

# **EXHIBIT G**

August 26, 2024

Terese Hruska  
Wyoming Refining Company  
10 Stampede Street  
Newcastle, WY 82701

**RE: Comments Submitted for Draft WYPDES Permit Renewal WY0001163, Newcastle Refinery: WDEQ Response to Comments.**

Dear Ms. Hruska:

The purpose of this letter is to respond to comments submitted regarding WYPDES Permit WY0001163, Newcastle Refinery's permit renewal, advertised in public notice beginning May 17, 2024. Your comments were received by the WDEQ on June 17, 2024.

Comments were as follows. DEQ responses are also noted below, in italics, and referenced in the comments section.

**Comment 1 – WRC's Compliance History Does Not Indicate Changes to the Permit are Needed**

- 1) WRC has a good compliance history with no systemic or unaddressed violations. The Statement of Basis does not reflect the compliance posture over the most recent permit term because it omits important information associated with each exceedance as summarized below. WRC has provided the Agency with reasonable explanations for each exceedance listed in Table 1A through monthly compliance reports and the permit renewal application which document WRC's response and corrective action for each exceedance. When put in proper context, the exceedances do not support any changes to the Permit. Therefore, addition of an upstream sampling port, WET testing requirements, and more frequent monitoring for oil and grease, COD, BOD5, ammonia, and phenolic compounds are not warranted.
- 2)
  - a. Six of the 31 permit exceedances listed in Table 1A are for Outfall 002 and did not occur during the term of the currently effective permit, which began August 1, 2018. Further, these six exceedances, all from the monitoring period ending May 31, 2018, were caused by a single, random, and unprecedented storm event that delivered 4.35 inches of precipitation in a short timeframe. The isolated storm event that caused permit exceedances at Outfall 002 in May 2018 is not a compliance issue.
  - b. Seventeen of the 31 exceedances listed in Table 1A were the result of a one-time event that had a 7-month long effect on WRC's system extending from May 2022 through November 2022 caused by a temporary spike of ethanol in the refinery's wastewater treatment system. Corrective actions were successfully implemented and documented in monthly compliance reports, and no similar upsets have occurred since. These exceedances do not represent any compliance issues.
  - c. One of the 31 permit exceedances listed in Table 1A was the result of pond turn-over as the ice came off the Frog Pond and Outfall 001 at the end of March 2022. The Outfall 001 discharge was sampled immediately upon resuming flow and found to be compliant with all other parameters. The turn-over anomaly combined with the compliant subsequent test in April 2022 prove this is not a compliance issue.
  - d. The two April 2023 exceedances for selenium (one at Outfall 001 and one at Outfall 002) were confirmed to be the result of laboratory bias or error. Since changing laboratories for selenium analysis in May 2023, the analyses have been completed properly and no further selenium exceedances have

occurred. These exceedances were not the result of WRC's actions and should not be portrayed as a compliance issue.

e. Three of the 31 permit exceedances listed in Table 1A occurred in September 2021 and September 2022 and were the result of livestock activity immediately upstream and within 10- to 20-feet of Outfall 001. Upstream samples from the Frog Pond discharge were approximately 10 times lower than at the Outfall, proving that WRC is not responsible for the excess sulfide. The Frog Pond has been fenced since construction in the 1980s, keeping livestock out of the impoundment. The fencing is checked whenever personnel are at the site to maintain its integrity. WRC is doing what it can to keep livestock from this location. WRC's efforts appear to have been effective because no exceedances were noted in 2023. These sulfide exceedances are not a result of a compliance issue with the refinery's wastewater system as Table A1 implies.

f. The final two of the 31 permit exceedances listed in Table 1A (Outfall 002 in March 2022) resulted in a policy being instituted that, absent emergency conditions, storm water will not be released through Outfall 002 until monitoring, sample analysis, and review has been completed to confirm compliance with TOC limits. Since instituting this policy, no additional permit exceedances have occurred at Outfall 002.

