

NEBRASKA ADMINISTRATIVE CODE

Title 128 - Department of Environmental Quality

Appendix IV - WASTES EXCLUDED FROM CHAPTER 3

Facility:

Thermal Oxidation Facility
Kimball, NE NED981723513

Address:

Kimball County
Nebraska

Waste Description:

Ash, bed media, oversized material, and air pollution control residue generated at the Thermal Oxidation Facility (TOF), Kimball County, Nebraska, during the fluidized bed thermal oxidation of hazardous waste listed in:

- (1) Chapter 3, 013. Hazardous Waste from Nonspecific Sources (except those wastes numbered F020-F023 and F026-F028);
- (2) Chapter 3, 014. Hazardous Waste from Specific Sources.
- (3) Chapter 3, 015. Acute Hazardous Waste; and
- (4) Chapter 3, 016. Toxic Waste; and

Stabilized ash, bed media, and air pollution control residue generated at the TOF during the fluidized bed thermal oxidation of hazardous waste listed in:

- (1) Chapter 3, 013. Hazardous Waste from Nonspecific Sources (except those wastes numbered F020-F023 and F026-F028);
- (2) Chapter 3, 014. Hazardous Waste from Specific Sources;
- (3) Chapter 3, 015. Acute Hazardous Waste; and
- (4) Chapter 3, 016. Toxic Waste, generated after September 6, 1994, provided that the owner or operator (owner/operator) meets the following conditions:

- (1) Verification testing:

- (A) Initial testing:

For the first thirty (30) operating days during the period designated in the Nebraska Department of Environmental

Quality (NDEQ), Hazardous Waste Incinerator and Storage Facility Permit (Permit), NED981723513, at Part VI.G.3. as Post-Trial Burn, excluding oversized material, owner/operator must collect grab samples of mixed ash, bed media, and air pollution control residue (Waste) and composite these samples daily. The daily composite samples must be split and analyzed, respectively, prior to disposal, by owner/operator and by an independent laboratory designated by the Director. An SW-846 Method 1311, Toxicity Characteristics Leaching Procedure (TCLP) analysis, or an alternate method approved by the Director, is required for all hazardous waste constituents

listed in (2)(A) and (2) (B), (except that 2,4-D and Silvex need not be analyzed unless they are known to be constituents of hazardous waste fed to the thermal oxidation unit (TOU)), and a total analysis is required for all constituents in (2)(D). An analysis for the concentrations of leachable constituents listed in (2)(C) is required using 0.001 M sodium bicarbonate at pH 8.3 and the SW-846 Method 1311 extraction procedure protocol, or an alternate method approved by the Director, except that Chlordane, 2,4,5-T, diethylstilbestrol and epichlorohydrin need not be analyzed unless they are known to be constituents of hazardous waste fed to the TOU.

If analysis shows that the concentrations of all of the constituents listed in (2)(C) and (2)(D) are equal to, or less than, the corresponding delisting levels, and the concentration of any one of the constituents listed in (2)(A) or (2)(B) is greater than, the corresponding delisting level, the Waste must be stabilized and composited grab samples of the stabilized Waste must be split and analyzed, respectively, prior to disposal, by owner/operator and an independent laboratory designated by the Director. The Multiple Extraction Procedure (MEP) using the TCLP extraction rather than the EP, analysis of the stabilized Waste, using SW-846 Method 1320, must be performed to obtain the leachable concentrations of constituents listed in (2)(A) and (2)(B). A minimum of eight (8) composited grab samples of stabilized Waste, as defined in the Waste Analysis Plan, must be split and analyzed over the thirty (30) day period.

For hazardous waste constituents where the delisting level is less than the Practical Quantitation Limit (PQL) the delisting level will have been achieved if a constituent is not detected provided that the Method Detection Limit (MDL) is less than the delisting level.

The owner/operator must report the results of all available analyses beginning no later than ten (10) days after the Post-Trail Burn commences and continuing at ten (10) day intervals until data from thirty (30) TOF operating days has been reported. For the purposes of this section, operation day means any 24-hour period during which the facility incinerates hazardous waste.

Waste and stabilized Waste for which analysis verifies that the concentrations of all constituents listed in (2) (A), (2)(B), (2)(C), and (2)(D) are equal to, or 1 less than, delisting levels must be disposed of in a monofill dedicated to the disposal of Waste and stabilized Waste generated at the TOF only and licensed according to the requirements of Title 132 - Integrated Solid Waste Management Regulations (Title 132), as amended, or it must be managed and disposed of as a hazardous waste in accordance with Title 128 and in accordance with the facility permits.

The Initial Testing period may be extended an additional thirty (3) days as required by the Director in accordance with a written notice provided to owner/operator prior to the end of the Initial Testing period.

