Supplemental Fact Sheet for NPDES Permit WA0000809
Cosmo Specialty Fibers, Inc.

September 14, 2020

Purpose of this supplemental fact sheet

This supplemental fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed National Pollutant Discharge Elimination System (NPDES) permit modification for Cosmo Specialty Fibers, Inc. (Cosmo).

Ecology makes the draft permit modification and supplemental fact sheet available for public review and comment at least thirty (30) days before issuing the final permit modification. Copies of the supplemental fact sheet and draft permit modification for Cosmo's NPDES permit WA0000809, are available for public review and comment from September 17, 2020 until October 23, 2020. An online public hearing will take place if requested on October 19, 2020. Due to COVID-19 and Governor Inslee's "Stay home, stay safe" order, we will not hold an in-person event. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

Cosmo reviewed the draft permit modification and supplemental fact sheet for factual accuracy. Ecology corrected any errors or omissions regarding the facility's location, history, discharges, or receiving water prior to publishing this draft fact sheet for public notice.

After the public comment period closes, Ecology will summarize substantive comments and provide responses to them. Ecology will include the summary and responses to comments in this fact sheet as **Appendix B - Response to Comments**, and publish it when issuing the final NPDES permit. Ecology generally will not revise the rest of the fact sheet. The full document will become part of the legal history contained in the facility's permit file.

Summary

Ecology issued NPDES Permit No. WA0000809 to Cosmo Specialty Fibers, Inc. on November 12, 2015. The permit became effective on December 1, 2015 and was subsequently modified on March 1, 2018. In May 2020, Cosmo began curtailment of the facility. The curtailment included shut down of the pulping and bleaching operations, draining the wastewater treatment systems, and removing the sludge from the aeration basins (aka bioponds) and secondary clarifiers. The facility will not generate any process wastewater while operations at the facility are curtailed. The Permittee requested reduced monitoring frequencies for certain parameters on the basis that the amount of pollution that has the potential to be discharged will be significantly reduced during periods of curtailment.

Ecology considers reduction of monitoring frequencies to be a major modification to the permit. Minor permit changes include the correction of typographical errors, incorporating more frequent monitoring, certain changes to interim compliance dates, or incorporating a change in ownership.

The request to decrease monitoring frequencies does not qualify as a minor modification as defined by 40 CFR 122.63.

This proposed modification includes reduced monitoring frequencies for 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), fecal coliform, enterococci, and Adsorbable organic halides (AOX) during periods of curtailment. The proposal also removes the monitoring requirements for temperature and chemical oxygen demand (COD) during curtailment. The current, more stringent monitoring frequencies will remain in effect during normal operations.

This modification also includes administrative changes to the permit, updating the website links. These changes are minor and for information purposes.

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PROPOSED PERMIT CHANGES

1. **Reduced Monitoring Frequencies During Curtailment**

For the purpose of monitoring, Ecology defines curtailment as an extended period of no pulp production activities and no discharge of process wastewater. Mill maintenance outages and emergency shut downs are not considered curtailment periods. During curtailment, Cosmo will not discharge any process wastewater, including wastewater generated by their pulping operations and the bleach plant effluent. However, the facility will continue to have a discharge from their outfalls during these periods. These discharges will consist of gland water from pumps, stormwater, and unused fresh water supplied to the mill. During curtailment, Cosmo will send this water to the Westport ponds, which will provide some treatment through aeration and settling. Cosmo will also add disinfection chemicals to the effluent downstream of Westport Pond A, prior to discharge.

As described in more detail below, the characteristics of discharge from the outfalls will change significantly during periods of curtailment. As discussed in Chapter 13 of Ecology's *Water Quality Program Permit Writer's Manual,* "all permits must require monitoring to determine if the facility is in compliance with the permit" and "the variability of the effluent is one of the most important factors in establishing monitoring frequency". Based on the change in operations during periods of curtailment and in consideration of the purpose of monitoring, Ecology is proposing to reduce the monitoring frequencies for certain parameters for each outfall, as described below.

A. Five-day Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) at Outfall 001

During normal operations, the major source of BOD_5 and TSS is the process wastewater associated with pulp production. No process wastewater will be generated during curtailment periods. Continued monitoring during the current curtailment showed that both BOD_5 and TSS decreased significantly over the weeks following the shutdown of the pulping and bleaching operations and removal of sludge from the wastewater treatment system (see graphs in Figures 1 and 2 below). BOD_5 loading in pounds per day (lbs/day) dropped to less than 3% of the monthly average limit, while TSS loading dropped to about 12% of monthly average limit. Based on this information, the facility is unlikely to violate the permit limits during periods of curtailment. Additionally, the amount of BOD_5 and TSS present in the discharge is not expected to vary significantly in the water that will be discharged during curtailment, therefore a monthly sample is expected to be representative of the discharge during the month. Therefore, Ecology is proposing to reduce monitoring from daily to weekly two weeks after the facility's operations are curtailed, starting from the day the facility ceases pulp production. The proposed modification allows the facility to further reduce the monitoring frequency to quarterly after they have successfully demonstrated that

the discharge is less than 80% of the associated monthly average permit limit. Daily monitoring will resume after curtailment ends and pulp production commences again.

