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August 24, 2023

Ms. Tari Enos  
Department of Labor & Industries  
Division of Occupational Safety & Health (DOSH)  
P.O. Box 44620  
Olympia, WA 98504-4620

Via email to: [Tari.Enos@Lni.wa.gov](mailto:Tari.Enos@Lni.wa.gov)

Re: Comments on Proposed Rulemaking for WAC 296-67 Part B (CR-102)

Dear Ms. Enos,

On behalf of BP Products North America Inc. (bp) and the employees who work at the bp Cherry Point Refinery, we thank you for the opportunity to share the attached comments on the proposed process safety management (PSM) rule that was recently issued for comment by your department (WAC 296-67 Part B). These comments are submitted for your consideration; they are not intended to change the underlying intent of the regulatory language but to improve the clarity and efficacy of the proposed rule. For ease of review and consideration, we reference the portions of the rule, provide proposed alternative language that we believe meets the intent in a more effective manner and/or include editorial suggestions to clarify the language and avoid the potential for misinterpretation.

We are all working to find the best path forward for the safe operations of refineries in Washington state to protect employees, our community and our environment. We appreciate your willingness to consider these comments.

Sincerely,

Derek Thompson  
bp Cherry Point Process Safety Engineering Superintendent

There are several topics that bp would like the Department of Labor and Industries (L&I) to consider when finalizing the proposed rule. We present these in the spirit of creating a rule that focuses on process safety improvements and effectiveness for all parties (including the regulator and the regulated facilities).

**1.1: WAC 296-67-323(1)(c)(ii): [The process hazard analysis (PHA) must address:] *“Previous publicly documented process safety incidents in the petroleum refinery and petrochemical industry sectors that are relevant to the process;”***

- Comment: The volume of publicly documented incidents is potentially large and dispersed, which could lead to an unreasonably burdensome amount of work to document that all relevant incidents have been discovered, unless some sort of boundary is given with regards to what incidents are expected to be covered by this rule.
- bp Proposed alternative language: [The PHA must address:] *“Previous publicly documented process safety incidents in the petroleum refinery and petrochemical industry sectors that are relevant to the process, such as those published by the U.S. Chemical Safety Board (CSB), the Center for Chemical Process Safety (CCPS) or similar.”*

**1.2: WAC 296-67-323(3)(b): *“All hierarchy of hazard controls analyses (HCAs) for facility processes must be updated and revalidated as standalone analyses at least once every five years, and can be performed in conjunction with the PHA schedule.”***

- Comment: It is not clear what it means to require that an HCA be revalidated every 5 years in a way that will improve process safety performance effectively. A revalidation of an HCA is likely to be most effective if there is either a change to the risk in the process (as identified in the PHA) or a change to the industry standard for a particular safeguard. Therefore, we propose that further direction be added to the language of the rule to avoid an unnecessarily burdensome review of safeguards for which the execution of an HCA would not alter the conclusion as to the appropriate hierarchy implemented.
- bp Proposed alternative language: *“All HCAs for facility processes must be updated and revalidated as standalone analyses at least once every five years, and can be performed in conjunction with the PHA schedule to verify that the HCA is consistent with both the current process and the level of inherent safety achieved in practice by the petroleum refining industry.”*

**1.3: WAC 296-67-363(11): *“Investigation reports must be provided to and upon request, reviewed with employees whose job tasks are affected by the incident. Investigation reports must also be made available to all operating, maintenance and other personnel, including employees of contractors where applicable, whose work assignments are within the facility where the incident occurred or whose job tasks are relevant to the incident findings. Investigation reports must be provided on request to employee representatives and, where applicable, contractor employee representatives.”***

- Comment: We believe learning from incidents is a vital component of our continuous improvement process. Further, we believe care needs to be taken to protect and secure

proprietary and confidential information. This section should not require the production of privileged and confidential material. Therefore, we propose that the language for this section revert to the original language present in the existing regulation.