During the Initial Testing period, no Waste or stabilized Waste may be disposed of in the owner/operator monofill without the written approval of the Director.

(B) Subsequent testing:

Once the Initial Testing period has ended, the testing requirements of (1)(A) shall continue except for the verification sampling and analysis by an independent laboratory, and the MEP analysis of Stabilized Waste. Verification by an independent laboratory and MEP analyses may be required by the Director as necessary throughout the operating life of the facility. The owner/operator must nevertheless composite and

analyze grab samples collected during the filling of each ash day bin and stabilization, if required, prior to disposal.

(C) Maintenance reports:

All reports of analyses and results of studies to establish Method Detection Limits must be maintained on the TOF site throughout the operating life of the facility. In addition, a report summarizing analyses must be submitted to the NDEQ within thirty (30) days after the end of each calendar year quarter.

(2) Delisting Levels:

(A) Metals:

If the extract concentration of any one of the following constituents is greater than the corresponding delisting level, the Waste must be stabilized until the constituent concentration is less than, or equal to, the corresponding delisting level, or it must be managed and disposed of as a hazardous waste in accordance with Title 128:

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
Antimony	1.0	0.5
Arsenic	5.0	1.0
Barium	100.0	0.1
Beryllium	20.0	0.5
Cadmium	1.0	0.3
Chromium	5.0	0.2
Lead	5.0	0.3
Mercury	0.2	0.002
Nickel	5.0	0.2
Selenium	1.0	1.0
Silver	5.0	0.2
Thallium	14.0	1.0
Vanadium	20.0	0.2
Zinc	500.0	0.2

(B) Other toxicity characteristic constituents:

If the extract concentration of any one of the following constituents is greater than the corresponding delisting level, the Waste must be retreated at the TOF by thermal oxidation until the constituent concentration is less than, or equal to, the corresponding delisting level, or it must be managed and disposed of as a hazardous waste in accordance with Title 128, except that 2,4-D and Silvex need not be analyzed unless they are known to be constituents of hazardous waste fed to the TOU:

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
Chlordane	0.03	0.001
Endrin	0.02	0.0001

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
Heptachlor	0.008	0.00005
Heptachlor epoxide	0.008	0.001
Lindane	0.4	0.00005
Methoxychlor	10.0	0.01
Toxaphene	0.5	0.002
2,4-D	10.0	0.01
Silvex	1.0	0.002
Benzene	0.5	0.005
Carbon tetrachloride	0.5	0.005
Chlorobenzene	100.0	0.005
Chloroform	6.0	0.005
Cresols (ortho, meta, para, total)	200.0	0.01
1,4-Dichlorobenzene	7.5	0.01
1,2-Dichloroethane	0.5	0.005
1,1-Dichloroethylene	0.7	0.005
2,4-Dinitrotoluene	0.13	0.01
Hexachlorobenzene	0.13	0.01
Hexachlorobutadiene	0.5	0.01
Hexachloroethane	3.0	0.01
Methyl ethyl ketone	200.0	0.01
Nitrobenzene	2.0	0.01
Pentachlorophenol	100.0	0.05
Pyridine	5.0	0.01
Tetrachloroethylene	0.7	0.005
Trichloroethylene	0.5	0.005
2,4,5-Trichlorophenol	400.0	0.01
2,4,6-Trichlorophenol	2.0	0.01
Vinyl chloride	0.2	0.01

(C) Organics and cyanides:

If the extract concentration of any one of the following constituents determined using 0.001 M sodium bicarbonate at pH 8.3 and SW-846 Method 1311, or an equivalent method approved by the Director, protocol exceeds the corresponding delisting level, the Waste must be re-treated at the TOF by thermal oxidation until the constituent concentration is less than, or equal to, the corresponding delisting level, or it must be managed and disposed of as a hazardous waste in accordance with Title 128, except that chlordane, 2,4,5-T, diethylstilbestrol and epichlorohydrin need not be analyzed unless they are known to be constituents of hazardous waste fed to the TOU:

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
Acenaphthene	200.0	0.01
Acetone	400.0	0.1
Acetonitrile	20.0	0.1
Acetophenone	400.0	0.01
Acrolein	70.0	0.05
Acrylonitrile	0.01	0.01