*DEQ Response – DEQ appreciates that Newcastle Refinery is adhering to the exceedance notification requirements of their permit. While it may be true that Newcastle Refining feels that there are good reasons behind each permit violation, the DEQ is required to review permit compliance as part and parcel of each permit renewal. As this information is public domain knowledge, WDEQ does not feel that including a permit violation summary in the permit renewal's statement of basis is harmful or malicious in any way, and such summaries are routinely incorporated in EPA-issued permit renewals. By doing so, the DEQ is simply providing this information in an easy-to-access format, and has become common DEQ practice for facilities with documented compliance issues.*

*There is no standard 'look back' period for such violations, so including violations from previous permit terms is common.*

*Regardless of cause, all the noted violations have the potential to re-occur, unless Newcastle Refinery has put in place facility mechanisms to address any potential violations occurring due to repeat occurrences of the circumstances noted above. In particular, the circumstances noted due to livestock have not been proven to DEQ's satisfaction. It is the DEQ's position that whatever occurs prior to outfall discharge is the responsibility of the permittee, whether an actual facility process or not. Therefore the facility exceedance summary included in the permit renewal statement of basis will not be removed as requested. However, the summary was revised to remove the two selenium exceedances that were noted to be due to laboratory error.*

#### **Comment 2 – Upstream Sampling Ports Should Not be Required.**

- a. Outfall 001: The Frog Pond provides treatment via settling and aeration. The treatment area between the Frog Pond and Outfall 001 provides sediment trapping, nutrient removal, and chemical detoxification. Because the treatment area extends to within 25 feet of the weir at Outfall 001, the best location for SP-1 would be at the end of the treatment area, approximately 25 feet upgradient from Outfall 001, in order to be “representative of the monitored activity” as required by 40 C.F.R. 122.48(b). However, Paragraph 3 of the Second Stipulation of the Parties filed May 22, 1985 in Docket No. 86-108 in People of the State of Wyoming v. Wyoming Refining Company in the District Court of the First Judicial District in and for Laramie County (“Second Stipulation”) requires that compliance monitoring “be conducted at the flume which has been installed in Windmill Draw,” which was designated and S1 and later as Outfall 001.. Wyoming regulations

contemplate scenarios where the permittee may use an outfall located on property owned by others and therefore outside of the permittee's control. Wyo. Admin. Code 020.0011.2 § 5 (a)(v)(G). Therefore, compliance monitoring must be conducted at Outfall 001 and nothing requires that WRC own or control the property where Outfall 001 is located.

Instead of installing and monitoring a new sample port, WRC will continue collecting data at the Frog Pond for internal use and, if compliance issues arise due to non-point sources, WRC will provide the internal use data to WyDEQ for its consideration when evaluating compliance issues.

*DEQ Response: To date, Newcastle Refinery has provided no definitive scientific information that demonstrates the treatment thought to be provided by discharging into the 'Frog Pond' prior to discharge at outfall 001 is actually occurring, or the magnitude of said treatment. Inclusion of SP-1 in the permit renewal will provide a basis to compare water quality leaving the refinery to water quality at outfall 001 after the 'treatment' that the Frog Pond is thought to provide. DEQ disagrees with the proposed location 25 feet upstream of outfall 001, as the purpose of the sampling port is to compare refinery process water as it leaves the plant to post-Frog Pond treated water at outfall 001. The DEQ is willing to consider other locations for SP-1, provided the proposed location is prior to discharge into the Frog Pond. While it is true that there is no provision in Wyoming Regulations that states that facility outfalls must be located on property owned by the permittee, permittees also bear full responsibility should they choose to give up total control of that outfall. Permittees are totally responsible for water quality at their outfalls, regardless of location or outfall land ownership. Permittees have the sole discretion in determining the type of treatment being used at their facilities. However, the treatment selected cannot 1). Cause violations of other effluent limitations, or 2). Fail to provide adequate, reliable treatment of targeted pollutants. In this case, using the 'Frog Pond' as a type of effluent treatment may be allowing other pollutants (for example, E. coli bacteria and sulfide) to enter the discharged wastestream. Therefore the WDEQ is required to limit those pollutants in the treated wastestream.*

b. Outfall 002: Storm water ultimately collects at Outfall 002, where it is released through a gate valve and pipe plug to Little Oil Creek. There is no treatment. The basis for SP-1 is so that WyDEQ can evaluate the data "during the next renewal cycle to determine if effluent concentrations of various constituents change between exiting the refinery and prior to outfall discharge" (page 1, item 2). SP-1 is required to be installed upstream of Outfall 001 which has no relationship to Outfall 002 which is the refinery's stormwater outfall. Therefore, the data from SP-1 **cannot** be used to evaluate limits at Outfall 002 and the requirement that SP-1 must be sampled when Outfall 002 is impractical as a matter of fact and therefore should be removed from the permit. Further, the permit states in Part I, Section A (page 5 of the permit) that "Monitoring point SP1 shall be sampled on the same day that outfall 001 is sampled, as soon as possible after outfall sampling occurs. Monitoring point SP1 shall be sampled and results reported as established in Table A. Effluent limits established in Table A do not apply to monitoring point SP1." Per this statement, sampling of SP1 is NOT required for discharges from Outfall 002.

