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April 30, 2019

Jocelyn Jones
Water Quality Program
Washington department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Subject: Chapter 173-230 WAC *Certification of Operators of Wastewater Treatment Plants*

Dear Ms. Jones:

Equilon Enterprises LLC, dba Shell Oil Products US - Puget Sound Refinery operates an NPDES permitted wastewater treatment plant (WWTP) in support of its petroleum refinery operations. Wastewater influent to the system are primarily sourced from refinery processes, but there are small contributions from stormwater, third party wastewater – from Air Liquide, Linde Gas and General Chemical, and sanitary wastes. While the sanitary wastewater comprises much 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 would be burdensome for our WWTP and system operators. An explanation of our operator training and on-shift staff support will demonstrate system-wide competence that is sufficient to fulfil the fundamental objectives of this regulation. Ecology's proposed revisions of WAC 173-230 present an opportunity to both suggest regulation changes and/or gain agreement on sensible application of the rule language considering the work-process based operational model at refinery WWTPs over the operator-focused model that this rule language refers to.

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[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.

Background

1. Equilon Enterprises LLC, dba Shell Oil Products US - Puget Sound Refinery operates a complex primary and secondary WWTP at 8505 S Texas Rd, Anacortes WA, 98221. System components include:
    - Two surge tanks (that also serve as overflow tanks)
    - Three bay (parallel configuration) API oil/water separator unit
    - Three (parallel configuration) dissolved air (nitrogen) flotation unit
    - A pretreatment biotreater (1st stage biotreater)
    - A three bay oxidation (series configuration) oxidation channel (2nd stage biotreater)
    - Two secondary clarifiers (parallel configuration)
    - Intermediary retention basin
    - Stormwater pond
    - Disinfection system (using sodium hypochlorite/bleach)
    - Final holding pond

    An average influent flow to the WWTP is 4.3 million gallons per day. The sanitary wastewater contribution is about 15,000-30,000 gallons per day, or about (0.5%-1%) of the total treated wastewater. The contribution of sewage flow and its conventional pollutant loading to the WWTP is truly insignificant and demands no additional expertise for successful treatment.

2. Equilon Enterprises LLC, dba Shell Oil Products US - Puget Sound Refinery employs 17 operators who have partial responsibilities to operate the WWTP. These employees are affiliated with the United Steel Workers Union and operate on a shift schedule. Furthermore, operating the WWTP is not a dedicated, full-time role, as these operators have other responsibilities in the refinery that they assume on a scheduling basis. Additional responsibilities over that of operating the WWTP broadly include but may not be limited to tank operations, rail car operations and/or dock operations. The refinery's structural organization around wastewater treatment and management extends to a broader team of personnel that includes but is not limited to Production Shift Team Leaders and Supervisors, Production Specialists, Process Engineers, Environmental Engineers, Reliability Engineers, Operations and Maintenance Specialists and Instrumentation and Electrical (I&E) Engineers. The Wastewater Treatment Operators are highly trained and skilled in their role that is fundamentally to operate the plant based on well-defined and documented procedures. The more extensive development of operating procedures, design calculations, advanced trouble-shooting and preventative/reactive maintenance related to water treatment and management is carried out by the larger team that is accessible to the operator on a 24 × 7 basis.

3. Competent and compliant operation of the WWTP is critically important for the success of Shell Puget Sound Refinery's WWTP. Various management tools have been developed to achieve excellent performance. These include:

    - Standardized and documented operating procedures for each system component
    - Preventative and reactive maintenance programs
    - Development, updating and adherence to the Treatment System Operating Manual
    - required (TSOP) by the NPDES permit
    - Proactive technical monitoring system that includes unit targets/alarms

- 24 × 7 support to operators at the WWTP by an extended team of non-shift staff

Each EP operator goes through an extensive training, qualification and assessment process to both qualify as an EP operator and maintain EP operator proficiency. The training process entails up to 8 weeks of training followed by detailed assessments/interviews with unit trainers and specialists.

Suggestions on WAC 173-230

We acknowledge this is a well-intentioned regulation that has undoubtedly advanced the overall competence of municipal WWTP operators through the years. However, it is primarily intended to WWTP's that process domestic wastewater including sanitary waste with unequivocal rule language that "industrial wastewater treatment plants" are not subject to the requirements of this rule. These 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 facilities dedicated to domestic sewage treatment.

In context of Shell Puget Sound Refinery's sanitary wastewater contribution being < 1% of the total treated wastewater, we request consideration and thoughtful applicability to the definition of wastewater treatment plant in WAC 173-230-020. Furthermore, and considering Shell Puget Sound Refinery's work-process based WWTP operating model over an operator-focused operating model, we request Ecology to broadly interpret and apply the language in WAC 173-230-250(2) to facilitate achieving a certification status. The "case-by-case" provision along with "relevant experience" and "operating experience" and "allowable substitutions" could provide a means for introducing Shell Puget Sound Refinery's WWTP management approach and gaining certification for the operating team.

We appreciate the opportunity to comment on proposed changes by Ecology to WAC 173-230. If you have any questions or need further clarifications related to the letter, please contact Gautam Kini, Environmental Engineer (Water) for Shell Puget Sound Refinery at (360) 299 1890.

Sincerely,

Brian Robson
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