- bp Proposed alternative language: (Revert to original language) *“The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.”*

**1.4: WAC 296-67-379(4): “The human factors analysis must apply an effective method in evaluating at least the following:”**

- Comment: The addition of the term ‘effective method’ could be interpreted as meeting a specific standard that would presumably be measured by specific criteria. Without clearly designating what constitutes an ‘effective method’ or how such an analysis might be measured as effective, however, this wording could result in an unintentionally burdensome amount of work to conduct a human factors analysis that, despite extensive effort conducted in good faith to meet the intent of the rule, may still not be able to be determined to be effective at improving safety or compliance with the rule. We propose to remove the term ‘effective’ unless a method for determining effectiveness can be clearly articulated.
- bp Proposed alternative language: *“The human factors analysis must apply an **effective appropriate** method in evaluating at least the following:”*

**1.5: WAC 296-67-307(5): Definitions. “Employee representative. A union representative, where a union exists, or an employee-designated representative in the absence of a union. The employee representative must be qualified for the task. The term is to be construed broadly, and may include the local union, the international union, or a refinery or contract employee designated by these parties, such as the safety and health committee representative, where the person works on-site at the refinery. Employee representative may partner with an employee representative who does not work on-site when designated by the union, employees in the absence of the union, or when their participation is requested by the employee representative.”**

- Comment: The authority for collective bargaining agents to select employees for participation in an employer program is typically the result of collective bargaining negotiations and not rulemaking. We proposed to clarify the rule to avoid interfering or coming into conflict with any collective bargaining agreements.
- bp Proposed alternative language: *“(5) Employee representative. A union representative, where a union exists, or an employee-designated representative in the absence of a union **that is on-site and qualified for the task.** The term is to be construed broadly, and may include the local union, the international union, or a refinery onsite contract employee designated by these parties, such as the safety and health committee representative at the site. **Employee representative may partner with an employee representative who does not work on-site when designated by the union, employees in the absence of the union, or when their participation is requested by the employee representative.”***

**1.6: WAC 296-67-307(23): “Process. Any activity involving a highly hazardous chemical or material, including: (a) Use; (b) Storage; (c) Manufacturing; (d) Handling; (e) Piping; or (f) The on-site movement of such chemicals or materials or combination of these activities”.**

- Comment: The addition of part ‘(e) Piping’ introduces a potential inconsistency in the language used in the rule in that it could be misinterpreted as a noun (i.e., ‘all piping’ in the facility) and could lead to confusion and disagreement in what constitutes compliance. We propose to adjust the wording to refer to an activity in the proposed language (or remove the term ‘piping’ in lieu of it being covered by the term ‘on-site movement’).
- bp Proposed alternative language: “Process. Any activity involving a highly hazardous chemical or material, including: (a) Use; (b) Storage; (c) Manufacturing; (d) Handling; (e) **Transfer using Piping**; or (f) The on-site movement of such chemicals or materials or combination of these activities”

**1.7: WAC 296-67-315(5)(b): “Effective procedures to ensure the right of all employees, including employees of contractors, to anonymously report hazards. The employer must respond in writing within 30 calendar days to written hazard reports submitted by employees, employee representatives, contractors, employees of contractors and contractor employee representatives. The employer must prioritize and promptly respond to and correct hazards that present the potential for death and serious physical harm. If the employer determines that an anonymous report does not constitute a hazard, or that the hazard is being corrected by some other means, a written response must be prepared and made available that provides this information to affected employees.”**

- Comment: We believe that all employees, contractors, and visitors to our site have the ability to report hazards of any kind. We actively encourage a ‘speak-up’ culture. Given that ‘how to report unsafe conditions and practices’ is already a requirement of the WAC code, and that this particular code is intended to ‘reduce the risk of process safety incidents by eliminating or minimizing process safety hazards to which employees may be exposed,’ we propose that this language be adjusted to address process safety hazards specifically.
- bp Proposed alternative language: “Effective procedures to ensure the right of all employees, including employees of contractors, to anonymously report **process safety** hazards. The employer must respond in writing within 30 calendar days to written **process safety** hazard reports submitted by employees, employee representatives, contractors, employees of contractors and contractor employee representatives. The employer must prioritize and promptly respond to and correct **process safety** hazards that present the potential for death and serious physical harm. If the employer determines that an anonymous report does not constitute a **process safety** hazard, or that the **process safety** hazard is being corrected by some other means, a written response must be prepared and made available that provides this information to affected employees.”

