

APPENDIX E--RESPONSE TO COMMENTS

ENTITY REVIEW COMMENTS

Comments to the draft Fact Sheet were received from Schnitzer Steel of Tacoma (SST) in a letter dated April 26, 2019, during the Entity Review period. The Entity Review period allows the Permittee to review the draft Permit and Fact Sheet and provide comments regarding factual errors only. The following are Ecology's responses to SST's comments:

General Comments

General Comment 1:

There is no mention of emergency bypass outfall.3 (OF-3) in the Fact Sheet. When the upgrades were made to the Tacoma Boat parcel in 2012 as part of the new treatment plant installation, GMT, with Ecology's approval, removed the sand filter treatment system previously present at the Tacoma Boat facility and installed additional catch basins and conveyance lines at the Tacoma Boat facility to convey all stormwater to the new treatment plant located at the main GMT property. The outfall on Tacoma Boat was left in place and a manhole was sealed so in the event of a severe storm event that was beyond the capacity of the treatment, the manhole could be opened and used for as an emergency bypass for stormwater. There have not been any bypass events since the new treatment plant was installed in 2012 (check date) and GMT continues to effectively manage all stormwater that falls on site with its existing treatment capacity. The emergency bypass discharge point (OF-3) is shown on the attached site map and should be incorporated into the Fact Sheet.

General Response 1:

Ecology has added a description of the work done on the Tacoma Boat parcel on page 5 of the fact sheet. Ecology has also added a description of the Outfall 003 on page 5 of the fact sheet. Ecology has added monitoring requirements for bypass events at Outfall 003. Monitoring mirrors the requirements for bypass events at Outfall 002.

Specific Comments

Comment 1:

Page 3, Section A, paragraph 1. Change text to read "The facility currently processes and recycles in excess of ~~300,000~~ 500,000 tons annually."

Response 1:

Ecology has made the correction noted.

Comment 2:

Page 3, Section A, paragraph 3. The text states that the permit identifies "chromium (hex)" and mercury as potential stormwater contaminants and that monitoring is required. GMT disagrees that hexavalent chromium is a potential contaminant and suggests that hexavalent chromium be

changed to total chromium. Quarterly samples of storm water have been analyzed for total chromium and shown very low levels. We have not sampled for hexavalent chromium nor does the Draft Fact Sheet or Draft Permit identify the need for analyzing for hexavalent chromium; instead the draft documents request total chromium.

Likewise, discharge samples have been analyzed for mercury and this compound has been present at very low levels (0.023 ug/L). The Fact Sheet states that "Mercury remnants may exist if old mercury switches in automobiles are not completely removed ... " GMT has a strict Scrap Acceptance Policy and also requires that customers sign a Hazardous Substances Removal Control Contract that verifies that mercury switches, among other items, have been removed from scrap. In addition, GMT participates in the End of Life Vehicle (ELVS) program and continues to purchase mercury switches from customers for recycling through the ELVS program. Through the years the volume of mercury switches purchased has reduced significantly because vehicles containing mercury switches are becoming obsolete. GMT requests that the sentence regarding mercury switches be removed from the Fact Sheet because we do not believe it is representative of the current market or facility conditions.

Response 2:

Ecology agrees with SST's comment regarding chromium and has changed "chromium (hex)" to "total chromium," as requested. SST's comment on mercury is noted; however, Ecology has elected to leave the sentence regarding the known source of mercury in the Fact Sheet. Ecology appreciates the progress made on reducing the level of mercury into the environment. Mercury is highly toxic and should continue to be a priority for SST and monitored. Due to SST's aggressive management of mercury, it has been flagged with no reasonable potential to exceed water quality or human health criteria at this time.

Comment 3:

Page 3, Section A, paragraph 4. There are several corrections suggested for this paragraph. Please change the text to read:

Stormwater collected from the paved areas is collected in ~~sumps~~ **catch basins** and transferred by underground piping into three underground concrete lift stations **with capacities of approximately 24,000-gallons; 24,000-gallons, and 9,000-gallons.** The stormwater treatment system consists of two ~~450,000~~ **471,000-gallon** and one ~~120,000~~ **121,000-gallon** above-ground equalization tanks ~~equipped with skimmers for floating oil removal,~~ a 750-gallon chemical mix tank, a 150-gallon flash mix tank, a 750-gallon flocculation tank, a liquid-solid inclined ~~separation tank~~ **plate clarifier**, and a three sludge thickening tanks followed by a filter press for sludge dewatering. **Treated stormwater is transferred from the clarifier to an effluent surge tank, through piping with a flow meter and in-line pH meter, before being discharged to (Outfall 1?).**

Response 3:

Suggested corrections made.

