

Agency, 75 Hawthorne Street, San Francisco, CA 94105-3901 Telephone: (415) 744-1184

SUPPLEMENTARY INFORMATION: This document concerns negative declarations for VOC source categories from the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Santa Barbara County Air Pollution Control District (SBCAPCD). On June 6, 1996, the SMAQMD submitted two negative declarations for the following VOC source categories: Plastic Parts Coating; Business Machines and Plastic Parts Coating; Other. On July 12, 1996, the SBCAPCD submitted six negative declarations for the following VOC source categories: Industrial Wastewater, Plastic Parts: Business Machines, Plastic Parts: Other, Industrial Cleaning Solvents, Offset Lithography, and Shipbuilding Coating. These negative declarations confirm that the respective source categories are not present in the SMAQMD or the SBCAPCD. The negative declarations were submitted to EPA by the California Air Resources Board as revisions to the SIP on the dates indicated.

For further information, please see the information provided in the Direct Final action which is located in the Rules Section of this **Federal Register**.

Authority: 42 U.S.C. 7401-7671q.

Dated: July 16, 1997.

Felicia Marcus,

Regional Administrator.

[FR Doc. 97-20218 Filed 7-30-97; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 261

[SW-FRL-5862-8]

Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Proposed Removal of Final Rule

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule and request for comment.

SUMMARY: The Environmental Protection Agency (EPA) is proposing repeal of the exclusion that appears in the final rule published at 56 FR 67197 (December 30, 1991) regarding a delisting granted to Reynolds Metals Company (Reynolds), Gum Springs, Arkansas. The exclusion granted to Reynolds on December 30, 1991, was to exclude (or delist), certain solid wastes (i.e., kiln residue from

treatment of spent potliner from primary aluminum reduction) generated at Reynolds' facility from the lists of hazardous wastes contained in 40 CFR 261.24, 40 CFR 261.31, 40 CFR 261.32 and 40 CFR 261.33 (hereinafter all sectional references are to 40 CFR unless otherwise indicated). This proposed decision to repeal the exclusion is based on an evaluation of waste-specific information provided by Reynolds and obtained by EPA either independently or from the Arkansas Department of Pollution Control and Ecology (ADPC&E) subsequent to the promulgation of the exclusion. If this proposed decision is finalized, all future waste generated at Reynold's Gum Springs, Arkansas facility will no longer be excluded from the requirements of hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA) and must be handled as hazardous waste in accordance with 40 CFR parts 260 through 266, 268 and 273 as well as any permitting standards of 40 CFR part 270.

DATES: The EPA is requesting public comments on this proposed decision. Comments will be accepted until September 2, 1997. Comments postmarked after the close of the comment period will be stamped "late", and will not be considered in formulating a final decision.

Any person may request a hearing on this proposed decision by filing a request by August 15, 1997. The request must contain the information prescribed in § 260.20(d).

ADDRESSES: Send three copies of your comments. Two copies should be sent to William Gallagher, Delisting Program, Multimedia Planning and Permitting Division (6PD-O), Environmental Protection Agency, Region 6, 1445 Ross Avenue, Dallas, Texas 75202. A third copy should be sent to the Arkansas Department of Pollution Control and Ecology, P.O. Box 8913, Little Rock, Arkansas 72209-8913. Identify your comments at the top with this regulatory docket number: F-97-ARDEL-REYNOLDS. Requests for a hearing should also be addressed to William Gallagher.

The RCRA regulatory docket for this proposed rule is located at Region 6, Environmental Protection Agency, 1445 Ross Avenue, Dallas, Texas 75202 and is available for viewing in the EPA library on the 12th floor from 8:30 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays. Call (214) 665-6444 for appointments. The docket may also be viewed at the Arkansas Department of Pollution Control and Ecology, 8001 National Drive, Little

Rock, Arkansas 72209. The public may copy material from any regulatory docket at no cost for the first 100 pages, and at \$0.15 per page for additional copies.

FOR FURTHER INFORMATION, CONTACT: For technical information concerning this notice, contact William Gallagher, Delisting Program (6PD-O), Region 6, Environmental Protection Agency, 1445 Ross Avenue, Dallas, Texas 75202, (214) 665-6775.

SUPPLEMENTARY INFORMATION:

I. Background

A. "Delisting", in General

On January 16, 1981, as part of its final and interim final regulations implementing section 3001 of RCRA, the EPA published an amended list of hazardous wastes from nonspecific and specific sources. This list has been amended several times, and is published in §§ 261.31, 261.32 and 261.33. These wastes are listed as hazardous because they typically and frequently exhibit one or more of the characteristics of hazardous wastes identified in subpart C of part 261 (i.e., ignitability, corrosivity, reactivity, and toxicity) or meet the criteria for listing contained in § 261.11 (a)(2) or (a)(3).

