

US EPA ARCHIVE DOCUMENT

RCRA REVISION CHECKLIST 94

Burning of Hazardous Waste in Boilers and Industrial Furnaces;
Corrections and Technical Amendments I

56 FR 32688-32852

July 17, 1991

(RCRA Cluster II, HSWA and non-HSWA provisions)

Note: 1) This checklist makes extensive technical corrections and provides technical amendments to the February 21, 1991 (56 FR 7134; Revision Checklist 85) final rule. It also adds two new appendices, Appendix IX and Appendix X, to the code. Technical corrections to several sections (i.e., 266.104(a)(2), 266.107(d)(1)&(2) and 270.73(f)&(g)) of code were already addressed in Revision Checklist 85. However, for completeness, these corrections are repeated in this checklist and identified in the endnotes. On August 27, 1991 (56 FR 42504) the Agency published a second technical amendment, which is addressed by Revision Checklist 96.

2) The regulations addressed by this checklist typically do not make a distinction between the various types of burning devices. However, the provisions in the regulations as they apply to sludge dryers, carbon regeneration units, infrared incinerators, and plasma arc incinerators are considered to be non-HSWA requirements, while the regulations as they apply to all other types of burning devices are HSWA provisions. EPA will implement the HSWA requirements in authorized States until the States modify their programs and such modifications are approved by EPA. The non-HSWA requirements are applicable only in those States which are unauthorized. In authorized States, the non-HSWA requirements will not be applicable until the States revise their programs to adopt equivalent requirements under State law.

3) EPA has adopted a format in the Federal Register where the designation of a citation beyond a certain subparagraph is italicized. This format was not consistently used in the February 21, 1991 Federal Register (Revision Checklist 85). Subsequently, the July 17, 1991 Federal Register (Revision Checklist 94) corrected several of the formatting errors found in the February 21, 1991 Federal Register. The EPA format is consistently used in both Revision Checklists 85 and 94. Technical corrections which only address the italicizing format of a citation are not included in this checklist. Such citations include 266.102(e)(6)(i)(B)(2), 266.102(e)(6)(ii)(B)(2), 266.103(b)(5)(i)(B)(1), 266.103(b)(5)(i)(B)(2), 266.103(b)(5)(ii)(B)(1), and 266.103(c)(7)(ii)(B)(2).

4) Because this checklist corrects numerous errors, States which are not authorized for Revision Checklist 85 are strongly encouraged to adopt these present technical corrections/amendments and the ones addressed by Revision Checklist 96 at the same time the requirements addressed by Revision Checklist 85 are adopted. States already authorized for the provisions addressed by Revision Checklist 85 should adopt the Revision Checklist 94 and 96 technical corrections/amendments as soon as possible.

5) Note that on September 5, 1991 (56 FR 43874), an administrative stay was published affecting the February 21, 1991 (56 FR 7134; Revision Checklist 85) final rule. Revision Checklist 98 addresses changes to the Federal code made by the September 5, 1991 final rule. The changes addressed by that checklist are optional.

**RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)**

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A - GENERAL

DEFINITION OF HAZARDOUS WASTE

2 replace

"261.6(a)(3)(v) .
through (ix)" with
"261.6(a)(3)(v)
through (viii)"

261.3(c)(2)(ii)(B)

HWMR-7
Part II §201

X

REQUIREMENTS FOR RECYCLABLE MATERIALS

replace the letter
"G" with "H"

261.6(a)(2)

HWMR-7
Part II §201

X

replace "Subpart D"
with "Subpart H"

261.6(a)(2)(ii)

"

"

**PART 265 - INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

SUBPART P - THERMAL TREATMENT

OTHER THERMAL TREATMENT

delete "."

at the end and
insert ", and Subpart H
of Part 266, if the
unit is a boiler or
an industrial furnace
as defined
in §260.10."

265.370

HWMR-7
Part VI §601

X

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 266 - STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES
AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

SUBPART E - USED OIL BURNED FOR ENERGY RECOVERY

APPLICABILITY

3	replace "Subpart D of Part 266" with "Subpart H of Part 266"	266.40(c)	HWMR-7 Part VII §701	X	
3	replace "Subpart D" with "Subpart H"	266.40(d)	"	"	

SUBPART H - HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

APPLICABILITY

	replace the "." after "recovery" with a ";	266.100(b)(2)	HWMR-7 Part VII §701	X	
	replace "chapter." with "chapter; and"	266.100(b)(3)	"	"	

PERMIT STANDARDS FOR BURNERS

	change "the Evaluation of Solid Waste" to "Evaluating Solid Waste"	266.102(b)(1)	"	"	
4	redesignate old "(d)(4)(iii)(D)" as "(d)(4)(iv)"	266.102(d)(4)(iv)	"	"	
	insert "A" before "sampling"	266.102(e)(4)(i)(C)	"	"	
	in heading, change "paramenters" to "parameters"	266.102(e)(6)	"	"	
	change "means" to "mean"	266.102(e)(6)(i)(B) (1)(ii)	"	"	
	change "opeator" to "operator"	266.102(e)(6)(ii)	"	"	

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
5 remove "the most recent" before "one hour"; change "averages" to "average"; change "average period" to "averaging period"	266.102(e)(6)(ii)(B) (2)	HWMR-7 Part VII §701	X		
delete the comma after "266.106(f)"	266.102(e)(6)(iv)(B)	"	"		
INTERIM STATUS STANDARDS FOR BURNERS					
insert "or" after "facilities to burn"	266.103(a)(1)(ii)	HWMR-7 Part VII §701	X		
insert "and" before "thallium"	266.103(b)(2)(ii)(A)	"	"		
4 replace "(b)(ii)(A)" with "(b)(2)(ii)(A)"	266.103(b)(2)(ii)(B)	"	"		
replace "(b)(ii)(B) or (b)(ii)(C)" with "(b)(2)(ii)(B) or (b)(2)(ii)(C)"	266.103(b)(2)(ii)(D)	"	"		
change "paticulate" to "particulate"	266.103(b)(2)(iv)	"	"		
change "equivalent" to "equivalent"; replace "." after "facility" with ";	266.103(b)(2)(v)(A) (5)	"	"		
change "HC1" (number "1") to "HCl" (letter "l")	266.103(b)(2)(vi)	"	"		
replace ";" after "streams" with ";	266.103(b)(3)(ii)	"	"		
change "meat" to "meet"	266.103(b)(5)(ii)(B)	"	"		
5 remove "the most recent" before "one hour"	266.103(b)(5)(ii)(B) (2)	"	"		
change "[the effective date of this rule]" to "August 21, 1991"	266.103(b)(6)	"	"		

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
delete "On or before August 21, 1992" and capitalize the "t" in "the"; insert "on or before August 21, 1992" after "Director"	266.103(c)	HWMR-7 Part VII §701	X		
add "and all applicable emissions standards"		"	"		
after "limits"	266.103(c)(1)				
change "light-weighted"		"	"		
to "light-weight"	266.103(c)(1)(iv)				
replace ";" after "(e))"		"	"		
with ":	266.103(c)(1)(ix)				
change "system" to "systems"; replace ";" after "(e))"		"	"		
with ":	266.103(c)(1)(xi)				
replace ";" after "(e))" with ":	266.103(c)(1)(xii)	"	"		
change "test"		"	"		
to "testing"	266.103(c)(4)(i)(C)				
change "average"	266.103(c)(4)(ii)(B)	"	"		
to "average"	(5)				
remove "the most recent" before "one hour"	266.103(c)(4)(iv)(C) (2)(ii)	"	"		
4 change the number "(1)" after "paragraph" to the letter "(I)"	266.103(c)(7)(i)(A)	"	"		
replace "to" after "waste burning" with "only for purposes of compliance testing (and pretesting to prepare for com- pliance testing)"	266.103(c)(7)(i)(B)	"	"		
insert "." after "HCl/Cl ₂ "	266.103(c)(7)(ii)(B) (1)(i)	"	"		
change "or" after "emissions" to "of"	266.103(g)(1)	"	"		

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

			STATE ANALOG IS:		
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
STANDARDS TO CONTROL ORGANIC EMISSIONS					
in equation, change "(1-W _{out})/W _{in} " to "1 - (W _{out} /W _{in})"	266.104(a)(1)	HWMR-7 Part VII §701	X		
4 change the "tetra-," after "to burn than" to "tetra-,"; change "paragraph (a)" to "paragraph (a)(1)"	266.104(a)(3)	"	"		
change "in Hazardous Waste Incinerators, Boilers, and Industrial Furnaces" to "for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste"	266.104(b)(2)	"	"		
add "Burning Hazardous Waste" after "Industrial Furnaces"; insert "and" between "CO" and "oxygen"	266.104(c)(3)	"	"		
insert "(PCDDs)" after "Dibenzo-p-Dioxins"; replace "." at the end of the sentence with ";	266.104(e)(1)	"	"		
replace "." at the end of the sentence after "TCDD" with ";	266.104(e)(2)	"	"		
6 insert "(" before "2.2"	266.104(e)(4)	"	"		
change "conducts" to "conduct"	266.104(f)(3)(iii)	"	"		
4 designate paragraph "(g)2." as "(g)(2)"	266.104(g)(2)	"	"		
STANDARDS TO CONTROL METALS EMISSIONS					
change "Evaluation Solid Waste" to "Evaluating Solid Waste"	266.106(a)	HWMR-7 Part VII §701	X		

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
in the equation, change "<1.0" to "≤1.0" and change "numeral" to "number"	266.106(b)(2)(i)	HWMR-7 Part VII §701	X		
insert "as defined in §266.102(e)(6)(ii)" between "hours" and "with"	266.106(b)(2)(ii)(B)	"	"		
insert "shall be used" at the end of the sentence before the period	266.106(b)(5)	"	"		
in the equation, change "K=physical stack height (meters)" to "H=physical stack height (meters)"; change "K=stack gas flow rate (m ³ /second)" to "V=stack gas flow rate (m ³ /second)"	266.106(b)(6)	"	"		
delete minus sign "-" after "AER(i)" in equation	266.106(c)(2)	"	"		
revise equation as indicated at 56 FR 32690, correction 57	266.106(d)(3)	"	"		
after "screening limit for" change "each" to "a" and "levels" to "level"	266.106(e)	"	"		
delete ";" after "metal" in the introductory text	266.106(f)(2)(ii)	"	"		
change "ratio" to "ratios"	266.106(f)(2)(ii)(B)	"	"		

STANDARDS TO CONTROL HYDROGEN CHLORIDE (HCl) AND CHLORINE GAS (Cl₂) EMISSIONS

change "paragraphs (b), (c), or (d)" to "paragraph (b) or (c)"	266.107(a)	HWMR-7 Part VII §701	X		
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RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
change "screen" in heading to "screening"	266.107(b)(2)	HWMR-7 Part VII §701	X		
change "screen" to "screening"	266.107(b)(3)	"	"		
4 change paragraph designated as "(i)" to "(1)"	266.107(d)(1)	"	"		
4 change paragraph designated as "(ii)" to "(2)"	266.107(d)(2)	"	"		
insert "limit" between "screening" and "provided"; change "Appendix I" to "Appendix II"	266.107(e)	"	"		
after "compliance with", change "his" to "this"	266.107(h)	"	"		
SMALL QUANTITY ON-SITE BURNER EXEMPTION					
change "Exemption" in heading to "Exempt"; change "section" to "subpart" in introductory text	266.108(a)	HWMR-7 Part VII §701	X		
insert "to" between "10.0" and "11.9" in first column of table	266.108(a)(1)	"	"		
change "<1.0" to "≤1.0" in equation; delete "," after "Allowable Quantity Burned"	266.108(c)	"	"		
LOW RISK WASTE EXEMPTION					
change "of" after "Director" to "on"; replace apostrophe after "fuel" with an end quotation mark	266.109(a)(1)(i)	"	"		
change reference "(a)(iii)" to "(a)(2)(iii)"	266.109(a)(2)(iv)	"	"		

**RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)**

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
change "componds" to "compounds"	266.109(a)(2)(iv)(A)	HWMR-7 Part VII §701	X		
insert "or adjusted Tier I" before "metals"	266.109(b)(2)	"	"		
WAIVER OF DRE TRIAL BURN FOR BOILERS					
insert "the" between "volatility of" and "fuel"	266.110(f)(3)	"	"		
REGULATION OF RESIDUES					
4 designate "266.122" as "266.112"	266.112	"	"		

