

US EPA ARCHIVE DOCUMENT

DCN PH4P013  
COMMENTS New York DEC  
RESPONDER SS  
SUBJECT F039  
SUBJNUM 013  
COMMENT

DEC also agrees with EPA's proposed simplification of the treatment standard for waste F039. There is no need to separate the treatment standards for F039 in the table under 40CFR 268.40.

RESPONSE:

The Agency appreciates the commenter's stated support for the proposed change to the FO39 treatment standard. However, the Agency has decided to maintain the existing FO39 treatment standard (as promulgated under the LDR Phase III rulemaking), rather than change it as proposed. The Agency's intent in proposing the change to the FO39 treatment standard was to simplify the LDR regulations. EPA did not intend to broaden the scope of the treatment standards for FO39. However, the change to the FO39 treatment standard, as proposed, would have resulted in both a simplification of the regulatory language (e.g., eliminating the need for a separate list of constituents for FO39) and a broadening of the scope of the standards (e.g., increasing the number of constituents applicable to FO39). Although the Agency could continue to reference the list of constituents and the applicable UTS provided in §268.48 for FO39 and expand the proposed list of exempt constituents for FO39, the result would be to complicate, rather than simplify the regulatory language. Therefore, EPA is maintaining the existing treatment standards for FO39, as listed at 40 CFR 268.40.

DCN PH4P031  
COMMENTS Department of Energy  
RESPONDER SS  
SUBJECT F039  
SUBJNUM 031  
COMMENT

III.B. Simplification of Treatment Standard for Waste Code F039

1. p. 43679, col. 1-- EPA proposes that the LDR treatment standard for F039 be changed from specific concentrations for a list of hazardous constituents to the Universal Treatment Standards in §268.48, with the exception of fluoride, vanadium and zinc.

a. DOE requests that EPA clarify the exclusion of concentrations for fluoride, vanadium and zinc from the LDR treatment standards for F039 wastes. The reasoning for this is unclear. The existing LDR treatment standards for F039 include concentration limits for fluoride and vanadium, but not zinc (see existing 40 CFR §268.40, Table -Treatment Standards for Hazardous Waste). The existing UTS (§268.48 Table UTS - Universal Treatment Standards) include concentration limits for all three constituents. If EPA is excluding these three constituents from the LDR treatment standards applicable to F039 because they are excluded from the definition of "underlying hazardous constituents," DOE is confused as to the connection and requests that EPA address this issue in the preamble to the final rule.

b. EPA appears to be broadening the scope of the F039 treatment standard by referencing the UTS Table because there are eight organic constituents on the UTS table that are not now covered by the F039 treatment standard. These constituents are Acrylamide, Benzal chloride, p-Chloro-m-cresol, p-Dimethylaminoazo-benzene, o-Nitroaniline, o-Nitrophenol, Pentachloroethane, and Phthalic acid. These eight organic constituents should also be designated as exceptions from the UTS that constitute the F039 treatment standard. This should be done either in the columns of the table in §268.40, "Treatment Standards for Hazardous Wastes," labeled "Wastewaters" and "Nonwastewaters," or in a footnote the table.

c. DOE provides the following comments on the proposed regulatory language implementing this section of the preamble.  
(1) p. 43697, 40 CFR 268.40, Table - Treatment Standards for Hazardous Wastes --EPA proposes that the LDR treatment standards

given on this table for F039 wastes be changed, for both wastewater and nonwastewater forms, from a list of individual chemical constituent concentrations to the Universal Treatment Standards in §268.48, with the exceptions of vanadium and zinc.

(a) DOE notes that the proposed regulatory language for the Table (i.e., proposed 40CFR 268.40, Table - Treatment Standards for Hazardous Wastes) differs from the preamble (60 FR 43654, 43679, col. 1) in that the preamble states that fluoride will be an exception to the UTS for this waste stream in addition to vanadium and zinc. DOE requests that EPA resolve the inconsistency between the preamble and the proposed regulatory language.