In 1988,¹ the Agency determined that spent potliners are a solid waste that may pose a substantial present or potential hazard to human health or the environment when improperly transported, treated, stored, disposed of, or otherwise managed. It was determined that spent potliners contain toxic constituents that are mobile and/or persistent in the environment. Spent potliners were originally listed as hazardous waste because: (1) Spent potliners contain significant amounts of iron cyanide complexes and free cyanide, both of which EPA detected in spent potliners in significant concentrations; (2) free cyanide is extremely toxic to both humans and aquatic life if ingested; (3) available data indicated that significant amounts of free cyanide and iron cyanide will leach from potliners if spent potliners are stored or disposed in unprotected piles outdoors and are exposed to rain water; (4) damage incidents have been reported that are attributable to improper disposal of spent potliners, demonstrating migration, mobility, and persistence of waste constituents and demonstrating that substantial hazard can result from improper management of this waste; and (5) generation of large quantities of the waste increases the

¹ 53 FR 35412 (September 13, 1988)

potential for hazard if mismanagement should occur.

Individual waste streams may vary, however, depending on raw materials, industrial processes, and other factors. Thus, while a waste described in these regulations generally is hazardous, a specific waste from an individual facility meeting the listing description may not be hazardous. Therefore, §§ 260.20 and 260.22 provide a variance procedure, allowing persons to demonstrate that a specific waste from a particular generating facility should not be regulated as a hazardous waste.

To have their wastes excluded, petitioners must show that wastes generated at their facilities do not meet any of the criteria for which the wastes were listed. See, § 260.22(a) and the background documents for the listed wastes. In addition, the Hazardous and Solid Waste Amendments (HSWA) of 1984 require EPA to consider any factors (including additional constituents) other than those for which the waste was listed, if there is a reasonable basis to believe that such additional factors could cause the waste to be hazardous. Accordingly, a petitioner also must demonstrate that the waste does not exhibit any of the hazardous waste characteristics (i.e., ignitability, reactivity, corrosivity, and toxicity), and must present sufficient information for EPA to determine based on actual or theoretical data whether the waste contains any of the other identified constituents at levels not protective of human health and the environment through comparison to maximum contaminant levels, drinking water standards, etc. See, § 260.22(a), 42 U.S.C. 6921(f), and the background documents for the listed wastes. Although wastes that are delisted (i.e., excluded) are evaluated to decide whether they exhibit any of the characteristics of hazardous waste, generators remain obligated under RCRA to determine whether their waste exhibits a hazardous waste characteristic as defined by §§ 261.21 through 261.24. The Agency may also impose additional conditions to ensure the waste does not result in a health hazard, and has the ability to consider and act on new information if it becomes available.

In addition, mixtures containing listed hazardous wastes and residues from the treatment, storage, or disposal of listed hazardous wastes are also considered hazardous wastes. See, §§ 261.3 (a)(2)(iv) and (c)(2)(i), referred to as the "mixture" and "derived-from" rules, respectively. Such wastes are also eligible for exclusion but remain hazardous wastes until excluded.

B. The Reynolds' "Delisting" Petition

On August 14, 1989, Reynolds Metals Company (Reynolds), located in Bauxite, Arkansas, petitioned EPA pursuant to §§ 260.20 and 260.22 to exclude kiln residue derived from processing K088 spent potliner wastes at its R.P. Patterson facility in Gum Springs, Arkansas from hazardous waste regulation. Reynolds conducted the demonstration for the delisting at its Bauxite, Arkansas, facility but later moved its thermal treatment process from Bauxite, Arkansas, to the Reynolds facility located in Gum Springs, Arkansas. Specifically, Reynolds requested an exclusion (i.e., for a waste that had not yet been generated) for kiln residue from the treatment of spent potliner from four Reynolds aluminum reduction facilities. Reynolds petitioned EPA for the exclusion based on: (1) descriptions of a full-scale process used to treat spent potliner; and (2) characterization of untreated spent potliner and residue generated at Reynolds' Bauxite, Arkansas, facility during the treatment of spent potliners from four Reynolds aluminum reduction facilities. In support of its petition, Reynolds submitted: (1) Detailed descriptions of its waste treatment process; (2) a description of the processes generating spent potliners that were treated by the rotary kiln process; (3) total constituent analysis results for the eight metals listed in § 261.24; (4) total constituent analysis results for antimony, beryllium, nickel, cyanide, and fluoride from representative samples of both the kiln residue and the untreated spent potliner; (5) Extraction Procedure² leachate analysis results for the eight metals listed in § 261.24, antimony, beryllium, nickel, cyanide, and fluoride from representative samples of the kiln residue; (6) Toxicity Characteristic Leaching Procedure, test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (hereinafter the TCLP)³ leachate analyses for the metals in § 261.24 (except mercury), antimony, beryllium, nickel, cyanide, and fluoride from representative samples of the kiln residue; (7) total constituent analysis results for volatile and semivolatile organic compounds, dioxins, and furans from representative samples of the kiln residue; and (8) test results and information regarding the hazardous

