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Department of Ecology
Water Quality Program
P.O. Box 47600
Olympia, WA 98504-7600
Attn: Jocelyn Jones

May 01, 2019
HSE900.001.009.2019, File # 6.3.3.2.1.28.16

Re: Chapter 173-230 WAC; Certification of Operators of Wastewater Treatment Plants

Dear Ms. Jones,

Phillips 66 Company, Ferndale Refinery operates an NPDES permitted wastewater treatment system (WWTS) in support of its petroleum refinery operations. Wastewater influent to the system are primarily sourced from the refinery activities, but there are small contributions from stormwater, ship ballast water (on a rare occasion) and sanitary wastes. While the sanitary wastewater comprises less than 1% of flow and conventional pollutant loading to the system, it is that contribution which has triggered an obligation under WAC 173-230 *Certification of Operators of Wastewater Treatment Plants* for our operators to become "certified."¹

For the reasons presented in this letter, we believe these certification requirements are unnecessary for our WWTS operators. As explained herein, the operator training, and on-shift staff support the Refinery provides its WWTS operators ensures that these individuals have the system-wide competence that is required under WAC 173-230.

Ecology's proposed revisions of WAC 173-230 present an opportunity to suggest regulation changes. As discussed in detail below, Phillips 66 requests that Ecology clarify that the certification requirements for facilities treating sanitary wastes are only applicable to publicly-owned facilities that treat significant amounts of sanitary wastes.

Background

1. Phillips 66 Company operates a complex primary and secondary WWTS at our Ferndale Refinery. System components include:

¹ While "Industrial wastewater treatment plant(s)" are exempt from this regulation, the definition of "wastewater treatment system" includes those facilities treating a "combination of domestic, commercial or industrial origin...", thus making those "plants" subject to the regulation. We now believe this is an incorrect interpretation of regulation intent and language. See our Suggested Change #1.

- three surge tanks (a chemical water surge tank, a chemical water retention tank, and an oily water surge tank)
- two parallel API oil/water separators with skimmers
- two parallel Induced gas flotation units
- two parallel moving bed biofilm reactors (MBBR)
- two parallel aeration basins
- two parallel clarifiers
- sludge stabilization pond
- catchment basin
- dewatering basin
- stormwater basin
- final holding pond

An average daily influent flow is 2.8 million gallons per day. The sanitary wastewater contribution is about 15,000 gallons per day, or about 0.5% of the total treated wastewater. The contribution of sanitary wastewater flow and its conventional pollutant loading to the WWTS is very low and demands no additional expertise for successful treatment.

2. Phillips 66 employs approximately 6 individuals who have partial responsibilities to operate the WWTS. These employees are affiliated with the United Steel Workers, 12-590. Operating the WWTS is not a dedicated, full-time role, as these employees have other responsibilities to other process units. In addition, there are salaried professional staff available on-shift to support the treatment systems operators. These include: Environmental Specialist – compliance reporting (state certified; Operator in Responsible Charge); Process Engineers – engineering support for process changes and control; Shift Supervisors – day-to-day operational supervision; Operations Coordinators – day-to-day coordination and scheduling for Operations with the cooperation of the Maintenance Department personnel; Maintenance Dept – coordination and execution of all equipment maintenance, including rotating equipment, fixed piping, instrumentation and controls.
3. Competent and compliant operation of the WWTS is critically important for the success of Phillips 66 Ferndale Refinery. Various management tools have been developed to achieve excellent performance. These include:
 - Standardized and documented operating procedures for each system component
 - Preventative and incident maintenance programs
 - Development, updating and adherence to the Treatment System Operating Manual required by the NPDES permit
 - On-site presence of contracted wastewater treatment consulting and analysis firm Athlon Solutions, a Halliburton Service company.
 - Unit specific training and qualifications with annual refresher training on procedures and emergency response.

Suggested Changes in WAC 173-230 Requirements

1. This regulation is clearly targeted to WWTS's processing domestic sewage and requiring a dedicated operating staff. Similarly, the unequivocal rule language is that "industrial wastewater treatment plants" are not subject to the requirements of this rule. These companion statements simply recognize that POTWs and industrial facilities are not the same, and a different approach to gain confidence on operator competence and supervisory over-sight is needed for those facilities

dedicated to domestic sewage treatment. By comparison, industrial WWTS are privately-owned, with differing influent composition requiring a range of treatment technologies, and system-wide staffing model that could differ from the typical public facility.

To clearly limit the requirements of WAC 173-230-020 to systems primarily designed and operated to handle significant volumes of sanitary wastes, Phillips 66 requests that the definition of "wastewater treatment plant" be revised as follows:

"...means a publicly-owned facility used to treat any liquid or waterborne waste of domestic origin or a combination of domestic, commercial, or industrial origin, and that, by its design requires the presence of an operator. It does not include any facility ...".

This change would clearly align rule applicability to its stated intent and avoid the illogical outcome where a low level domestic sewage contribution subjects the facility to the entire set of WAC 173-230 requirements.

2. The WAC 173-230 objective to compel operator and ostensibly WWTS operating competence can be demonstrated by recognizing the total operating team responsible for treatment system operation. Team credentials, experience and how they are deployed will be a more compelling demonstration of this capability vs. a sole focus on individual operator academic and experience measures. NPDES permittees are responsible for compliance with permit terms and conditions. This certainly includes decisions on WWTS staffing levels, provision for training, professional skills support, etc. At Phillips 66 the responsibility for WWTS performance is shared across the manufacturing system. WWTS operators have on-shift access to multiple salaried professional staff to trouble-shoot any operational issues, optimize the treatment process, identify maintenance priorities and work, etc. This is a more robust work practice approach (as opposed to focus on an individual operators' certification status). Yet the WAC 173-230 provides no rule language mechanism to credit this management choice.

To recognize a system of competence, Phillips 66 requests that Ecology consider adding a new subsection in WAC 173-230-220 *Applicability* which states:

(4) In lieu of having one or more operators which have met the competency requirements of WAC 173-230-220 onsite, a facility may petition the Department to approve and the Department may approve a facility's competency demonstration. The Demonstration shall indicate the system the facility has onsite to ensure proper wastewater treatment system operation including staff training and supervision. If accepted by the Department the submittal would substitute for the requirements in this regulation and would be incorporated into the Treatment System Operating Plan required of NPDES permittees.

As a less favored approach, Ecology could be prepared to broadly interpret and apply the language in WAC 173-230-250(2) to facilitate achieving a certification status. For example, the "case-by-case" provision along with "relevant experience" and "operating experience" and "allowable substitutions" could provide a means for introducing the Phillips 66 Ferndale Refinery WWTS management approach and gaining certification for the operating team.

3. Finally, we would encourage Ecology to simplify this rule. We acknowledge this is a well-intentioned regulation that has undoubtedly advanced the overall competence of WWTS operators through the years. But it is also a very complex rule and especially bureaucratic in its structure and requirements. This current proposed revision takes the rule from eight pages length to 14 pages (partly related to formatting). Ecology might consider whether there is comparable environmental protection value with this expanded rule and, if not, to trim in back.

Page 4
Department of Ecology
May 01, 2019

If you have any further questions, please contact David Schmitz at 360-384-8331.

Sincerely,

A handwritten signature in black ink that reads "John Andersen". The signature is written in a cursive, flowing style.

John Andersen

JLA:RFP:DES/kjm