APPENDIX I TO PART 266

TIER I AND TIER II FEED RATE AND EMISSIONS SCREENING LIMITS FOR METALS

in title to table, change "Carcinogenic" to "Noncarcinogenic"	Appendix I/Table I-A	HWMR -7 Part VII §701	X		
move the first column "Beryllium" under "Values for use in rural areas" to fifth column under "Values for use in urban areas"; change "9.6E+01" in second column under "Arsenic g/hr" for "Values for use in urban areas" for a Terrain adjusted effective stack height of 16 meters to "9.6E-01"	Appendix I/Table I-D	"	"		
change "4.3-01" corresponding to Terrain adjusted effective stack height (m) of 12 meters in the second column to "4.3E-01"	Appendix I/Table I-E	"	"		

DRAFT

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

APPENDIX II TO PART 266

TIER I FEED RATE SCREENING LIMITS FOR TOTAL CHLORINE

replace Appendix II as indicated at 56 FR 32690, correction 79	Appendix II	HWMR-7 Part VII §701	X		
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APPENDIX III TO PART 266

TIER II EMISSION RATE SCREENING LIMITS FOR FREE CHLORINE AND HYDROGEN CHLORIDE

replace Appendix III as indicated at 56 FR 32691, correction 80	Appendix III	HWMR-7 Part VII §701	X		
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APPENDIX IV TO PART 266

REFERENCE AIR CONCENTRATIONS

in first column of table change "Methyl Ethyl Katone" to "Methyl Ethyl Ketone"; change "Metyl Parathion" to "Methyl Parathion"	Appendix IV	HWMR-7 Part VII §701	X		
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RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
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APPENDIX VII TO PART 266

HEALTH-BASED LIMITS FOR EXCLUSION OF WASTE-DERIVED RESIDUES

change "(mg/kg)" to
"(mg/L)" in the
heading of the third
column in table
entitled "Metals-
TCLP Extract
Concentration Limits";
add the following
entry to the end
of the table:

Appendix VII/
Metals Table

HWMR-7
Part VII §701

X

Thallium | 7440-28-0 | 7xE+00

delete 8 lines
beginning with
"Thallium" and
ending with
"Thallium(I) sulfate"
from the table
entitled
"Nonmetals-Residue
Concentration Limits"

Appendix VII/
Nonmetals Table

HWMR-7
Part VII §701

X

APPENDIX VIII TO PART 266

POTENTIAL PICs FOR DETERMINATION OF EXCLUSION OF WASTE-DERIVED RESIDUES

change "roform" to
"chloroform" and
"robenzene" to
"chlorobenzene"
in the first column
of the table

Appendix VIII/
PICs Table

HWMR-7
Part VII §701

X

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

APPENDIX IX TO PART 266

METHODS MANUAL FOR COMPLIANCE WITH THE BIF REGULATIONS

7,8 Burning Hazardous Waste in Boilers and Industrial Furnaces (see 56 FR 32692-32795)	Appendix IX	HWMR-7 Part VII §701	X		
Determination of Enrichment Factor (see 56 FR 32796)	Appendix A to Appendix IX	"	"		

APPENDIX X TO PART 266

GUIDELINE ON AIR QUALITY MODELS (REVISED)

Guideline on Air Quality Models (see 56 FR 32796-32819)	Appendix X	HWMR-7 Part VII §701	X		
Summaries of Preferred Air Quality Models (see 56 FR 32819-32828)	Appendix A to Appendix X	"	"		
Summaries of Alternative Air Quality Models (see 56 FR 32828-32849)	Appendix B to Appendix X	"	"		
Example Air Quality Analysis Checklist (see 56 FR 32849-32852)	Appendix C to Appendix X	"	"		

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 270 - EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE
PERMIT PROGRAM

SUBPART B - PERMIT APPLICATION

SPECIFIC PART B INFORMATION REQUIREMENTS FOR BOILERS AND INDUSTRIAL
FURNACES BURNING HAZARDOUS WASTE

change "Methods for the Evaluation of" to "Methods for Evaluating"	270.22(a)(2)(ii)(B)	HWMR-7 Part IX §901	X		
change the reference "(a)(1)(ii)(B)" to "(a)(2)(ii)(B)"	270.22(a)(2)(ii)(C)	"	"		
change "feestocks" to "feedstocks"	270.22(a)(5)(vii)	"	"		
change "trail" to "trial"; before "other compliance tests" change "from from" to "from"	270.22(a)(6)	"	"		
change "minimize" to "minimize"	270.22(b)(1)	"	"		

SUBPART D - CHANGES TO PERMITS

9 PERMIT MODIFICATION AT THE REQUEST OF THE PERMITEE

replace "270.21" with "270.22" and "and 270.63" with "270.63 and 270.66"	270.42(c)(1)(iv)	HWMR-7 Part IX §901	X		
change "wates" to "wastes"	270.42(g)(1)	"	"		
change "effetive" to "effective"	270.42(g)(1)(i)	"	"		

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
delete "In the case of Classes 2 and 3 modifications,"; capitalize the "t" in "the"; insert "Class 2 or 3" before "modification"	270.42(g)(1)(iv)	HWMR-7 Part IX §901	X		
in "L.5." replace "." after "requirements" with ":	270.42/Appendix I	"	"		

SUBPART F - SPECIAL FORMS OF PERMITS

PERMITS FOR BOILERS AND INDUSTRIAL FURNACES BURNING HAZARDOUS WASTE

change "operation readiness" to "operational readiness"	270.66(b)(1)	HWMR-7 Part IX §901	X		
change "107" to "266.107"	270.66(b)(4)	"	"		
change "for the Evaluation of Solid Waste" to "for Evaluating Solid Waste"	270.66(c)(2)(i)	"	"		
change "for the Evaluation of Solid Waste" to "for Evalua- ting Solid Waste"	270.66(c)(2)(ii)	"	"		
delete "and" after "system(s);"	270.66(c)(3)(vi)	"	"		
insert "air" before "pollution"	270.66(c)(3)(vii)	"	"		
replace "." after "standard" with ":	270.66(f)(3)	"	"		
replace "is" after "performance standards" with "in"	270.66(f)(8)	"	"		

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and
Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
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SUBPART G - INTERIM STATUS

10 TERMINATION OF INTERIM STATUS

change "as" after "which" to "has"	270.73(f)	HWMR-7 Part IX §901	X		
change "as" after "which" to "has"	270.73(g)	"	"		

- ¹ Revision Checklist 85 (February 21, 1991; 56 FR 7134) redesignated the old paragraph (d)(2) as (d)(3) and introduced a new paragraph (d)(2) into the code. Revision Checklist 94 makes technical corrections to the February 21, 1991 amendatory language for 261.2 and incorrectly redesignates paragraph (d)(3) as (d)(4) and paragraph (d)(4) as (d)(5). The Federal code as of February 21, 1991, did not include 261.2(d)(3) or 261.2(d)(4). The technical correction addressed by Revision Checklist 96 (August 27, 1991; 56 FR 42504) fixes this error. The amendatory language should be as originally stated in the February 21, 1991 Federal Register at 56 FR 7206 (Revision Checklist 85) and should read: "Section 261.2 is amended by redesignating paragraph (d)(2) as (d)(3) and adding new paragraph (d)(2) to read as follows:"
- ² Note that the Federal Register addressed by this checklist references "261.3(c)(2)(ii)(8)." This is a typographical error; the correct reference is "261.3(c)(2)(ii)(B)." See the technical correction at 56 FR 42512 (August 27, 1991; Revision Checklist 96).
- ³ Note that there is a typographical error in the July 17, 1991 Federal Register (56 FR 32692). The "§266.4" in the heading should be "§266.40." See the technical correction at 56 FR 42512 (August 27, 1991; Revision Checklist 96).
- ⁴ Note that this technical correction found in the July 17, 1991 Federal Register (56 FR 32688) was addressed in Revision Checklist 85. However, it is included in this checklist for completeness.
- ⁵ Note that the July 17, 1991 Federal Register italicized the subparagraph designation in order to be consistent with the format in which the designation of a citation beyond a certain subparagraph is italicized.
- ⁶ There is a typographical error in the July 17, 1991 Federal Register. The amendatory language should read "insert a "(" between the words "a" and "before." See technical correction at 56 FR 42512 (August 27, 1991; Revision Checklist 96).
- ⁷ Note that the Federal Register addressed by this checklist has a typographical error at 56 FR 32786. In section 9.2, first bullet under paragraph "2", ">=0.95" should be "<=0.95." See the technical correction at 56 FR 42512 (August 27, 1991; Revision Checklist 96).

RCRA REVISION CHECKLIST 94: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

- ⁸ Note that the Federal Register addressed by this checklist has typographical errors at 56 FR 32786. In section 9.2, paragraph "3", the last sentence should read (corrections are underlined): "Then for HCl, convert the chlorine emission rate to HCl by multiplying it by the ratio of the molecular weight of HCl to the molecular weight of Cl (i.e., 36.5/35.5)." See the technical correction at 56 FR 42512 (August 27, 1991; Revision Checklist 96).
- ⁹ States only need to make these changes if they have adopted, or plan to adopt, the provisions addressed by Revision Checklist 54 (53 FR 37912), because 270.42 is not required by 271.14 to be part of a State's permitting program.
- ¹⁰ Note that there is a typographical error in the July 17, 1991 Federal Register (56 FR 32692). The "\$270.33" in the heading should be "\$270.73." See the technical correction at 56 FR 42512 (August 27, 1991; Revision Checklist 96).

RCRA REVISION CHECKLIST 95

Land Disposal Restrictions for
 Electric Arc Furnace Dust (K061)
 56 FR 41164-41178
 August 19, 1991
 (RCRA Cluster II, HSWA Rule)

Note: This checklist revises and finalizes treatment standards for K061 nonwastewaters in the high zinc subcategory originally regulated in the First Third Land Disposal Restrictions rule addressed by Revision Checklist 50 (53 FR 31138; August 17, 1988). Other related checklists include Revision Checklist 62 (54 FR 18836; May 2, 1989) and Revision Checklist 66 (54 FR 36967; September 6, 1989), as these two checklists amended and corrected Revision Checklist 50.

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A - GENERAL

DEFINITION OF HAZARDOUS WASTE

† add new paragraph
 which excludes as
 hazardous waste
 certain
 nonwastewater
 residues resulting
 from high tempera-
 ture metals recovery
 processing of K061
 waste; generic
 exclusion levels;
 testing requirements;
 notification and
 certification
 requirements for
 each shipment of
 certain K061 HTMR
 residues sent to a
 subtitle D unit

261.3(c)(2)(ii)(C)

HWMR-7
 Part II §201

X

RCRA REVISION CHECKLIST 95: Land Disposal Restrictions for
Electric Arc Furnace Dust (K061) (cont'd)

DRAFT

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

EXCLUSIONS

† add new paragraph
which excludes
as solid waste
nonwastewater
splash condenser
dross residue from
the treatment of
K061 in high
temperature metals
recovery units,
provided it is
shipped in drums
and not land
disposed before
recovery

261.4(a)(11)

HWMR-7
Part II §201

X

PART 268 - LAND DISPOSAL RESTRICTIONS

SUBPART D - TREATMENT STANDARDS

TREATMENT STANDARDS EXPRESSED AS CONCENTRATIONS IN WASTE EXTRACT

in Table CCWE revise
entry for K061, high
zinc subcategory as
shown below (see
56 FR 41177)

268.41(a)/
Table CCWE

HWMR-7
Part VIII §801

X

TABLE CCWE—CONSTITUTE CONCENTRATIONS IN WASTE EXTRACT

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	Wastewaters		Nonwastewaters	
				Concentration (mg/L)	Notes	Concentration (mg/L)	Notes
K061, High Zinc, Subcategory.	Electric Arc Furnace Dust.	Table CCW in 268.43	Antimony.....	NA		2.1	
			Arsenic.....	NA		0.055	
			Barium.....	NA		7.8	
			Beryllium.....	NA		0.014	
			Cadmium.....	NA		0.19	
			Chromium (Total).....	NA		0.33	
			Lead.....	NA		0.37	
			Mercury.....	NA		0.009	
			Nickel.....	NA		5	
			Selenium.....	NA		0.16	
			Silver.....	NA		0.3	
			Thallium.....	NA		0.078	
			Vanadium.....	NA		Reserved	
			Zinc.....	NA		5.3	

RCRA REVISION CHECKLIST 95: Land Disposal Restrictions for
Electric Arc Furnace Dust (K061) (cont'd)

DRAFT

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
at end of paragraph add "except that mixtures of high and low zinc nonwastewater K061 are subject to the treatment standard for high zinc K061"	268.41(b)	HWMR-7 Part VIII §801		X	
TREATMENT STANDARDS EXPRESSED AS SPECIFIED TECHNOLOGIES					
in Table 2 remove entry for K061	268.42(a)/Table 2	"		"	

RCRA REVISION CHECKLIST 96

Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments II
56 FR 42504-42517
August 27, 1991
(RCRA Cluster II, HSWA and non-HSWA provisions)

Notes: 1) The notice addressed by this checklist makes several technical amendments to the final rule addressed by Revision Checklist 85 (56 FR 7134, February 21, 1991) and Revision Checklist 94 (56 FR 32688, July 17, 1991). These revisions provide clarification and correct unintended consequences of the Boilers and Industrial Furnaces (BIF) rule. This notice also adds two new appendices, Appendix XI and Appendix XII, to the code. Technical corrections to several sections (i.e., 261.2(d), 261.3(c)(2)(ii)(B), 266.103(a)(5)(i)(D), 266.103(b)(5)(i)(A) and Appendix IX to Part 266) were already addressed in Revision Checklist 94. However, for completeness, these corrections (except the incorrect referral to 261.3(c)(2)(ii)(8) instead of 261.3(c)(2)(ii)(B)) are repeated in this checklist and identified in the endnotes. Technical corrections which address only the italicizing format of a citation (266.102(e)(4)(ii)(C)(1), 266.102(e)(4)(ii)(C)(2), 266.102(e)(4)(ii)(C)(3), (266.102(e)(4)(iii)(C)(1) and 266.102(e)(4)(iii)(C)(2)) are not included in this checklist.