waste characteristics of ignitability, corrosivity, and reactivity.

Moreover, Reynolds requested that the exclusion also apply to the waste generated by an additional kiln in order for Reynolds to expand its treatment capacity. The second kiln was established in conjunction with the first kiln in Gum Springs, Arkansas, and similarly treats spent potliner.

C. EPA Evaluation of Reynolds' "Delisting" Petition

The EPA evaluated the information and analytical data provided by Reynolds in support of its petition. Specifically, EPA evaluated the petitioned waste (i.e., the treatment residues) against the listing criteria for K088 listed waste and factors cited in § 261.11(a)(3). Based on that review, EPA determined that the waste was nonhazardous with respect to the original listing criteria (i.e., presence of cyanide in the residue). The EPA then evaluated the waste with respect to other factors or criteria to assess whether there was a reasonable basis to believe that additional factors could cause the waste to be hazardous. In accordance with § 260.22, EPA was required to consider whether the waste was acutely toxic, the toxicity of the constituents, the concentration of the constituents in the waste, "their tendency to migrate and to bioaccumulate, their persistence in the environment once released from the waste, plausible and specific types of management of the petitioned waste, the quantities of waste generated, and waste variability".

For this delisting determination, the EPA used such information to identify plausible exposure routes (i.e., ground water, surface water, air) for hazardous constituents present in the petitioned waste. As explained in the final rule delisting the waste, EPA assumed that disposal in a subtitle D landfill was the most reasonable, worst-case disposal scenario for Reynolds' petitioned waste. This assumption is based in part on Reynolds' original delisting petition that stated that the waste would be disposed of in an on-site monofill or in a municipal landfill. The EPA determined the major exposure route of concern would be ingestion of contaminated ground water. Evaluations of wind blown dust and surface water runoff were conducted and determined not to be a concern. The EPA Composite Model for Landfills (EPACML) was used to predict the maximum allowable concentrations of hazardous constituents that may be released from the petitioned waste after disposal and to determine the potential impact of the

² The Extraction Procedure was the accepted leachate test in 1989 when Reynolds originally submitted its petition.

³ The Toxicity Characteristic Leaching Procedure replaced the Extraction Procedure as the standard leaching procedure for hazardous waste in 1990.

disposal of Reynolds' petitioned waste on human health and the environment. At the time of the Reynolds petition submittal, the Agency had developed a ground water model which could address a large number of limitations in the ground water models used in 1989. See, 56 FR 32993, July 18, 1991 and 56 FR 67197, December 30, 1991. Specifically, EPA used the maximum estimated waste volume and the maximum reported TCLP extract concentrations as inputs to estimate the constituent concentrations in the ground water at a hypothetical receptor well downgradient from the disposal site. The calculated receptor well concentrations (referred to as compliance-point concentrations) were then compared directly to the health-based levels (i.e., Maximum Contaminant levels, drinking water standards, etc.) used in delisting decision-making for the hazardous constituents of concern.

The EPA believed that this fate and transport model represented a reasonable worst-case scenario for disposal of the petitioned waste in a landfill, and that a reasonable worst-case scenario was appropriate when evaluating whether a waste should be relieved of the protective management constraints of RCRA subtitle C. The delisting process was established on the basis that if it could be demonstrated that the waste concentrations would not exceed the health based concentrations at a hypothetical downgradient well, when modeled using the assumed

worst-case scenario, the waste could be delisted. Based on this evaluation, EPA believed that the hazardous constituents in Reynolds' petitioned waste would not leach and migrate at concentrations above the health-based levels used in delisting decision-making and, therefore, would not pose a threat to human health and the environment. Accordingly, after providing the required public notice and opportunity to comment EPA concluded that: (1) The waste to be excluded was not hazardous based upon the criteria for which K088 was listed, and (2) no other hazardous constituents or factors that could cause the waste to be hazardous were present in the waste at levels of regulatory concern. For complete information on EPA's proposed and final decisions to grant Reynold's delisting petition see 56 FR 32993 (July 18, 1991) and 56 FR 67197 (December 30, 1991) respectively.