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
Aldrin	0.0002	0.00005
Allyl chloride	0.2	0.1
Aniline	0.6	0.01
Aramite	0.1	0.01
Benz[a]anthracene	0.01	0.01
Benzidine	0.02	0.02
Benzo[a]pyrene	0.02	0.01
Benzo[b]fluoranthene	0.02	0.01
Benzyl alcohol	1000.0	0.02
Benzyl chloride	0.02	0.02
Bis(2-chloroethyl) ether	0.01	0.01
Bis(2-chloroisopropyl) ether	0.05	0.01
Bis(2-ethylhexyl) phthalate	0.6	0.01
Bromodichloromethane	0.03	0.005
Bromomethane	5.0	0.005
Butyl benzyl phthalate	10.0	0.01
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	0.7	0.02
Carbon disulfide	400.0	0.005
p-Chloroaniline	10.0	0.02
Chlorobenzilate	70.0	0.01
2-Chloro-1, 3-butadiene (Chloroprene)	70.0	0.01
Chlorodibromomethane	0.04	0.005
2-Chlorophenol	20.0	0.01
Chrysene	0.02	0.01
Cyanide	20.0	0.04
DDD	0.01	0.0001
DDE	0.01	0.00005
DDT	0.01	0.0001
Diallate	0.06	0.01
Dibenz[a,h]anthracene	0.03	0.01
1,2-Dibromo-3-chloropropane	0.02	0.005
Dibromomethane	40.0	0.005
Di-n-butyl phthalate	400.0	0.01
1,2-Dichlorobenzene	60.0	0.01
3,3'-Dichlorobenzidine	0.02	0.02
Dichlorodifluoromethane	700.0	0.01
1,1-Dichloroethane	400.0	0.005
cis-1,2-Dichloroethylene	7.0	0.005
trans-1,2-Dichloroethylene	10.0	0.005
Dichloromethane	0.5	0.005
2,4-Dichlorophenol	10.0	0.01
1,2-Dichloropropane	0.5	0.005
1,3-Dichloropropene	0.02	0.005
Dieldrin	0.0002	0.00005
Diethyl phthalate	3000.0	0.01
Dimethoate	0.7	0.01
3,3'-Dimethoxybenzidine	0.3	0.01

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
3,3'-Dimethylbenzidine	0.01	0.01
7,12-Dimethylbenz[a]-anthracene	0.01	0.01
2,4-Dimethylphenol	70.0	0.01
Dimethyl phthalate	40000.0	0.01
1,3-Dinitrobenzene	0.4	0.01
2,4-Dinitrophenol	7.0	0.05
Di-n-octyl phthalate	70.0	0.01
1,4-Dioxane	0.3	0.15
Diphenylamine	90.0	0.01
1,2-Diphenylhydrazine	0.02	0.02
Disulfoton	0.1	0.01
Endosulfan	0.2	0.0001
2-Ethoxyl ethanol	1000.0	10.0
Ethyl benzene	70.0	0.005
Ethyl ether	700.0	0.01
Ethylene dibromide	0.005	0.005
Ethyl methacrylate	300.0	0.01
Ethyl methanesulfonate	0.01	0.01
Famphur	0.1	0.01
Fluoranthene	100.0	0.01
Fluorine	100.0	0.01
Fluoride	100.0	0.1
Formic acid	7000.0	1.0
Hexachlorocyclopenta-diene	5.0	0.01
Hexachlorophene	1.0	0.01
alpha-HCH	0.0006	0.0005
beta-HCH	0.002	0.0005
Indeno[1,2,3,cd]pyrene	0.04	0.01
Isobutanol	1000.0	0.01
Isophorone	0.9	0.01
Kepone	0.01	0.01
Methacrylonitrile	0.4	0.005
Methanol	2000.0	10.0
Methyl chloride	0.3	0.01
3-Methylcholanthrene	0.01	0.01
Methyl isobutyl ketone	200.0	0.01
Methyl methacrylate	300.0	0.005
Methyl parathion	0.9	0.01
Naphthalene	100.0	0.01
2-Naphthylamine	0.01	0.01
2-Nitropropane	0.02	0.02
N-Nitroso-di-n-butylamine	0.01	0.01
N-Nitrosodiethylamine	0.01	0.01
N-Nitrosodimethylamine	0.01	0.01
N-Nitrosodiphenylamine	0.7	0.01
N-Nitrosodi-n-propylamine	0.01	0.01
N-Nitrosomethylethylamine	0.01	0.01
N-Nitrosopiperidine	0.01	0.01

