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Richland Operations Office
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Incoming: 9005086

Mr. Hugh O'Neill
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Dear Mr. O'Neill:

REVIEW OF PROPOSED REVISIONS TO THE DANGEROUS WASTE REGULATION

Reference: Washington State Register, Issue 90-20, pages 258-340, "Amending Chapter 173-303-WAC. Dangerous Waste Regulations," dated October 17, 1990.

Enclosed for your consideration are comments from the U.S. Department of Energy, Richland Operations Office (DOE-RL) on the proposed revisions to Washington Administrative Code 173-303. In addition to commenting on the revisions proposed in the referenced notice, the DOE-RL has identified several additional issues which we believe the State of Washington Department of Ecology should consider when revising the dangerous waste regulations. These issues are, in our opinion, significant enough to warrant regulatory changes to clarify requirements pertaining to the regulated community throughout the state.

Should you have any questions regarding these comments, please contact Mr. R. G. Holt, DOE-RL, on (509) 376-9989.

Sincerely,

R. D. Izatt, Director
Environmental Restoration Division

Enclosure:
Comments on Proposed Revisions
to Dangerous Waste Regulations

cc w/encl.:
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Comments on Proposed Revisions to Dangerous Waste Regulations

Reference: Washington State Register, Issue 90-20, pages 258-340, "Amending Chapter 173-303-WAC. Dangerous waste regulations," dated October 17, 1990.

1. Washington Administrative Code (WAC) 173-303-040, Alphabetizing of definitions: The U.S. Department of Energy-Richland Operations Office (DOE-RL) strongly supports the effort to place the definitions in this section in alphabetical order.

2. WAC 173-303-040, Definition of "domestic sewage;" WAC 173-303-071(3)(a), Domestic sewage exemption: Why is domestic sewage restricted to residential sources? The definition in 40 Code of Federal Regulations (CFR) 261.4(a)(1)(ii) makes no such distinction. Does the State of Washington Department of Ecology (Ecology) really contend that untreated sanitary wastes from nonresidential sources (e.g., industrial, commercial, state and federal governmental office facilities, etc.) should not qualify for exemption from dangerous waste regulation requirements? It should be recognized that untreated sanitary waste may well fail the toxicity tests of WAC 173-303-101. Consider eliminating the phrase "from residential sources" from the definition of "domestic sewage."

   The DOE-RL also questions Ecology's interpretation of the U.S. Environmental Protection Agency (EPA) stance on this exemption. Contrary to the position stated on page 259 of the Washington State Register, DOE-RL believes that the EPA clearly does not interpret the scope of the "domestic sewage" exemption to apply only to sanitary wastes from residential sources, nor does the exemption require that such wastes be treated in a publicly-owned treatment works. As noted in the May 19, 1980, Federal Register, "a waste stream comprised entirely of sanitary wastes that pass through a sewer system is 'domestic sewage' under any reasonable interpretation of the statutory exemption. This exemption applies regardless of whether the sewer system or the treatment works to which it connects is publicly or privately owned."

   The EPA regulations create two exemptions related to domestic sewage. First, domestic sewage is exempted without qualification. Second, a mixture of domestic sewage and other wastes is exempt. This latter exemption contains the qualification that the mixture must pass through a publicly-owned treatment works. The proposed revision to WAC 173-303-071(3)(a) appears to eliminate the second exemption, since the words "and any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment" would be deleted. This is contrary to the intent described on page 260 of the Washington State Register discussion, which indicates

that "dangerous wastes generated by business or industrial sources that have been managed pursuant to the permit by rule provisions of WAC 173-303-802(5) may mix with household or residential sanitary wastes in a sewer system that is downstream from the business or industrial source. The mixture would be eligible for the 'domestic sewage' exclusion at that point." How can this be, since the language exempting mixtures of domestic sewage and other waste would be deleted, and the domestic sewage definition would be revised to apply only to residential sewage?

The regulation, as proposed, could have a disproportionate impact on rural businesses not served by a community sewer system. The proposed regulation goes beyond EPA's scope and congressional intent in that no waste from a business, regardless of size or trade, would be eligible for the domestic sewage exclusion. The effects on rural businesses could be dramatic and do not appear to be adequately addressed in the Small Business Economic Impact Statement.

The WAC 173-303 designation criteria includes a toxicity evaluation. The proposed regulations would result in dangerous waste application to most sanitary sewage since this waste would most likely fail the bioassay testing specified in WAC 173-303-101(3)(c), and the domestic sewage exemption which would otherwise apply would be eliminated except for residential sources.