2) Note that the Federal Register for this rule corrects typographical errors in certain headings at 56 FR 32692 in the July 17, 1991 Federal Register (Revision Checklist 94) [i.e., the "\$266.4" should be "\$266.40", and the "\$270.33" should be "\$270.73"]. However, no additional changes were made to the paragraphs by this rule, therefore they have not been included in this revision checklist.

3) Note that on September 5, 1991 (56 FR 43874; Revision Checklist 98), an administrative stay was published affecting the February 21, 1991 (56 FR 7134; Revision Checklist 85) final rule. The changes addressed by that administrative stay are optional.

4) States which are not authorized for Revision Checklists 85 and 94 are strongly encouraged to adopt these present technical corrections at the same time the requirements addressed by Revision Checklists 85 and 94 are adopted. States already authorized for the provisions addressed by Revision Checklists 85 and 94 should adopt these present technical corrections as soon as possible.

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A - GENERAL

1 DEFINITION OF SOLID WASTE

at the end of paragraph, add exception for brominated material that meets certain criteria	261.2(d)(2)	HWMR-7 Part II §201		X	
material must contain a bromine concentration of at least 45%	261.2(d)(2)(i)	"		"	
material must contain less than a total of 1% of toxic organic compounds listed in Appendix VIII	261.2(d)(2)(ii)	"		"	
material is processed continually on-site in the halogen acid furnace via direct conveyance	261.2(d)(2)(iii)	"		"	

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 265 - INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART G - CLOSURE AND POST-CLOSURE

CLOSURE PLAN; AMENDMENT OF PLAN

2	remove introductory clause; restructure paragraph to create (d)(2), (d)(2)(i) and remove last sentence replacing it with "; or"; add (d)(2)(ii) addressing provisions for units meeting 265.113(d) requirements	265.112(d)(2) 265.112(d)(2)(i) 265.112(d)(2)(ii)	HWMR-7 Part VI §601 " "	X " "	
---	---	--	----------------------------------	-------------	--

CLOSURE: TIME ALLOWED FOR CLOSURE

2	add text regarding the final volume of nonhazardous waste; remove text regarding the 90-day requirement for a boiler or industrial furnace	265.113(a)	HWMR-7 Part VI §601 "	X "	
2	add text regarding the final volume of nonhazardous waste; remove text regarding the 90-day requirement for a boiler or industrial furnace	265.113(b)	"	"	

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 266 - STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES
AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

SUBPART H - HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

APPLICABILITY

add "(f)" to list of references in the first sentence	266.100(a)	HWMR-7 Part VII §701	X		
add text restricting exemption to metal recovery furnaces and subjecting an owner or operator of a lead or a nickel-chromium recovery furnace, or certain metal recovery furnaces to 266.100(c)(3) requirements	266.100(c)(1)	"	"		
add text regarding alternative methods that meet or exceed SW-846 method performance capabilities; situation where "best available method" is used	266.100(c)(1)(ii)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
replace "as-generated" with "as-fired"; add additional text regarding the reduction of organic compound concentration to the 500 ppm limit by bona fide treatment; blending for dilution to meet the 500 ppm limit is prohibited; retention of documentation in records required by 266.100(c)(1)(iii)	266.100(c)(2)(i)	HWMR-7 Part VII §701	X		
replace "as-generated" with "as-fired"; add additional text regarding the reduction of the heating value to below 5,000 Btu/lb by bona fide treatment; blending for dilution to meet the 5,000 Btu/lb limit is prohibited; retention of documentation in records required by 266.100(c)(1)(iii)	266.100(c)(2)(ii)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
add new paragraph regarding requirements for exemption from 266.102 through 266.111 for owner or operator of certain metal recovery furnaces: written notice to director; 266.100(c)(1) compliance	266.100(c)(3)	HWMR-7 Part VII §701		X	
exemption from 266.100(c)(1) requirements for hazardous wastes listed in Appendices XI and XII, Part 266, and baghouse bags used to capture metallic dusts emitted by steel manufacturing, provided:	266.100(c)(3)(i)	"		"	
waste contains recoverable levels of specified metals	266.100(c)(3)(i)(A)	"		"	
waste does not exhibit the Toxicity Characteristic of 261.24 for an organic constituent	266.100(c)(3)(i)(B)	"		"	
waste is not a hazardous waste listed in Part 261 Subpart D because it is listed for an organic constituent as identified in Appendix VII of Part 261	266.100(c)(3)(i)(C)	"		"	

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
certification by owner or operator under 266.100(c)(3) regarding hazardous waste; sampling and analysis or other information to assure compliance; sampling and analysis con- ducted according to 266.100(c)(1)(ii); maintain records to document compliance with (c)(3) for at least three years	266.100(c)(3)(i)(D)	HWMR-7 Part VII §701	X		
basis for case-by-case decisions regarding toxic organic constituents; metal recovery furnace subject to Subpart H require- ments after adequate notice and opportunity for comment; factors Director will consider:	266.100(c)(3)(ii)	"	"		
concentration and toxicity of organic constituents in the material	266.100(c)(3)(ii)(A)	"	"		
level of destruction of toxic constituents provided by the furnace	266.100(c)(3)(ii)(B)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
acceptable ambient levels established in Appendices IV or V exceeded for any toxic organic compound that may be emitted based on certain conditions	266.100(c)(3)(ii)(C)	HWMR-7 Part VII §701	X		
3 conditional exemption from Subpart H requirements for owners or operators of certain smelting, melting, and refining furnaces, except for 266.112; to be exempt from 266.101 through 266.111, an owner or operator must:	266.100(f)				
provide a one-time written notice indicating:	266.100(f)(1)	"	"		
owner or operator claims 266.100(f) exemption	266.100(f)(1)(i)	"	"		
hazardous waste is burned for legitimate recovery of precious metal	266.100(f)(1)(ii)	"	"		
compliance with 266.100(f) sampling and analysis and recordkeeping requirements	266.100(f)(1)(iii)	"	"		
sample and analyze hazardous waste as necessary using specified procedures	266.100(f)(2)	"	"		
maintain specified records at facility for at least three years	266.100(f)(3)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
PERMIT STANDARDS FOR BURNERS					
insert sentence regarding alternative methods and best available method after "...see §260.11 of this chapter)."	266.102(b)(1)	HWMR-7 Part VII §701	X		
replace "for not less than three years" with "until closure of the facility"	266.102(e)(10)	"	"		
INTERIM STATUS STANDARDS FOR BURNERS					
replace "Hazardous waste listed for dioxin or derived from any of the following dioxin-listed wastes" with "The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes" at the beginning of paragraph	266.103(a)(3)	"	"		
replace "and" after "discharged" with "or"	266.103(a)(5)	"	"		
change "(c)(7)(ii)" to "(c)(5)"	266.103(a)(5)(i)(D)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
replace "as-generated" with "as-fired"; remove parentheses around the phrase beginning with "and so is..." and add period at end of phrase; insert text regarding 1) the reduction of the concentration of nonmetal compounds to the 500 ppm limit by bona fide treatment, and 2) blending for dilution to meet the 500 ppm limit prohibited; retention of documentation in facility record	266.103(a)(5)(ii)(A)	HWMR-7 Part. VII §701	X		
remove "as-generated or" before "as-fired"; remove parentheses around the phrase beginning with "and so is..."; add text regarding 1) the reduction of the heating value of a waste as-generated to below 5,000 Btu/lb limit by bona fide treatment, and 2) blending to augment heating value to meet the 5,000 Btu/lb limit prohibited; retention of documentation in facility record	266.103(a)(5)(ii)(B)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
restructure paragraph by breaking it into (a)(6), and (a)(6)(i)-(iv) and revising old 266.103(a)(6) as follows: remove verbiage between "not feed hazardous waste" and "that has a heating value less"; revise rest of para- graph after "5,000 Btu/lb; as generated" by replacing it with parenthetical phrase addressing situation where 5,000 Btu/lb limit can be exceeded; exceptions: paragraphs as indicated below	266.103(a)(6)	HWMR-7 Part VII §701	X		
hazardous waste burned solely as an ingredient	266.103(a)(6)(i)	"	"		
hazardous waste burned for purposes of compliance testing for a total period of time not to exceed 720 hours	266.103(a)(6)(ii)	"	"		
waste burned if Director has documentation to show that, prior to August 21, 1991:	266.103(a)(6)(iii)	"	"		
boiler or industrial furnace operating under Part 265, Subpart O or P requirements	266.103(a)(6)(iii)(A)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
boiler or industrial furnace met 270.70 interim status eligibility requirements for Part 265, Subpart O or Subpart P	266.103(a)(6)(iii)(B)	HWMR-7 Part VII §701	X		
hazardous waste with a heating value less than 5,000 Btu/lb burned prior to August 21, 1991	266.103(a)(6)(iii)(C)	"	"		
such waste burned in halogen acid furnace if waste burned as an excluded ingredient under 261.2(e) prior to February 21, 1991 and documentation kept on file	266.103(a)(6)(iv)	"	"		
4 insert "and recorded" after "monitored"	266.103(b)(5)(i)(A)	"	"		
remove "operating" before "record"; insert "records and" before "locations"	266.103(b)(6)(viii)	"	"		
insert "The administrative record kept by the" before "Agency" at the beginning of the paragraph	266.103(b)(6)(viii)(A)	"	"		
insert "The BIF correspondence file kept at" before "The facility"; add sentence specifying what the correspondence file must include	266.103(b)(6)(viii)(B)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
insert "and the applicable emissions standards of §§ 266.104(b) through (e), 266.105, 266.106, 266.107, and 266.103(a)(5)(i)(D)" after "operating limits"; remove "until an operating permit is issued" from the end of the paragraph	266.103(c)(1)	HWMR-7 Part VII §701		X	
at end add text regarding case-by-case approval to use compliance test data from one unit in lieu of testing a similar on-site unit; information required to support owner or operator request; approval based on meeting 266.103(c) requirements	266.103(c)(3)(i)	"		"	
add text regarding criteria for compliance with 266.103(l), 265.112(d)(2) and 265.113 provisions	266.103(e)	"		"	
replace "for a period of three years" with "until closure of the boiler or industrial furnace unit"	266.103(k)	"		"	
STANDARDS TO CONTROL ORGANIC EMISSIONS					
5 insert "(" before "2.2"	266.104(e)(4)	"		"	

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT		FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
				EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
<u>SMALL QUANTITY ON-SITE BURNER EXEMPTION</u>						
replace "volume basis" with "total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste"		266.108(a)(2)	HWMR-7 Part VII §701	X		
<u>LOW RISK WASTE EXEMPTION</u>						
replace "of" after "Director" with "on"; replace "volume input" with "mass input"; replace "larger volume" with "greater mass feed rate"		266.109(a)(1)(i)	"	"		
<u>WAIVER OF DRE TRIAL BURN FOR BOILERS</u>						
replace "the boiler" with "the device"; replace "volume input" with "mass input"; replace "larger volume" with "greater mass feed rate"		266.110(a)	"	"		
<u>STANDARDS FOR DIRECT TRANSFER</u>						
add text regarding compliance with specified maintenance and protective distances requirements in lieu of 265.176 requirements; written certification by local Fire Marshall to be kept on file		266.111(d)(2)	"	"		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
REGULATION OF RESIDUES					
replace existing paragraph with "Boilers must burn at least 50% coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal:"	266.112(a)(1)	HWMR-7 Part VII §701	X		
replace "composite samples" with "samples representing a minimum of 10 days of operation"; add sentence regarding compositing period not to exceed 24 hours; replace "The upper 95% confidence level about the mean" in second sentence with "The upper tolerance limit (at 95% confidence with a 95% proportion of the sample distribution)"; replace "upper 95% confidence level about the mean" in last sentence with "upper tolerance limit"	266.112(b)(1)(i)	"	"		