(b) In the proposed regulatory language for the Table (i.e., proposed 40 CFR 268.40, Table - Treatment Standards for Hazardous Wastes), the column labeled "Common Name" contains the following words for the F039 waste code: "Universal Treatment Standards in §268.48 apply, with the exceptions of fluoride, vanadium, and zinc." Such wording is inconsistent with the language proposed for the F039 columns labeled "Wastewaters" and "Nonwastewaters." Also, it appears that the words "multi-source leachate" might be more appropriate as the "Common Name" for the F039 waste code.

#### RESPONSE:

The Agency has decided to maintain the existing FO39 treatment standard (as promulgated under the LDR Phase III rulemaking), rather than change it as proposed. The Agency's intent in proposing the change to the FO39 treatment standard was to simplify the LDR regulations. EPA did not intend to broaden the scope of the treatment standards for FO39. However, the change to the FO39 treatment standard, as proposed, would have resulted in both a simplification of the regulatory language (e.g., eliminating the need for a separate list of constituents for FO39) and a broadening of the scope of the standards (e.g., increasing the number of constituents applicable to FO39). Although the Agency could continue to reference the list of constituents and the applicable UTS provided in §268.48 for FO39 and expand the proposed list of exempt constituents for FO39, the result would be to complicate, rather than simplify the regulatory language. Therefore, EPA is maintaining the existing treatment standards for FO39, as listed at 40 CFR 268.40.

The commenter is correct in pointing out the inconsistency in the proposed rule related to the exceptions to the applicable UTS for FO39. The Agency's intent was to exclude vanadium and zinc from the list of applicable UTS, due to their exclusion from the definition of underlying hazardous constituents. However, since the Agency is maintaining the existing treatment standard for FO39, the point is moot.

DCN PH4P048  
COMMENTS Chemical Waste Management  
RESPONDER SS  
SUBJECT F039  
SUBJNUM 048  
COMMENT

B. Simplification of Treatment Standard for Waste Code F039 (60 Fed. Reg. at 43,679)

Ostensibly, the Agency is proposing to simplify the treatment standard for multisource leachate (F039). The Agency states that with the promulgation of the UTS in the Phase II LDR rule (59 Fed. Reg. at 47982) there is no longer a need for the separate list of constituents for F039 which currently appears in 268.40. The Agency is proposing that F039 meet the UTS for the constituents at 268.48, with the exception of fluoride, vanadium, and zinc.

While on its face this proposed change has the appearance of simplicity, CWM believes that the Agency has seriously understated the impact of converting F039 to UTS. The Agency's statement that there is no longer a need for a separate list of constituents implies that the two lists are the same, except for fluoride, vanadium, and zinc. This is not the case. CWM conducted a detailed review of 268.48 (UTS) and 268.40 (F039) which highlighted the following facts. First, EPA's proposal actually adds six new constituents (Acrylamide, Benzal Chloride, 2-Chloroethyl vinyl ether, o-Nitroaniline, Pentachloroethane, and Phthalic acid) that were not previously regulated in F039 waste and nonwastewater. Second, this proposed change adds twelve new constituents (Acetonitrile, Carbon disulfide, 2-Chloro-1,3-butadiene, Cyclohexanone, Diphenylnitrosamine, Methanol, N-Nitrosodimethylamine, Phthalic anhydride, tris(2,3-dibromopropyl) phosphate, Beryllium, Cyanides (Amenable), and Thallium) to the F039 nonwastewater treatment standards that are currently only regulated for F039 wastewater. Merely referencing that the Universal Treatment Standards in 268.48 apply to F039 in the 268 table does not simplify the issue. A list of these F039 standard changes is provided below:

268.48 Constituents Currently Not Regulated Under F039

CONSTITUENT	WASTEWATER BDAT	NONWASTEWATER BDAT
Acrylamide	19	23
Benzal Chloride	0.055	6.0