CONSTITUENT NAME	DELISTING LEVEL (mg/L)	PRACTICAL QUANTITATION LIMIT (mg/L)
Nitrosopyrrolidine	0.01	0.01
Octamethyl pyrophosphoramidate	7.0	0.2
Parathion	20.0	0.01
Pentachlorobenzene	3.0	0.01
Pentachloronitrobenzene	0.01	0.01
Phenol	100.0	0.01
Phorate	0.7	0.01
Polychlorinated biphenyls	0.05	0.05
Pronamide	300.0	0.01
Pyrene	100.0	0.01
Pyridine	4.0	0.01
Safrole	0.01	0.01
Strychnine and salts	1.0	0.04
Styrene	10.0	0.005
1,2,4,5-Tetrachlorobenzene	1.0	0.01
1,1,1,2-Tetrachloroethane	0.1	0.005
1,1,2,2-Tetrachloroethane	0.02	0.005
2,3,4,6-Tetrachlorophenol	100.0	0.01
Tetraethyl dithiopyro-phosphate (Sulfatepp)	2.0	0.01
Toluene	100.0	0.005
Toluene-2,4-diamine	0.01	0.01
Toluene-2,6-diamine	700.0	0.01
o-Toluidine	0.01	0.01
p-Toluidine	0.02	0.01
Tribromomethane (Bromoform)	0.4	0.005
1,2,4-Trichlorobenzene	7.0	0.01
1,1,1-Trichloroethane	20.0	0.005
1,1,2-Trichloroethane	0.5	0.005
Trichlorofluoromethane	1000.0	0.005
2,4,5-Trichlorophenoxy-acetic acid (2,4,5-T)	40.0	0.002
1,2,3-Trichloropropane	20.0	0.005
1,1,2-Trichloro-1,2,2- trifluoroethane	100000.0	0.01
sym-Trinitrobenzene	0.2	0.01
Tris(2,3-dibromopropyl) phosphate	0.2	0.2
Xylene (mixed)	1000.0	0.005

(D) Polychlorinated dibenzo-p-dioxins and dibenzofurans:

If the concentration of any one of the polychlorinated dibenzo-p-dioxins and dibenzofurans analyzed by SW-846 Method 8280, or an equivalent method approved by the Director, exceeds the corresponding delisting level, but does not equal or exceed the corresponding permit concentration limits established for waste acceptance, the Waste will be considered a hazardous waste, and it may be re-treated by the TOF thermal oxidation until its concentration is less than, or equal to, the delisting level. Otherwise, it must be managed as hazardous waste in accordance with Title 128.

The concentration of polychlorinated dibenzo-p-dioxins shall be calculated as 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) equivalents, using the current EPA-approved method of determining equivalents or using an alternate method approved by the Director. If the EPA modifies its method, owner/operator will be given reasonable time to prepare a transition plan for submittal and approval by the Director.

<u>Constituent</u>	<u>Delisting Level</u>
2,3,7,8-TCDD (equivalents)	1.0 (ug/kg)

(3) Testing List Amendment:

The owner/operator must monitor EPA health-based standards using the current "Docket Report on Health-Based Levels and Solubilities Used in the Evaluation of Delisting Petitions, submitted under 40 CFR 260.20 and CFR 260.22". If changes are made to the constituent lists and standards, owner/operator must notify NDEQ of these changes on or before the first day of July of each year. The Council may amend the delisting levels, in (2)(A), (2)(B), and (2)(C) to correspond to changed constituents or standards.

(4) Data Submittals:

All reports of analyses must be submitted to the Director, NDEQ, P. O. Box 98922, Lincoln, Nebraska 68509-8922 within the time period specified in (1)(A) and (1)(B), respectively. Failure to submit the required reports will be considered by NDEQ to revoke owner/operator exclusion.

All reports of analyses must be accompanied by the following certification statement: "Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations, I certify that the information contained in or accompanying this document is true, accurate, and complete. As to those identified sections of this document for which I can personally verify their truth or accuracy, I certify that the information contained in or accompanying this document is true, accurate, and complete. As to those identified sections of this document for which I cannot personally verify their truth or accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete. In the event that any of this information is determined by NDEQ in its sole discretion to be false, inaccurate or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of wastes will be void as if it never had effect or to the extent directed by NDEQ and that the company will be liable for any actions taken in contravention of the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion."

(5) Petition for Renewal of the Exclusion:

When the design capacity of the permitted monofill is attained, owner/operator must petition the Environmental Quality Council (EQC) for a new exclusion based on a new site, or it must manage the Waste and Stabilized Waste as hazardous waste in accordance with Title 128.

(6) Disposal of Waste and Stabilized Waste:

Waste and Stabilized Waste generated at the TOF during the thermal oxidation of hazardous waste must be disposed of at the permitted monofill licensed permitted according to Title 132, as amended, or it must be managed as hazardous waste in accordance with Title 128. Any

Title 128

Appendix IV

deviation from these requirements and the terms of the permit to operate the owner/operator monofill, will void this exclusion.

Effective Dates: July 26, 1989, as amended January 30 and September 1, 1994,
as amended May 27, 2000, as amended June 18, 2001.

This page intentionally left blank