In summary, DOE-RL feels that the proposed revisions to the domestic sewage exemption represent an inappropriate interpretation of the EPA stance on the statutory exemption in that:

1) The EPA clearly intends that the domestic sewage exemption applies to all sanitary sewage, regardless of whether the sewage comes from a residential source

2) The proposed revision would constrain the domestic sewage exemption to sources that pass through a sewer system to a publicly-owned treatment works, a restriction which is clearly beyond the scope of the EPA stance on the exemption

3) The proposed revision would eliminate the language which exempts mixtures of domestic sewage and other wastes, an exemption which EPA clearly allows provided that the mixture passes through a sewer system to a publicly-owned treatment works.

The DOE-RL also notes that state programs which are broader in scope than the Federal Resource Conservation and Recovery Act (RCRA) program are not authorized under RCRA, but may exist as a matter of state law only (see 40 CFR 271.1(i)(2)). The EPA interpretation is that a state requirement which increases the size of the regulated community (e.g., regulates wastes which are not regulated by RCRA) is an aspect of the state program which goes beyond the scope of the federally-authorized program. The proposed WAC 173-303 revisions would regulate wastes which are exempted

from RCRA (i.e., domestic sewage from non-residential sources and mixtures of domestic sewage and other wastes which pass through a publicly-owned treatment works), and hence would not be part of the Federally-authorized State RCRA program.

3. **WAC 173-303-040, Definition of "elementary neutralization unit:"** The definition of "elementary neutralization unit" excludes wastes which may be designated for any reason other than corrosivity. This seems like an overly conservative definition since almost all of the corrosive acids and bases would be designated due to toxicity under WAC 173-303-084(5) or -101, and hence could not qualify for elementary neutralization per the WAC 173-303-040 definition. Is it really Ecology's intent to preclude elementary neutralization for common acids and bases which are both corrosive and state-only toxic? The DOE-RL recommends that the definition of "elementary neutralization unit" be revised to include neutralization of acids and bases that are toxic under state code, but not listed due to toxicity under Federal RCRA regulations.

4. **WAC 173-303-070(2)(a)(ii)(B), Delisting of waste under state authority:** In this section, Ecology is attempting to clarify that a listed waste must be delisted by both Ecology and the EPA to be exempted from regulation as a dangerous waste. Will Ecology continue to support the policy established in Technical Information Memorandum (TIM) 85-1, which states that wastes delisted by the EPA are considered tentatively delisted by Ecology, and hence exempted from regulation while the delisting petition is being considered by Ecology? The DOE-RL believes that the policy established in TIM 85-1 is appropriate and recommends that WAC 173-303 be amended to establish a clear regulatory basis for this approach.

5. **WAC 173-303-071(3)(b), Addition of permit-by-rule language to industrial wastewater discharge exemption:** The DOE-RL believes that the addition of the permit-by-rule language to this section is inappropriate. The proposed changes appear to confuse the differences between regulatory exclusions versus imposition of a lesser degree of regulatory requirements. From a federal standpoint, the specified point source discharges are excluded from RCRA regulation. Thus, there are no RCRA imposed requirements. The upstream storage, collection, and treatment, however, is not excluded from Federal RCRA regulation, and therefore cannot be excluded in the state program as this would represent less stringent requirements than Federal RCRA regulations. Upstream storage, collection, and treatment could qualify for a lesser degree of regulation as wastewater treatment units. This is not the same as being excluded from regulation - only the downstream point of discharge is excluded from RCRA by the Federal program (see Federal Register of May 19, 1980, page 33098, which verifies that upstream collection, storage, or treatment was never intended to be excluded under the point-source discharge exclusion).

6. WAC 173-303-103(2), WAC 173-303-084(7), Designation limits for carcinogens: Only a dangerous waste (DW) designation exists in WAC 173-303-084(7). This would apply to a waste with a total carcinogen content in excess of 1.0 percent. A waste would be DW if the total concentration of "sufficient and limited" carcinogens exceeds 1.0 percent per WAC 173-303-103(2) as well. Per WAC 173-303-103(2), however, a waste which contains 0.01 percent of a "sufficient" carcinogen would be DW, and a waste which contains 1.0 percent of a "sufficient" carcinogen would be extremely hazardous waste (EHW). Why aren't the latter designation limits included in WAC 173-303-084(7)? The information resulting in designation under WAC 173-303-084(7) (i.e., knowledge of the carcinogens present and the respective concentrations) would be the same information used to determine if the limits specified only in WAC 173-303-103 are exceeded. The "special knowledge" language of WAC 173-303-070(5) seems to require a generator to review the more stringent limits of WAC 173-303-103 anyway (at least in terms of the 0.01 percent designation limit). Consider revising the two carcinogen designation sections so that the designation limits are consistent, or provide some indication as to when the more stringent designation limits under WAC 173-303-103 are to be used if Ecology intends to allow the WAC 173-303-084(7) limit in most cases.