As part of the decision to grant the Reynolds delisting petition, EPA imposed requirements that Reynolds conduct ongoing sampling of the treatment residue using the TCLP to verify that the hazardous constituents remaining in the residue were below the established delisting levels for those constituents. No requirements were established for sampling the monofill residue leachate.

D. Reynolds' Current Disposal of the Delisted Treatment Residue

Reynolds presently uses its process to treat its own spent potliner K088 wastes

and those from other sources, and has disposed approximately 300,000 cubic yards of the residue in a single lined monofill located at the Gum Springs site. According to Reynolds, from June 1994 to March 1996, the leachate generated from the landfill (approximately 7,000,000 gallons of leachate) was shipped off-site to a Reynolds facility located in Sherwin, Texas, for use as a water conditioner (a practice now no longer employed by Reynolds). Since April 1996, the company also has used approximately 150,000 cubic yards of the delisted residues in mine reclamation activities at its Hurricane Creek, Arkansas, mining site as fill material in unlined pits, and as test material for all-weather road surfaces at the mining site and at the Gum Springs Plant.

As required by the delisting conditions, Reynolds has conducted ongoing daily sampling (TCLP) of the treatment residue generated by its treatment of spent potliner K088 waste to determine if the hazardous constituents remaining in the residue are below the established delisting levels. See Part 261 Appendix IX-Table 2, Reynolds Metals Company, Condition (2)(B). According to Reynolds' test results, the leachate generated from using the test method prescribed by Reynolds' exclusion (the TCLP) do not indicate that the health-based delisting levels established for the constituents of concern in the residue have been exceeded. (See Table 1).

TABLE 1.— TCLP LEACHATE DATA FOR RESIDUES (MILLIGRAMS PER LITER, mg/L)¹

TCLP results from ongoing verification testing			
Date of report	Arsenic (mg/L)	Cyanide ² (mg/L)	Fluoride (mg/L)
Delisting Limit	0.6	2.4	48
Health Based Level	≥0.05	40.2	44
4/6/94	<0.002	<0.5	28.8
5/10/94	0.002	0.733	26.6
3/22/95	<0.005	1.28	32.4
9/28/95	0.008	2.00	27.0
1/14/96	0.010	1.22	32.0
4/2/96	<0.002	1.90	31.1
9/26/96	0.015	1.70	25.5

¹ Representative sample of data collected from daily analyses for Reynolds Metals Company's Laboratory Reports for the Kiln Product.

² Deionized water leachate used in lieu of TCLP extraction media.

³ Maximum Contaminant Level.

⁴ National Primary and Secondary Drinking Water Standards.

II. Repeal of Final Rule Granting Reynolds' Delisting Petition

A. Highly Alkaline Nature of Reynolds' Treatment Residue

Subsequent to issuing the final rule granting Reynolds' delisting petition, EPA has obtained additional

information gathered after the operations at the Gum Springs facility began. Specifically, EPA now has received and analyzed data regarding the makeup of the actual residue leachate generated by Reynolds' K088 treatment process and data from the

Hurricane Creek mining site. As explained in greater detail below, those data indicate that the monofill leachate contains levels of hazardous constituents significantly higher than the health-based delisting levels. Those data also show that the leachate is

hazardous waste as defined by § 261.22. The leachate is corrosive with a pH in the range of 12.5–13.5. In light of those actual field data, EPA has now initially concluded that the Agency's 1991 determination under § 260.22, that no other hazardous constituents or factors that could cause the K088 treatment residue resulting from Reynolds' treatment process to be hazardous are present in the waste at levels of regulatory concern, needs to be revised.

Specifically, EPA now preliminarily concludes that the highly alkaline nature of the treatment residue is a factor which warrants retaining it as a hazardous waste. As supported by the data recently gathered by EPA and the State of Arkansas and discussed below, the mobility of the arsenic, cyanide, and fluoride remaining in the treatment residue increases in the highly alkaline matrix. This results in these compounds leaching from the residue at hazardous levels under most disposal scenarios, including those utilized by Reynolds. In addition, the leachate is a hazardous waste because it exhibits the hazardous waste characteristic of corrosivity. Therefore, based on this new data, the treatment residue should not remain delisted.