FACT SHEET FOR
SCHNITZER STEEL OF TACOMA
NPDES PERMIT WA0040347

Comment 4:

Page 3, Section A, paragraph 5. The treatment plant is designed for and approved by Ecology for a treatment capacity of 700 gallons per minute (gpm). Please change the text to read "The design capacity of the treatment system is ~~200~~ 700 gallons per minute."

Response 4:

Suggested correction made.

Comment 5:

Page 5, Section A, paragraph 2. The outfall diffuser was upgraded when the new treatment plant was constructed in order to effectively manage the increased flow rate. Please change the text to read "The outfall diffuser consists of 12-inch diameter pipe with four \pm 4-inch diameter ports spaced 10-feet apart."

Response 5:

Suggested correction made.

Comment 6:

Page 11, Table 4. The table sets the maximum daily limit for Zinc at 223 ug/L. However, the maximum daily limit calculated in the PerformLim spreadsheet in the appendix to fact sheet (page 45 of Fact Sheet) of 225.1 ug/L. Please change the daily Zinc limit in Table 4 to 225.1 ug/L.

Response 6:

On Table 4, page 11, the total zinc maximum daily limit has been changed to 225 $\mu\text{g/L}$, from 223 $\mu\text{g/L}$, as calculated by the PerformLim spreadsheet. Table 8, on page 26, the proposed total zinc maximum daily limit was updated similarly. Page 6, of the proposed permit, the total zinc maximum daily limit was changed from 223 to 225 $\mu\text{g/L}$.

Comment 7:

Page 19, Section D, paragraph 2. The Draft Fact Sheet states that the sediment samples near the outfall suggest that PCB Aroclor-1242 and bis(2-Ethyhexyl)phthalate (BEHP) are originating from the facility. GMT is not aware of any specific sample results that indicate PCB and BEHP present near the diffuser is sourced from the GMT facility. The GMT outfall diffuser is near the Hylebos Waterway turning basin which is a sediment deposition area with many different potential contributors of these compounds. Without specific forensic chemical evidence it is not possible to identify a specific source for the contaminants in the sediments with the number of potential sources to the waterway. Accordingly, we respectfully request that the following sentence be deleted from the Fact Sheet: "Samples collected by SST near their outfall suggest that one of the places where PCB Aroclor-1242 and BEHP are originating is from their facility."

Response 7:

Ecology has agreed to delete the quoted sentence in paragraph 2 of Section D, page 19. Ecology has agreed that there is insufficient data to state the source of the contaminants to the sediments. In similar fashion, the last sentence stating the city of Tacoma's Stormwater outfall as a possible source of contamination was also removed. Ecology added a sentence stating "The accompanying permit requires SST to begin monitoring for these pollutants in their discharge and the sediments around their outfalls."

Comment 8:

Page 19, last paragraph. The Draft Fact Sheet States that: "Monthly monitoring of total PCBs and PCB congener are required in the proposed permit." This sentence could be interpreted to suggest that the monthly testing for PCBs should be done using EPA Method 1668C. Our understanding is that permit requires discharge samples to be tested for PCBs using EPA Method 608.3 (the EPA approved method as indicated in Appendix A of the Draft Permit), and not the unapproved Method 1668C. Method 1668C should only be used for source control evaluations, not for compliance monitoring. In no circumstances should Method 1668C be required for compliance monitoring. See *Puget Soundkeeper Alliance v. Ecology*, 191 Wash.2d 631 (2018) (an unapproved method, such as Method 1668C, cannot be used for compliance monitoring).

Response 8:

Ecology agrees with SST's comment regarding testing methods. The quoted sentence has been revised by replacing "PCB congener" with "PCB arochlor 1242." This was a typo and is now consistent with the proposed permit.

PUBLIC COMMENTS

Citizens for a Healthy Bay (CHB) submitted comments on June 27, 2019 regarding the draft Schnitzer Steel of Tacoma (SST) permit and fact sheet during the Public Review and Commenting Period. A summary of CHB's comments and Ecology's responses are provided below:

General Comments

General Comment 1:

CHB requests additional language be added to the "Description of the Receiving Water" section of the Permit fact sheet. As is, this description makes no mention of the Puyallup Tribe.

General Response 1:

Ecology will add the sentence: "The Puyallup Tribe uses the mouth of the Hylebos Waterway for ceremonial gatherings (near Chinook Landing Marina) as a canoe landing site for Tribal Canoe Journey events." to the Description of the Receiving Water Section of the Fact Sheet.

