# RESPONSE TO COMMENTS FINAL PERMITTING DECISION

Response to comments received on the subject draft permit in accordance with regulations promulgated at 40 CFR Part 124.17 are as follows:

Permit No.: AR0038822

Cooper Tire and Rubber Company Applicant:

Prepared by:

Shane Byrum

The state of the s Public Notice Date: The draft permit was publicly noticed on or about 2/13/2009.

Date Prepared: 3/24/2009

The following comments have been received on the draft permit:

Correspondence from Tom Cullins (Cooper Tire) to Shane Byrum (ADEQ) dated 3/16/2009.

#### ISSUE #1

Section 9 of the Statement of Basis indicates that the average flow for the facility is 10.3 MGD, based on the highest monthly average flow reported during the last 2 years. Because of this flow, seasonal limits for zinc were removed from the permit and seasonal limits for mercury were not established. Cooper is conducting a flow study to establish a more accurate flow measurement method. Cooper reserves the right to modify the permit to include seasonal limits for mercury and zinc, if appropriate, based on the results of this study.

### RESPONSE #1

The facility may submit a request for a permit modification for review in the event that the flow study indicates that the facility flow used to calculate mercury and zinc limits should be classified as a "primary season critical flow" as defined in Reg. 2.106. Any permit modification would be subject to the applicable permit modification fee at that time.

#### ISSUE #2

Section 14 of the Statement of Basis indicates that the draft permit limits (20 mg/L monthly average and 30 mg/L daily maximum) for Total Suspended Solids (TSS) are based on 40 CFR 122.44(l) and the previous permit. The antibacksliding requirements found in 40 CFR 122.44(l) prevent the permitting authority from issuing permits with limits that are less stringent that the previous permit. However, 40 CFR 122.44(1)(2)(i) provides exceptions to the antibacksliding requirements in cases where substantial alterations to the facility have occurred or where information is available that was not available at the time of permit issuance that justifies the application of a less stringent limitation.

Since the previous permit was issued on May 31, 2003, Cooper has made a significant investment in substantial alterations to the facility and procedures aimed at reducing TSS concentrations. These improvements represent the best available technology (BAT) for reducing TSS discharges from these areas. The areas that these alterations have occurred include the outfall 001 structure, south trash compactor building, north trash handling area, oil storage building, scrap metal hopper, carbon black handling system, dust collection systems, mixing building roof, curing/finishing roof, tank truck/rail car unloading areas, and tank farm.

Cooper also contracted with FTN Associates to conduct an assessment of the receiving stream downstream of Cooper's discharge. The purpose of the assessment was to evaluate whether Cooper's discharge caused or contributed to violations of the narrative criteria for solids found in Reg. 2.408. FTN conducted a visual investigation on March 11, 2009, from the outfall 001 discharge point to approximately 0.3 miles downstream. Within this reach, 25 locations along the stream were evaluated for the deposition of solids. FTN's assessment found no evidence of distinctly visible solids, bottom deposits, or shoaling in the stream, indicating that the narrative criteria are being met. During this investigation, the TSS concentration in the receiving stream upstream of Cooper's discharge was measured to be 656 mg/L. The predominant flow upstream of Cooper's discharge is from off-site sources.

Given that Cooper has implemented BAT to control TSS discharges, that the narrative criteria is being met downstream of Cooper's discharge, and that background concentrations of TSS in the receiving stream appear to be much higher than Cooper's permit limit, Cooper requests that the TSS limitations be removed. Cooper is committed to maintaining the BAT control measures and would be willing to provide ADEQ annual verification that the BMPs implemented to address the TSS issues are being maintained at BAT levels, if necessary.

#### RESPONSE #2

While in suspension, TSS increases the turbidity of the receiving stream, reduces light penetration and impairs the photosynthetic activity of aquatic plants, thereby contributing to oxygen depletion. TSS can kill fish and shellfish through abrasive injury or clogging of gills and respiratory passages. Excessive TSS can destroy aquatic habitats by coating the bottom with sediment. The Department acknowledges that Cooper has made significant efforts to reduce the concentration of TSS being discharged from the facility. A review of the TSS concentrations reported during the last permit term indicate that these efforts have been successful at significantly reducing the number of permit violations for TSS. However, the Department's position is that a TSS limit is still necessary to ensure protection of the receiving stream and that the proper implementation and maintenance of the various BMPs will continue. Therefore, the TSS limits will be continued from the previous permit.

### ISSUE #3

Should ADEQ decide to keep TSS limits in the permit, Cooper requests that less stringent limits be considered based on implementation of BAT resulting from significant alteration to the facility, and new information in the form of DMR data submitted under the current permit, and the FTN investigation. DMR data from July 2003 to February 2009 indicates improved and less variable TSS concentration beginning in August 2006 when BAT was fully implemented and effective. These improvements reduced the average TSS concentration from 24 mg/L (July 2003 through July 2006) to 16 mg/L (August 2006 – February 2009), and the rate of permit exceedences dropped from 40% to 19%. Despite the implementation of BAT and resulting improvements in TSS discharges, a non-compliance rate of approximately 20% is still anticipated with current TSS limitations. The receiving stream shows no impact from previous exceedences indicating that the TSS limits are more stringent than necessary to protect the receiving stream. Given the application of BAT, FTN's stream investigation, and the anticipated non-compliance rate with current TSS limits, Cooper requests less stringent TSS limits in the

permit if ADEQ still feels limits are necessary. For your consideration, please note that the 95<sup>th</sup> percentile of observed monthly average data since August 2006 is 33 mg/L.