*DEQ Response: It is not WDEQ's intent to compare stormwater discharged at outfall 002 to effluent results obtained at SP1. Only effluent 'treated' in the Frog Pond and discharged through outfall 001 will be compared to refinery wastewater quality prior to treatment in the 'Frog Pond'. Which is why the permit requires outfall 001 and monitoring point SP1 to be sampled on the same day as close as possible to each other, but does not mention sampling outfall 002 on the same day.*

**Comment 3 – Chromium Monitoring Should Remain as Required in the Current and Previous Permits.**

Statement 7 should be removed, and chromium monitoring and limits should remain the same as in all previous permits. This permit acknowledges and relies on the same special conditions as all previous permits, which are based on the Second Stipulation:

**SPECIAL CONDITION #1:** In 1990, DEQ established the following policy regarding chromium monitoring at this facility:

1. Chromium effluent limitations will be retained in the permit as required by the EPA regulations;
2. Wyoming Refining is not required to monitor for chromium unless the company begins using chromium-based compounds in their process;
3. WDEQ will monitor the discharge for chromium compounds whenever compliance monitoring is performed by this agency.

**Special Condition #2 confirms that the Second Stipulation still applies. Paragraph 6 of the Second Stipulation specifies that the “DEQ waives any chromium monitoring.”** The waiver is not limited to monitoring for compliance with federal limitations, it applies to monitoring for compliance with any limitation, including state water quality based limitations.

**SPECIAL CONDITION #2:** This discharge permit was originally issued pursuant to the Second Stipulation of the Parties filed in May 1985 in the District Court, First Judicial District, in and for Laramie County, Wyoming, Docket No. 85-108, and modified Consent Decree entered by Judge Joseph F. Maier in that matter. It is recognized that the District Court retains continuing jurisdiction over this matter. WRC disagrees with WyDEQ’s statement, “However, this may not be correct, as this facility is likely largely constructed using chrome steel (Basis summary, item 7)”. The vast majority of piping in the refinery is carbon steel piping with no chromium content and none of the process water piping in the refinery’s wastewater treatment system, that is continually exposed to wastewater, contains chromium. The carbon steel piping used in the refinery that does contain chromium only contains a minor amount of chromium (<2%) and is only used in specialized applications, such as high heat transfer applications. This unsubstantiated claim should not be used as a basis for requiring additional testing. Importantly, WRC has NOT begun using chromium-based compounds in its refining process; therefore, none of the conditions articulated in the Second Stipulation have been met that would trigger the need for chromium sampling. As drafted the terms of the draft permit are in direct conflict with the court approved Second Stipulation, which still governs this permit. Finally, WyDEQ’s statement “As there is no wastewater chromium data available at this facility. . .” is incorrect. Although limited, WRC has tested for Outfall 001 for chromium in 2017 and 2022 and communicated the results to WyDEQ in their permit renewal applications. Data from both sampling events indicate total dissolved chromium is <5 µg/L. WyDEQ inspections of Outfall 001 also included testing for chromium and the limited data from these reports indicates either non-detect or below detection limits were reported. These concerns also apply to WyDEQ’s statement for chromium testing on the bottom of page 7 (Monitoring Only Requirements section). In Part I.A.1, Special Condition 1, item 2, states that “WRC is not required to monitor for chromium unless the company begins using chromium compounds” [emphasis added]. Therefore, all chromium monitoring requirements listed in Tables A & B need to be annotated as conditional only requirements to be consistent with this section and the court approved Second Stipulation.

*DEQ Response: Please provide a copy of this ruling to the DEQ for review. DEQ does not have a copy of this ruling and cannot at this time determine its applicability to the current permit renewal.*

**Comment 4 - WET Testing Should Not Be Required.**

None of the violations listed in Table 1A suggest that WRC’s effluent regularly contains pollutants in levels that, when combined, would create toxicity. As WyDEQ noted, WET testing is used to demonstrate that the effluent will not have an adverse impact on aquatic life. WRC has been proactive in addressing

each of the non-compliances listed in Table 1A. Excluding the April 2023 selenium exceedances which WRC believes was the result of lab bias, WRC has been in compliance with all of the required chemical constituent limits since November 2022 (and since September 2022 for non-selenium limits). WRC believes that WET testing is unnecessary.

