

OFFICE OF RIVER PROTECTION

P.O. Box 450, MSIN H6-60 Richland, Washington 99352

NOV 0 7 2013

13-ECD-0085

Ms. Jane A. Hedges, Program Manager Nuclear Waste Program Washington State Department of Ecology 3100 Port of Benton Blvd. Richland, Washington 99354

Ms. Hedges:

SUBMITTAL OF HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT MODIFICATION NOTIFICATION FORM 24590-WTP-PCN-ENV-13-001, EDITORIAL CORRECTIONS TO PERMIT CONDITIONS III.10.C.9.f (CRITICAL SYSTEMS); III.10.H.1.b.x, III.10.I.1.b.x, III.10.J.1.b.x, AND III.10.K.1.b.x (SHORT- AND LONG- TERM LOW-ACTIVITY WASTE [LAW] AND HIGH-LEVEL WASTE [HLW] FACILITIES); APPENDIX 7.7 (SPECIFICATIONS); AND APPENDIX 2 (CRITICAL SYSTEMS FOR THE WTP) OF THE REFERENCE

Reference:

WA7890008967, "Dangerous Waste Portion of the Hanford Facility Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10, 'Waste Treatment and

Immobilization Plant."

This letter transmits Hanford Facility RCRA Permit Modification Notification Form 24590-WTP-PCN-ENV-13-001, attached, for the Washington State Department of Ecology (Ecology) review and approval. The form describes a requested Class 1 modification requiring concurrence or approval to the Reference.

Modification Notification Form 24590-WTP-PCN-ENV-13-001 submits editorial corrections to permit conditions III.10.C.9.f (Critical Systems); III.10.H.1.b.x, III.10.I.1.b.x, III.10.J.1.b.x, III.10.K.1.b.x (Short- and Long-Term LAW and HLW Facilities); Appendix 7.7 (Specifications); and Appendix 2 (Critical Systems for the WTP) of the Reference.

Ecology comments resulting from review of this modification notification form and the associated information have been resolved.

If you have any questions, please contact me, or your staff may contact Gae M. Neath, Environmental Compliance Division, (509) 376-7828.

Paul G. Harrington, Assistant Manager Technical and Regulatory Support

ECD:GMN

Attachment

cc w/attach:

B. L. Curn, BNI

B. G. Erlandson, BNI

C. M. Gallaway, BNI

M. McCullough, BNI

S. K. Murdock, BNI

Administrative Record (WTP H-0-8)

BNI Correspondence

Environmental Portal, LMSI

cc electronic:

J. Cantu, Ecology (2 hard copies)

A. S. Carlson, Ecology (5 hard copies, Public Review)

M. E. Jones, Ecology

A. C. Tortoso, Ecology

J. K. Perry, MSA

A. C. McKarns, RL

D. J. Sommer, SCS

cc w/o attach:

D. M. Busche, BNI

J. Cox, CTUIR

S. G. Harris, CTUIR

S. L. Dahl, Ecology

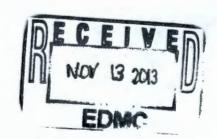
D. McDonald, Ecology

G. P. Bohnee, NPT

K. Niles, Oregon Energy

E. D. MacAlister, RL

R. Jim, YN



Attachment 13-ECD-0085 (8 Pages)

Hanford Facility RCRA Permit Modification Notification Form 24590-WTP-PCN-ENV-13-001, Editorial Corrections

Hanford Facility RCRA Permit Modification Notification Form Part III, Operating Unit 10

Waste Treatment and Immobilization Plant

Index

Page 2 of 3:

Hanford Facility RCRA Permit, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant Make editorial corrections to permit conditions III.10.H.1.b.x, III.10.I.1.b.x, III.10.J.1.b.x, III.10.J.1.b.x, III.10.K.1.b.x (Short-and Long-Term Low-Activity Waste [LAW] and High-Level Waste [HLW] Facilities); III.10.C.9.f (Critical Systems); Appendix 7.7 (Specifications); and Appendix 2 (Critical Systems for the WTP) of the Dangerous Waste Permit.