DRAFT

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
replace existing paragraph with new paragraph regarding sampling and analysis of waste-derived residue to determine whether residue generated during each 24-hour period has concentrations of toxic constituents higher than 266.112(b)(1)(i) normal residue concentrations; if so, residue not excluded from definition of hazardous waste; toxic constituent concentrations based on analysis of samples obtained over 24-hour period; for multiple samples, concentration of toxic constituent is arithmetic mean; no results may be disregarded	266.112(b)(1)(ii)	HWMR-7 Part VII §701	X		

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
add new paragraph regarding sampling and analysis of waste-derived residue to determine whether residue generated during each 24-hour period has con- centrations of toxic constituents higher than health-based levels; determination of toxic concentrations based on analysis of one or more samples obtained over 24-hour period; for multiple samples, con- centration of toxic constituent is arithmetic mean of concentrations in samples; no results may be disregarded	266.112(b)(2)(iii)	HWMR-7 Part VII §701		X	
replace "must" with "shall"; replace "for a period of three years" with "until closure of the boiler or industrial furnace unit"	266.112(c)		"	"	

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

APPENDIX IX TO PART 266

METHODS MANUAL FOR COMPLIANCE WITH THE BIF REGULATIONS

replace section 7.0,

"Statistical
Methodology for
Bevill Residue
Determinations,"

with new text

given at

56 FR 42516 & 42517

Appendix IX/

Section 7.0

HWMR-7

Part VII §701

X

change " ≥ 0.95 " to

" ≤ 0.95 " in

section 9.2, first

bullet under

paragraph "2";

in section 9.2,

paragraph "3",

change the ending

phrase of the last

sentence to "ratio

of the molecular

weight of HCl to the

molecular weight of

Cl (i.e., 36.5/35.5)"

Appendix IX/

Section 9.2

"

"

APPENDIX XI TO PART 266

LEAD-BEARING MATERIALS THAT MAY BE PROCESSED IN EXEMPT LEAD SMELTERS

add new appendix

addressing lead-bearing

materials that

may be processed

in exempt lead

smelters, see

56 FR 42517

Appendix XI

HWMR-7

Part VII §701

X

RCRA REVISION CHECKLIST 96: Burning of Hazardous Waste in
Boilers and Industrial Furnaces; Technical Amendments (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

APPENDIX XII TO PART 266

**NICKEL OR CHROMIUM-BEARING MATERIALS THAT MAY BE PROCESSED IN EXEMPT
NICKEL-CHROMIUM RECOVERY FURNACES**

add new appendix
addressing nickel or
chromium-bearing
materials that may be
processed in exempt
nickel-chromium
recovery furnaces,
see 56 FR 42517

HWMR-7
Part VII §701

X

Appendix XII

- ¹ Revision Checklist 85 (February 21, 1991; 56 FR 7134) redesignated the old paragraph (d)(2) as (d)(3) and introduced a new paragraph (d)(2) into the code. Revision Checklist 94 (July 17, 1991; 56 FR 32688) made technical corrections to the February 21, 1991 amendatory language for 261.2 and incorrectly redesignated paragraph (d)(3) as (d)(4) and paragraph (d)(4) as (d)(5). The Federal code as of February 21, 1991, did not include 261.2(d)(3) or 261.2(d)(4). The technical correction addressed by Revision Checklist 96 (August 27, 1991; 56 FR 42504) fixes this error.
- ² Note that the technical corrections addressed by the August 27, 1991 Federal Register for this rule reverse the corrections made by the February 21, 1991 notice (56 FR 7134; Revision Checklist 85). The August 27, 1991 language is the same as the language in the July 1990 CFR. Thus, effectively the technical corrections addressed by Revision Checklist 85 for these citations have been nullified by this checklist.
- ³ Note that there is a typographical error in the August 27, 1991 Federal Register (Revision Checklist 96; 56 FR 42504). The reference to "261.111" should be "266.111." Revision Checklist 111 (57 FR 38558; August 25, 1992) fixes this error.
- ⁴ Note that the technical correction found in the August 27, 1991 Federal Register (56 FR 42504) was addressed in Revision Checklist 85. However, it is included in this checklist for completeness.
- ⁵ Note that this technical correction found in the August 27, 1991 Federal Register (56 FR 42504) was addressed in Revision Checklist 94. However, it is included in this checklist for completeness.

RCRA REVISION CHECKLIST 97

Exports of Hazardous Waste; Technical Correction

56 FR 43704-43705

September 4, 1991

(RCRA Cluster II, HSWA provisions)

Note: This Revision Checklist amends §262.53 and §262.56 originally introduced into the code by Revision Checklist 31 (August 8, 1986; 51 FR 28664), by changing the office to which notifications of export activities and annual export reports must be sent.

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
PART 262 - STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE					
SUBPART E - EXPORTS OF HAZARDOUS WASTE					
NOTIFICATION OF INTENT TO EXPORT					
replace "Office of International Activities (A-106), EPA" with "Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), Environmental Protection Agency"	262.53(b)	HWMR-7 Part III §301	X		
replace "Office of International Activities (A-106)" with "Office of Waste Programs Enforce- ment, RCRA Enforce- ment Division (OS-520), Environmental Protection Agency"	262.56(b)	"	"		

RCRA REVISION CHECKLIST 98

Coke Ovens Administrative Stay
56 FR 43874-43877
September 5, 1991
(RCRA Cluster II, HSWA provisions)

Note: This Revision Checklist addresses an administrative stay of the permitting standards for boilers and industrial furnaces (BIFs) adopted pursuant to the February 21, 1991 (56 FR 7134; Revision Checklist 85) final rule as it applies to coke ovens burning certain hazardous wastes from the coke by-products recovery process. The primary effect of the stay is to halt the application of industrial furnace standards to coke ovens when they reprocess non-K087 hazardous wastes while the Agency can evaluate comments on a pending regulatory proposal to exclude certain wastes from Subtitle C jurisdiction when recycled by reprocessing in coke ovens. This means that on August 21, 1991, coke ovens may continue to process residues from the by-products recovery process that exhibit the TC without the coke oven having to comply with the BIF regulations. The effects of the administrative stay are uniform in all States, as the BIF rule is based on HSWA authority. The Agency encourages States to follow deferring the effective date of the BIF rule for coke ovens as is announced in this stay. However, States may elect to implement the BIF rule with an earlier effective date than specified in this stay, as a matter of State law. Because this stay makes existing Federal requirements less stringent, Revision Checklist 98 is optional.

RCRA REVISION CHECKLIST 98: Burning of Hazardous Waste in
Boilers and Industrial Furnaces;
Administrative Stay of Applicability and Technical Amendment (cont'd)

		STATE ANALOG IS:			
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
PART 266 - STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES					
SUBPART H - HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES					
APPLICABILITY					
replace "(c), (d) and (f)" with "(c) and (d)"; remove "operating" before "permit"; add note stating the pro- vision does not apply to coke ovens processing coke by- products wastes ex- hibiting the Toxicity Characteristic identi- fied in 261.24 pending completion of proposed July 26, 1991 rulemaking	266.100(a)	HWMR-7 Part VII §701	X		

¹ Note the replacement of "(c), (d) and (f)" with "(c) and (d)" is an error. The reference should remain as "(c), (d) and (f)." This will be addressed by a technical correction in the near future.

RCRA REVISION CHECKLIST 99

Amendments to Interim Status Standards
for Downgradient Ground-Water Monitoring Well Locations
56 FR 66365-66369
December 23, 1991
(RCRA Cluster II, Non-HSWA)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

PART 260 - HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART B - DEFINITIONS

† DEFINITIONS

"qualified ground-water scientist"	260.10	HWMR-7 Part I §101	X		
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PART 265 - INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART F - GROUND-WATER MONITORING

† GROUND-WATER MONITORING SYSTEM

demonstrate alternate hydraulically down-gradient monitoring well location will meet alternate criteria; in writing and kept at facility; certified by qualified ground-water scientist and establish:	265.91(a)(3)	HWMR-7 Part VI §601	X		
existing physical obstacle prevents monitoring well installation at hydraulically downgradient limit of the waste management area	265.91(a)(3)(i)	"	"		

DRAFT

RCRA REVISION CHECKLIST 99: Amendments to Interim Status Standards
for Downgradient Ground-Water Monitoring Well Locations (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
selected alternate downgradient location is as close to limit of waste management area as practical	265.91(a)(3)(ii)	HWMR-7 Part VI §601	X		
location ensures detection that, given alternate location, is as early as possible of any statistical amounts of hazardous waste or constituents that migrate from the waste management area to uppermost aquifer	265.91(a)(3)(iii)	"	"		
lateral expansion, new or replacement units not eligible for an alternate downgradient location	265.91(a)(3)(iv)	"	"		

RCRA REVISION CHECKLIST 100

Liners and Leak Detection Systems for Hazardous Waste
Land Disposal Units
57 FR 3462-3497
January 29, 1992
(RCRA Cluster II, Both HWSA and Non-HWSA provisions)

Note: As is explained in the preamble (57 FR 3480 & 3481), EPA considers all of this rule to be promulgated pursuant to HSWA, with the exception of the Construction Quality Assurance Program (CQA) as it applies to final cover requirements.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
PART 260 - HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL						
SUBPART B - DEFINITIONS						
DEFINITIONS						
add "replacement unit"	260.10	HWMR-7 Part I §101	X			
revise "sump"	260.10	"	"			
PART 264 - STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES						
SUBPART B - GENERAL FACILITY STANDARDS						
GENERAL INSPECTION REQUIREMENTS						
replace "264.194" with "264.193, 264.195"; remove "264.253"; add "264.278	264.15(b)(4)	HWMR-7 Part V §501	X			
CONSTRUCTION QUALITY ASSURANCE PROGRAM						
CQA program	264.19(a)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
required for all surface impoundment, wastepile and landfill units that must comply with 264.221(c)&(d), 264.251(c)&(d), and 264.301(c)&(d); program must ensure constructed unit meets or exceeds all permit design criteria and specifications; program must be developed and implemented under a CQA officer who is a registered professional engineer	264.19(a)(1)	HWMR-7 Part V §501	X			
the physical components the CQA program must address	264.19(a)(2)	"	"			
	264.19(a)(2)(i)	"	"			
	264.19(a)(2)(ii)	"	"			
	264.19(a)(2)(iii)	"	"			
	264.19(a)(2)(iv)	"	"			
	264.19(a)(2)(v)	"	"			
	264.19(a)(2)(vi)	"	"			
before construction begins, owner/operator must develop a written CQA plan; must identify steps that will be used to monitor and document quality of materials and condition and manner of their installation; what the CQA plan must include:	264.19(b)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
identification of applicable units and how they will be constructed	264.19(b)(1)	HWMR-7 Part V §501	X			
identification of key CQA plan development and implementation personnel; CQA officer qualifications	264.19(b)(2)	"	"			
inspection and sampling activities' description; what must be described	264.19(b)(3)	"	"			
contents of program	264.19(c)	"	"			
must include observations, inspections, tests, and measurements sufficient to ensure:	264.19(c)(1)	"	"			
structural stability and integrity of 264.19(a)(2) units	264.19(c)(1)(i)	"	"			
proper construction according to permit specifications and good engineering practices, and proper installation according to design specifications	264.19(c)(1)(ii)	"	"			
material conformity with design and other material specifications	264.19(c)(1)(iii)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
test fills for compacted soils liners, using full scale compaction methods to ensure liners are constructed to meet specific hydraulic conductivity requirements; compliance verified by in-situ testing on constructed test fill; conditions under which alternate may be accepted	264.19(c)(2)	HWMR-7 Part V §501	X			
certification to Regional Administrator before waste received; signed by CQA officer stating that approved CQA plan successfully carried out and units meet specific requirements; 270.30(l)(2)(ii) procedure complete; documentation furnished upon request	264.19(d)	"	"			

SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

OPERATING RECORD

insert "264.19, 264.191, 264.193, 246.195, 264.222, 264.223"; replace "264.253, 264.254" with "264.252 - 264.254" and "264.303" with "264.302 - 264.304"	264.73(b)(6)	"	"			
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**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
SUBPART K - SURFACE IMPOUNDMENTS						
DESIGN AND OPERATING REQUIREMENTS						
completely revise paragraph; surface impoundments which must install two or more liners and a leachate collection and removal system between such liners; "construction commences" defined under "existing facility"	264.221(c)	HWMR-7 Part V §501	X			
liner system must include:	264.221(c)(1)(i)	"	"			
top liner designed and constructed to prevent migration of hazardous constituents into liner for specified period	264.221(c)(1)(i)(A)	"	"			
composite bottom liner consisting of at least two components; upper component to prevent migration of hazardous constituents into this component during specified period; lower component designed and constructed to minimize such migration if upper component is breached; specified thickness and hydraulic conductivity	264.221(c)(1)(i)(B)	"	"			
liners must comply with 264.221(a)(1),(2)&(3)	264.221(c)(1)(ii)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
relationship between leachate collection and removal system and a "leak detection system"; what system must be capable of; minimum requirements	264.221(c)(2)	HWMR-7 Part V §501	X			
bottom slope of 1 percent or more	264.221(c)(2)(i)	"	"			
4 constructed of: 1) granular drainage materials with 1×10^{-1} cm/sec or more hydraulic conductivity and 12 in. (30.5 cm) or more thickness, or 2) synthetic or geonet drainage materials with 3×10^{-4} m ² /sec or more transmissivity	264.221(c)(2)(ii)	"	"			
construction material specifications	264.221(c)(2)(iii)	"	"			
designed and operated to minimize clogging during active life and post-closure care period	264.221(c)(2)(iv)	"	"			
specifications for sumps and liquid removal methods	264.221(c)(2)(v)	"	"			
collect and remove pumpable liquids in sumps to minimize head on bottom liner	264.221(c)(3)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
what must be demonstrated if leak detection system is not located completely above seasonal high water table	264.221(c)(4)	HWMR-7 Part V §501	X			
Regional Administrator may approve alternate design or operating practices if owner or operator can demonstrate that design/practices will:	264.221(d)	"	"			
prevent hazardous constituent migration into ground or surface water as effectively as system specified in 264.221(c), and	264.221(d)(1)	"	"			
allow detection of hazardous constituent leaks through top liner at least as effectively	264.221(d)(2)	"	"			
redesignate old 264.221(f) as 264.221(g); add new paragraph on exemption from 264.221(c) for replacement surface impoundment unit	264.221(f)	"	"			
meets RCRA 3004(o)(1)(A)(i) and (o)(5) design standards	264.221(f)(1)	"	"			
no reason to believe liner is not functioning as designed	264.221(f)(2)	"	"			
old 264.221(f),(g)&(h) become 264.221(g),(h)&(i)	264.221(g)-(i)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
ACTION LEAKAGE RATE						
Regional Administrator approval of action leakage rate for surface impoundment units subject to 264.221(c) or(d); definition of action leakage rate; adequate safety margin	264.222(a)	HWMR-7 Part V §501	X			
how to determine if action leakage rate has been exceeded; unless another calculation approved, average daily flow rate calculated weekly, during active life and closure period and monthly during post-closure care period	264.222(b)	"	"			
RESPONSE ACTIONS						
approved response action plan before receipt of waste for surface impoundments subject to 264.221(c) or(d); address actions if action leakage rate exceeded; at a minimum plan must describe actions in 264.223(b)	264.223(a)	"	"			
responsibilities if flow rate into leak detection system exceeds the action leakage rate for any sump:	264.223(b)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
notify Regional Administrator in writing within seven days of determination	264.223(b)(1)	HWMR-7 Part V §501	X			
preliminary assessment to Regional Administrator within 14 days of determination; what assessment must address	264.223(b)(2)	"	"			
determine location, size and cause of any leak	264.223(b)(3)	"	"			
determine whether 1) waste receipt should cease or be curtailed, 2) waste should be removed for inspection, repairs, or controls, or 3) unit should be closed	264.223(b)(4)	"	"			
determine short- and longer-term actions to mitigate or stop any leaks	264.223(b)(5)	"	"			
within 30 days after Regional Administrator notification, submit the results of 264.223(b)(3)-(5) analyses, the results of actions taken, and actions planned; thereafter, as long as flow rate exceeds action leakage rate, monthly report to Regional Administrator summarizing results of remedial actions taken and actions planned	264.223(b)(6)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
how the 264.223(b)(3)-(5) determinations must be made:	264.223(c)	HWMR-7 Part V §501	X			
assess the source of liquids and amounts by source	264.223(c)(1)(i)	"	"			
conduct analyses of liquids in leak detection system to identify sources of liquids and location of leaks, and the hazard and mobility of the liquid	264.223(c)(1)(ii)	"	"			
assess seriousness of leaks	264.223(c)(1)(iii)	"	"			
document why assessments not needed	264.223(c)(2)	"	"			

MONITORING AND INSPECTION

if leak detection system required under 264.221(c) or (d), record amount of liquids removed from each sump, at least weekly during active life and closure period	264.226(d)(1)	HWMR-7 Part V §501	X			
after final cover installed, at least monthly record the amount of liquids removed from each leak detection sump; when quarterly and semi-annual recording allowed; when monthly recording must resume	264.226(d)(2)	"	"			
definition of "pump operating level"	264.226(d)(3)	"	"			

RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for Hazardous Waste Land Disposal Units(cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
CLOSURE AND POST-CLOSURE CARE						
redesignate old 264.228(b)(2) as 264.228(b)(3); add new paragraph addressing maintaining and monitoring leak detection system in accordance with 264.221(c)(2)(iv)&(3) and 264.226(d); comply with other applicable Part 264 leak detection requirements	264.228(b)(2)	HWMR-7 Part V §501	X			
redesignated 264.228(b)(2) becomes new 264.228(b)(3)	264.228(b)(3)	"	"			
redesignated 264.228(b)(3) becomes new 264.228(b)(4)	264.228(b)(4)	"	"			
SUBPART L - WASTE PILES						
DESIGN AND OPERATING REQUIREMENTS						
redesignate old 264.251(c) as 264.251(g); add new paragraph addressing waste piles that must install two or more liners and a leachate collection and removal system above and between these liners; "construction commences" defined under "existing facility"	264.251(c)	HWMR-7 Part V §501	X			
liner system must include:	264.251(c)(1)(i)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
top liner designed and constructed to prevent migration of hazardous constituents into liner for specified period	264.251(c)(1)(i)(A)	HWMR-7 Part V §501	X			
composite bottom liner consisting of at least two components; upper component to prevent migration of hazardous constituents into this component during specified period; lower component designed and constructed to minimize such migration if upper component is breached; specified thickness and hydraulic conductivity	264.251(c)(1)(i)(B)	"	"			
liners must comply with 264.251(a)(1)(i)-(iii)	264.251(c)(1)(ii)	"	"			
leachate collection and removal system must collect and remove leachate from the waste pile during the active life and post-closure care period; Regional Administrator to specify permit conditions to ensure leachate depth over liner does not exceed 30 cm (1 ft); leachate collection and removal system must comply with 264.251(c)(3)(iii)&(iv)	264.251(c)(2)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
relationship between leachate collection and removal system and the leak detection system; what the leak detection system must be capable of; minimum requirements:	264.251(c)(3)	HWMR-7 Part V §501	X			
bottom slope of 1 percent or more	264.251(c)(3)(i)	"	"			
constructed of: 1) granular drainage materials with hydraulic conductivity of 1×10^{-2} cm/sec or more, and 12 in. (30.5 cm) or more thickness; or 2) synthetic or geonet drainage materials with 3×10^{-5} m ² /sec or more transmissivity	264.251(c)(3)(ii)	"	"			
construction material specifications	264.251(c)(3)(iii)	"	"			
designed/operated to minimize clogging during active life and post-closure care period	264.251(c)(3)(iv)	"	"			
specifications for sumps and liquid removal methods	264.251(c)(3)(v)	"	"			
collect and remove pumpable liquids in leak detection system sumps to minimize head on the bottom liner	264.251(c)(4)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
what must be demonstrated if leak detection system not located completely above seasonal high water table	264.251(c)(5)	HWMR-7 Part V §501	X			
redesignate old 264.251(d) as 264.251(h); add new paragraph addressing circumstances under which Regional Administrator may approve alternate design or operating practices if owner/operator can demonstrate that design/practices will:	264.251(d)	"	"			
prevent hazardous constituent migration into ground or surface water as effectively as system specified in 264.251(c), and	264.251(d)(1)	"	"			
allow detection of hazardous constituent leaks through top liner at least as effectively	264.251(d)(2)	"	"			
redesignate old 264.251(e) as 264.251(i); add new paragraph addressing monofills granted a 264.221(e) waiver by Regional Administrator	264.251(e)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
redesignate old 264.251(f) as 264.251(j); add new paragraph addressing when a replacement waste pile owner/operator is exempt from 264.251(c)	264.251(f)	HWMR-7 Part V §501	X			
meets RCRA 3004(o)(1)(A)(i) and (o)(5) design standards	264.251(f)(1)	"	"			
no reason to believe liner is not functioning as designed	264.251(f)(2)	"	"			
old 264.251(c)-(g) become new 264.251(g)-(k)	264.251(f)(g)-(k)	"	"			
ACTION LEAKAGE RATE						
5 Regional Administrator approval of action leakage rate for waste pile units subject to 264.251(c) or (d); definition of action leakage rate; adequate safety margin	264.252(a)	"	"			
how to determine if action leakage rate has been exceeded; unless another calculation approved, average daily flow rate calculated weekly, during active life and closure period	264.252(b)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
RESPONSE ACTIONS						
approved response action plan before receipt of waste for waste piles subject to 264.251(c) or (d); address actions if action leakage rate exceeded; plan must describe actions in 264.253(b)	264.253(a)	HWMR-7 Part V §501	X			
responsibilities if flow rate into leak system exceeds the action leakage rate for any sump:	264.253(b)	"	"			
notify Regional Administrator in writing within seven days of determination	264.253(b)(1)	"	"			
preliminary assessment to Regional Administrator within 14 days of determination; what assessment must address	264.253(b)(2)	"	"			
determine location, size and cause of any leak	264.253(b)(3)	"	"			
determine if 1) waste receipt should cease or be curtailed, 2) waste should be removed for inspection, repairs, or controls, and 3) unit should be closed	264.253(b)(4)	"	"			
determine short- and longer-term actions to mitigate or stop <u>any leaks</u>	264.253(b)(5)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
within 30 days after Regional Administrator notification, submit the results of 264.253(b)(3)-(5) analyses, the results of actions taken and actions planned; thereafter, as long as flow rate exceeds action leakage rate, monthly report to Regional Administrator summarizing results of remedial actions taken and actions planned	264.253(b)(6)	HWMR-7 Part V §501	X			
how the 264.253(b)(3), (4), & (5) determinations must be made	264.253(c)	"	"			
assess the source of liquids and amounts by source	264.253(c)(1)(i)	"	"			
conduct analyses of liquids in leak detection system to identify sources of liquids and location of leaks, and the hazard and mobility of the liquid	264.253(c)(1)(ii)	"	"			
assess seriousness of leaks	264.253(c)(1)(iii)	"	"			
document why assessments not needed	264.253(c)(2)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
MONITORING AND INSPECTION						
if leak detection system required under 264.251(c), record amount of liquids removed from each sump, at least weekly during active life and closure period	264.254(c)	HWMR-7 Part V §501	X			
SUBPART N - LANDFILLS						
DESIGN AND OPERATING REQUIREMENTS						
completely revise paragraph; landfills that must install two or more liners and a leachate collection and removal system above and between such liners; "construction commences" defined under "existing facility"	264.301(c)	"	"			
the liner system must include:	264.301(c)(1)(i)	"	"			
top liner designed and constructed to prevent migration of hazardous constituents into liner for specified period	264.301(c)(1)(i)(A)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
composite bottom liner consisting of at least two components; upper component to prevent migration of hazardous constituents into this component during specified period; lower component designed and constructed to minimize such migration if upper component is breached; specified thickness and hydraulic conductivity	264.301(c)(1)(i)(B)	HWMR-7 Part V §501	X			
liners must comply with 264.301(a)(1)(i)-(iii)	264.301(c)(1)(ii)	"	"			
6 leachate collection and removal system must collect and remove leachate from the landfill during the active life and post-closure care period; Regional Administrator to specify permit conditions to ensure leachate depth over liner does not exceed 30 cm (1 ft); leachate collection and removal system must comply with 264.301(c)(3)(iii)&(iv)	264.301(c)(2)	"	"			
relationship between leachate collection and removal system and the leak detection system; what the leak detection system must be capable of; minimum requirements:	264.301(c)(3)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd.)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIVALENT	LESS STRINGENT	MORE STRINGENT	BROADER IN SCOPE
bottom slope of 1 percent or more	264.301(c)(3)(i)	HWMR-7 Part V §501	X			
constructed of: 1) granular drainage materials with hydraulic conductivity of 1×10^{-2} cm/sec or more, and 12 in. (30.5 cm) or more thickness; or 2) synthetic or geonet drainage materials with 3×10^{-5} m ² /sec or more transmissivity	264.301(c)(3)(ii)	"	"			
construction material specifications	264.301(c)(3)(iii)	"	"			
designed/operated to minimize clogging during active life and post-closure care period	264.301(c)(3)(iv)	"	"			
specifications for sumps and liquid removal methods	264.301(c)(3)(v)	"	"			
collect and remove pumpable liquids in leak detection system sumps to minimize head on the bottom liner	264.301(c)(4)	"	"			
what must be demonstrated if leak detection system not located completely above seasonal high water table	264.301(c)(5)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
completely revise paragraph; Regional Administrator may approve alternate design or operating practices if owner/operator can demonstrate that design/practices will:	264.301(d)	HWMR-7 Part V §501	X			
prevent hazardous constituent migration into ground or surface water as effectively as system specified in 264.301(c), and	264.301(d)(1)	"	"			
allow detection of hazardous constituent leaks through top liner at least as effectively	264.301(d)(2)	"	"			
redesignate old paragraph 264.301(f) as 264.301(g); add new paragraph addressing when a replacement landfill owner/operator is exempt from 264.301(c)	264.301(f)	"	"			
meets RCRA 3004(o)(1)(A)(i) and (o)(5) design standards	264.301(f)(1)	"	"			
no reason to believe liner is not functioning as designed	264.301(f)(2)	"	"			
old 264.301(f)-(k) become new 264.301(g)-(l)	264.301(g)-(l)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
ACTION LEAKAGE RATE						
Regional Administrator approval of action leakage rate for landfill units subject to 264.301(c) or (d); definition of action leakage rate; adequate safety margin	264.302(a)	HWMR-7 Part V §501	X			
how to determine if action leakage rate has been exceeded; unless another calculation approved, average daily flow rate calculated weekly, during active and closure period	264.302(b)	"	"			
MONITORING AND INSPECTION						
if leak detection system required 264.301(c) or (d), record amount of liquids removed from each sump at least weekly during the active life and closure period	264.303(c)(1)	"	"			
after final cover installed, at least monthly record the amount of liquids removed from each leak detection sump; when quarterly and semi-annual recording allowed; when monthly recording must resume	264.303(c)(2)	"	"			
definition of "pump operating level"	264.303(c)(3)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
RESPONSE ACTIONS						
approved response action plan before receipt of waste for landfills subject to 264.301(c) or (d); address actions if action leakage rate exceeded; at a minimum, plan must describe actions in 264.304(b)	264.304(a)	HWMR-7 Part V §501	X			
responsibilities if flow rate into leak detection system exceeds the section leakage rate for any sump	264.304(b)	"	"			
notify Regional Administrator in writing within seven days of determination	264.304(b)(1)	"	"			
preliminary assessment to Regional Administrator within 14 days of determination; what assessment must address	264.304(b)(2)	"	"			
determine location, size and cause of any leak	264.304(b)(3)	"	"			
determine if 1) waste receipt should cease or be curtailed, 2) waste should be removed for inspection, repairs, or controls, and 3) unit should be closed	264.304(b)(4)	"	"			
determine short- and longer-term actions to mitigate or stop any leaks	264.304(b)(5)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
within 30 days after Regional Administrator notification, submit the results of 264.304(b)(3)-(5) analyses, the results of actions taken and actions planned; thereafter, as long as flow rate exceeds action leakage rate, monthly report to Regional Administrator summarizing results of remedial actions taken and actions planned	264.304(b)(6)	HWMR-7 Part V §501	X			
how the 264.304(b)(3)-(5) determinations must be made	264.304(c)	"	"			
assess the source of liquids and amounts by source	264.304(c)(1)(i)	"	"			
conduct analyses of liquids in leak detection system to identify sources of liquids and location of leaks, and the hazard and mobility of the liquid	264.304(c)(1)(ii)	"	"			
assess seriousness of leaks	264.304(c)(1)(iii)	"	"			
document why assessments not needed	264.304(c)(2)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