Outfall 002 is a stormwater Outfall and is separate from the refinery's wastewater system. On rare occasions, the storm water located in Pond 6 immediately upstream of Outfall 002 is commingled with treated process wastewater and WRC's policy is to transfer this water back to the refinery's wastewater system and not to discharge it except in emergency situations to prevent breaching of storm water containment systems. Therefore, the storm water discharged from Outfall 002 is only storm water and does not contain any toxic parameters. WET testing at Outfall 002 is unnecessary.

The chemicals listed in Table 1R should be completely disregarded. The discharge rate to the Frog Pond from the wastewater treatment system averages 228 gallons per minute and the chemical with the highest daily injection rate is Caustic Soda 50% at an average of 27.4 gallons per day. At this rate, Caustic Soda 50% makes up 0.008% of the wastewater and the other chemicals make up even less. Table 1R lists the LC50 levels, but does not take into consideration the significant dilution these chemicals are receiving in the wastewater and Frog Pond, the breakdown of the chemical in the treatment process and even further dilution if stormwater enters the wastewater system. In addition, all the chemicals listed in Table 1R are used in the refinery process and have no access to the stormwater. When non-commingled water is released (stormwater only), these chemicals cannot come in contact with storm water and should be removed from testing requirements for Outfall 002.

*WDEQ response: One of the purposes of WET testing is to determine whether or not various water treatment chemicals and facility effluent might have an adverse synergistic toxic effect. This type of toxicity cannot be determined or prevented by meeting chemical constituent limits. While the Frog Pond is not a classified stream section, the receiving waters downstream of outfalls 001 and 002 are classified as 3B waters. Therefore, they are protected for aquatic life, making aquatic life protection necessary.*

*WET testing is also used to evaluate potential effects from added water treatment chemicals. As this facility uses a large number of water treatment chemicals, WET evaluation is necessary.*

*As stormwater discharges contact various parts of the refinery property, which may or may not be contaminated from historic chemical and hydrocarbon spills due to its long operating history during periods of time when environmental considerations were either absent or considerably less important than they are now, WET evaluation of this facility's stormwater discharges is also necessary. See page 9, statement of basis, **STORM WATER DISCHARGES (Outfall 002)**; and Part I, page 3, paragraph after **Table A** footnotes.*

*Also In line with the information provided by Newcastle Refinery regarding outfall 002 discharges in 'Comment 4 - WET Testing Should Not Be Required', treated process waters are on occasion discharged to stormwater containment ponds feeding outfall 002. Therefore, it is possible for chemicals listed in Table 1R to be discharged from outfall 002.*

#### **Comment 5 – Increased Monitoring Frequency is Not Necessary.**

As noted in Comment 1, WRC believes that the increased testing frequency of selected parameters is not warranted. Also, Part II A. MANAGEMENT REQUIREMENTS on Page 19 of the Permit requires either a phone call or written notification of noncompliance issues. WRC has always met this requirement and these notifications will continue to be made, so the WyDEQ will be aware of any issues, without twice monthly sampling and monthly reporting being required. The extra monitoring requirements will

provide limited, if any, relevant information to WyDEQ, but they are an onerous, expensive, and overly burdensome requirement for WRC. WRC requests the requirements be removed or decreased appropriately.

*WDEQ Response: It is current WDEQ practice to increase monitoring and reporting frequencies for facilities with significant compliance histories. Therefore, WDEQ has not granted your request to revert monitoring and reporting frequencies back to their previous schedule. However, should Newcastle Refinery achieve an acceptable compliance record during their next 5-year permit term, the WDEQ will be happy to reduce sampling and monitoring frequency to monthly as part of the next permit renewal.*

#### **Comment 6 – E. Coli. Limits Should Be Removed from the Permit.**

Table 1C should be removed as WRC should not be required to monitor and control E. Coli added by non-point source contributions from wildlife and livestock. There is no source for E. Coli. in the refinery effluent and WyDEQ's reasonable potential analysis demonstrates no reasonable potential to exceed the standard. Requiring a limitation because the analysis result is "very close to the standard" is not reasonable and makes the analysis inconsistent and arbitrary. Use of the E. Coli. standards is improper here where the receiving waterbody is an ephemeral gully completely surrounded by private property from the Outfall downstream past the confluence with Blacktail Creek.

When developing permit effluent limitations, "[e]xisting controls on point and non-point sources of pollution" shall be considered. Wyo. Admin. Code 020.0011.2 § 5(c)(iii)(C)(I)(1). Here, WRC controls its discharge to the furthest extent possible. Wildlife and livestock are non-point sources of pollution outside of WRC's facility and beyond WRC's control; therefore, the impacts of wildlife and livestock should be considered as uncontrollable non-point sources, not subject to regulation in WRC's permit. WRC's discharge is distinguishable from the non-point source discharge caused by wildlife and livestock. Non-point sources beyond WRC's control may have reasonable potential to adversely impact the uses of state waters due to e. coli. and other pollutants specific to the non-point sources, but WRC's discharge does not. Therefore, WRC's discharge should not be regulated for those non-point source additions.