Submitted by Co-Operator:

D. M. Busche

10/17/13

Reviewed by ORP Program Office:

D. L. Noyes

Date

Hanford Facility RCRA Permit Modi	fication Notification Form
Unit:	Permit Part:
Waste Treatment and Immobilization Plant	Part III, Operating Unit 10

Description of Modification:

The purpose of this Class 1 modification is to request Ecology to make editorial corrections to permit conditions III.10.H.1.b.x, III.10.I.1.b.x, III.10.J.1.b.x, III.10.J.1.b.x, III.10.K.1.b.x (Short- and Long-Term Low-Activity Waste [LAW] and High-Level Waste [HLW] Facilities); III.10.C.9.f (Critical Systems); Appendix 7.7 (Specifications); and Appendix 2 (Critical Systems for the WTP) of the Dangerous Waste Permit. The following corrections are submitted to replace those currently in the permit:

Permit Condition	Replace	With	
III.10.H.1.b.x.	The emission limits specified in Permit Conditions III.10.H.1.b.l. through III.10.H.1.b.x. above, will be met for the LAW Vitrification System by limiting feed-rates as specified in Permit Tables	The emission limits specified in Permit Conditions III.10.H.1.b.i. through III.10.H.1.b.ix., above, will be met for the LAW Vitrification System by limiting feed rates as specified in Permit Tables	
Conditions III.10.I.1.b.i. through x. above, will be met for the LAW Vitrification System by met for the LAW Vitrification System by		The emission limits specified in Permit Conditions III.10.I.1.b.i. through III.10.I.1.b.ix., above, will be met for the LAW Vitrification System by limiting feed rates as specified in Permit Tables	
III.10.J.1.b.x.	The emission limits specified in Permit Conditions Conditions III.10.J.1.b.i. through III.10.J.1.b.x. above, will be met for the HLW Vitrification System by limiting feed rates as specified in Permit Tables		
III.10.K.1.b.x.	The emission limits specified in Permit Conditions Ill.10.K.1.b.i. through x. above, will be met for the HLW Vitrification System by limiting feed rates as specified in Permit Tables	he emission limits specified in Permit Conditions 1.10.K.1.b.i. through III.10.K.1.b.ix., above, will be let for the HLW Vitrification System by limiting feed lites as specified in Permit Tables	
III.10.C.9.f.	For each Critical System identified in Operating Unit Group 10, Appendix 2.0, the Permittees will submit to Ecology for review and approval, following the schedule in Operating Unit Group 10, Appendix 1.0, the information identified in Permit Conditions III.10.C.16., III.10.D.10., III.10.E.9., III.10.F.7., III.10.G.10., III.10.H.5., and III.10.J.5.	For each Critical System identified in Operating Unit Group 10, Appendix 2.0, the Permittees will submit to Ecology for review and approval, following the schedule in Operating Unit Group 10, Appendix 1.0 the information identified in Permit Conditions III.10.D.10., III.10.E.9., III.10.F.7., III.10.G.10., III.10.H.5., and III.10.J.5.	
Appendix 7.7	Drawing/Document Number 24590-WTP-3PS-MPC0-TP001, Rev 0 (Engineering Specification for Centrifugal Pumps to Meet Requirements of API Standard 610, Eighth Edition, and for Quality Levels QL-1 and QL-2)	N/A Specification to be deleted from Appendix (see below)	
Appendix 2.0	Balance of Facilities Systems CPE Cathodic Protection Electrical System RLD Radioactive Liquid Waste Disposal System	Balance of Facilities Systems CPE Cathodic Protection Electrical System	

This modification requests Ecology approval and incorporation into the permit the editorial changes specified in the above table.

Permit Conditions III.10.H.1.b.x through III.10.K.1.b.x

Emission limits are specified in subsections III.10.(H, I, J, and K).1.b.i through III.10.(H, I, J, and K).1.b.ix only. Subsection III.10.(H, I, J, and K).1.b.x compares emission limits to feed rate tables and does not, in itself, contain an emission limit.

Quarter Ending December 31, 2013

WAC 173-303-830 Modification Class: Please mark the Modification Class: Enter relevant WAC 173-303-830, Appendix I Modification and A2. Enter wording of WAC 173-303-830, Appendix I Modification A1. Administrative and informational changes A2. Correction of typographical errors Modification Approved/Concur: Reason for denial:		7.	Class 2	Class 3
Please mark the Modification Class: Enter relevant WAC 173-303-830, Appendix I Modification and A2. Enter wording of WAC 173-303-830, Appendix I Modification A1. Administrative and informational changes A2. Correction of typographical errors Modification	X citation number: on citation:	A1		
Please mark the Modification Class: Enter relevant WAC 173-303-830, Appendix I Modification and A2. Enter wording of WAC 173-303-830, Appendix I Modification A1. Administrative and informational changes	X citation number:		Class 2	Class 3
Please mark the Modification Class: Enter relevant WAC 173-303-830, Appendix I Modification and A2.	X citation number:		Class 2	Class 3
Please mark the Modification Class: Enter relevant WAC 173-303-830, Appendix I Modification	X		Class 2	Class 3
Please mark the Modification Class:	X		Class 2	Class 3
		Class 11	Class 2	Class 3
in accordance with Permit Condition III.10.C.2.e, this changes to the Permit, attachments, and permit applic				iude page
Appendix 2.0 The Balance of Facilities Systems does not include the Waste Disposal System) should, therefore, be removed				
24590-WTP-PCN-ENV-08-002 (CCN 184911).	should be delete	d from Appendi	x 7.7 per appro	oved PCN
Specification 24590-WTP-3PS-MPC0-TP001, Rev 0 s				
opendix 7.7 Specification 24590-WTP-3PS-MPC0-TP001. Rev 0 s				
		, Jim Jonata		223 1101 07101

