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Ms. Tari Enos, Administrative Regulations Analyst

Division of Occupational Safety & Health

WA State Dept of Labor and Industries

Via email: psmcomments@lni.wa.gov

Re: Evergreen Islands Written Comment, L&I Revision of Chapter 296-67 WAC, Safety Standards for Process Safety Management of Highly Hazardous Chemicals, First Draft of Rules

Dear Ms. Enos:

Evergreen Islands appreciates this opportunity to participate as a stakeholder in and commenter on the revision of the Washington State's Process Safety Management (PSM) regulations for oil refineries. In addition to this comment, we plan to submit further written comments during the rulemaking process.

Updated and stronger PSM rules are of particular importance to Evergreen Islands. Our mission is to promote, protect, and defend the saltwater islands of Skagit County and their unique ecosystems. To fulfill this mission Evergreen Islands actively supports the enactment and implementation of effective local, state, and national laws that protect the Skagit environment in which we live and work. Two of the state's oil refineries are in Skagit County on March Point, the Shell Puget Sound Refinery (formerly Equilon) and the Andeavor Anacortes Refinery (formerly Tesoro). These refineries have both had catastrophic events related to process management practices resulting in the tragic deaths of 6 workers in November 1998 (Equilon)<sup>1</sup> and 7 workers in April 2010 (Tesoro).<sup>2</sup> The consequences of these avoidable tragedies still infuse the memories of families, co-workers, and friends of the victims throughout Skagit County.

Incidents such as these demonstrate the potential for other environmental catastrophes, including release of toxic materials into the air, water, and landscapes of the communities and natural environment surrounding the March Point refineries. The natural environment includes the unique ecosystems of Padilla Bay (including the Padilla Bay National Estuarine Research Reserve) and Fidalgo Bay (including Fidalgo Bay Aquatic Reserve).

We offer the following examples of the potential for harm to surrounding communities such as ours and the natural environment from failures to manage refinery process safety effectively:

**Chevron Richmond CA Refinery Pipe Rupture and Fire, August 2012** – A catastrophic pipe rupture released a flammable vapor cloud that ignited and burned. 19 refinery workers narrowly escaped injury or death. A large plume of vapor, particulates and black smoke also traveled across the surrounding communities. As a result, some 15,000 people sought medical treatment for breathing problems, chest pain, shortness of breath, sore throat, and headaches. Twenty were hospitalized.<sup>3</sup>

**ExxonMobil Torrance CA Refinery Electrostatic Precipitator Explosion, February 2015** - Four contract employees were injured in the blast. The blast also scattered catalyst dust up to a mile away from the facility and into the nearby community.<sup>4</sup>

**Shell Puget Sound Refinery Anacortes, February 2015** - A flare line released uncombusted hydrogen sulfide, dimethyl sulfide, mercaptans, and benzene into the atmosphere and south from the refinery through the Swinomish Reservation and the town of La Conner. Hundreds of people reported symptoms that included irritation of the eyes, throat and lungs, headaches, nausea, fatigue and loss of appetite. Twelve people from the Swinomish Tribe sought medical treatment and five went to emergency rooms or area hospitals.<sup>5</sup>

These incidents demonstrate that threats to refinery workers from ineffective process safety management, harm to community health, and environmental degradation are intermeshed. Robust regulations to prevent catastrophic releases of highly hazardous chemicals will not only prevent refinery worker fatalities, injuries and illnesses, but will also protect Skagit's communities and the environment. The agency has already acknowledged the potential impacts of catastrophic PSM-related incidents on communities like ours.<sup>6</sup> We request that L&I take these above listed incidents, illustrating impacts well beyond refinery boundaries, into consideration to formulate strong updated PSM rules for Washington State.

Particularly in light of the history of these deadly refinery incidents involving highly hazardous chemicals in Washington State, we believe that your agency must share our goal of developing the highest possible safety standards for Washington's refinery workers and the communities surrounding these refineries. As the letter of February 2, 2018 to Mr. Joel Sacks from a coalition of organizations including ours stated, the new California PSM rules<sup>7</sup> "are the strongest example yet developed in the United States." L&I's rules should not retreat from the safety gains made in California. Refinery safety is certainly no less important in our state than it is in California. If anything, in light of the two deadly refinery incidents at March Point, Washington's rules should strengthen California's rules and clarify their intent to prevent catastrophes.

We agree with the comment submitted to the agency on March 22, 2018 by the Blue Green Alliance and United Steelworkers, *Memo #1: Recommendations to Improve the Washington State PSM Proposal: Addressing Changes Made to Key California Text*. This comment expressed concern about areas in the agency's 1<sup>st</sup> draft that introduce weaknesses into specific sections of the Washington rules, by amending or omitting significant language that was used in the California rules. We fully adopt that comment herein by reference and make additional comment below.

**The “purpose” section must be reworded to state a strong intent to prevent incidents.** The purpose section sets the goal and intent of Washington State in regulating refinery process safety management. In their memo, the Blue Green Alliance and the United Steelworkers raised a concern with the 1<sup>st</sup> draft’s “Purpose” section. The language used in the draft is taken from the existing outdated rules, WAC 296-67-001 (1): “*requirements for preventing or minimizing the consequences of releases of highly hazardous chemicals.*” The updated rules must state a clear and undeniable resolve to require proactive measures to prevent incidents from occurring in the first place. We urge that the purpose section be revised to state: “*This section contains requirements for petroleum refineries to prevent major incidents and eliminate or minimize process safety hazards to which employees may be exposed.*”

**The adjective “effective” must be retained the rules.** Despite the use of this adjective in various sections of the California rules, industry representatives have objected to its use in the Washington rules. The deletion of this adjective would be another example of an omission from the California rules that would result in a weakening of Washington’s rules. The dictionary definition of “effective” is “*successful in producing a desired or intended result*”<sup>8</sup> - in the case of these rules, the prevention of major incidents and elimination or minimization of hazards. Industry representatives should be well acquainted with the meaning and intent of this word because it is used in the current rules in the non-mandatory guideline Appendix C.<sup>9</sup> There the word appears in various sections, for example, in the “Employee training” section. Arguably, among other things, the draft makes formal the objectives of the agency expressed in Appendix C that were not previously mandatory or enforceable.