7. WAC 173-303-120(4)(a), Regulation of immediate recycling facilities: The proposed revision to this section would impose various standards upon "immediate" recycling facilities (i.e., those facilities which recycle dangerous waste without prior storage). These same requirements are not imposed upon facilities which store prior to recycling, apparently because the storage facilities would be subject to regulation. This seems like an unlikely resolution to the problem - recycling facilities which don't store prior to recycling have the entire operation subject to regulation, whereas facilities which do store would be subject to regulation in the storage areas, but not in the recycling operations. For example, "immediate" recycling facilities would need to provide secondary containment for the recycling tanks, but recyclers who store prior to processing would not have to have secondary containment for their tanks.

   The DOE-RL believes that the proposed rules could discourage beneficial recycling operations due to the additional constraints imposed. The existing regulations require "immediate" recycling facilities to provide notification to Ecology per WAC 173-303-060. The language in the second paragraph of WAC 173-303-120(4) gives Ecology authority to regulate, on a case-by-case basis, recycling facilities which pose a threat to human health and the environment. The DOE-RL encourages Ecology to use this provision to impose regulation upon those facilities where recycling activities are creating an environmental problem, rather than imposing restrictive regulations upon all "immediate" recycling facilities.

8. WAC 173-303-120(4)(a)(v), Imposition of tank standards upon recycling facilities: Imposition of tank standards upon recycling facilities may have major impact. Is it really the intent to require recycling process tanks to upgrade to incorporate secondary containment, etc? As currently written, WAC 173-303-120(4)(a)(v) seems to require such. If this is indeed going to be a requirement, some new dates for completion of upgrades are needed. Obviously, the January 12, 1990, date for integrity assessments and the January 12, 1991, date for provision of secondary containment cannot be met. What dates are to be used in lieu of these dates?

9. WAC 173-303-145, Reporting of spills and discharges into the environment: As currently written, this regulation requires reporting when there is a release "such that public health or the environment are threatened." Is it Ecology's intent that the regulated community decide when this criterion is met? If not, some additional guidance is necessary. For example, Ecology could establish reporting requirements based upon specified reportable quantities, similar to the approach the EPA has taken for reporting of releases under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

10. WAC 173-303-200, Requirements applicable to satellite accumulation areas: A question which has hindered the regulated community, and for which Ecology seems to have given contradictory guidance, is whether all requirements applicable to less than 90-day accumulation areas must be met at satellite accumulation areas. For example, must operators of satellite accumulation areas do weekly inspections, develop contingency plans, etc.? WAC 173-303-200(2)(c) indicates that the 90-day accumulation period begins when certain quantity limits are exceeded in a satellite accumulation area. This could be interpreted as indicating that satellite accumulation areas are not subject to 90-day accumulation area standards until the limits are exceeded. On the other hand, WAC 173-303-200(1)(b) seems to imply that satellite areas must comply with all 90-day accumulation area requirements unless specifically exempted. Otherwise, why would a special exemption from secondary containment requirements for new satellite areas be needed? It seems like this issue (i.e., applicability of 90-day accumulation standards to satellite accumulation areas) is one which Ecology should be able to reach a consensus on, and modify the regulations accordingly to establish a consistent approach throughout the State.

    In evaluating the satellite accumulation area issue, the EPA determined that such accumulation (with specified volume limitations) "is reasonable and safe and does not pose a threat to human health or the environment." (See Federal Register of December 20, 1984, page 49569). As a consequence, the EPA decided that 90-day accumulation standards were not necessary for satellite accumulation areas. Has Ecology determined that satellite accumulation poses enough of a risk to necessitate imposition of 90-day accumulation standards?

11. **WAC 173-303-200, WAC 173-303-210(4), WAC 173-303-320, WAC 173-303-380, Record retention inconsistencies:** An inconsistency exists in the WAC 173-303-210(4) change that requires records to be retained for at least five years for records required under WAC 173-303-200. WAC 173-303-200(1)(e) requires compliance with, among others, WAC 173-303-320(1)(d) which only requires record retention for three years. Also, although not an inconsistency, WAC 173-303-380(1)(e) only requires a three year retention time. Is it your intent to require different retention times for generators and facility owners/operators?