B. Fecal Coliform and Enterococci at Outfall 001

During normal operations, the source of fecal coliform and its growth are process wastewater and solids carryovers at the secondary clarifiers. With no process wastewater or solids generated during curtailment, there is a significant drop in fecal coliform as shown the Figure 3. Cosmo continued to operate the disinfection treatment system prior to discharge. After one week of curtailment, fecal coliform dropped to less than 0.01% of the daily limit. As long as Cosmo continues to disinfect the discharge and does not introduce flow from Westport Pond D, Ecology does not anticipate that there will be significant variability in the amount of fecal coliform present in the discharge. Therefore, Ecology proposes to reduce monitoring from daily to weekly two weeks after the facility's operations are curtailed, starting from the day the facility ceases pulp production. The proposed modification allows the facility to further reduce the monitoring frequency to monthly after they have successfully demonstrated that the discharge is less than 10,000 cfu/100 mL for three consecutive weeks.

Cosmo must resume daily monitoring if monitoring results show more than 50,000 cfu/100 mL. At this point, weekly monitoring may resume if the results are 50,000 cfu/100 mL for three consecutive days. Monthly monitoring may resume if the weekly results are no more than 10,000 cfu/100 mL for three consecutive weeks. Ecology is also proposing additional monitoring on days when Cosmo does not operate their disinfection treatment.

Monitoring showed that fecal coliform is still non-detect (<10 cfu/100 mL) when there is residual flow from Westport Pond D to the outfall for short periods of time, about 30 to 45 minutes. However, if Pond D drains to the outfall for longer than 45 minutes, monitoring is required. While Pond D receives water that has been disinfected, there is a potential for fecal coliform growth when water is stored in the pond and a large volume is drained to the outfall.

Daily monitoring will resume after curtailment ends.

There is no permit limit for enterococci. The purpose for monitoring this parameter is to gather data for: 1) evaluating correlation with fecal coliform results; and 2) future permitting work. Therefore, Ecology is proposing to apply the same reduced monitoring frequency for enterococci as for fecal coliform.

C. Adsorbable Organic Halides (AOX) at Outfall 001

Ecology established performance-based AOX limits to address AOX produced from the reaction of organics in the wastewater with hypochlorite that is being used as a disinfection chemical. During curtailment, organics in the wastewater have drop significantly, as evidenced from BOD_5 reductions to less than 3% of the permit limit (see Section 1.A above).

Cosmo has also reduced the amount of disinfection chemical present in the wastewater by eliminating batch disinfections. Since the current curtailment began, AOX loading has dropped to 6% of the limit on average, with the most recent sample at 2% of the limit. Ecology proposes to reduce the monitoring frequency from weekly to quarterly during the curtailment. Weekly AOX monitoring will resume after curtailment ends and Cosmo returns to production.

D. BOD_5 at Outfall 002

Outfall 002 discharges stormwater from Cosmo as well as other areas not owned by the mill. It also contains filter plant backwash from Cosmo's freshwater treatment plant. None of the streams are expected to be sources of BOD_5. Ecology placed a BOD_5 limit of 500 lbs per day to address the potential for spills of process wastewater or red liquor to this outfall. There is no process wastewater generated at the site during curtailment. Monitoring data during the current curtailment showed that BOD_5 was non-detect (below <2 mg/L). Therefore, Ecology is proposing to reduce BOD_5 monitoring at this outfall to weekly. If the Permittee removed red liquor from the site, thereby eliminating potential for spills, no further monitoring will be required thereafter. Daily BOD_5 monitoring will resume after curtailment ends.

E. Whole Effluent Toxicity (WET) Testing

Ecology requires acute and chronic WET testing at Outfall 001 to demonstrate compliance with the limits. Because the discharge will consist mostly of stormwater and freshwater during periods of curtailment, it is unlikely to have toxicity. To confirm, Ecology will require WET testing for the first quarter after the shutdown. If the test results show no acute or chronic toxicity, no further monitoring will be required during curtailment. Quarterly WET testing will resume after curtailment ends.

2. **Suspended Monitoring During Curtailment**

Ecology is proposing to temporarily suspend the monitoring for some parameters during curtailment periods. The basis for this proposal is discussed below for each parameter.