*Permittees have the sole discretion in determining the type of treatment being used at their facilities. However, the treatment selected cannot 1). Cause violations of other effluent limitations, or 2). Fail to provide adequate, reliable treatment of targeted pollutants. In this case, using the 'Frog Pond' as a type of effluent treatment may be allowing other pollutants (for example, E. coli bacteria and sulfide) to enter the discharged wastestream. Therefore, the WDEQ is required to limit those pollutants in the treated wastestream.*

#### **Comment 7 – Corrections to Errors in Permit / Inconsistencies in Requirements**

**a)** The statement requiring WRC to "fence off all livestock from their retention pond, also known as the 'Frog Pond'" (Statement of Basis page 1, item 2) is incorrect. As noted in the 1<sup>st</sup> paragraph in the Compliance Section (Statement of Basis, page 2), WRC has "fenced the containment pond to prevent livestock access".

*WDEQ Response: All references and requirements related to installing fencing around the Frog Pond have been removed from the final permit.*

**b)** The statement "The control dike has an overflow structure (discharge point 002) that allows storm water runoff discharge to Little Oil Creek (class 3B water)" in the last paragraph in the Facility Description section (Statement of Basis, page 2) is incorrect. The definition of an overflow structure includes a structure that will allow an automatic discharge from a collection system when flows from

storm water exceed a defined level. WRC's Outfall 002 release mechanism does not contain any automatic features that would allow water to be discharged. All releases from Outfall 002 have to be manually initiated.

*WDEQ Response: The phrase 'once manually initiated' has been added onto the end of the sentence in question.*

c) The statement "Facility personnel have indicated that they believe that most, if not all, of the compliance issues are related to livestock accessing the area between outfall 001 and the containment pond, also known as the 'Frog Pond' "(Statement of Basis, page 2, 4th paragraph) is incorrect. As noted in Comment 1, only 3 of the 31 exceedances shown in Table 1A are associated with livestock or wildlife in the drainage upstream of Outfall 001. The recommendation to fence off this area, which would require permission from the landowner, or relocation of the Outfall is unwarranted given only three occurrences within a five-year period.

*WDEQ Response: This statement has been corrected to read 'some of the compliance issues are related to livestock accessing the area between outfall 001 and the containment pond'. As this potential source of outfall limit non-compliance has not been addressed, and future additional non-compliance instances seem likely, the recommendation in the permit to fence off the area remains.*

d) The statement "Although the containment pond is not achieving the originally-intended 'no discharge' intent, the permittee believes that the containment pond is providing a degree of waste treatment prior to discharge at outfall 001. In order to validate both the amount of waste treatment being attained and the source of the compliance issues, the WyDEQ is requiring the permittee to install a sample port immediately downstream of the facility's final treatment unit and prior to discharge into Windmill Draw or Little Oil Creek." (Statement of Basis, page 2, 5th paragraph) is incorrect. The discharge from the Windmill Draw Impoundment ("the facilities final treatment unit") cannot physically enter Little Oil Creek as stated in the second sentence. WRC routinely collects and analyzes samples from the Impoundment. Those sample results may be compared to monitoring data collected at SP-1. WRC can submit this data to WyDEQ upon request to aid in evaluation of the degree of wastewater treatment between the Frog Pond and Outfall 001.

*WDEQ Response: This phrase has been clarified to remove reference to Little Oil Creek.*

e) Table 1B Reasonable Potential Analysis (Statement of Basis, page 4) is incorrect as this table combines effluent data for both Outfall 001 and Outfall 002 and uses this combined data to establish reasonable effluent limits for both Outfalls. However, these two outfalls are separate and independent of each other and deal with completely distinct effluent sources. Combining and applying this data for both Outfalls is incorrect and misrepresents compliance issues at both outfalls (see also footnote 7 for Table 1B). Therefore, this table must be separated and use outfall specific data in order to appropriately and accurately conduct the "Reasonable Potential Analysis" for each outfall.