CLOSURE AND POST-CLOSURE CARE

redesignate old 264.310(b)(3) as 264.310(b)(4); add new paragraph addressing maintaining and monitoring leak detection system according to 264.301(c)(3)(iv)&(4) and 264.303(c); comply with other applicable Part 264 leak detection requirements	264.310(b)(3)	HWMR-7 Part V §501	X			
old 264.310(b)(3)-(5) become 264.310(b)(4)-(6)	264.310(b)(4)-(6)	"	"			

**PART 265 - INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

SUBPART B - GENERAL FACILITY STANDARDS

GENERAL INSPECTION REQUIREMENTS

insert "265.260, 265.278, 265.304"	265.15(b)(4)	HWMR-7 Part VI §601	X			
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CONSTRUCTION QUALITY ASSURANCE PROGRAM

1 CQA program	265.19(a)	"	"			
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**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
required for all surface impoundment, waste pile and landfill units that must comply with 265.221(a), 265.254 and 265.301(a); program must ensure constructed unit meets or exceeds all permit design criteria and specifications; program must be developed and implemented under a CQA officer who is a registered professional engineer	265.19(a)(1)	HWMR-7 Part VI §601	X			
the physical components the CQA program must address	265.19(a)(2)	"	"			
	265.19(a)(2)(i)	"	"			
	265.19(a)(2)(ii)	"	"			
	265.19(a)(2)(iii)	"	"			
	265.19(a)(2)(iv)	"	"			
	265.19(a)(2)(v)	"	"			
	265.19(a)(2)(vi)	"	"			
before construction begins, owner/operator must develop a written CQA plan; identify steps that will be used to monitor and document the quality of materials and condition and manner of their installation; the CQA plan must include:	265.19(b)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
identification of applicable units and how they will be constructed	265.19(b)(1)	HWMR-7 Part VI §601	X			
identification of key CQA plan development and implementation personnel; CQA officer qualifications	265.19(b)(2)	"	"			
inspection and sampling activities' description; what must be described	265.19(b)(3)	"	"			
contents of program	265.19(c)	"	"			
must include observations, inspections, tests, and measurements sufficient to ensure:	265.19(c)(1)	"	"			
structural stability and integrity of 265.19(a)(2) units	265.19(c)(1)(i)	"	"			
proper construction according to permit specifications and good engineering practices, and proper installation according to design specifications	265.19(c)(1)(ii)	"	"			
material conformity with design and other material specifications under 264.221, 264.251, and 264.301	265.19(c)(1)(iii)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
test fills for compacted soils liners, using full scale compaction methods to ensure liners are constructed to meet specific hydraulic conductivity requirements; compliance verified by in-situ testing on constructed test fill; conditions under which test fill requirement may be waived	265.19(c)(2)	HWMR-7 Part VI §601	X			
certification to Regional Administrator at least 30 days before receiving waste; signed by CQA officer stating that CQA plan has been successfully carried out and that the unit meets specific requirements; may receive wastes in unit after 30 days from the Regional Administrator's receipt of the CQA, unless Regional Administrator determines in writing that construction is not acceptable or extends review period for 30 days or seeks additional information; CQA documentation	265.19(d)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

SUBPART E - MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

OPERATING RECORD

replace "when required by" with ", and corrective action where required by subpart F and"; insert "265.19" before "265.90"; insert "265.222, 265.223, 265.226, 265.255, 265.259, 265.260" after "265.195" and "265.302 - 265.304" after "265.280(d)(1)"	265.73(b)(6)	HWMR-7 Part VI §601	X			
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SUBPART K - SURFACE IMPOUNDMENTS