2-Chloroethyl vinyl ether	0.062	NA
o-Nitroaniline	0.27	14
Pentachloroethane	0.055	6.0
Phthalic acid	0.055	28

F039 Constituents Currently Only Regulated As Wastewaters

CONSTITUENT	CURRENT F039NWW	BDAT	New UTS	NWW LEVEL
Acetonitrile	NA		1.8	
Carbon Disulfide	NA		43.8	TCLP
2-chloro-1,3-butadiene	NA		.28	
Cyclohexanone	NA		.75	TCLP
Diphenylnitrosamine	NA		13	
Methanol	NA		.75	TCLP
N-Nitrosodimethylamine	NA		2.3	
anhydride	NA	28		
tris(2,3-dibromopropyl) phosphate	NA		0.10	
Beryllium	NA		0.014	TCLP
Cyanides (Amenable)	NA		30	
	NA	0.078		TCLP

Phthalic

Thallium

CWM does not support this proposed change. CWM believes that the Agency must provide specific discussion and analysis as to why it is necessary to add these compounds to the treatment standards for F039. The F039 BDAT standards are based on the actual analysis of leachate samples from TSDFs. CWM sees no advantage in adding random compounds just because they are found in 268.48. Tremendous resources were expended by the leachate task force companies in the development of F039 standards for the Third Third final rule (55 Fed. Reg. at 22520). These proposed changes would force costly recharacterization of multisource leachate at every on and off-site landfill in the country.

Further, if the Agency maintains this change to the F039 treatment standards CWM strongly objects to the addition of tris(2,3-dibromopropyl)phosphate to the list of NWW constituents as the proposed treatment standard is not analytically achievable. CWM has previously commented on the 0.01 ppm standard for this compound, and EPA has not taken to resolve this technical issue pursuant to these comments. A review of SW-846, Third Ed., proposed Update III, shows that the EPA has two methods that are suitable for the analysis of the compound. One uses gas chromatography (GC) and the other high performance liquid chromatography (HPLC); both with mass spectroscopic (MS)

detection systems.

Method 8270, using GC/MS, has an estimated quantitation limit (EQL) of 0.2 ppm for ground water (page 8270C-35 of proposed Update III). While no EQL is provided for tris(2,3-dibromopropyl) phosphate in solids, the EQL for a nonwastewater sample, like a treatment residual prior to land disposal, will be at least one to two orders of magnitude higher than the EQL for ground water. This suggests that the EQL for a solid sample will be approximately 10 ppm. The second approach, using UPLC/MS, is method 8321. This gives a detection limit of 33 ppm and an EQL range of 113 ppm to 172 ppm (page 8321A-35 of proposed Update III).

The above data, presented in EPA methods, clearly imply the regulated community will be expected to document achievement of treatment standards that are substantially lower than quantitation limits that can be attained in a laboratory. CWM strongly urges that the EPA refrain from including tris (2,3-dibromopropyl) phosphate in the NWW standards for F039.

If the Agency maintains this change to the F039 treatment standards as proposed, which CWM opposes, the Agency must amend the proposed language in 268.40 for F039 wastewaters and nonwastewaters. The proposed language needs to be amended to reflect that fluoride is an exception for both of these waste streams.

**RESPONSE:**

The Agency has decided to maintain the existing FO39 treatment standard (as promulgated under the LDR Phase III rulemaking), rather than change it as proposed. The Agency's intent in proposing the change to the FO39 treatment standard was to simplify the LDR regulations. EPA did not intend to broaden the scope of the treatment standards for FO39. However, as the commenter points out, the change to the FO39 treatment standard, as proposed, would have resulted in both a simplification of the regulatory language (e.g., eliminating the need for a separate list of constituents for FO39) and a broadening of the scope of the standards (e.g., increasing the number of constituents applicable to FO39). Although the Agency could continue to reference the list of constituents and the applicable UTS provided in §268.48 for FO39 and expand the proposed list of exempt constituents for FO39, the result would be to complicate, rather than simplify the regulatory language. Therefore, EPA is maintaining the existing treatment standards for FO39, as listed at 40 CFR 268.40.

