



October 5, 2018  
SS 100518 001

Washington Department of Ecology  
ATTN: HWTR Program Rules Unit  
P.O. Box 47600  
Olympia, WA 98504-7600

REF: Boeing Comments on August 2018 Proposed Amendments to Dangerous Waste Regulations, Chapter 173-303 WAC

Dear Mr. Rieck and Dangerous Waste Staff,

The Boeing Company has reviewed the proposed dangerous waste rule revisions issued in August 2018, and offers comments and suggestions below. Boeing operates multiple dangerous waste generator locations in Washington, including some small quantity generator sites. For this reason, we support the adoption of the federal Episodic Generation rules and Waste Consolidation rules. However, we have concerns with some of the Washington-unique variations from these rules and other provisions in the proposal.

Boeing generates hazardous waste in other authorized states that have already adopted or are in the process of adopting the federal Hazardous Waste Generator Improvements Rule. Boeing-host states of Utah, Florida, and Pennsylvania have adopted that rule without state-unique additions. Oklahoma, Illinois, and Hawaii have issued proposals to do the same. Other Boeing-host states are reviewing the rule and determining next steps. In all states where we generate hazardous wastes, Boeing is encouraging as much alignment with federal requirements as possible to minimize compliance confusion.

State-unique requirements complicate and increase the costs of developing and updating employee training. Boeing sites in states that deviate significantly from federal rules must develop state-unique training supplements and compliance systems. Boeing employees who move or are temporarily assigned to a site in another state must "unlearn" state-unique requirements that were correct in their prior assignment and learn anew any state-unique requirements applicable to their new assignments. Internal compliance auditing is also complicated and more costly when authorized states in which Boeing operates have significantly different rules.

The Washington Administrative Procedures Act (RCW 34.05.328) directs agencies to "coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter." Some of the state-unique provisions in the proposed dangerous waste revisions indicate that this statutory directive has not been observed. Specific examples are described below.

In addition, the Administrative Procedures Act requires the Department of Ecology, before adopting a rule, to "determine that the probable benefits of the rule are greater than its probable costs," [RCW 34.05.328(1)(d)] and "that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives" [RCW 34.05.328(1)(e)]. In many of the cases described below, we believe that state-unique additions to the federal rule impose significant costs on dangerous waste generators without any demonstrated environmental benefit, and that the federal rules provide a less burdensome alternative than the corresponding provisions in the Washington proposed rule. Simply put, Ecology has no basis to conclude that its state-unique changes provide a net benefit or that the federal approach is not the least burdensome alternative. Ecology has only provided speculative hypotheticals, instead of data or even real-world anecdotal incidents, to presume benefits arising from these provisions, and has no idea of the resulting costs to generators.

## Container and Tank Hazard Labeling

Throughout the proposed rule, the hazard/risk labeling language found in the existing Washington rule<sup>1</sup> is proposed to be modified in a manner which introduces new ambiguities and opportunities for varying interpretation by generators and inspectors. By contrast, the hazard labeling requirements in the federal Generator Improvements Rule provide a safe harbor, so that generators who follow the detailed hazard warning provisions of DOT, OSHA, or NFPA have a definitive basis for determining that the hazard label is compliant. The federal rule applies the following hazard labeling language for each category of waste generators:

“...marks its container(s) of hazardous waste with (1) The words “Hazardous Waste” and (2) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e. ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).”

Hazard marking instructions in the proposed Washington rule<sup>2</sup> incorporate the federal examples of “ignitable, corrosive, reactive, toxic” labels, but omit the other hazard communication options (DOT, OSHA, and NFPA) found in the federal rule.

Leaving OSHA and NFPA hazard markings aside for a moment, we would like to focus on the adequacy of DOT hazard labels. For DOT hazard classes 1 through 8, the pictograms, label colors, and text on the DOT label convey the type of hazard more graphically and with more precision than the broad RCRA characteristic words “ignitable,” “corrosive,” “reactive,” and “toxic.” At minimum, the text of Ecology’s rule should plainly indicate that the DOT labels for hazard classes 1 through 8 are acceptable. .