**1.8: WAC 296-67-323(1)(d): “The PHA must be performed by a team with expertise in engineering and process operations, and must include at least one refinery operating employee who currently works in, or provides training about the process, and who has experience and knowledge specific to the process being evaluated. The team must also include one member with expertise in the specific PHA**

***methodology being used. As necessary, the team must consult with individuals with expertise in damage mechanisms, process chemistry, safeguard protection analysis, and control systems.”***

- Comment: The use of commas, ‘and’ and ‘or’ in this section could be misconstrued to have two different and conflicting meanings, specifically with regards to what qualifications are optional vs required as it pertains the personnel performing the PHA. To avoid possible confusion, we propose to rearrange the wording so that it is more clear that the ‘or’ statement is referring to only the qualification of the refinery operating employee (and whether they ‘work in the process’ or ‘provide training about the process’) and not to the other qualifications (‘expertise in engineering and process operations’ and ‘experience and knowledge specific to the process’).
- bp Proposed alternative language: *“The PHA must be performed by a team with expertise in engineering and process operations. This team must include at least one refinery operating employee who has experience and knowledge specific to the process being evaluated, and either currently works in or provides training about the process being evaluated. The team must also include one member with expertise in the specific PHA methodology being used. As necessary, the team must consult with individuals with expertise in damage mechanisms, process chemistry, safeguard protection analysis, and control systems.”*

**1.9: WAC 296-67-307(19): Definitions. *“Leading indicators. Predictive metrics of equipment, written procedures, training, employee collaboration, or other best practices used to identify potential and recurring deficiencies.”***

- Comment: In order for leading indicators to be effective, each facility needs to be able to identify and implement those indicators that are most relevant to the areas where improvement is required. Therefore, care should be taken not to overly prescribe what indicators are to be monitored to avoid monitoring indicators that potentially will not be effective at driving performance improvement. Facilities will also need flexibility to evolve these metrics as performance improves to ensure continuous improvement. This is aligned with the guidance from industry consensus per API RP 754 and IOGP Report 456. We proposed language to clarify that the topics included in this definition are examples of possible leading indicators, as opposed to specific indicators that are required to be monitored explicitly.
- bp Proposed alternative language: *“Leading indicators. Predictive metrics used to identify potential and recurring deficiencies, such as those pertaining to the performance of equipment, effectiveness of written procedures, training, employee collaboration, or other work processes.”*

**1.10: WAC 296-67-307(32): Definitions. *“Recognized and generally accepted good engineering practices (RAGAGEP). Engineering, operation or maintenance practices and procedures established in codes, standards, technical reports or recommended practices, and published by recognized and generally accepted organizations such as, but not limited to, the American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), American Society of Mechanical Engineers (ASME), American Society of Testing and Materials (ASTM), National Fire Protection Association (NFPA), and International Society of Automation (ISA). The employer should also consider informative sources of***

***industry practices as appropriate. RAGAGEP does not include standards, guidelines or practices developed for internal use by the employer.”***

- Comment: Regarding internal company standards as RAGAGEP: On May 11, 2016, Thomas Galassi, Director of Enforcement Programs for Federal OSHA, issued a memorandum to Regional Administrators describing RAGAGEP in Process Safety Management Enforcement. The memorandum acknowledges the potential for internal company standards to be considered RAGAGEP, provided the employer document accomplishes one of the following purposes: (1) Translating the requirements of published RAGAGEP into detailed corporate or facility implementation programs and/or procedures, (2) Setting design, maintenance, inspection, and testing requirements for unique equipment for which no other RAGAGEP exists, (3) Supplementing or augmenting RAGAGEP selected by the employer that only partially or inadequately address the employer's equipment, (4) Controlling hazards more effectively than the available codes and consensus and/or non-consensus documents when deemed necessary by the employer's PSM program, or (5) Addressing hazards when the codes and consensus and/or non-consensus documents used for existing equipment are outdated and no longer describe good engineering practice. The proposed language below includes the language from the 2016 memorandum to ensure any RAGAGEP definition created in this regulation is consistent with the federal OSHA PSM regulation.
- bp Proposed alternative language: *“Recognized and generally accepted good engineering practices (RAGAGEP). Engineering, operation or maintenance practices and procedures established in codes, standards, technical reports or recommended practices, and published by recognized and generally accepted organizations such as, but not limited to, the American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), American Society of Mechanical Engineers (ASME), American Society of Testing and Materials (ASTM), National Fire Protection Association (NFPA), and International Society of Automation (ISA). The employer should also consider informative sources of industry practices as appropriate. RAGAGEP ~~does not may~~ include standards, guidelines or practices developed for internal use by the employer **if the employer document accomplishes one of the following purposes: (1) Translating the requirements of published RAGAGEP into detailed corporate or facility implementation programs and/or procedures, (2) Setting design, maintenance, inspection, and testing requirements for unique equipment for which no other RAGAGEP exists, (3) Supplementing or augmenting RAGAGEP selected by the employer that only partially or inadequately address the employer's equipment, (4) Controlling hazards more effectively than the available codes and consensus and/or non-consensus documents when deemed necessary by the employer's PSM program, or (5) Addressing hazards when the codes and consensus and/or non-consensus documents used for existing equipment are outdated and no longer describe good engineering practice.”***