DCN PH4P064  
COMMENTS Commenter Dow Chemical  
RESPONDER SS  
SUBJECT F039  
SUBJNUM 064  
COMMENT

EPA is proposing that F039 wastes meet all the UTS for the constituents at 268.48, with the exceptions of fluoride, vanadium, and zinc. This presents a problem as more constituents are added to the UTS list. For instance, the carbamate waste standards added many constituents that are unique to those wastes. By applying UTS to F039 wastes, we could be pressured by regional and state inspectors or permit writers to analyze for these materials. Currently, a generator can use knowledge of the waste to determine those constituents expected to be present in the F039 waste and only analyze for those compounds. This ability to analyze for appropriate compounds must be available should EPA choose to apply UTS to F039 wastes. Dow recommends that UTS not be applicable to F039 wastes, however, should EPA do so, the use of process knowledge should be expressly allowed to reduce the list of constituents required to be analyzed for F039 wastes.

RESPONSE:

The Agency has decided to maintain the existing FO39 treatment standard (as promulgated under the LDR Phase III rulemaking), rather than change it as proposed. The Agency's intent in proposing the change to the FO39 treatment standard was to simplify the LDR regulations. EPA did not intend to broaden the scope of the treatment standards for FO39. However, the change to the FO39 treatment standard, as proposed, would have resulted in both a simplification of the regulatory language (e.g., eliminating the need for a separate list of constituents for FO39) and a broadening of the scope of the standards (e.g., increasing the number of constituents applicable to FO39). Although the Agency could continue to reference the list of constituents and the applicable UTS provided in §268.48 for FO39 and expand the proposed list of exempt constituents for FO39, the result would be to complicate, rather than simplify the regulatory language. Therefore, EPA is maintaining the existing treatment standards for FO39, as listed at 40 CFR 268.40.



DCN PH4P089  
COMMENTS ASTSWMO  
RESPONDER SS  
SUBJECT F039  
SUBJNUM 089  
COMMENT

9. The proposed simplification of the treatment standards for waste F039 is appropriate as there is no need to separate the treatment standards for F039 in the table under 40 CFR 268.40.

RESPONSE:

The Agency appreciates the commenter's stated support for the proposed change to the FO39 treatment standard. However, the Agency has decided to maintain the existing FO39 treatment standard (as promulgated under the LDR Phase III rulemaking), rather than change it as proposed. The Agency's intent in proposing the change to the FO39 treatment standard was to simplify the LDR regulations. EPA did not intend to broaden the scope of the treatment standards for FO39. However, the change to the FO39 treatment standard, as proposed, would have resulted in both a simplification of the regulatory language (e.g., eliminating the need for a separate list of constituents for FO39) and a broadening of the scope of the standards (e.g., increasing the number of constituents applicable to FO39). Although the Agency could continue to reference the list of constituents and the applicable UTS provided in §268.48 for FO39 and expand the proposed list of exempt constituents for FO39, the result would be to complicate, rather than simplify the regulatory language. Therefore, EPA is maintaining the existing treatment standards for FO39, as listed at 40 CFR 268.40.