The updated rules must be superior to those currently in place to in order to prevent more fatalities and injury in Washington’s refineries. Elimination of “effective” from any rule where it is used in the 1<sup>st</sup> draft would mean PSM program elements and procedures, including training requirements, could be put in place that would be merely *pro forma* and thus ineffective to achieve the purposes of the regulations. Additionally, withdrawing the word “effective” from future drafts and final rules when it appeared in the 1<sup>st</sup> draft invites arguments in an administrative enforcement action that the agency intended deference to defendants’ choices in matters such as worker training, even if that led to a catastrophic incident. In light of the

above, we are concerned that the industry objection to “paperwork” or the meaning of the word “effective” is in reality a complaint about the requirements themselves. “Effective” must be retained as it now appears in the 1<sup>st</sup> draft.

**The rules must maintain linkages among program elements.** Process safety management is a system in which program elements are interconnected to achieve an overall result of preventing releases of highly hazardous chemicals. As Appendix C to the existing rules points out, in order to be effective, a PSM program “*requires a systematic approach to evaluating the whole process*” including all the elements that impact the process.

To maintain and reinforce important linkages between and among program elements, sections of the 1<sup>st</sup> draft appropriately reference and/or identify by topic or text other applicable rule sections. These references must be maintained. Industry representatives have frequently flagged provisions in the draft that they label as “redundant.” While the dictionary definition of “redundant” can mean using more words than necessary or characterized by repetition, “redundant” also means “*serving as a duplicate for preventing failure of an entire system (such as a spacecraft) upon failure of a single component.*”<sup>10</sup> At the heart of the concept of safety is the notion of redundant preventative measures. That is a good thing.

In this case, as in the California rules, references to other rule sections or repeated language is not a matter of inartful drafting, but is deliberate to ensure unambiguous applicability of related provisions. Redundancy is crucial to link requirements together, ensure that the workforce and management are trained in and fully aware of all interconnected provisions, and establish the enforceability of all provisions by administrative actions. There must be linkage between and among sections. Whether restating provisions makes the rules a longer read does not matter; what matters is that the rules are effective to protect workers, surrounding communities and the natural environment.

Thank you for your attention to our comment. We look forward to providing additional comments as the stakeholder process continues.

Respectfully yours,

Mary Ruth Holder, Evergreen Islands

**Endnotes:**

<sup>1</sup> CSB, *Safety Bulletin: Management of Change*, No. 2001-04-SB (August 2001).  
<https://www.csb.gov/assets/1/20/moc082801.pdf?13886>.

<sup>2</sup> CSB, Investigation Report: Catastrophic Rupture of Heat Exchanger (Seven Fatalities: Tesoro Anacortes Refinery Anacortes Washington, Report 2010-08-I-WA (May 1, 2014).  
[http://www.csb.gov/assets/1/7/Tesoro\\_Anacortes\\_2014-May-01.pdf](http://www.csb.gov/assets/1/7/Tesoro_Anacortes_2014-May-01.pdf).

<sup>3</sup> CSB, *Final Investigation Report: Chevron Richmond Refinery Pipe Rupture and Fire*, Report No. 2012-03-I-CA. (January 28, 2015).  
[csb.gov/assets/1/16/Chevron\\_Final\\_Investigation\\_Report\\_2015-01-28.pdf](http://csb.gov/assets/1/16/Chevron_Final_Investigation_Report_2015-01-28.pdf).

<sup>4</sup> CSB, *Final Investigation Report: ExxonMobil Torrance Refinery Electrostatic Precipitator Explosion*. No. 2015-02-I-CA (May 3, 2017). <https://www.csb.gov/exxonmobil-refinery-explosion-/>.

<sup>5</sup> Preston, S. Northwest Clean Air Agency. Shell's Puget Sound Refinery Penalized for Chemical Release. Nov. 16, 2016. <http://nwcleanairwa.gov/news-release/shells-puget-sound-refinery-penalized-for-chemical-release/>.

<sup>6</sup> WAC 296-67-291 Appendix C--Compliance guidelines and recommendations for process safety management (non-mandatory), §(1), *Introduction to Process Safety Management*. "This standard as a whole is to aid employers in their efforts to prevent or mitigate episodic chemical releases that could lead to a catastrophe in the workplace and possibly to the surrounding community."

<sup>7</sup> Standards Presentation to California Occupational Safety and Health Standards Board, *California General Industry Safety Order (GISO) §5189.1, Process Safety Management for Petroleum Refineries*. <https://www.dir.ca.gov/OSHSB/documents/Process-Safety-Management-for-Petroleum-Refineries-txtbrdconsider.pdf>.

<sup>8</sup> Effective [Def. 1] (adj.), Merriam-Webster Online. In Merriam-Webster. Retrieved April 5, 2018, from <https://www.merriam-webster.com/dictionary/effective>.

<sup>9</sup> WAC 296-67-291 Appendix C, *supra*. "This appendix serves as a nonmandatory guideline to assist employers and employees in complying with the requirements of this section, as well as provides other helpful recommendations and information."

<sup>10</sup> Redundant [Def. 3] (adj.). Merriam-Webster Online, *supra*, from <https://www.merriam-webster.com/dictionary/redundant>.