The EPA believes that the highly alkaline nature of the Reynolds treatment residue is due to the high pH of each of the materials being combined in the treatment process (i.e., spent potliner, brown sand, and limestone). Spent potliner alone has been found to raise the pH of deionized water from 7

to 12.0.⁴ Historically, the pH of spent potliner has ranged from 11–13 when measured. Brown sand is an alkaline mud produced from the extraction of alumina from bauxite ore with sodium hydroxide, and contains significant concentrations of highly caustic sodium hydroxide residuals. Its pH has been measured at ranges from 12–14. Limestone (pH 9–10) is a caustic material whose intended use in the process is to react with soluble fluoride salts in spent potliner to form stable, relatively insoluble, calcium fluoride. However, the high alkalinity of brown sand together with spent potliner and limestone provides no neutralization of the inherent alkalinity of the residue; in confirmation, the pH of deionized water leach solutions (for cyanide extraction) of the Reynolds' treatment residue has been found to range from 11.9 to 12.2.⁵

As EPA noted in the Emergency Rule for the K088 national capacity variance (See, 62 FR 1993, January 14, 1997) cyanide (for example, alkali-metallic cyanide complexes) is soluble, and even insoluble iron cyanides can be solubilized under highly alkaline conditions. While the total cyanide concentration in the treated waste has been reduced by Reynolds' treatment process, cyanide remaining in the residue is environmentally mobile and appears in high concentrations in the alkaline leachate from the Gum Springs landfill. As a result, almost all forms of remaining cyanide (free cyanide and cyanide complexes) are detected in the Gum Springs leachate. However, at a

neutral pH, only the soluble free cyanide would be expected in the leachate. Moreover, although, the final exclusion did not express concerns with the presence of arsenic in the treatment residue, high concentrations of arsenic are present in the residue leachate sampled from the monofill. It is believed that the high degree of arsenic in the leachate is also due to the highly alkaline nature of the treatment residue. Arsenic in the treated spent potliner will be predominantly in the III oxidation state because of the high operating temperature of the rotary kilns. Arsenic probably would normally remain in the III oxidation state, whether in the solid phase or in leachate, however, arsenic III solubility and mobility tend to increase under highly alkaline conditions.

B. EPA Analysis of Data

The EPA has completed an analysis of data gathered from Reynolds, the ADPC&E and its independent sampling of the residue. Those data consist of leachate samples from Reynolds' monofill and from the Reynolds Hurricane Creek mining site. Those data support the Agency's preliminary conclusion that Reynolds' treatment residue should not remain delisted. For example, the Reynolds and ADPC&E sampling data from the residue leachate from the dedicated monofill show that the leachate contains concentrations of hazardous constituents above the delisting limits, (See Table 2).

TABLE 2

Residue leachate data from monofill¹

Date	pH	Arsenic (mg/L)	Cyanide (mg/L)	Fluoride (mg/L)
Delisting Limits .....	.....	0.6	2.4	48
Health-Based Level .....	.....	² 0.05	³ 0.2	³ 4
4/6/94	13.5	.....	18.8	5.2
5/11/94 .....	.....	3.54	.....	.....
3/22/95 .....	.....	12.8	22	.....
9/28/95	13.1	10.6	35.3	2650
1/5/96	12.5	7.0	.....	.....
4/2/96	12.9	11.5	41.4	2320
9/26/96	12.75	6.55	46.5	2228

¹ These samples were collected during Reynolds' semi-annual landfill sampling events and an ADPC&E inspection.

² Maximum Contaminant Level.

³ National Primary and Secondary Drinking Water Standards.

Data from samples of the actual leachate from the monofill taken in September 1996, shows total cyanide concentrations in the actual leachate are 46.5 mg/L (the maximum cyanide

concentration allowable under the Reynolds' exclusion is 2.4 mg/L); arsenic concentrations are at 6.55 mg/L (Reynolds' delisting maximum concentration is 0.6 mg/L); and fluoride

concentrations are at 2228 mg/L (Reynolds' delisting maximum concentration is 48 mg/L). The residue leachate concentrations from the monofill are orders of magnitude higher

⁴ Attachments to December 9, 1996, letter from Pat Grover of Reynolds Metals Company to Michael Shapiro, Director, Office of Solid Waste. Results

cited are from the analysis of 100 grams of solid material leached with 2-liters of deionized water (1:20 ratio).

than the average predicted TCLP leachate values, (See Table 3).