DESIGN AND OPERATING REQUIREMENTS

completely revise paragraph; surface impoundment units that must install two or more liners and a leachate collection and removal system between such liners and operate leachate collection and removal systems in accordance with 264.221(c), "construction commences" defined under "existing facility"	265.221(a)	HWMR-7 Part VI §601	X			
revise paragraph; when a replacement surface impoundment unit is exempt from 265.221(a):	265.221(c)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
constructed in compliance with RCRA 3004(o)(1)(A)(i) and (o)(5) design standards	265.221(c)(1)	HWMR-7 Part VI §601	X			
no reason to believe liner is not functioning as designed	265.221(c)(2)	"	"			
redesignate old paragraph 265.222(a) as 265.221(f)	265.221(f)	"	"			
redesignate old paragraph 265.222(b) as 265.221(g)	265.221(g)	"	"			
ACTION LEAKAGE RATE						
redesignate old 265.222(a) as 265.221(f); add new paragraph addressing proposed action leakage rate to Regional Administrator when submitting 265.221(b) notice; within 60 days of receipt, Regional Administrator will establish action leakage rate or extend review period; when the proposed rate will be approved	265.222(a)	"	"			
redesignate old 265.222(b) as 265.221(g); add new paragraph addressing Regional Administrator approval of action leakage rate for 265.221(a) units; definition of action leakage rate; adequate safety margin	265.222(b)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
how to determine if action leakage rate has been exceeded; unless another calculation approved, average daily flow rate calculated weekly during active life and closure period, and monthly during post-closure care period	265.222(c)	HWMR-7 Part VI §601	X			
RESPONSE ACTIONS						
if unit subject to 265.221(a), then must submit a response action plan to the Regional Administrator when submitting 265.222 proposed action leakage rate; must set forth actions to be taken if action leakage rate is exceeded; content as specified in 265.223(b)	265.223(a)	"	"			
responsibilities if flow rate into leak detection system exceeds the action leakage rate for any sump:	265.223(b)	"	"			
notify Regional Administrator in writing within seven days of determination	265.223(b)(1)	"	"			
preliminary assessment to Regional Administrator within 14 days of determination; what assessment must address	265.223(b)(2)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
determine location, size and cause of any leak	265.223(b)(3)	HWMR-7 Part VI §601	X			
determine whether 1) waste receipt should cease or be curtailed, 2) waste should be removed for inspection, repairs, or controls, and 3) unit should be closed	265.223(b)(4)	"	"			
determine short- and longer-term actions to mitigate or stop any leaks	265.223(b)(5)	"	"			
within 30 days after Regional Administrator notification, submit the results of 265.223(b)(3)-(5) analyses, the results of actions taken, and actions planned; thereafter, as long as flow rate exceeds action leakage rate, monthly report to Regional Administrator summarizing results of remedial actions taken and actions planned	265.223(b)(6)	"	"			
how the 265.223(b)(3), (4) & (5) determinations must be made	265.223(c)	"	"			
assess the source of liquids and amounts by source	265.223(c)(1)(i)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
conduct analyses of liquids in leak detection system to identify sources of liquids and location of leaks, and the hazard and mobility of the liquid	265.223(c)(1)(ii)	HWMR-7 Part VI §601	X			
assess seriousness of leaks	265.223(c)(1)(iii)	"	"			
document why assessments not needed	265.223(c)(2)	"	"			
MONITORING AND INSPECTION						
if leak detection system required under 265.221(a), record amount of liquid removed from each sump, at least weekly during active life and closure period	265.226(b)(1)	"	"			
after final cover installed, record amount of liquids at least monthly; when quarterly and semi-annual recording allowed; when monthly recording must resume	265.226(b)(2)	"	"			
"pump operating level" defined	265.226(b)(3)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
CLOSURE AND POST-CLOSURE CARE						
redesignate old 265.228(b)(2) as 265.228(b)(3); add new paragraph regarding maintaining and monitoring the leak detection system in accordance with 265.221(c)(2)(iv) and (3) and 265.226(b) and comply with other applicable Part 265 leak detection system requirements	265.228(b)(2)	HWMR-7 Part VI §601	X			
redesignated 265.228(b)(2) becomes new 265.228(b)(3)	265.228(b)(3)	"	"			
redesignated 265.228(b)(3) becomes new 265.228(b)(4)	265.228(b)(4)	"	"			
SUBPART L - WASTE PILES						
DESIGN AND OPERATING REQUIREMENTS						
completely revise section; waste piles which must install two or more liners and a leachate collection and removal system in accordance with 264.251(c) unless exempt under 264.251(d), (e) or (f); compliance with 265.221(b) procedures; "construction commences" defined under "existing facility"	265.254	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
ACTION LEAKAGE RATES						
proposed action leakage rate to Regional Administrator when submitting 265.254 notice; within 60 days of receipt, Regional Administrator will establish action leakage rate or extend review period; when the proposed rate will be approved	265.255(a)	HWMR-7 Part VI §601	X			
Regional Administrator approval of action leakage rate for 265.254 units; definition of action leakage rate; adequate safety margin	265.255(b)	"	"			
how to determine if action leakage rate has been exceeded; unless another calculation approved, average daily flow rate calculated weekly during active life and closure period	265.255(c)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
RESPONSE ACTIONS						
if unit subject to 265.254, then must submit a response action plan to the Regional Administrator when submitting 265.255 proposed action leakage rate; must set forth actions to be taken if action leakage rate is exceeded; content as specified in 265.259(b)	265.259.(a)	HWMR-7 Part VI §601	X			
responsibilities if flow rate into leak detection system exceeds the action leakage rate for any sump:	265.259(b)	"	"			
notify Regional Administrator in writing within seven days of determination	265.259(b)(1)	"	"			
preliminary assessment to Regional Administrator within 14 days of determination; what assessment must address	265.259(b)(2)	"	"			
determine location, size and cause of any leak	265.259(b)(3)	"	"			
determine whether 1) waste receipt should cease or be curtailed, 2) waste should be removed for inspection, repairs, or controls, and 3) unit should be closed	265.259(b)(4)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
determine short- and longer-term actions to mitigate or stop any leaks	265.259(b)(5)	HWMR-7 Part VI §601	X			
within 30 days after Regional Administrator notification, submit the results of 265.259(b)(3)-(5) analyses, the results of actions taken and actions planned thereafter, as long as flow rate exceeds action leakage rate, monthly report to Regional Administrator summarizing results of remedial actions taken and actions planned	265.259(b)(6)	"	"			
how the 265.259(b)(3),(4) & (5) determinations must be made:	265.259(c)	"	"			
assess the source of liquids and amounts by source	265.259(c)(1)(i)	"	"			
conduct analyses of liquids in leak detection system to identify sources of liquids and location of leaks, and the hazard and mobility of the liquid	265.259(c)(1)(ii)	"	"			
assess seriousness of leaks	265.259(c)(1)(iii)	"	"			
document why assessments not needed	265.259(c)(2)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
MONITORING AND INSPECTION						
if leak detection system required under 265.254, record amount of liquids removed from each sump, at least weekly during active life and closure period	265.269	HWMR-7 Part VI §601	X			
SUBPART N -- LANDFILLS						
DESIGN AND OPERATING REQUIREMENTS						
completely revise paragraph; landfills which must install two or more liners and a leachate collection and removal system above and between such liners, and operate in accordance with 265.301(d), (e) (f); "construction commences" defined under "existing facility"	265.301(a)	"	"			
revise paragraph; when a landfill owner/operator is exempt from 265.301(a)	265.301(c)	"	"			
meets RCRA 3004(o)(1)(A)(i) and (o)(5) design standards	265.301(c)(1)	"	"			
no reason to believe liner is not functioning as designed	265.301(c)(2)	"	"			
redesignated 265.302(a), (b), (c) & (d) became new 265.301(f), (g), (h) and (i)	265.301(f)-(i)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
ACTION LEAKAGE RATE						
redesignate old 265.302(a) as 265.301(f); add new paragraph addressing proposed action leakage rate to Regional Administrator when submitting 265.301(b) notice; within 60 days of receipt Regional Administrator will establish action leakage rate or extend the review period; when the proposed rate will be approved	265.302(a)	HWMR-7 Part VI §601	X			
redesignate old 265.302(b) as 254.301(g); add new paragraph addressing Regional Administrator approval of action leakage rate for 265.301(a) units; definition of action leakage rates; adequate safety margin	265.302(b)	"	"			
redesignate old 265.302(c) as 265.301(h); add new paragraph addressing how to determine if action leakage rate has been exceeded; unless another calculation approved, average daily flow rate calculated weekly during active life and closure period, and monthly during post-closure care period	265.302(c)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
old 265.302(d) becomes 265.301(i)	265.302(d)	HWMR-7 Part VI §601	X			
RESPONSE ACTIONS						
if unit subject to 265.301(a), then must submit a response action plan to the Regional Administrator when submitting 265.302 proposed action leakage rate; must set forth actions to be taken if action leakage rate is exceeded; content as specified in 265.303(b)	265.303(a)	"	"			
responsibilities if flow rate into leak detection system exceeds the action leakage rate for any sump:	265.303(b)	"	"			
notify Regional Administrator in writing within seven days of determination	265.303(b)(1)	"	"			
preliminary assessment to Regional Administrator within 14 days of determination; what assessment must address	265.303(b)(2)	"	"			
determine location, size and cause of any leak	265.303(b)(3)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
determine whether 1) waste receipt should cease or be curtailed, 2) waste should be removed for inspection, repairs, or controls, and 3) unit should be closed	265.303(b)(4)	HWMR-7 Part VI §601	X			
determine short- and longer-term actions to mitigate or stop any leaks	265.303(b)(5)	"	"			
within 30 days after Regional Administrator notification, submit the results of 265.303(b)(3)-(5) analyses, the results of actions taken and actions planned; thereafter, as long as flow rate exceeds action leakage rate, monthly report to Regional Administrator summarizing results of remedial actions taken and actions planned	265.303(b)(6)	"	"			
how the 265.303(b)(3), (4) & (5) determinations must be made:	265.303(c)	"	"			
assess the source of liquids and amounts by source	265.303(c)(1)(i)	"	"			
conduct analyses of liquids in leak detection system to identify sources of liquids and location of leaks, and the hazard and mobility of the liquid	265.303(c)(1)(ii)	"	"			
assess seriousness of leaks	265.303(c)(1)(iii)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
document why assessments not needed	265.303(c)(2)	HWMR-7 Part VI §601	X			

MONITORING AND INSPECTION

if leak detection system required under 265.301(a), record amount of liquids removed from each sump, at least weekly during active life and closure period	265.304(a)	"	"			
after final cover installed, record amount of liquid at least monthly; when quarterly and semiannual recording allowed; when monthly recording must resume	265.304(b)	"	"			
definition of "pump operating level"	265.304(c)	"	"			

CLOSURE AND POST-CLOSURE CARE

redesignate old 265.310(b)(2) as 265.310(b)(3); add new paragraph addressing maintaining and monitoring the leak detection system in accordance with 264.301(c)(3)(iv) & (4), and 265.304(b); comply with other applicable Part 265 leak detection system requirements	265.310(b)(2)	"	"			
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**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
redesignated 265.310(b)(2), (3) & (4) become 265.310(b)(3), (4) & (5)	265.310(b)(3)-(5)	HWMR-7 Part VI §601	X			

**PART 270 - EPA ADMINISTERED PERMIT PROGRAMS:
THE HAZARDOUS WASTE PERMIT PROGRAM**

SUBPART A - GENERAL INFORMATION

EFFECT OF A PERMIT

paragraph is reorganized so that requirements not included in a permit are subparagraphs (a)(1)&(2); add a third subparagraph addressing Part 264 requirements regarding leak detection systems for new and replacement surface impoundments, waste piles, landfills and lateral expansion of such units; what the leak detection system requirements include	270.4(a)	HWMR-7 Part IX §901	X			
	270.4(a)(1)	"	"			
	270.4(a)(2)	"	"			
	270.4(a)(3)	"	"			

RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for Hazardous Waste Land Disposal Units(cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

SUBPART B - PERMIT APPLICATION

SPECIFIC PART B INFORMATION REQUIREMENTS FOR SURFACE IMPOUNDMENTS

remove "or will be" after "impoundment is" and insert "and is or will be" after "designed"; insert "264.19," "264.222," and "264.223 of this chapter"; replace the last sentence with the following clause: ", addressing the following items:"	270.17(b)	HWMR-7 Part IX §901	X			
redesignate old 270.17(b)(2) as 270.17(b)(6); add new paragraph addressing double liner and leak (leachate) detection, collection and removal system if unit must meet 264.221(c) requirements; submission if seeking 264.221(d), (e) or (f) exemption	270.17(b)(2)	"	"			
redesignate old 270.17(b)(3) as 270.17(b)(7); add new paragraph addressing information required if surface impoundment is located in a saturated zone	270.17(b)(3)	"	"			
construction quality assurance plan, if required	270.17(b)(4)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
proposed action leakage rate with rationale and response action plan if required	270.17(b)(5)	HWMR-7 Part IX §901	X			
redesignated 270.17(b)(2)&(3) became new 270.17(b)(6)&(7)	270.17(b)(6)&(7)	"	"			
replace "liner and" with "double liner system, leak detection system"; replace "§ 264.226(a) and (b)" with "§ 264.226(a), (b) and (d) of this chapter"	270.17(c)	"	"			

SPECIFIC PART B INFORMATION REQUIREMENTS FOR WASTE PILES

insert "waste" before "pile"; remove "or will be" after pile is"; insert "and is or will be" after "designed"; insert "264.19" "264.252" and "264.253 of this chapter"; replace last sentence with following clause: "addressing the following items:"	270.18(c)	"	"			
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**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN GENT	BROADER IN SCOPE
redesignate old 270.18(c)(1) as 270.18(c)(1)(i); after parenthetical clause addressing existing portion, insert "if the waste pile must meet the requirements of § 264.251(a) of this chapter"; replace "§ 264.252(b), the owner or operator must submit" with "§ 264.251(b) of this chapter, submit"	270.18(c)(1)(i)	HWMR-7 Part IX §901	X			
double liner and leak (leachate) detection, collection, and removal system if must meet 264.251(c) requirements; submission if seeking a 264.251(d), (e) or (f) exemption	270.18(c)(1)(ii)	"	"			
information required if leak detection system is located in a saturated zone	270.18(c)(1)(iii)	"	"			
construction quality assurance plan if required	270.18(c)(1)(iv)	"	"			
proposed action leakage rate with rationale and response action plan if required	270.18(c)(1)(v)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIVALENT	LESS STRINGENT	MORE STRINGENT	BROADER IN SCOPE
replace "liner" with "double liner system, leachate collection and removal system, leak detection system, cover system"; replace "264.254(a) and (b)" with "264.254(a), (b) and (c) of this chapter"	270.18(d)	HWMR-7 Part IX §901	X			
SPECIFIC PART B INFORMATION REQUIREMENTS FOR LANDFILLS						
remove "or will be" after "landfill is" and insert "and is or will be" after "designed"; insert "264.19" and "264.302 and 264.303 of this chapter"; replace the last sentence with the following clause: ", addressing the following items:"	270.21(b)	"	"			
redesignate old 270.21(b)(1) as 270.21(b)(1)(i); remove "and leachate collection and removal system"; add "if the landfill must meet the requirements of §264.301(a) of this chapter" to first sentence; add "of this chapter" after "264.301(b)"; after "alternate" change "design" to "designs"; after "any hazardous" change "constituent" to "constituents"	270.21(b)(1)(i)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIVALENT	LESS STRINGENT	MORE STRINGENT	BROADER IN SCOPE
double liner and leak (leachate) detection, collection, and removal system if must meet 264.301(c) requirements; submission if seeking exemption under 264.301(d), (e) or (f)	270.21(b)(1)(ii)	HWMR-7 Part IX §901	X			
information required if leak detection system located in a saturation zone	270.21(b)(1)(iii)	"	"			
construction quality assurance plan if required	270.21(b)(1)(iv)	"	"			
proposed action leakage rate, with rationale and response action plan if required	270.21(b)(1)(v)	"	"			
9 remove "liner and" and insert "double liner system, leachate collection and removal system,"; after "cover system" insert "and appurtenances for control or run-on and run-off,"; replace "264.303(a) and (b)" with "264.303(a), (b), and (c) of this chapter"; in last sentence, replace "should" with "must"	270.21(d)	"	"			

**RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
SUBPART D - CHANGES TO PERMIT						
PERMIT MODIFICATION AT THE REQUEST OF THE PERMITTEE						
add the "7. a. & b." entries under "B. General Facility Standards"; add the "6., and 7. a., b. & c." entries under "H. Surface Impoundments"; add the entries "7., and 8. a., b. & c." entries under "J. Landfills and Unenclosed Waste 270.42/Piles"	270.42/Appendix I	HWMR-7 Part IX §901	X			

- ¹ This section is considered to be both a HSWA and a Non-HSWA provision. It is Non-HSWA only to the extent that it applies to the final cover requirements for the Construction Quality Assurance Program.
- ² Note that there is a typographical error in the Federal Register; "COA" should be "CQA."
- ³ Note that there is a technical error in the Federal Register; "1x10⁻⁷/cm/sec" should be "1x10⁻⁷cm/sec."
- ⁴ Note that there are two technical errors in the Federal Register; "1x10⁻¹/cm/sec" should be "1x10⁻¹cm/sec" and 3x10⁻⁴/m²sec" should be 3x10⁻⁴m²/sec."
- ⁵ Note that there is a typographical error in the Federal Register; "surface impoundment" should be "waste pile."
- ⁶ Note that there is a technical error in the Federal Register; "paragraphs (3)(c)(iii) and (iv)" should be "paragraphs (c)(3)(iii) and (iv)."
- ⁷ Note that there is a typographical error in the Federal Register; "surface impoundment" should be "landfill."
- ⁸ Note that there is a typographical error in the Federal Register; "surface impoundment" should be "waste pile."