12. **WAC 173-303-380(2)(f), Requirement to document corrective action in operating record:** Corrective actions could be fairly involved. Additional information is needed regarding the level of detail required for entries in the facility operating record for documentation of corrective actions. The DOE-RL suggests allowing reference in the operating record to some other documentation, rather than requiring a description of the entire corrective action in the operating record itself.

13. **WAC 173-303-390(3), Additional reports required from facilities:** The authority shown in the last sentence of this section (which states that a facility owner/operator must submit any other reports required by Ecology) could easily result in inconsistent application throughout the State unless some criteria are supplied. What is the basis that Ecology will use to determine whether an engineering report, plan, or specification is necessary to protect human health and the environment? How detailed will such a report need to be? For example, should Ecology be concerned about details such as concrete foundation specifications for a TSD facility? If so, does Ecology intend to request this from all TSD facilities? If not, what is the criteria to be used to determine when a request for such information is appropriate? Leaving this determination to the Ecology permit writer fosters the potential for inconsistent application since the various permit writers are likely to interpret the requirement differently unless some clear criteria are established within the regulations.

14. **WAC 173-303-515(4)(b)(vii)(D), Imposition of tank standards upon marketers who store off-specification used oil:** The comments provided for WAC 173-303-120(4)(a)(v) regarding the need to establish new dates for mandatory tank upgrades applies to the proposed revision of WAC 173-303-515(4)(b)(vii)(D).

15. **WAC 173-303-610(2)(b)(i), Removal of hazardous constituents to background environmental levels:** Consider revising this requirement to impose cleanup to levels specified in the Model Toxics Control Act (MTCA) standards rather than to background environmental levels. The MTCA standards represent levels which Ecology has determined to be protective of human health and the environment. It seems inconsistent to require cleanup to these levels at some sites in the State, but to lower levels

at sites subject to cleanup under WAC 173-303-610(2)(b)(i). What is the benefit of cleaning to levels which are lower than those which Ecology has determined to be protective? At a minimum, consider revising WAC 173-303-610(2)(b)(i) to give Ecology the discretion to use health-based cleanup standards (such as those established by the MTCA) in lieu of background. Apparently, Ecology has already been using such discretion in some instances, even though the current version of WAC 173-303-610(2)(b)(i) does not empower Ecology to do so.

In addition, Ecology may wish to consider revision of this section to refer to "hazardous constituents" rather than "hazardous wastes." This would create consistency with the EPA requirements. As currently written, the WAC 173-303-610(2)(b)(i) standards are less stringent than the EPA "remove and decontaminate" regulations since the Ecology standards address only "hazardous wastes," whereas the EPA addresses all "hazardous constituents" (i.e., those contained in Appendix VIII of Part 261).

16. **WAC 173-303-630(5)(c), Requirement for three-foot aisle space:** The proposed requirement for a three-foot aisle space appears somewhat arbitrary. Required aisle spaces for storage of hazardous materials are already specified in the Uniform Building Code and the Life Safety Code. In some cases, these codes require aisle space greater than three feet. A general requirement for a three-foot aisle space could be overly conservative in other cases, and would result in a reduction of storage capacity of TSD facilities without providing further protection of human health and the environment.

    If Ecology decides to finalize the three-foot aisle space (which DOE-RL presumes Ecology would view as a minimum value rather than the only allowable separation), some provision should be made for an owner/operator to demonstrate to Ecology that a lesser spacing is acceptable.

    Finally, some definition of "aisle space" is needed. For example, does this refer to the space between each drum, or each pallet of drums (with two drums potentially side-by-side on a pallet)? Could more than one pallet load be placed side-by-side, with a three-foot aisle space between rows of pallets arranged in this configuration?

17. **WAC 173-303-802(5)(a), Elementary neutralization, totally enclosed treatment facility, wastewater treatment unit provisions:** This section of the proposed regulation indicates that an elementary neutralization unit, totally enclosed treatment facility, or wastewater treatment unit will have a permit-by rule only if the owner/operator has an NPDES permit, state wastewater discharge permit, pretreatment permit, etc. for the discharge. This requirement would greatly reduce the availability for permit-by-rule status. For example, many elementary neutralization units and totally enclosed treatment facilities have no discharge, and hence would not have any of the specified permits. Based upon the language in the proposed rule, such units could not qualify for

permit-by-rule status. The DOE-RL recommends that the regulatory language be revised to indicate that the permit requirement listed in WAC 173-303-802(5)(a)(i) is a prerequisite for permit-by-rule status only when the treatment unit involved has a discharge subject to such permit requirements.