With respect DOT hazard class 9, the practice of using the DOT system, *without modification*, as a risk communication method is not only allowed by the federal rule, but is encouraged by EPA for its obvious benefit and streamlining of waste accumulation and shipping processes. As noted in the preamble to the final federal rule:

“...as a matter of practicality, it would benefit many generators to consider the use of DOT hazard communication, since such a method would not only satisfy EPA’s requirement, but it may also satisfy DOT requirements when the wastes are shipped off site...It is important to note that if generators choose to identify the hazards of the contents of their containers using the DOT, OSHA or NFPA labeling methods, those methods must be used appropriately. Furthermore, if a method other than DOT hazard communication is used while the waste is accumulating on site, when the waste is shipped off site, generators and transporters must ensure that those markings and labels are located away from and do not obscure DOT marking and labeling.”<sup>3</sup>

Ecology’s Summary of Proposed Amendments states that “Some labels, such as US DOT’s Class 9 label, do not say what the hazard is. We are not specifying US DOT or other labeling systems to avoid

---

<sup>1</sup> At WAC 173-303-200(1)(d), the on-site accumulation rules for all generator categories.

<sup>2</sup> In the reorganized proposed rule, hazard marking requirements are repeated for each category of generators and for satellite accumulation areas.

<sup>3</sup> 81 Fed. Reg. 85732, 85758 (November 28, 2016)

implying any and all labels are adequate.”<sup>4</sup> EPA addressed this issue in the preamble to the Hazardous Waste Generator Improvement proposal (80 Fed. Reg. 57918, 57949 (Sept. 25, 2015)). EPA correctly states that under DOT rule 49 CFR 172.301(b), general marking requirements, a generator using a DOT shipping name ending in N.O.S. (as is common for Class 9 wastes) must also provide the technical name of the hazardous material in association with the proper shipping name. This technical name provides information that will signal hazard type to employees who generate the dangerous waste, trained first responders, inspectors, and TSD contractors who are familiar with wastes that they encounter on the job.

Requiring a supplemental hazard warning on DOT Class 9 waste containers/tanks presents a significant dilemma that is not addressed by the proposal. Specifically, first responders and others who are familiar with DOT hazard labels will recognize that a Class 9 label means that the contents of the container or tank do not meet any of the hazards described by DOT Classes 1 through 8 – indicating a that the risk to first responders is minimal although such “miscellaneous hazardous materials” might be “environmentally hazardous.” In particular, state-only dangerous wastes that are neither RCRA characteristic nor DOT Class 1 through 8 might be “persistent” or “toxic” according to the dangerous waste rules, but applying a “toxic,” “poison,” – words which the DOT regulations reserve for use with DOT class 6 materials (49 CFR 172.544(b) -- or some similar hazard description to this container would be misleading to first responders. Whether a particular chemical is persistent to the environment or toxic to fish larvae is simply irrelevant to first responders. More importantly, applying a “toxic” or “poison” label to a container that does not meet the DOT toxic/poison criteria introduces an unnecessary risk of affecting the response to an emergency, by overstating the risk of approaching the incident, and delaying an effective response.

As noted in the federal EPA preamble discussed above, if Class 9 or state-only wastes are labeled on a generator site with words like “toxic” or “poison,” the labels must be removed before shipping the waste off-site.<sup>5</sup> DOT does not allow labels that might be confused for a DOT label.<sup>6</sup> The words “toxic” and “poison” are both used by DOT for Class 6 materials that can be far more dangerous to first responders than a Class 9, state-only waste.

**For the reasons described above, Boeing recommends that the Washington dangerous waste rules use the following hazard warning language in lieu of the language found in multiple locations in the August 2018 proposal:**

“...marks each container or tank of hazardous or dangerous waste with (1) The words “Hazardous Waste” or “Dangerous Waste” and (2) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e. ignitable, corrosive, reactive, toxic) that is legible and/or recognizable from a distance of 25 feet or the lettering size is a minimum of one half inch in height. Alternatively, in addition to the words “Hazardous Waste” or “Dangerous Waste,” the generator may use a hazard warning consistent with the U.S. Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding) for DOT hazard classes 1 through 8.”

---

<sup>4</sup> Page 1, Summary of Proposed Amendments to the Dangerous Waste Regulations, Chapter 173-303 WAC, August 2018, Publication 18-04-019.

<sup>5</sup> 80 Fed. Reg. 57918, 57949 (September 25, 2015) “...for packages subject to 49 CFR, the generator or shipper/carrier should be familiar with and aware of the...prohibited labeling and label visibility requirements at 49 CFR 172.401 and 172.406, respectively.”

