep and rest, as well as their property values?

Beyond noise, the Project will also generate light pollution. We are concerned that nighttime light pollution will impact nearby residents' ability to experience consistent sleep and rest. Many warehouse projects include flashing green and red lights in addition to overhead broad-spectrum lighting. With these concerns in mind, we request the following questions be addressed through the lens of an EIS: How will the applicant ensure that ongoing construction activities and daily operations will not significantly increase lighting glare and reflections in the adjacent neighborhood above current ambient levels? Will flashing lights be restricted? How will the applicant ensure they are compliant with Pierce County's Enhanced Exterior Lighting Standards (Ordinance No. 2019-101)?

<u>Inadequate Analysis of Other Potential Uses for the Property</u>

There are many assessments of the lack of adequate affordable housing in Tacoma. Though this land is currently zoned as industrial, there is no reason why the zoning could not be changed with an adequate cleanup plan. We have exactly that evidence in a much more highly contaminated site here in Tacoma, where the ASARCO site has been redeveloped into Point Ruston. This mixed-use development has over 1,000 apartment, condominium and single-family homes built on 97 acres. The City of Tacoma and the property owner should investigate better and higher uses for the property.

Thank you for providing the opportunity to review and comment on the Bridge Industrial BNSF Critical Area Development Permit and State Environmental Policy Act (SEPA) checklist - LU21-0125. Due to the substantial uncertainties around the actual impacts of the Project – including missing significant information in the project proposal and deficient analysis of impacts that are required under SEPA - and the high likelihood of significant adverse environmental and public health impacts posed by the Project, we urge the City of Tacoma to issue a Determination of Significance for the Project, and prepare an EIS for the Project. If you have questions or need clarification of any of our comments, please contact Erin Dilworth at edilworth@healthybay.org.

Sincerely,

Erin Dilworth

Erin Dilwork

Communities for a Healthy Bay Policy & Technical Program Manager

cc: Piper Peterson, EPA

Noel Tamboer, WA Department of Ecology

- 1. Tacoma Pierce County Health Department. (n.d.). South Tacoma Groundwater Protection District. Accessed on April 4, 2022 from https://www.tpchd.org/healthy-places/waste-management/business-pollution-prevention/south-tacoma-groundwater-protection-district
- 2. United States Geological Survey. (2010). USGS Scientific Investigations Report 2010-5055: Hydrogeologic Framework, Groundwater Movement, and Water Budget in the Chambers Creek-Clover Creek Watershed and Vicinity, Pierce County, Washington, Savoca, et al, 2010, 45 pp.
- 3. Personal communication with Barry Goldstein, Professor Emeritus of Geology at University of Puget Sound. April 6, 2022.
- 4. Environmental Protection Agency. (2005). Commencement Bay, South Tacoma Channel Partial Deletion Narrative. June 14, 2005. 2pp.
- 5. Environmental Protection Agency. (2018). Fifth Five-Year Review Report for Commencement Bay, South Tacoma Channel Superfund Site. Tacoma, Washington. September 28, 2018. 86pp.
- 6. Environmental Protection Agency. (1994). Record of Decision for Commencement Bay, South Tacoma Channel South Tacoma Field Operable Unit. Tacoma, Washington. September 1994. 214pp.
- 7. Washington Department of Fish and Wildlife. (n.d.) SalmonScape. Accessed on April 4, 2022 from http://apps.wdfw.wa.gov/salmonscape/map.html
- 8. Yuan, Q. (2018). Environmental Justice in Warehousing Location: State of the Art. Journal of Planning Literature, 1-12.
- 9. The Impact Project. (2012). Storing Harm: the Health and Community Impacts of Goods Movement Warehousing and Logistics. Author. January 2012. 8pp.
- 10. Washington State Department of Health. (n.d.). Washington Tracking Network: A Source for Environmental Public Health Data. Accessed from https://fortress.wa.gov/doh/wtn/WTNIBL/ on April 13, 2022.
- 11. Rüdiger, D., Schön, A. and K. Dobers. (2016). Managing greenhouse gas emissions from warehousing and transshipment with environmental performance indicators. *Transportation Research Procedia*, 14 (2016), 996-895.
- 12. Forster, P., et. al. (2021). The Earth's Energy Budget, Climate Feedbacks, and Climate Sensitivity. In Climate Change 2021: The Physical Science Basis.

 Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University

 Press In Press
- 13. Tacoma, Washington, REV. ORDINANCES Title 8, Public Safety, Section 122 Noise Enforcement.
- 14. Jenkins, A.C. (2019). DuPont Industrial Park Noise Review. [Memordandum] The Greenbusch Group, Inc. May 29, 2019.