**1.11: WAC 296-67-335(2)(c): *“The refinery employer must inform the contractor and must ensure that the contractor has informed each of its employees of the following:”***

- Comment: The proposed addition of the language ‘and must ensure that the contractor has informed each of its employees of the following:’ and the associated sections (i), (ii) and (iii) raises co-employment issues. The original WAC language correctly and appropriately assigns the responsibility of informing the contract employees to the contract employer. Additionally,



sections 2(c)(i) and 2(c)(ii) are already encompassed in the original WAC language. Section 2(c)(iii) is covered under the original WAC section (2)(c).

- bp Proposed alternative language: “The refinery employer *must inform contract employers of the following*.”

**1.12: WAC 296-67-307(17): Definitions.** *“Isolate. To cause equipment to be removed from service and completely protected from the inadvertent release or introduction of material or energy by such means as: (a) Blanking or blinding; (b) Misaligning or removing sections of lines, pipes, or ducts; (c) Implementing a double block and bleed systems; or (d) Blocking or disconnecting all mechanical linkages”*

- Comment: The term ‘isolate’ is used in section 296-67-327(5)(b) with regards to operating procedures that must ‘isolate any vessel, piping, and equipment where a leak, spill, or discharge is occurring’. The examples listed under this definition of isolate would be considered ‘positive isolations’ and may not be appropriate for an operator to conduct while responding to a loss of primary containment (LOPC) that is still on-going. Valve isolation would be sufficient as an initial response to address the concern posed in this section (i.e., making the area safe for responding to LOPCs). This requirement (i.e., removing sections of pipe) could introduce additional, unnecessary hazards to operators trying to respond to an LOPC.
- bp Proposed alternative language: *“Isolate. To stop flow into or out of a vessel, piping, or piece of equipment where a leak, spill, or discharge is occurring so that the leak may be addressed.”*

**1.13: WAC 296-67-327(1)(a)(viii):** *“The employer must develop, implement, and maintain effective written operating procedures. The operating procedures must provide clear instructions for safely performing activities involved in each process. The operating procedures must be consistent with the PSI and, at a minimum, must address the following: (a) Steps for each operating phase or mode of operation:*

*(i) Start up; .... (vi) Normal shutdown .... (viii) Nonroutine work:”*

- Comment: The term ‘nonroutine work’ as defined by CCPS includes startup and shutdown operations, and therefore could be considered redundant with parts (i) ‘Start up’ and (vi) ‘Normal Shutdown’ in the same section. To avoid confusion and possible redundancy, we propose to combine these items into section (i).
- bp Proposed alternative language: *“(i) Start up, Normal shutdown, and any other Nonroutine work”*

**1.14: WAC 296-67-307(24): Definitions.** *“Process equipment. Equipment including, but not limited to, pressure vessels, rotating equipment, piping, instrumentation, process control, or appurtenances, related to a process.”*

- Comment: This definition should align with the definition of Process. In stakeholder sessions, L&I stated that appurtenances meant mitigative equipment, but this is not clear in the proposed rule. Most of the PSM processes in the proposed rule require analysis of process equipment, which makes this definition very important for focusing the PSM program on prevention of Process Safety Incidents. Treating all equipment as if it has the same process safety risk will

dilute the process safety focus for operators, mechanics, inspectors, and other staff.