*WDEQ Response: While it is true that outfalls 001 and 002 are separate, there is some potential overlap in that stormwater contacting the Newcastle Refinery campus has the potential to pick up any and all contaminants present on-site due to soil contamination from historical and possibly un-recorded and un-mitigated spills, leaks, and waste disposal practices. Therefore, the permit has not been modified to divide the facility's reasonable potential analysis as requested.*

f) Similarly, combined outfall data was used to evaluate Technology Based Limits for both outfalls as noted on page 8, Statement of Basis. Therefore, the technology-derived limits shown in this section are incorrect and must be recalculated using Outfall specific data.



*WDEQ Response: See response to f). above.*

**g)** The daily maximum Chromium VI limit shown in the Water-Quality-Based Effluent Limits (Statement of Basis, page 8) is incorrect. The correct value should be 16 µg/L.

*WDEQ Response: Corrected as requested.*

**h)** The statement “Because this facility discharges to an ephemeral waterbody that’s normally dry and therefore has no available dilutional flow, limits established in this permit do not consider available dilution” (Statement of Basis, page 9, 1st paragraph) is ONLY true for Outfall 001. Little Oil creek (receiving water for Outfall 002) flows continuously throughout the year.

*WDEQ Response: While Little Oil Creek may have some flow throughout the year, this stream, according to the ‘Wyoming Surface Water Classification List’, is classified as a class 3B water. Any flow present may be from other dischargers in the area. In addition, there is no flow or water quality data available to use in wasteload allocation calculations. For these reasons, the permit has not been modified in an attempt to satisfy this comment.*

**i)** Table 1C (Statement of Basis, page 9) summarizes discharge limits for E. coli for various recreational uses. The Daily Maximum Standard limit shown in Table 1D (Statement of Basis, page 10) and Table A (Permit, page 3) is 410 colonies/100 mL which is the limit for streams categorized as “Lightly-used Full-Body Contact” [emphasis added]. WRC submits that classification for the small ephemeral stream channel that flows down Windmill Draw is incorrect and that there are no known “recreational areas” where individuals could be expected to use this stream for “Lightly-Used Full-Body Contact”. WRC requests that if this requirement is retained in the final permit, this categorization be changed to “Infrequently-Used Full-Body Contact” which is more accurate for the site. The Daily Maximum limit for E. coli in Tables 1D and A should be changed to 576 colonies/100 ml. This value would also need to be changed in Water-Quality-Based Effluent Limit section on page 8, Statement of Basis.

*WDEQ Response: E. coli standards are established by locating facility outfalls on the Water Quality Division’s Surface Water Quality Standards ‘Recreation Designated Uses Web Map’, available on-line at <https://wdeq.maps.arcgis.com/apps/webappviewer/index.html?id=177cf0d99fb34b1aac1664944f754b7d>, and identifying stream uses as designated in the web map. In this case, Little Oil Creek in the location of this facility’s outfalls has been designated as a primary recreation use area, which normally means that the most stringent standard is applied. In this case, since the outfalls are located on private, fenced property, it is appropriate to assume that the general public does not have access to the water body in the immediate outfall area. Therefore, the DEQ has determined that the ‘Lightly-Used Full-Body Contact’ criteria is appropriate. The permit has not been modified to include this request.*

**j).** The statement “Because the Newcastle Refinery has had numerous effluent limit violations with no determined cause,” (Statement of Basis, page 9, Whole Effluent Toxicity section) is incorrect. For every month where an exceedance of permit limits occurred at Outfall 001 during the previous permit term, WRC submitted monthly non-compliance reports to both EPA and WyDEQ as required. These reports not only contained WRC’s evaluation for the cause of the exceedance, but also WRC’s corrective actions taken to both minimize the duration of the exceedance and to prevent a reoccurrence. Neither WyDEQ nor EPA has disagreed with or provided any information that would change the conclusions reached in WRC’s evaluations and corrective actions. Therefore, the statements cited above and offered on page 9 of the Statement of Basis are inaccurate and contrary to the record.

*WDEQ Response: This language has been changed to remove the phrase ‘with no determined cause’.*

k). The Whole Effluent Toxicity section (Statement of Basis, page 9) states that “This permit renewal includes effluent limits for whole effluent toxicity (WET) for acute toxicity only.” However, testing requirements listed in Table 1E for Outfall 002 list a requirement for “WET Testing, chronic” which conflicts with this statement on page 9, and therefore WET testing for chronic toxicity needs to be removed from Table 1E. In addition, the Monthly Average for WET testing shown in Table 1D (Statement of Basis, page 10), Table 1E (Statement of Basis, page 11), Table A (Permit, page 2), and Table B (Statement of Basis, page 4) contains the statement “See Part I.A.3 and 4”. However, these sections do not exist. The permit should be revised to reference the correct section of Part I.B.1.