TABLE 3

Comparison of leachate concentrations from monofill and TCLP concentrations (mg/L)					
Constituent	DL ¹	HBL ¹	(A)	(B)	(A)÷(B)
			Monofill Leachate (4/94–9/96).	Average TCLP (4/94–9/96).	Leachate-TCLP=Comparative Strength of Monofill Leachate.
Arsenic	0.6	² 0.05	3.54–12.8	0.006	590–2133
Cyanide	2.4	³ 0.2	18.8–46.5	1.30	14.46–35.77
Fluoride	48	³ 4	5.2–2650	29.06 .....	.179–91.19

¹ DL=Delisting Limit in mg/L; HBL = Health Based Level in mg/L.

² Maximum Contaminant Level.

³ National Primary and Secondary Drinking Water Standards.

Further, the Gum Springs monofill leachate also has a pH of 12.5 to 13.5, exceeding the pH level of 12.5 identifying a waste as hazardous due to the characteristic of corrosivity. See § 261.22. The leachate from the residue is a hazardous waste.

An analysis of surface water run off from treated spent potliner used as test roadbeds at the Hurricane Creek Mine by ADPC&E in September 1996 found concentrations of the following hazardous constituents of concern: total cyanide concentrations of 2.0 mg/L (compared with a health-based level of 0.2 mg/L) ⁶; arsenic concentrations at 1.24 mg/L (compared with the health-based level of 0.05 mg/L) ⁷; and fluoride concentrations at 229 mg/L (compared with the health-based level of 4.0 mg/L) ⁸. (See, sampling results provided by ADPC&E included in the docket, items F-97-ARDEL-REYNOLDS-002). In addition, EPA performed sampling at the Hurricane Creek mine reclamation site in March 1997. Results from the sampling of the residue used as fill material indicate TCLP leachable concentrations of fluoride in the residue used as fill material at the mine site ranged from 17.0 mg/L–86.4 mg/L (compared to the health-based level of 4.0 mg/L).⁹ The cyanide concentrations in the residue used as fill material ranged from 0.01 mg/L–0.79 mg/L. (compared to the health-based number of 0.2 mg/L).¹⁰ Water samples taken from boreholes placed in the mine reclamation area show arsenic concentrations at 19.8 mg/L (compared to the health-based level of 0.05 mg/L), cyanide concentrations at 3.3 mg/L

(compared to the health-based level of 0.2 mg/L) and fluoride concentrations at 2320 mg/L (compared to the health-based level of 4.0 mg/L). This indicates that when placed in an acidic environment, the waste continues to leach at levels which would not be protective of human health and the environment.

Values for pH, arsenic, fluoride, and cyanide differ significantly between the TCLP extract for treated spent potliner and the actual residue leachate from the monofill. EPA assumed that the TCLP would accurately predict the leachate quality of the treated spent potliner when evaluating Reynolds' petition in 1991 and used the maximum TCLP leachate concentrations and the EPACML model to evaluate the compliance point concentrations for the waste. The EPACML projected that no hazardous constituents would migrate from the landfill at concentrations that would exceed the health-based levels at a receptor well.

Based on the actual data when using the TCLP the delisted material has always met the delisting criteria as prescribed in the December 1991 exclusion or the residue has been further treated when a batch failed to meet the delisting criteria. The predicted leachate characteristics (via TCLP), however, do not correlate to the actual leachate concentrations, (See, Table 4).

TABLE 4.—Leachate Concentrations (mg/L) TCLP vs. Actual Leachate

Inorganic constituents	Leachate analyses	
	TCLP (1991 petition)	Landfill (1994–1996)
Arsenic	0.018	3.54–12.8
Cyanide	0.014	18.8–46.5
Fluoride	29.0	5.2–2650

In this limited circumstance, the TCLP was not an accurate predictor for the actual leachability of the treated residue. This is a distinct and unusual case. The Agency anticipated that certain situations might arise, as stated in the Response to Comments on the promulgation of revisions to the TCLP method. See, 55 FR 11798 (March 29, 1990).

The EPA is continuing to investigate the reasons for the discrepancies between the predicted and actual results, but the initial findings indicate a possible explanation. The EPA suspects that the highly alkaline residue does not leach under the TCLP test conditions because the solubility and mobility of arsenic, cyanide, and fluoride remaining in the residue do not occur at the extraction conditions of the test (liquid to solid ratio). The liquid to solid ratio for the TCLP test is 20:1 (2 liters of extraction fluid/100 grams of residue). The liquid to solid ratios of the monofill range 0.15:1–0.09:1 based on rainfall amounts and in situ waste volume. See, F-97-ARDEL-REYNOLDS-010. The difference in the TCLP liquid to solid ratio and the actual monofill liquid to solid ratio contributes to the differing results. The TCLP appears to be diluting the concentrations of the constituents leaching from the residue.