<sup>6</sup> 49 CFR 172.401 Prohibited Labeling: “(b) No person may offer for transportation and no carrier may transport a package bearing any marking or label which by its color, design, or shape could be confused with or conflict with a label prescribed by this part.”



Mr. Rieck and Dangerous Waste Staff  
SS 100518 001  
Page | 4

If Ecology insists on supplementing the Class 9 labeling (and with respect to the labelling of state-only wastes that are not regulated by DOT), Ecology should consider provisions in the rule that will provide a clear safe harbor to generators through agreed allowable approaches to avoid future inconsistent practice by generators and inspectors. One possibility would be a compliance option stated in the rule that generators mark DOT hazard class 9 containers or tanks with a chemical hazard label based on National Fire Protection Association code 704, if such waste has an NFPA hazard rating higher than zero for health hazard, fire hazard, or reactivity. However, we encourage direct Ecology engagement with first responder agencies prior to final rule promulgation, to ensure that the Dangerous Waste rules do not work at cross-purposes to effective first response to emergencies.

### **Episodic Generation Event Annual Report, proposed section 173-303-173(3)(d)**

While the federal generator improvements rule requires the Very Small Quantity Generator (SQG in Washington) to maintain records associated with the episodic event(s), the proposed Washington rule adds a requirement for an annual report covering all dangerous waste generated during the calendar year of the episodic event. The possibility of and timing of an episodic event will often not be known at the beginning of the year (especially those episodic events caused by a spill cleanup). This proposed annual reporting requirement would require generators to produce detailed records for waste generated prior to the episodic event. Such records may or may not exist, since there is no requirement for a (Washington) SQG to record dangerous waste generated each month. The only requirement is that the generator ensure that the amounts generated or stored not exceed the SQG limits in WAC 173-303-171(a) and (c). For many SQGs, the processes that generate dangerous waste are inherently so small that the generator can maintain and demonstrate compliance with SQG limits without detailed recordkeeping. The proposed rule would create a recordkeeping requirement for waste volumes generated where none otherwise exists, if there is any possibility that SQG might utilize the episodic event provisions. Furthermore, waste generated after an episodic event would also be subject to inclusion in the annual report. As for the more significant volume of waste generated during an episodic event, both the federal rule and the Washington proposal requires records and notifications to the Department of Ecology.

**In short, the annual report of waste generation triggered by episodic generation at proposed section 173-303-173(3)(d) would be an unnecessary Washington addition to the federal episodic generation rules, which are already complex for both generators and the agency.**

### **Contingency Plan Scope, proposed section 173-303-350(1)**

The contingency plan needs to show that the facility is prepared to respond to a range of incidents. Subsection (1) attempts to describe the scope of these events or incidents, but the proposed revision is overbroad.

The corresponding federal rule 40 CFR 262.260 has a well-defined list of such events:

“The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of **hazardous waste or hazardous waste constituents** to air, soil, or surface water.” [emphasis added]

The federal rule lacks two trigger events, natural disasters and releases to groundwater, which the proposed Washington rule would include, and this addition is appropriate.



Mr. Rieck and Dangerous Waste Staff  
SS 100518 001  
Page | 5

The proposed addition of “hazardous substance” release is problematic, since this is a defined term under CERCLA and EPCRA rules, *which have their own planning and response requirements* that are tied to Reportable Quantities, which the proposed Washington addition of “hazardous substance” lacks. The dangerous waste rule should confine itself to materials that are dangerous wastes or dangerous waste constituents before any release to the environment, and not purport to require the contingency plan to cover all “hazardous substances,” which under CERCLA and EPCRA may be fresh product, not waste. (The Washington definition of “hazardous substances” at WAC 173-303-040 reinforces that this definition includes non-wastes, by including the terms “product” and “commodity.”). Ecology’s Response to Comments presumes that any fresh product involved in an emergency event will be “spilled,” and thus become solid or dangerous wastes. Even if this dubious legal conclusion is accepted as correct, Ecology does not address the fact that Ecology’s change to the federal rule language massively expands the dangerous waste contingency planning requirements overlapping with the planning requirements of other programs directed toward the release of materials that are not waste prior to their release. While a dangerous waste generator may opt to maintain a single unified plan that covers dangerous waste requirements, as well as CWA, SPCC, CERCLA, and EPCRA requirements, such a unified plan is an option, not a requirement.<sup>7</sup>