Finally, the Daily Maximum section in these four tables contain the statement “Must pass @ 100% effluent” while the testing requirements of Part I.B.1 require testing at 5 additional concentration levels. If WET testing is retained in the final permit and compliance to the permit is based on the results for 100% effluent (no dilution), WRC requests that the testing for the four listed dilution levels in Part I.B.1 be deleted as this data is not required to assess compliance.

*WDEQ Response: The reference to “WET Testing, chronic” in Table 1E has been removed, and Table 1D, 1E, A, and B reference has been corrected as requested. Although WET requirements state that the permittee must pass WET at 100% effluent, WET tests are multi-dilutional tests according to 40 CFR 136.3., ‘Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms’, 5<sup>th</sup> Edition, October 2002, the tests recommended for use in determining discharge permit compliance in the NPDES program are multi-concentration, or definitive tests and consist of a control (0% effluent) and a minimum of 5 effluent concentrations. Effluent test concentrations of 6.25%, 12.5%, 22.5%, 50%, and 100% are commonly used, which is the dilution series specified in this permit. The permit has not been modified to include this request.*

l). The limit of 100 mg/L TOC in the last paragraph on page 11, Statement of Basis, needs to be corrected to 110 mg/L TOC to be consistent with limit stated in Storm Water Discharge for Outfall 002 (Statement of Basis, page 9), to prevent any “grey” areas for required analytical testing if the TOC is between 100 mg/L and 110 mg/L.

*WDEQ Response: Corrected as requested.*

m. The sampling schedule for Outfall 002 shown in Table 1E (Statement of Basis, page 11) and Table B (Permit, page 4) indicate “Twice Monthly” sampling for selected parameters and then “Monthly” for a different set of parameters. Outfall 002 is the refinery’s storm water outfall and discharges from this Outfall are infrequent. Therefore, WRC requests that the Sampling Schedule be changed to “Per Discharge” for parameters whose current sampling schedule is listed as “Twice Monthly” or “Monthly”.

*WDEQ Response: Change has been made as requested.*

n. The sample schedule for E coli shown in both Table 1D (Statement of Basis, page 10) and Table A (Permit, page 3) state that sampling must occur “Once per discharge occurrence”. However, there is continual flow at Outfall 001 so this requirement implies continuous sampling at this Outfall. For clarity, WRC requests that if E. coli testing is retained in the final permit, the language used for the sampling schedule in both these tables be changed to reflect the requirement listed in the first column of each table. For example, “Once per discharge period May – September”.

*WDEQ Response: Thank you for this clarification. The sampling schedule for E. coli bacteria has been changed to ‘seven times per quarter’ as is typical for other permits with E. coli sampling requirements.*

o) Outfall 002 is the refinery's storm water only outfall. The chemicals Acrolein, Arsenic, total Nitrogen, Phosphorus, and Sulfate, which are part of the refining process, cannot be reasonably expected to come in contact with storm water and should be removed from testing requirements for Outfall 002. in Table 1E and Table B.

*WDEQ Response: See response to **Comment 4 - WET Testing Should Not Be Required.***

p). There is a calculation error in Table 1J for the Daily Max Process Limit (Crude) for Total Chromium (Appendix A, page 4).  $40.0 \times 0.011 = 0.44$ , not 0.044 as shown in Table 1J. The corrected value needs to be applied to the Total Daily Maximum Limit (lbs/day) in Table 1J and will increase the Total Daily Maximum Limit from 3.13 lbs/day to 3.53 lbs/day. This change also applies to Tables 1D, 1N, 1P and Table A.

*WDEQ Response: Changed as requested.*

q). Table 1K (Appendix A, page 5) shows that the Total Monthly Avg Limit (lbs/day) for Hexavalent Chromium is 0.101 lbs/day. However, Tables 1D, 1N, 1P and Table A incorrectly show this result as 0.72 s/day.

*WDEQ Response: Changed as requested*

r). Stormwater runoff effluent limits are calculated and summarized in Table 1O (Appendix A, page 8). However, these results are not correctly transferred to Tables 1E, 1Q and Table B.

*WDEQ Response: Changed as requested*

s). Table A (Permit page 2) lists the lb/day loading limits for ammonia, BOD, COD, O&G, phenolics, sulfides, and TSS. However, Basis Comment 2 (Statement of Basis, page 1) and footnotes 4 & 6 for both Table 1D (Statement of Basis, page 11) and Table A (Permit page 3) state that effluent discharge duration (days/month) and effluent limits do not apply to sample point SP-1. Therefore, WRC requests that these loading parameters be annotated with footnote 4 for clarity.