When the measured leachate concentrations are input into the EPACML model, the residue fails to meet the delisting criteria for arsenic, cyanide, and fluoride, (See, Table 5). The concentrations of constituents in the actual landfill leachate can pose a threat to human health and the environment. Further, the leachate exhibits the characteristic of corrosivity.

⁵ Id. at Attachment 1.

⁶ See 56 FR 33006.

⁷ Id.

⁸ Id.

⁹ Id.

Table 5.—EPACML: CALCULATED COMPLIANCE-POINT CONCENTRATIONS (MG/L) TCLP /ACTUAL LANDFILL LEACHATE

Inorganic constituents	Compliance point concentrations ¹ (mg/L)		Health based levels ² (mg/L)
	TCLP	Landfill	
Arsenic	0.0026	0.295–1.07	³ 0.05
Cyanide	0.021	1.57–4.291	⁴ 0.2
Fluoride	2.42	0.433–221	⁴ 4.0

¹ Compliance Point Concentrations are calculated using the TCLP leachate concentration divided by a dilution attenuation factor (DAF) of 12. The DAF corresponds to the maximum volume of 300,000 cubic yards of residue generated Reynolds annually).

² See, 56 FR 33006, December 30, 1991 located in the RCRA public docket for today's document.

³ Maximum Contaminant Level.

⁴ National Primary and Secondary Drinking Water Standards.

The EPA believes that this is an anomalous case because of the unique characteristics of Reynolds' waste (i.e., very caustic) and treatment process. The EPA's reasoning in evaluating the difference between predicted using the TCLP and actual landfill leachate results and findings relating to the mine reclamation site are expressly limited to this isolated waste, treatment process, and circumstance. It is to be anticipated that no test methodology will be universally appropriate in all circumstances and will be varied based upon discrete site-specific conditions as was anticipated by the rule promulgating revisions to the TCLP referenced above. It is for just such reasons that the Agency did not so limit the appropriate test method for making all delisting decisions. The EPA finds that there are distinct differences in the assumptions made in use of the TCLP and the actual monofill conditions as well as most other potential disposal scenarios. For example, Reynolds' waste is not co-disposed with 95 per cent municipal waste as assumed by the TCLP worst case scenario. The leaching of Reynolds' waste by rain water (with little buffer capacity) occurs in lieu of the simulated municipal landfill leachate (where the leaching media is designed with a certain buffer capacity). Finally, highly alkaline conditions (pH 12.5–13.5) exist in the monofill as opposed to the low pH (<5) conditions normally anticipated in municipal landfills.

C. Conclusion

Based on the information described above, EPA believes that Reynolds' residue from the treatment of K088 spent potliner from the list of hazardous waste contained in § 261.32 should not remain delisted. Based on more than two years of sampling data from the actual treatment residue leachate and data gathered during EPA's sampling event in March 1997, EPA believes that the residue does not meet the § 260.22 criteria for delisting. Therefore, EPA

proposes to repeal the final rule published at 56 FR 67197 (July 18, 1991) granting Reynolds' petition for an exclusion from K088 hazardous waste listing contained in §§ 261.31 and 261.32 for certain solid waste generated at Reynolds Metals Company, Gum Springs, Arkansas.

The leachate from the kiln residue contains cyanide concentrations which greatly exceed the health-based limit of 0.2 mg/L. Cyanide is extremely toxic when it is ingested in free form and less toxic when ingested in complex form. In its most toxic form, cyanide can be fatal to humans at a concentration of 300 parts per million. Cyanide affects human tissues ability to use oxygen. Some health effects from low level cyanide exposures are breathing difficulties, headaches, skin irritation and in some cases sores. Moreover, the concentrations of arsenic, a human carcinogen, far exceed the maximum contaminant level of 0.05 mg/L. The concentrations of fluoride at the compliance point are well above the drinking water standard of 4 mg/L. Fluoride concentrations as low as 4 mg/L have been determined to mottle teeth.