#### **Quick Reference Guide for LQG Contingency Plans, proposed section 173-303-201(11)(b)(iv)**

The Washington proposal and the federal generator improvements rule have the same requirement for a Quick Reference Guide that includes: “A map of the facility showing where dangerous wastes are generated, accumulated, recycled and treated and routes for accessing these wastes.” A map showing all the points of generation at a Boeing manufacturing facility would include every workbench and work station where solvent wipes are used, sealant applied, or touch-up paint is hand applied, hardly a “quick reference guide.” Also, the precise locations where these activities occur on the shop floor are in constant flux, making a detailed map obsolete before it can be printed and distributed to emergency responders. This is one instance where some Washington language is needed to interpret the federal rule. We suggest adding the following:

“For situations where generation and accumulation locations within a building are frequently moved (for example, to follow moving assembly lines or moving work stations), or are widespread throughout an area, making it impractical to identify each location individually on a map, the map shall indicate those areas of the building where generation or accumulation may occur.”

#### **Unique Washington Nomenclature for LQGs, MQGs, and SQGs**

Now that the federal nomenclature is changing to Large Quantity Generator, Small Quantity Generator, and Very Small Quantity Generator, most states either have or will soon follow suit, to prevent confusion among generators and RCRA trainees. For transporters and TSD facilities that serve customers in many states, a common language will facilitate understanding of whether a customer’s site is subject to 90 day, 120 day, or 180 day storage time limits. Likewise, companies like Boeing that generate hazardous waste in multiple states would face one less employee training obstacle when employees relocate to other states, if the Washington nomenclature were replaced with the new federal nomenclature at the same time that other states are aligning their language to the federal nomenclature. There is no valid reason why Ecology cannot coordinate this nomenclature with the federal rule.

---

<sup>7</sup> WAC 173-303-350(2): “If the owner or operator has already prepared...some other emergency or contingency plan, they need only amend that plan to incorporate dangerous waste management provisions...The owner or operator may develop one contingency plan that meets all regulatory requirements.” [emphasis added].



Mr. Rieck and Dangerous Waste Staff  
SS 100518 001  
Page | 6

**Persons Who Discover Unknown Materials, proposed section 173-303-070(1)(b)**

It is unclear from the language proposed at 173-303-070(1)(b) whether the phrase “applicable to any person who generates a solid waste” limits the applicability of the remainder of this paragraph or not. It appears not, since further down the paragraph we read:

“Any person who generates a solid waste **or** discovers an unknown material must make an accurate determination if that waste or unknown material is a dangerous waste...” (emphasis added)

This language indicates that waste characterization obligations are imposed on anyone who discovers an unknown material, even non-generators and regardless of the location of the material when it is discovered. As proposed, if a person discovers an unknown material anywhere in the state (not necessarily at a generator site), then he, she or it would be subject to the requirement to determine its dangerous waste status. For unknown materials discovered at a location other than a generator site, the average property owner or passerby would have no knowledge of Washington’s dangerous waste classification rules. Ideally, a property owner or casual passerby would contact the Department of Ecology or local authority, rather than attempting to determine its dangerous waste status.

To prevent this (hopefully) unintended reading of the rule, some limitation on the location of discovery is needed. **Boeing suggests the following clarifying language:**

“Any person who generates a solid waste, and any person who discovers an unknown material at a location that is under the control of that person, must either make an accurate determination of whether that waste generated by that person, or that unknown material discovered by that person, is a dangerous waste, or promptly engage the assistance of another person who is qualified to make this determination. In the case of a person that discovers an unknown material at a location that is under the control of that person, and who is not the generator of that material, the obligations of that person under this section shall be fully satisfied by notifying Ecology, the Washington State Patrol, or any local law enforcement agency or local solid or dangerous waste regulatory agency of the discovery of the material. Furthermore, there shall be no liability under this section for any such person with respect such determination for any material that Ecology cannot demonstrate is a dangerous waste.”

Thank you for considering the comments and suggestions above. We look forward to continued engagement as this rulemaking progresses. For clarifications or technical discussions, please contact David Shanks at [david.l.shanks@boeing.com](mailto:david.l.shanks@boeing.com) or at (314) 777-9227.

Sincerely,

Steve Shestag  
Director, Environment  
Environment, Health and Safety  
Mail code: 9U4-08

cc: Susan Champlain, Manager, Government Operations