construction deficiency from the approved designs, plans, and specifications into the 1 2 construction of critical systems, as defined in the Hanford Site-wide Permit definition section. Such minor nonconformance or construction deficiency will be defined, for the 3 4 purposes of this Permit Condition, as nonconformance or construction deficiency that is necessary to accommodate proper construction and the substitution or the use of 5 6 equivalent or superior materials or equipment that do not substantially alter the Permit 7 conditions or reduce the capacity of the facility to protect human health or the environment. Such minor nonconformance or construction deficiency will not be 8 considered a modification of this Permit. If Ecology determines that the nonconformance 9 or construction deficiency is not minor, it will notify the Permittees in writing that a 10 permit modification is required for the deviation and whether prior approval is required 11 from Ecology before work proceeds which affect the nonconforming or construction 12 13 deficiency item. The Permittees will formally document, with a nonconformance report (NCR) or 14 III.10.C.9.e. 15 construction deficiency report (CDR), as applicable, incorporation of minor 16 nonconformance or construction deficiency from the approved designs, plans, and specifications into the construction of non-critical systems subject to this Permit. Such 17 minor nonconformance or construction deficiency will not be considered a modification 18 of this Permit. All NCR's and CDR's will be maintained in the WTP Unit Operating 19 20 Record and will be made available to Ecology upon request or during the course of an inspection. If Ecology determines that the nonconformance or construction deficiency is 21 not minor, it will notify the Permittees in writing that a permit modification is required 22 for the deviation and whether prior approval is required from Ecology before work 23 proceeds which affect the nonconforming or construction deficiency item. 24 III.10.C.9.f. For each Critical System identified in Operating Unit Group 10, Appendix 2.0, the 25 Permittees will submit to Ecology for review and approval, following the schedule in 26 27 Operating Unit Group 10, Appendix 1.0, the information identified in Permit Conditions HI.10.C.16., III.10.D.10., III.10.E.9., III.10.F.7., III.10.G.10., III.10.H.5., and III.10.J.5. 28 29 Information Ecology determines to incorporate into the Permit will follow the Permit 30 Condition III.10.C.2.g. process, unless stated otherwise within the specific permit condition. Information Ecology determines necessary to support design basis will be 31 32 incorporated into the Administrative Record. 33 III.10.C.9.g. Upon completion of the WTP Unit construction subject to this Permit, the Permittees will produce as-built drawings of the project which incorporate the design and 34 construction modifications resulting from all change documentation as well as 35 modifications made pursuant to Permit Conditions III.10.C.2.e., III.10.C.2.f., and 36 III.10.C.2.g. The Permittees will place the as-built drawings into the operating record 37 38 within twelve (12) months of completing construction. III.10.C.9.h. The Permittees will formally document changes to approved designs, plans, and 39 40 specifications with design change documentation [e.g., Design Change Notice (DCN), 41 Field Change Request (FCR), Field Change Notice (FCN), Specification Change Notice 42 (SCN), and Supplier Deviation Disposition Request (SDDR)]. All design change 43 documentation will be maintained in the WTP Unit-specific Operating Record and will 44 be made available to Ecology upon request or during the course of an inspection. For any 45 design change documentation affecting any critical systems, the Permittees will provide 46 copies to Ecology within seven (7) calendar days. Identification of critical systems will 47 be included by the Permittees in each WTP Unit-specific dangerous waste permit 48 application, closure plan, or permit modification, as appropriate. If Ecology determines