- bp Proposed alternative language: “Process equipment. Equipment including pressure vessels, rotating equipment, piping, *process heaters*, instrumentation, process control, or *mitigative equipment* related to a process, *which in the event of failure or malfunction has the potential to contribute to a process safety incident.*”

**1.15: WAC 296-67-307(25): Definitions.** “*Process safety culture. A combination of group values and behaviors that reflects whether there is a collective commitment by leaders and individuals to emphasize process safety over competing goals, in order to ensure the protection of people and the environment.*”

- Comment: We believe that protection of people, environment and the facility are fundamental to safe operation of our facility. This regulation has traditionally focused on the safety of the workforce. Given that there are other regulations that focus on the protection of the environment, we would encourage L&I to take careful consideration before expanding the scope of this rule to also overlap with the protection of the environment. We propose to update the language to align with the purpose highlighted in section 296-67-300: “This part contains requirements for petroleum refineries to reduce the risk of process safety incidents by eliminating or minimizing process safety hazards to which employee may be exposed.”
- bp Proposed alternative language: “*Process Safety Culture. A combination of group values and behaviors that reflects whether there is a collective commitment by leaders and individuals to emphasize process safety over competing goals, in order to ensure protection of **the workforce.***”

**1.16: WAC 296-67-307(26): Definitions.** “*Process safety hazard. A hazard of a process that has the potential for causing a process safety incident, or death or serious physical harm.*”

- Comment: The definition of ‘*process safety incident*’ already includes death and serious harm; therefore, repeating these two conditions is unnecessary.
- bp Proposed alternative language: “*Process safety hazard. A hazard of a process that has the potential to cause a process safety incident, ~~or death or serious physical harm.~~*”

**1.17: WAC 296-67-307(29): Definitions.** “*Process safety performance indicators. Measurements of the refinery's activities and events that are used to evaluate the performance of process safety systems.*”

- Comment: Some measures used as process safety performance indicators may be from refinery data sets that are not ‘activities and events’.
- bp Proposed alternative language: “*Process Safety Performance Indicators. **Company defined measures that may be used to assess process safety performance and process safety management** system(s).*”

**1.18: WAC 296-67-315(1)(c):** “*Access by employees and employee representatives to all documents or information developed or collected by the employer, including information that might be subject to protection as a trade secret.*”



- Comment: The proposed rule needs to be clear that ‘access’ needs to be provided to documents prepared or collected as required by this rule. The language proposed has no bounds. In discussions with L&I, they stated that their intent is to limit access to the rule related PSM documents. This point needs to be made clear in the language.
- bp Proposed alternative language: “Access by employees and employee representatives to all documents or information developed or collected by the employer *pursuant to this section*, including information that might be subject to protection as a trade secret.”

**1.19: WAC 296-67-319(3)(d): “The PSI must include accurate, verified, and complete information pertaining to the following: ... (d) Results of previous DMRs.”**

- Comment: The proposed rule goes beyond the definition from CCPS for process safety information (PSI) and includes study results and other information that is developed using PSI, rather than being PSI itself. For example, a Damage Mechanism Review (DMR) is conducted using PSI such as a simplified process flow diagram, information on materials of construction and technology of the process and corrosivity information. The results of a DMR are not PSI, just like PHAs are not PSI, but instead are performed using PSI. Therefore, we propose that the results of DMRs should be removed from (3).
- bp Proposed alternative language: “(remove section *(d) Results of previous DMRs*)”

**1.20: WAC 296-67-319(4)(a): “Information pertaining to the highly hazardous chemicals or materials used in, present in, or produced by the process, must include at least the following: (a) Toxicity information, including acute and chronic health hazards;”**

- Comment: The purpose of this regulation is to address hazards resulting in catastrophic consequences. Chronic consequences are covered under numerous other WAC HSE standards (ex. HAZCOM, Asbestos, Benzene). ‘Chronic’ should be deleted from (a).
- bp Proposed alternative language: “Toxicity information; including acute *and chronic health* health hazards;”