18. **WAC 173-303-802(5)(a)(i), Wastewater treatment unit permit-by-rule provisions:** The proposed wastewater treatment unit permit-by-rule requirements indicate that the facility must have a National Pollutant Discharge Elimination System (NPDES) permit, a state waste discharge permit, pretreatment permit (or written discharge authorization from the local sewerage authority). The final part of the proposal indicates that the pertinent permit must provide for the use of all known, available, and reasonable methods of prevention, control, and treatment of pollution pursuant to Chapter 90.48 RCW prior to discharge. At a federal facility, the NPDES permit would be issued by the EPA under authority of the Clean Water Act (CWA) rather than Chapter 90.48 RCW. The "AKART" terminology is not used in the federal program, although a similar philosophy exists. Does Ecology consider the "best available technology" process under the CWA to be equivalent to the AKART process under Chapter 90.48 RCW? If so, consider revising the proposed language to indicate that, at federal facilities, existence of a valid NPDES permit issued by the EPA is sufficient to allow a facility to qualify for the wastewater treatment unit permit-by-rule. If not, provide some guidance as to what additional requirements must be met to demonstrate AKART at federal facilities with NPDES permits.

19. **WAC 173-303-805(7)(a)(i), Addition of waste codes to Part A permit applications:** The proposed revision would require the owner or operator of an interim status facility to submit a revised Part A permit application, along with a justification detailing the equipment and processes that will be used to treat, store, or dispose of the waste. Ecology would then have the option to deny the addition of waste codes within 60 days.

    This proposal creates requirements that go beyond the Federal EPA program, which only requires that a revised Part A permit application be submitted. What is the justification for these additional requirements? What criteria are Ecology going to use to decide if the waste code addition should be denied? The DOE-RL feels that, if Ecology decides to adopt these requirements, the regulations should list the specific criteria which Ecology will use to decide this issue. Failure to identify criteria will create the potential for inconsistent application of the regulations, since the various Ecology sections are likely to interpret the bases for denial differently. The director of Ecology has, in the past, stressed the need for state-wide consistency in application of the regulations. The DOE-RL believes that the potential for realization of this goal can be greatly furthered by a clear delineation of the criteria and processes Ecology will use to implement approval/denial authorities.

20. WAC 173-303-805(7)(a)(ii) and (iii), Changes during interim status: The language in this section indicates that increases in design capacity, changes in processes, or addition of processes may be effected at dangerous waste treatment, storage, or disposal facilities provided that Ecology approves such action prior to the change. Is the change considered to occur prior to construction or merely prior to actually operating the process? This could be significant in that WAC 173-303-805(7)(a)(ii) states that the requirements of WAC 173-303-281 must be met prior to the change. WAC 173-303-281, in turn, invokes a Notice of Intent (NOI) cycle of a minimum of 150 days. If the requirement to complete this cycle applies only to operation of the process, construction could be started during this time frame, with process operation prohibited pending completion of the NOI process and final approval from Ecology. (Of course, the treatment, storage, or disposal (TSD) owner/operator would undertake any construction prior to Ecology approval at his own risk since there is no guarantee that final approval to actually operate the new or enlarged process will be granted). Obviously, a much longer time would be required to implement such a change if construction were prohibited pending completion of the NOI cycle and Ecology approval. Consider revising WAC 173-303-805 to allow construction (but not initiation of operation) prior to Ecology approval.

21. WAC 173-303-9906, WAC 173-303-9907, Changes to graphs to distinguish "small quantity generator waste:" The changes to these graphs to indicate the "small quantity generator waste" areas are appropriate, but some discussion may be needed in WAC 173-303-070 or WAC 173-303-084, WAC 173-303-101, and WAC 173-303-102 to clarify the use. Alternatively, consider revising the "small quantity generator waste" portion to read "DW for waste generators who exceeding the quantity exclusion limits; nonregulated for small quantity generators."

    Additionally, provide some indication as to how the waste aggregation requirements of WAC 173-303-070 apply to the graph in WAC 173-303-9906. This is necessary because the waste may be EHW or DW for the same Equivalent Concentration (EC), depending upon the quantity of waste generated. If a waste with an EC of 1.0 is generated in two batches a month of 100 pounds per batch, are both batches DW or EHW? In the latter case, what happens if a facility which typically generates only one batch per month unexpectedly generates a second batch? Was the first batch improperly designated if sent to a TSD unit as DW? Or is the first batch DW and the second batch EHW?

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Subject: REVIEW OF PROPOSED REVISIONS TO THE DANGEROUS WASTE REGULATION

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