Part III, Operating Unit Conditions Page 17 of 298

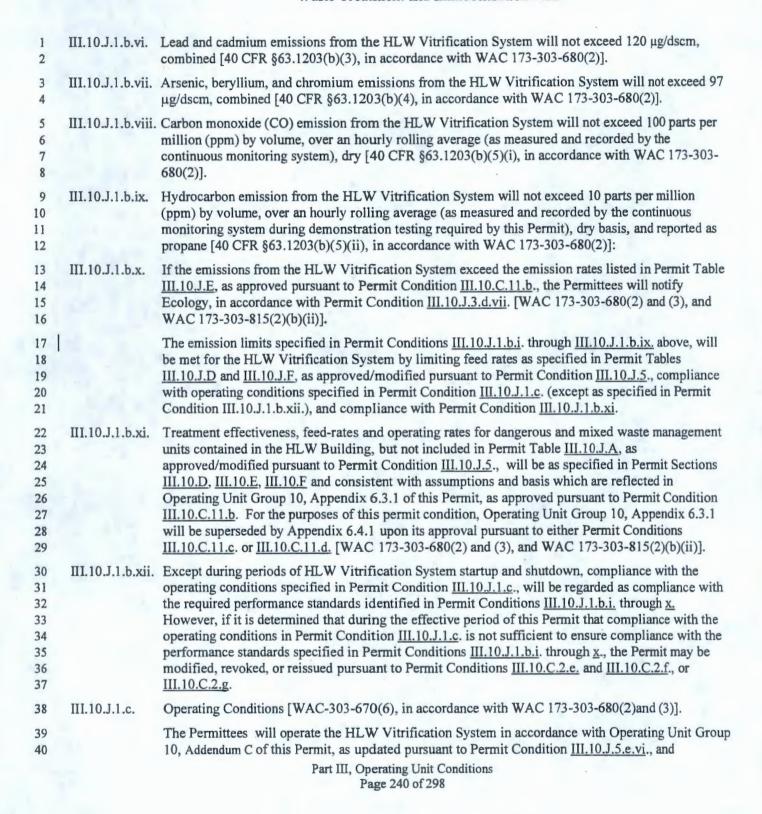
1 2	III.10.H.1.b.vii.	Arsenic, beryllium, and chromium emissions from the LAW Vitrification System will not exceed 97 μg/dscm, combined [40 CFR §63.1203(b)(4), in accordance with WAC 173-303-680(2)].
3 4 5 6		Carbon monoxide (CO) emission from the LAW Vitrification System will not exceed 100 parts per million (ppm) by volume, over an hourly rolling average (as measured and recorded by the continuous monitoring system), dry basis [40 CFR §63.1203(b)(5)(i), in accordance with WAC 173-303-680(2)].
7 8 9	III.10.H.1.b.ix.	Hydrocarbon emission from the LAW Vitrification System will not exceed 10 parts per million (ppm) by volume, over an hourly rolling average (as measured and recorded by the continuous monitoring system during demonstration testing required by this Permit), dry basis, and reported as propane [40 CFR §63.1203(b)(5)(ii), in accordance with WAC 173-303-680(2)].
11 12 13 14	III.10.H.1.b.x.	If the emissions from the LAW Vitrification System exceed the emission rates listed in Permit Table III.10.H.E, as approved pursuant to Permit Condition III.10.C.11.b., the Permittees will notify Ecology in accordance with Permit Condition III.10.H.3.d.vii. [WAC 173-303-680(2) and (3), and WAC 173-303-815(2)(b)(ii)].
15 16 17 18 19 20		The emission limits specified in Permit Conditions III.10.H.1.b.ix . above, will be met for the LAW Vitrification System by limiting feed-rates as specified in Permit Tables III.10.H.F ., as approved/modified pursuant to Permit Condition III.10.H.5 ., compliance with operating conditions specified in Permit Condition III.10.H.1.c . (except as specified in Permit Condition III.10.H.1.b.xii .), and compliance with Permit Condition III.10.H.1.b.xii .)
21 22 23 24 25 26 27 28	III.10.H.1.b.xi.	Treatment effectiveness, feed-rates and operating rates for dangerous and mixed waste management units contained in the LAW Building, but not included in Permit Table III.10.H.A, as approved/modified pursuant to Permit Condition III.10.H.5., will be as specified in Permit Sections III.10.D, III.10.E, III.10.F and consistent with assumptions and basis which are reflected in Operating Unit Group 10, Appendix 6.3.1 of this Permit, as approved pursuant to Permit Condition III.10.C.11.b. For the purposes of this permit condition, Operating Unit Group 10, Appendix 6.3.1 will be superseded by Appendix 6.4.1 upon its approval pursuant to either Permit Conditions III.10.C.11.c. or III.10.C.11.d. [WAC 173-303-680(2) and (3), and WAC 173-303-815(2)(b)(ii)].
29 30 31 32 33 34 35 36	III.10.H.1.b.xii.	Except during periods of LAW Vitrification System startup and shutdown, compliance with the operating conditions specified in Permit Condition $\underline{III.10.H.1.c.}$, will be regarded as compliance with the required performance standards identified in Permit Conditions $\underline{III.10.H.1.b.i.}$ through \underline{x} . However, if it is determined that during the effective period of this Permit that compliance with the operating conditions in Permit Condition $\underline{III.10.H.1.c.}$ is not sufficient to ensure compliance with the performance standards specified in Permit Conditions $\underline{III.10.H.1.b.i.}$ through \underline{x} ., the Permit may be modified, revoked, or reissued pursuant to Permit Conditions $\underline{III.10.C.2.e.}$ and $\underline{III.10.C.2.f.}$, or $\underline{III.10.C.2.g.}$
37	III.10.H.1.c.	Operating Conditions [WAC-303-670(6), in accordance with WAC 173-303-680(2) and (3)].
38 39 40		The Permittees will operate the LAW Vitrification System in accordance with Operating Unit Group 10, Addendum C of this Permit, as updated pursuant to Permit Condition III.10.H.5.e.vi., Operating Unit Group 10, Appendix 9.18 of this Permit, as approved pursuant to Permit Condition III.10.H.5.e.,