A. Temperature at Outfall 001

Temperature monitoring is required to evaluate the impacts of heat loading on the receiving water. Ecology acknowledges that there will be minimal heat loading from the discharge during curtailment, as the discharge consists of stormwater, fresh water, and gland water. This is evident as the discharge temperatures have dropped to an average of 18.5 ºC (65º F) in June, comparable to the temperature of Grays Harbor during this period. Therefore, Ecology is proposing no temperature monitoring during curtailment. Continuous temperature monitoring will resume after curtailment ends and Cosmo returns to production.

B. Chemical Oxygen Demand (COD) at Outfall 001

There is no limit for COD. The permit requires COD monitoring to gather information for the EPA to use for future limit development. This work requires data associated with mill's processes. As the mill is not operating, monitoring data during this time is not useful. Therefore, Ecology is proposing no monitoring for COD during curtailment. Monthly COD monitoring will resume after curtailment ends and Cosmo returns to production.

Figure 1 - BOD_5 Loading Trend at Outfall 001

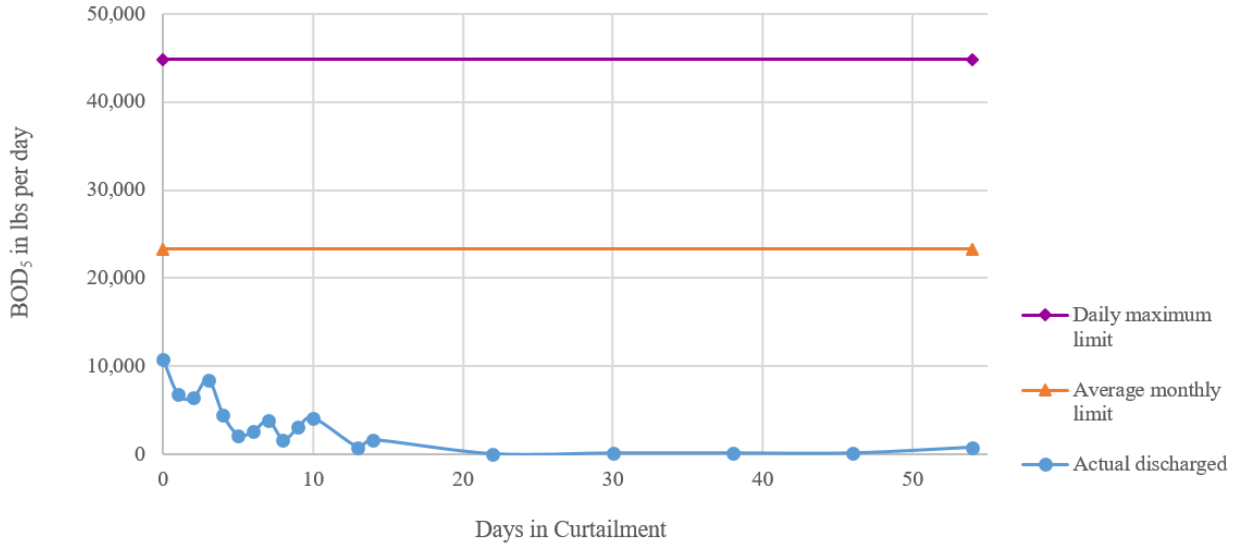


Figure 2 - TSS Loading Trend at Outfall 001

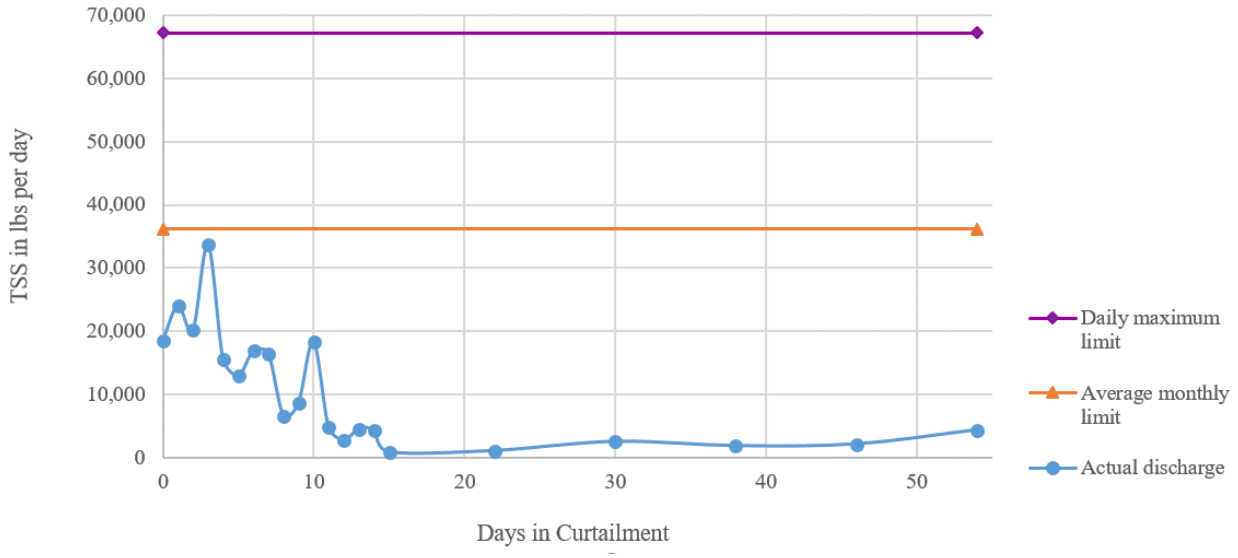
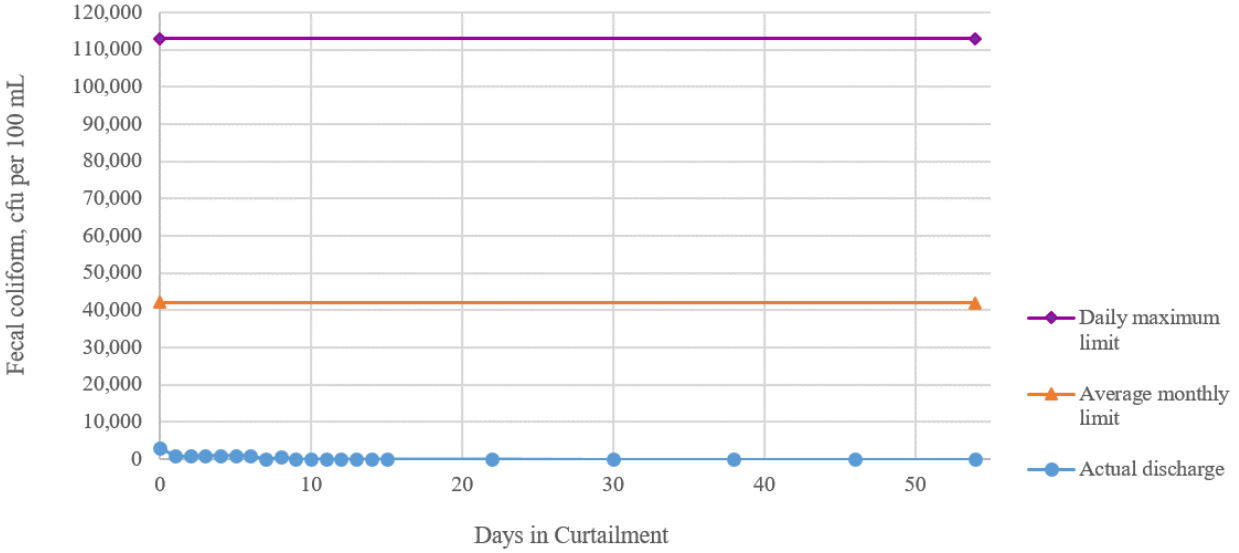


Figure 3 - Fecal Coliform at Outfall 001



APPENDIX A - PUBLIC INVOLVEMENT INFORMATION

The Department of Ecology is proposing to modify the NPDES permit for Cosmo. The Department will publish a Public Notice of Modification (PNOM) on September 17, 2020 in the Daily World to inform the public that a draft permit modification and supplemental fact sheet are available for review.

Interested persons are invited to submit written comments regarding the draft permit modification. The draft modification and supplemental fact sheet are available online at https://fortress.wa.gov/ecy/industrial/UIPermit/DraftPermits.aspx. Due to COVID-19 related building closures, documents will not be available to view at local repositories or Ecology's offices. A paper copy is available by request. Call (360) 407-6916 or e-mail angelina.ward@ecy.wa.gov if you'd like to receive a paper copy in the mail.

Send written comments:

- Using the online comment form available at http://wq.ecology.commentinput.com/?id=Pb3FY
- Or by mail to:

  Ha Tran
  Department of Ecology
  Industrial Section
  P.O. Box 47600
  Olympia, WA 98504-7600

Comments should reference specific text followed by the requested change or concern when possible. **Ecology will only consider comments that pertain to the permit conditions we propose to modify.**

The Department will consider all comments received by end of public notice of the draft indicated above, in formulating a final determination to modify the permit The Department's response to all significant comments is available upon request and will be sent directly to people expressing an interest in this permit.

If you have questions, or need additional information, you may also contact Ha Tran at ha.tran@ecy.wa.gov.

APPENDIX B - PERMIT MODIFICATION – RESPONSE TO COMMENTS

Ecology will fill out this appendix based on comments received.