RCRA REVISION CHECKLIST 100: Liners and Leak Detection Systems for
Hazardous Waste Land Disposal Units(cont'd)

⁹ Note that in the Federal Register this section is incorrectly designated as 270.21(c).

RCRA REVISION CHECKLIST 101

Administrative Stay for the
Requirement that Existing Drip Pads Be Impermeable
57 FR 5859-5861
February 18, 1992
(RCRA Cluster II, Both HWSA and Non-HWSA provisions)

Note: This Revision Checklist addresses an administrative stay of the requirements for drip pad coating, sealers, or covers for existing drip pads at wood preserving plants until October 31, 1992. A previous administrative stay addressed by Revision Checklist 91 (56 FR 27332; June 13, 1991) affected new drip pads and has no ending date. Note that in the Federal Register the stay was placed at 264.572(a)(4). The rule (56 FR 30192; July 1, 1991) addressed by Revision Checklist 92 redesignated 264.572(a)(4) as 264.573(a)(4). Because of this redesignation, the administrative stay for new drip pads, unfortunately, does not appear in the July 1, 1991 CFR.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

**PART 264 - STANDARDS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

SUBPART W - DRIP PADS

† **DESIGN AND OPERATING REQUIREMENTS**

add note addressing administrative stay until October 30, 1992, for the coating, sealer, or cover requirements for existing drip pads	264.573(a)(4)/note	HWMR-7 Part V §501 & §502 A.B.	X			
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RCRA REVISION CHECKLIST 101: Administrative Stay for the
Requirement that Existing Drip Pads be Impermeable (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

PART 265 - INTERIM STATUS FOR OWNERS AND OPERATORS OF
HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART W - DRIP PADS

† DESIGN AND OPERATING REQUIREMENTS

add note addressing administrative stay until October 30, 1992, for the coating, sealer, or cover requirements for existing drip pads	265.443(a)(4)/note	HWMR-7 Part V § 601 & §602 A.B.	X			
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RCRA REVISION CHECKLIST 102

Second Correction to the Third Third
Land Disposal Restrictions
57 FR 8086-8089
March 6, 1992
(RCRA Cluster II, HSWA provisions)

Note: 1) The rule addressed by this checklist corrects errors and clarifies the language in the preamble and regulations of the June 1, 1990 (55 FR 22520; Revision Checklist 78) Third Third Land Disposal Restrictions rule. This rule was also modified by a January 31, 1991 (56 FR 3864; Revision Checklist 83) final rule. States that have already adopted Revision Checklists 78 and 83 are strongly encouraged to apply for the changes addressed by this checklist as soon as possible. Those that have not yet adopted the Third Third Land Disposal Restrictions are strongly encouraged to apply for the provisions in Revision Checklists 78, 83 and 102 at the same time.

2) This checklist may be subject to change in the future. EPA's State and Regional Programs Branch is currently discussing the relationship of hazardous waste injection issues to the State authorization program. In question are the changes made to 40 CFR Part 148 by the final rule addressed by this checklist and whether they should be included in the checklist. This present checklist does not include these changes.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
PART 264 - STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES						
SUBPART B - GENERAL FACILITY STANDARDS						
GENERAL WASTE ANALYSIS						
add sentence regarding what information, at a minimum, the waste analysis must contain	264.13(a)(1)	HWMR-7 Part V §501	X			

RCRA REVISION CHECKLIST 102: Second Correction to the Third Third
Land Disposal Restrictions (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

PART 265 - INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS
OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART B - GENERAL FACILITY STANDARDS

GENERAL WASTE ANALYSIS

add sentence regarding what information, at a minimum, the waste analysis must contain	265.13(a)(1)	HWMR-7 Part VI §601	X			
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PART 268 - LAND DISPOSAL RESTRICTIONS

SUBPART A - GENERAL

DILUTION PROHIBITED AS A SUBSTITUTE FOR TREATMENT

after reference to 268.42, add the following clause: ", or unless the waste is a D003 reactive cyanide wastewater or nonwastewater"	268.3(b)	HWMR-7 Part VIII §801	X			
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RCRA REVISION CHECKLIST 102: Second Correction to the Third Third
Land Disposal Restrictions (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

SUBPART D - TREATMENT STANDARDS

TREATMENT STANDARDS EXPRESSED AS CONCENTRATIONS IN WASTE EXTRACT

1 change "K031" to "D031" and remove "P038"; remove ". Table CCWE identifies the restricted wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136"; also change "method" to "methods" before "in Appendix I"; remove "Appendix I of this part or" before "Appendix II of 40 CFR part 261"; add to the last sentence: ", unless otherwise noted in the following Table CCW"	268.41(a)	HWMR-7 Part VIII §801	X			
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TREATMENT STANDARDS EXPRESSED AS SPECIFIED TECHNOLOGIES

revise the entry for "Reactive Sulfides based on 261.23(a)(5)" under D003	268.42(a)/Table 2	"	"			
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- ¹ Note that there are typographical errors in the Federal Register addressed by this checklist. The change from K031 to D031 appears to be incorrect; "D031" should be "K031." There will be a technical correction in the future. Also, after "Appendix I of this part" in column 2 of page 57 FR 8089 of 268.41(a), "for the allowable" appears to have been incorrectly changed to "of the allowable."

RCRA REVISION CHECKLIST 103

Hazardous Debris Case-by-Case Capacity Variance

57 FR 20766-20770

May 15, 1992

(RCRA Cluster II, HSWA provisions)

Note: This rule provides an extension of the Land Disposal Restrictions effective date until May 8, 1993 for hazardous waste debris. The extension adopted by the rule includes more types of debris than granted a national capacity extension in the Third Third Land Disposal Restriction rule promulgated on June 1, 1990 (55 FR 22520, Revision Checklist 78). In that rule only inorganic solid debris and other debris contaminated with a waste whose treatment standard was based on incineration, mercury retorting or vitrification received a variance. Debris not covered by this variance includes debris contaminated with listed solvent or dioxin waste covered by the RCRA §3004(e) prohibition and debris contaminated with non-liquid "California List Wastes" pursuant to RCRA §3004(d) because the limit for granting national and case-by-case capacity extensions for these wastes has expired.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
PART 268 - LAND DISPOSAL RESTRICTIONS						
SUBPART C - PROHIBITIONS ON LAND DISPOSAL						
WASTE SPECIFIC PROHIBITIONS-THIRD THIRD WASTES						
effective May 8, 1993, prohibition from land disposal of debris contaminated with 268.10, 268.11 and 268.12 wastes and debris contaminated with any characteristic waste having Subpart D, Part 268 treatment standards	268.35(e)	HWMR-7 Part VIII §801	X			

RCRA REVISION CHECKLIST 104

Used Oil Filter Exclusion

57 FR 21524-21534

May 20, 1992

(RCRA Cluster II, HSWA provisions)

Note: The final rule addressed by this Revision Checklist preserves the status quo for used oil destined for disposal and exempts, from the definition of hazardous waste, certain types of used oil filters. The Agency is not taking final action, at this time, on a listing determination and/or management standards for used oils that are recycled as proposed in 1985 and 1991. It will, in the near future, make a final decision on such a listing under the authority of RCRA section 3014. The Agency may also propose standards controlling the burning of used oil in boilers and furnaces at a later date.

The standards addressed by this checklist narrow the scope of the Toxicity Characteristic (TC) rule promulgated pursuant to HSWA authority, as well as the characteristics of EP toxicity regulations promulgated under non-HSWA authority; thus, authorized States are not required to adopt them.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	MORE STRIN- GENT	LESS STRIN- GENT	BROADER IN SCOPE

PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A - GENERAL

† EXCLUSIONS

non-terne plated used oil filters not mixed with waste listed in Part 261, subpart C if oil filters have been gravity hot-drained using one of the following methods:	261.4(b)(15)	HWMR-7 Part II §201	X			
puncturing the filter anti-drain back valve of the filter dome end and hot-draining	261.4(b)(15)(i)	"	"			
hot-draining and crushing	261.4(b)(15)(ii)	"	"			

RCRA REVISION CHECKLIST 104: Used Oil Filter Exclusion (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	MORE STRIN- GENT	LESS STRIN- GENT	BROADER IN SCOPE
PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE						
dismantling and hot-draining	261.4(b)(15)(iii)	HWMR-7 Part II §201	X			
any other equivalent hot-draining method which will remove used oil	261.4(b)(15)(iv)	"	"			

RCRA REVISION CHECKLIST 105

Recycled Coke By-Product Exclusion

57 FR 27880-27888

June 22, 1992

(RCRA Cluster II, HSWA provisions)

Note: This Revision Checklist excludes from the definition of solid waste certain coke by-product plant residues that exhibit the Toxicity Characteristic (TC). The final rule reduces the scope of the Federal program; therefore, authorized States are not required to modify their programs to adopt this checklist. Although States are not required to adopt this checklist, EPA strongly encourages States to do so as quickly as possible in order to minimize disruption to legitimate recycling practices currently taking place in the coking industry.

Special Note: While this checklist is considered an optional checklist, States that adopt the Coke Oven Administrative Stay introduced by Revision Checklist 98 (56 FR 43874) should either remove their analog to the note that follows 266.100(a) or state in their regulations that this stay ends on June 22, 1992.

RCRA REVISION CHECKLIST 105: Recycled Coke By-Product Exclusion (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A - GENERAL

† EXCLUSIONS

replace existing paragraph with new paragraph excluding from definition of solid waste K087 and other wastes from coke by-products that are hazardous only because they exhibit the Toxicity Characteristic when recycled as specified; exclusion is conditioned on there being no land disposal of the wastes from point of generation to recycling point	261.4(a)(10)	HWMR-7 Part II §201	X			
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PART 266 - STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES

SUBPART H - HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

†,1 APPLICABILITY

remove note addressing the Administrative Stay for coke ovens processing coke by-product wastes exhibiting the toxicity characteristic identified in 266.100(a)	266.100(a),note	HWMR-7 Part VII §701	X			
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SPA 13

RCRA REVISION CHECKLIST 106

Lead-bearing Hazardous Materials

Case-by-Case Capacity Variance

57 FR 28628-28632

June 26, 1992

(RCRA Cluster II, HSWA provisions)

Note: This Revision Checklist is the third checklist affecting the prohibitions on land disposal of lead-bearing hazardous wastes. The two previous checklists include Revision Checklists 78 and 83. The final rule addressed by this checklist provides a one-year extension (until May 8, 1993) to the LDR effective date for owners and operators of secondary lead smelters who are engaged in the reclamation of lead-bearing hazardous materials. States adopting Revision Checklists 78 and 83 are encouraged to adopt the provisions of this checklist simultaneously. States which have already adopted the Revision Checklists 78 and 83 provisions are encouraged to adopt Revision Checklist 106 as soon as possible.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE

PART 268 - LAND DISPOSAL RESTRICTIONS

SUBPART C - PROHIBITIONS ON LAND DISPOSAL

WASTE SPECIFIC PROHIBITIONS - THIRD THIRD WASTES

remove "D003 (lead materials stored before secondary smelting);" before "and D009"	268.35(c)	HWMR-7 PART VIII §801	X			
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**RCRA REVISION CHECKLIST 106: Lead-bearing Hazardous Materials
Case-by-case Capacity Variance (cont'd)**

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
effective May 8, 1993, prohibition from land disposal of D008 lead materials stored before secondary smelting; submission of binding contractual commitment, documentation and detailed schedule for specified construction, and providing specified capacity, by March 1, 1993; D008 prohibited from land disposal by failure to submit documentation; placed in facility record by July 27, 1992, documentation demonstrating that such management capacity will be adequate and complies with all applicable Subtitle C requirements	268.35(k)	HWMR-7 PART VIII § 801	X			