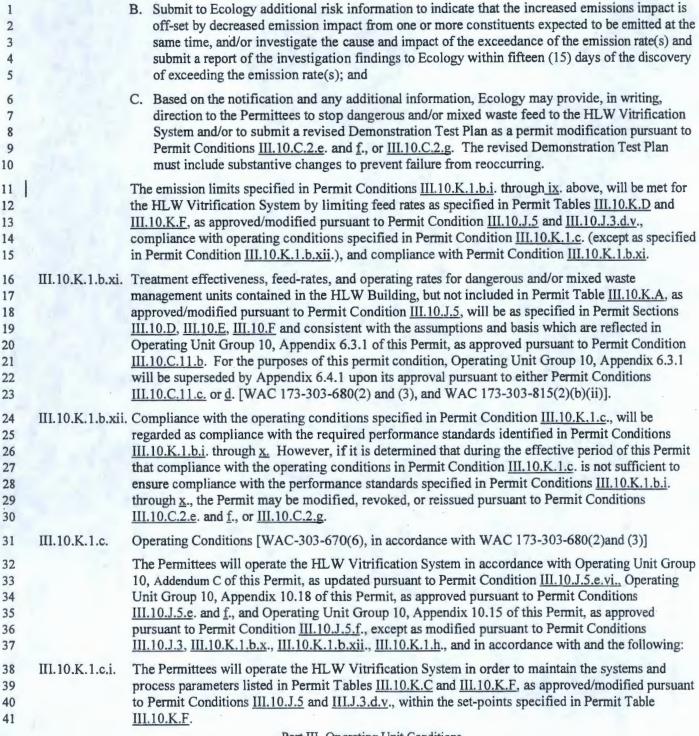
Part III, Operating Unit Conditions Page 175 of 298

WA7890008967, Part III, Operating Unit Group 10 Waste Treatment and Immobilization Plant

1 2		A. Verbally notify Ecology within twenty-four (24) hours of the discovery of exceeding the emission rate(s) as specified in Permit Condition I.E.21.
3 4 5 6 7		B. Submit to Ecology additional risk information to indicate that the increased emissions impact is offset by decreased emission impact from one or more constituents expected to be emitted at the same time, and/or investigate the cause and impact of the exceedance of the emission rate(s) and submit a report of the investigation findings to Ecology within fifteen (15) days of the discovery of exceeding the emission rate(s); and
8 9 10 11 12		C. Based on the notification and any additional information, Ecology may provide, in writing, direction to the Permittees to stop dangerous and/or mixed waste feed to the LAW Vitrification System and/or to submit a revised Demonstration Test Plan as a permit modification pursuant to Permit Conditions III.10.C.2.e. through g. The revised Demonstration Test Plan must include substantive changes to prevent failure from reoccurring.
13 14 15 16 17		The emission limits specified in Permit Conditions III.10.I.1.b.i . through ix. above, will be met for the LAW Vitrification System by limiting feed rates as specified in Permit Tables III.10.I.D and III.10.I.1.D and

Part III, Operating Unit Conditions Page 215 of 298





Part III, Operating Unit Conditions Page 282 of 298