## **RESPONSE #3**

The Department acknowledges that Cooper has made significant efforts to reduce the concentration of TSS being discharged from the facility. A review of the TSS concentrations reported during the last permit term indicate that these efforts have been successful at significantly reducing the number of permit violations for TSS. However, the Department does not agree to revise the TSS limits at this time based on the limited information that was submitted during the comment period. A more detailed stream study is required to justify changing the limits. The recent stream investigation covered only one TSS sample in the receiving stream and visible observations for one day only. Upon completion of a more detailed stream study, the permittee may request a permit modification to change the TSS limits.

#### ISSUE #4

The draft permit contains a "report only" for mercury for the first 3 years of the permit, followed by final mercury limits effective 3 years after the effective date of the permit. Cooper objects to mercury limits being placed in the permit at this time. In view of the fact that the inclusion of mercury limits are based on minimal data and that little can be done to control and reduce concentrations, Cooper requests that ADEQ change the mercury limitations to "report only" for the entire term of the permit, unless additional data warrant the inclusion of mercury limits.

### **RESPONSE #4**

Mercury limitations were included in the permit based on the four samples submitted with the permit application. An analysis of these four data values indicated that reasonable potential exists for mercury concentrations to exceed the water quality standards for mercury set forth in Reg. 2.508. Pursuant to 40 CFR 122.44(d), as adopted by Regulation No. 6, if a discharge poses the reasonable potential to cause or contribute to an exceedance above a water quality standard, the permit must contain an effluent limitation for that pollutant. Effluent limitations for mercury were derived in a manner consistent with the Technical Support Document (TSD) for Water Quality-based Toxics Control (EPA, March 1991), the State's 2009 Continuing Planning Process, and 40 CFR 122.45(c).

During the three year interim period, Cooper can request a permit modification to remove the mercury limits. The Department will consider the additional data to determine if reasonable potential to exceed water quality standards still exists. If the Department determines that no reasonable potential exists after additional data is collected, the permit can be modified to remove the final mercury limits. This would not violate the antibacksliding regulations since this determination would be based on new information that was not available at the time of permit issuance. Any permit modification would be subject to the applicable permit modification fee at that time.

### ISSUE #5

The draft permit includes a requirement to monitor toxicity for *P. promelas* once per two months. If toxicity is identified, the draft permit requires monthly monitoring until the limitation is met for three consecutive months. In the previous permit, the monitoring requirement was once/quarter. Cooper requests that once per quarter monitoring frequency for *P. promelas* be retained in the new permit.

### **RESPONSE #5**

The Department does not concur with Cooper's request. The increase in frequency from four/year to six/year for whole effluent toxicity testing for the *P. promelas* test species was based on the frequency of test failures during the previous permit term. According to ADEQ records there were eight lethal test failures during the last permit term for *P. promelas* test species.

### ISSUE #6

Cooper requests that the monitoring frequency be changed from twice/month to once/month for BOD5, DO, TSS, Oil & Grease, and pH. BOD5 and DO are new parameters, but no compliance issues are anticipated based on data collected. TSS concentrations have decreased significantly over the past permit term. There have been no compliance issues with Oil & Grease and pH. In view of this, and the fact that this is a stormwater discharge, monitoring once/month seems adequate and appropriate. It is also noted that the Zinc and Mercury monitoring frequency is already set at once/month.

#### **RESPONSE #6**

In order to be eligible for a monitoring frequency reduction, the 2009 Continuing Planning Process (CPP) states that no violations could have occurred in the past two years for the parameter(s) in question. A review of the past two years of reported values (January 2007 through January 2009) for BOD5, TSS, Oil & Grease, and pH, reveals that there were no Oil & Grease or pH violations, and four TSS violations. Also, BOD5 values reported during the above time period were all lower than the new permit limit. Therefore BOD5, Oil & Grease, and pH have been determined to be eligible for a frequency reduction from twice/month to once/month. Since there were TSS violations, TSS is not eligible for a frequency reduction at this time. However, TSS may be eligible for a frequency reduction in the next permit cycle. Dissolved Oxygen monitoring frequency will be set at once/month to be consistent with BOD5, O&G, pH, Zinc, and Mercury since no compliance issues with dissolved oxygen are anticipated.

### ISSUE #7

The table of permit limits in Part IA of the permit contains a footnote that refers to the monitoring frequency of twice/month for BOD5, TSS, DO, O&G, and pH. The footnote indicates that the samples should be taken at the first discharge of the monitoring period. This requirement is somewhat confusing because the first discharge of the monitoring period occurs once per month, yet the monitoring frequency is twice per month. Cooper requests that this requirement be once per month.

### RESPONSE #7

The intent of the footnote was to ensure that the sample is representative of a discharge for the entire monitoring period and not just a sample from the base flow. In order to clarify the requirement, the footnote will be changed to read, "Samples and measurements taken shall be representative of the volume and nature of the monitored discharge during the entire monitoring period."

### ISSUE #8

Section 14.c. of the Statement of Basis includes the following statement: "The facility...includes stormwater runoff from the parking lot area on the north side of the facility (Outfall 003) and stormwater runoff from the office area on the east side of the facility (Outfall 004)."

Please correct this statement. The statement should read, "The facility...includes stormwater runoff from the parking lot area on the north side of the facility (Outfall 004) and stormwater runoff from the the office area on the west side of the facility (Outfall 003)."

### **RESPONSE #8**

This statement will be corrected as requested.