Specific Comments

Comment 1:

CHB requests that Ecology use updated climate models that more accurately reflect the severity of future storm and flooding events to inform their permitted frequency of untreated stormwater discharges. Additionally, there is no mention of how sea-level rise will impact the outfalls at the facility – how is this being analyzed by Ecology?

Response 1:

SST can handle and treat stormwater up to a 25-year, 24-hour storm. SST has also fine-tuned their operations such that they have handled larger storms, spread out over a longer period of time without needing to bypass. SST has not had a bypass since January 2010. SST's stormwater conveyance and treatment facility is conservatively designed and their operations are aggressively managed to prevent a bypass events. Should climate change result in frequent bypasses in the future, Ecology would require an engineering report to be developed to re-assess the conveyance and treatment system. SST would be required to maintain capacity to handle a 25-year, 24-hour storm and upgrade their system if necessary.

The elevation of the water in their discharge tank is substantially higher than the Hylebos Waterway. The Commencement Bay tideflats would need to be grossly flooded before there would be a major hydraulic problem with the discharge due to sea rise. The entire facility would be flooded before this becomes an issue.

Comment 2:

CHB requests this excerpt be clarified to show that SST's stormwater treatment system is meeting AKART requirements, and if not, justification for why Ecology expects that their system will in the future.

Response 2:

Ecology has added a clarifying sentence to the bottom paragraph of Page 6 which states "SST meets the requirements of AKART."

AKART is a requirement before a mixing zone can be authorized. Therefore, the fact that a mixing zone has been authorized implies that AKART is being met.

Comment 3:

CHB requests the Permit include criteria for sludge disposal standards and clarification on the suitability of the selected landfill to handle these materials.

Response 3:

Ecology added the following clarification to the *Solid Wastes* subsection on Page 7 of the Fact Sheet. "SST must perform TCLP analysis to ensure the sludge does not designate as hazardous waste. If it does not meet TCLP standards, then it must be disposed of at a hazardous waste facility. Otherwise, it may be disposed of at a landfill."

Comment 4:

CHB requests justification for why technology-based limits were not also applied to mercury and total PAHs, especially given their known respective toxic and carcinogenic properties?2, 4 Additionally, as total chromium is identified as a potential pollutant, please provide justification for why a monitoring protocol nor an effluent limit is required as a condition of this permit.

Response 4:

Ecology has evaluated mercury and there was no reasonable potential to exceed human health or aquatic criteria. Therefore, neither a water quality-based limit nor a technology-based limit for mercury are needed at this time. Due to the nature of SST's operations, Ecology continues to require mercury monitoring in the permit.

Ecology has looked at each of the PAH constituents and all individual PAH parameters were below human health and aquatic criteria. Therefore, individual PAH parameter have no reasonable potential to exceed water quality standards. Neither a water quality-based limit nor a technology-based limit for total PAHs (or its individual parameters) are needed at this time. Due to the nature of SST's operations, Ecology continues to require Total PAH monitoring in the permit.

Ecology has required SST to monitor hexavalent and total chromium in a previous permit cycle. Monitoring results showed that both hexavalent and total chromium concentrations are very low and are not pollutants of concern. Based on existing data, Ecology has elected to discontinue monitoring for chromium and concentrate efforts instead on PCBs, and Bis(2-ethylhexyl)phthalate (BEHP).

Comment 5:

Given that both total iron and aluminum have set detection and quantitation levels, as well as known adverse impacts on humans and aquatic life, CHB requests justification for why a monitoring protocol nor an effluent limit is required for either of these chemicals nor iron solids as a condition of this permit.

Response 5:

There are no aluminum or iron human health or aquatic criteria for marine waters. These two metals have not been identified to be toxic in marine waters by EPA. Therefore, no limitations are warranted at this time.

Comment 6:

CHB requests the Permit be amended to require the timely implementation of on-the-ground source control technologies as the monitoring study identifies the sources of these newly-identified pollutants, rather than just "a comprehensive evaluation of methods to reduce the contributions of these pollutants to the environment..." as is currently stated in the Permit. The timeline for which these technologies must be implemented should also be defined in the Permit.

*FACT SHEET FOR
SCHNITZER STEEL OF TACOMA
NPDES PERMIT WA0040347*

Response 6:

Timely implementation of on-the-ground source control technologies are inherent in the permit. If SST does not conduct source control, they will continue to violate permit limitations. Ecology will monitor the data and work with SST as they face any challenges. Ecology can require additional treatment and best management practices to be put in place and/or additional studies, if needed. Please note SST is at the fore-front of these PCB and BEHP challenges which are a nation-wide problem and we are just beginning to tackle this problem. This will require an innovative approach that may take time to resolve.