DCN PH4P097  
COMMENTS Hazardous Waste Management  
RESPONDER SS  
SUBJECT F039  
SUBJNUM 097  
COMMENT

Simplification of Treatment Standard for Waste Code F039 (60 CFR 43679)

The Agency proposes to simplify the presentation of the treatment standard for multisource leachate (F039). The Agency states that with the promulgation of the UTS in the Phase II LDR rule (59 FR 47982) there is no longer a need for the separate list of constituents for F039 which currently appear in §268.40. Also, the Agency proposes that F039 meet all the UTS for the constituents in §268.48, with the exceptions of fluoride, vanadium, and zinc. The Agency has understated the impact of such a change in its preamble discussion. HWMA believes that the proposed change does not simplify the F039 treatment standard. EPA's proposal actually adds six new constituents (Acrylamide, Benzal Chloride, 2-Chloroethyl vinyl ether, o-Nitroaniline, Pentachloroethane, and Phthalic acid) that have never been regulated in F039 wastewater and nonwastewater. In addition, the proposal adds thirteen new constituents (Acetonitrile, Carbon Disulfide, 2-Chloro-1,3-butadiene, Cyclohexanone, Diphenylnitrosamine, Methanol, N-Nitrosodimethylamine, Phthalic anhydride, tris(2,3-dibromopropyl) phosphate, Beryllium, Cyanides (Amenable), Thallium, and Vanadium) to the F039 nonwastewater treatment standards that are currently only regulated for F039 wastewater. The Agency's statement that there is no longer a need for a separate list of constituents implies that the two lists are the same, except for fluoride, vanadium, and zinc. This is not the case and the Agency needs to reevaluate the impact of this proposed change. A detailed comparison of §268.48 and F039 standards listed in §268.40 reveals the true impact of this change whether intended or not. Simply referencing that Universal Treatment Standards in §268.48 apply to F039 in the §268.40 table does not simplify the issue. A list of these F039 standard changes is contained in the tables below.

HWMA does not support this proposed change and believes the Agency must provide specific discussion and analysis as to why it is now appropriate to add these compounds to the treatment standards for

F039 when it was originally determined that these constituents were not applicable to F039 when the standards were promulgated in the Third Third rulemaking (55 FR 22520). If the Agency maintains this change to the F039 treatment standards as proposed, it must amend the proposed language in §268.40 for F039 wastewaters and nonwastewaters. The proposed language needs to be amended to reflect that fluoride is an exception for both of these waste streams

268.48 Constituents Currently Not Regulated Under F039

CONSTITUENT	WASTEWATER BDAT	NONWASTEWATER BDAT
Acrylamide	19	23
Benzal Chloride	0.055	6.0
2-Chloroethyl vinyl ether	0.062	NA
o-Nitroaniline	0.27	14
Pentachloroethane	0.055	6.0
Phthalic acid	0.055	28

F039 Constituents Currently Only Regulated As Wastewaters

CONSTITUENT	CURRENT F039NWW BDAT	New UTS NWW LEVEL
Acetonitrile	NA	1.8
Carbon Disulfide	NA	43.8 TCLP
2-chloro-1,3-butadiene	NA	.28
Cyclohexanone	NA	.75 TCLP
Diphenylnitrosamine	NA	13
Methanol	NA	.75 TCLP
N-Nitrosodimethylamine	NA	2.3
anhydride	NA	28
tris(2,3-dibromopropyl) phosphate	NA	0.10
Beryllium	NA	0.014 TCLP
Cyanides (Amenable)	NA	30
	NA	0.078 TCLP

Phthalic  
Thallium

RESPONSE:

The Agency has decided to maintain the existing FO39 treatment standard (as promulgated under the LDR Phase III rulemaking), rather than change it as proposed. The Agency's intent in proposing the change to the FO39 treatment standard was to simplify the LDR regulations. EPA did not intend to broaden the scope of the treatment standards for FO39. However, as the commenter points out, the change to the FO39 treatment standard, as proposed, would have resulted in both a simplification of the regulatory language (e.g., eliminating the need for a separate list of constituents for FO39) and a broadening of the scope of the standards (e.g., increasing the number of constituents applicable to FO39). Although the Agency could continue

to reference the list of constituents and the applicable UTS provided in §268.48 for FO39 and expand the proposed list of exempt constituents for FO39, the result would be to complicate, rather than simplify the regulatory language. Therefore, EPA is maintaining the existing treatment standards for FO39, as listed at 40 CFR 268.40.