*WDEQ Response: The parameters annotated with footnote 4 refer to those parameters such as flow that are not required to be monitored for or reported at ALL at SP1. In order to accommodate this request, it was necessary to add parameter concentration reporting to Tables A and 1D in order to exclude load reporting requirements.*

t). For clarity, WRC requests to modify the following statement in Part I.A.1, page 5, to "The permittee is prohibited from discharging any raw refinery process wastewaters at outfall 002. This does not prohibit the release of commingled waters (storm water plus treated wastewater) provided that this water is sampled and analyzed per the requirements of Table B."

*WDEQ Response: In line with the information provided regarding outfall 002 discharges in '**Comment 4 - WET Testing Should Not Be Required**' WDEQ has modified this requirement as follows: "The permittee is prohibited from discharging any untreated refinery process wastewaters at outfall 002. Treated process waters may only be discharged from outfall 002 during emergency situations to event breaching of storm water containment systems. Should such emergency discharges occur, the permittee is required to immediately inform the WDEQ of such discharges. Such discharges are limited to providing storm water containment system breach relief ONLY, and shall cease immediately once the threat of storm water containment system breach is no longer imminent."*

u). Requirements in Part I.B1 for WET testing will likely be problematic to meet. The requirement of a two-day progression (1<sup>st</sup> paragraph of this section) could be difficult to achieve at either outfall due to shipping mid-week samples and the limited logistics available from Newcastle to the appropriate lab. Shipping alone may take the majority of the 36-hour window and could result in the lab being unable to start the test in the required time frame. Since WET testing is only a semi-annual requirement, it is unreasonable to suspect changes to this two-day progression will impact the result from the test. In order to increase the likelihood for the lab to receive and start WET testing in the required time frame, WRC requests that this two-day progression requirement be removed.

*WDEQ Response: This is a standard WET test requirement, and is intended to capture facility effluent variability. Note that WET testing is not required on Fridays, Saturdays, or Sundays (Part I.B.1, page 6). The final permit was not changed in response to this comment.*

v). Another requirement in Part I.B.1 (4<sup>th</sup> paragraph) is that WET testing has to be repeated upon failure of the control test. WRC requests that this requirement, if it is retained in the final permit, be modified so it only applies to Outfall 001. As Outfall 002 is the stormwater outfall, all of the water is typically released in a single day and so no water is left to sample for WET testing if the control sample was to fail. As noted above, WRC maintains that no WET testing at Outfall 002 should be required because the nature of the effluent discharged from outfall 002 is only stormwater with no potential to include toxic parameters in toxic quantities.

*WDEQ Response: This is a standard WET test requirement. This requirement was modified as follows: 'If more than 10 percent control mortality occurs, the test is not valid. The test shall be repeated until satisfactory control survival is achieved. Should effluent from outfall 002 fail to achieve satisfactory control survival, additional samples and repeat WET testing shall occur each time outfall 002 discharges until satisfactory control survival is achieved.'*

w) Reporting under Permit Part I.L – Monitoring and Reporting (Permit page 14) is inconsistent with Tables A & B shown in Part I, Section A. Per Tables A & B, reporting for a few selected parameters is required monthly while language in Section L states that the first report is due September 28, 2024. This requirement is only correct if the first monthly sampling event under the new permit occurs during the month of August. Due to the limited time to comply with many of the new requirements of the permit, WRC requests the effective date for the permit start at the beginning of a quarter.

*WDEQ Response: The effective date of this permit renewal has been changed from 'immediately upon issuance' to October 1, 2024.*

x) Permit Part I.L, item 10, Table 1 (Permit page 17) – The location information for SP1 needs to be changed to match that of Outfall 001 instead of Outfall 002 if this requirement is retained in the final permit. Also, Windmill Draw is unclassified until the confluence with Blacktail Creek which is located downstream of Outfall 001.

*WDEQ Response: The purpose of SP1 is to provide effluent sample data PRIOR TO discharge into the 'Frog Pond', in order to determine what treatment, if any, the 'Frog Pond' provides. While the WDEQ is willing to entertain alternate locations for SP1, SP1 shall be located somewhere between Newcastle Refinery's final on-site treatment works and upstream of discharge into the Frog Pond. The final permit has not been changed to accommodate this comment.*

*Windmill Draw, according to Wyoming Water Quality Rules and Regulations, Section 4.e, is a class 3 water.*

This permit renewal was signed and issued on September 30, 2024.

Please let me know if you've any other questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kathy Shreve", with a long horizontal flourish extending to the right.

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