The resultant leachate from the kiln residue is a characteristic hazardous waste (corrosive). The premise on which the delisting was based, that the TCLP test would be an appropriate test to model the fate and transport of hazardous constituents in this waste is not supported by the actual leachate data. The inherent waste-like qualities of the kiln residue (i.e., the high pH and the potential for the leachate contacting the residual to solubilize and increase the mobility of toxic constituents) also support repeal of the rule which delisted the treated kiln residue. The kiln residue's potential to cause damage to human health and the environment, especially under its current management practices, provides yet another reason for reestablishing regulatory control over the kiln residue. Based on the leachate data provided, information from the treatment process,

and evaluation of the additional uses of the residue employed by Reynolds, EPA concludes that the rule delisting the kiln residue should be repealed.

It is EPA's understanding that Reynolds is currently making several treatment process modifications to address the leachate issues surrounding the treated kiln residue. If the repeal of the final rule becomes effective, Reynolds may submit to the Agency a new delisting petition for the wastes generated from the modified treatment process.

D. Interim Status for Reynolds' Monofill

Because of the delisting granted to Reynolds' treatment residue generated at its Gum Springs facility, Reynolds can presently dispose of the treatment residue in its single lined on-site monofill without obtaining Resource Conservation and Recovery Act (RCRA) subtitle C interim status or an RCRA subtitle C permit. However, if EPA finalizes this proposed repeal of the Reynolds' delisting, Reynolds must manage the treatment residue as a hazardous waste and must dispose of the waste in either a unit permitted under subtitle C of RCRA or a unit which meets interim status standards under subtitle C of RCRA and all applicable state regulations.

Under RCRA Section 3005(e), any person who owns or operates a facility required to have a permit under subtitle C and which "is in existence on the effective date of statutory or regulatory changes under [subtitle C] that render the facility subject to the requirement to have a permit under Section 3005", may qualify for interim status, provided the requirements of Section 3005 are met. It is EPA's understanding that Reynolds has begun a lateral expansion of its landfill, which should meet the subtitle C minimum technological requirements (MTR), for disposal of future wastes. In EPA's view, the repeal represents a "regulatory change" that may render Reynolds' upgraded monofill subject to the requirements of subtitle C, if the

repeal of Reynolds' delisting is finalized. If Reynolds' new MTR landfill is in existence at the time of the regulatory change, EPA expects that the new MTR landfill may be eligible for interim status under RCRA Section 3005(e) provided that Reynolds complies with the interim status standards contained in § 265.1, *et seq.* and meets applicable State regulations.

E. Best Demonstrated Available Technology

The EPA also notes that Land Disposal Restrictions (LDR) treatment standards for spent potliners expressed as numerical concentrations limits were established in 61 FR 15584 (April 8, 1996). There is no inherent conflict between a finding that a waste has been treated to satisfy LDR requirements and a finding that the treatment residue nevertheless remains a hazardous waste. This in fact is the normal case (few residues from treating listed wastes have been delisted even after being treated to satisfy LDR requirements), and is directly contemplated in RCRA Section 3004 (m)(2).

III. Effective Date

This rule, if made final, will become effective 60 days from final publication. The HSWA of 1984 amended Section 3010 of RCRA to allow rules to become effective in less than six months when the regulated community does not need the six-month period to come into compliance. The EPA believes that 60 days will be sufficient for Reynolds to come into compliance with today's rule. The 60 days will allow Reynolds to either make arrangements to send its hazardous waste treatment residue to a disposal facility permitted under subtitle C of RCRA or to seek interim status for its on-site disposal facility (see interim status discussion above).

IV. Regulatory Impact Analysis Under Executive Order 12866

Under Executive Order 12866, 58 FR 51735 (October 4, 1993), EPA must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and to the requirements of the Executive Order (EO), which include assessing the costs and benefits anticipated as a result of the proposed regulatory action. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or

State, local, or tribal governments or communities; (2) create serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the EO.

The EPA has determined that today's final rule is not a significant rule under EO 12866 because it is a site-specific rule that directly affects only the waste treatment residue from the Reynolds' Gum Springs, Arkansas, facility.

V. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980 requires Federal agencies to consider "small entities" throughout the regulatory process. Section 603 of the RFA requires an initial screening analysis to be performed to determine whether small entities will be adversely affected by the regulation. If affected small entities are identified, regulatory alternatives must be considered to mitigate the potential impacts. Small entities as described in the Act are only those "businesses, organizations and governmental jurisdictions subject to regulation."

Today's rule, if promulgated, will directly affect only the Reynolds Metals Company, therefore, no small entities will be adversely affected. The EPA certifies pursuant to the provisions at 5 U.S.C. 605(b), that this rule will not have a significant economic impact on a substantial number of small entities.

VI. Paperwork Reduction Act

The Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, authorizes the Director of the OMB to review certain information collection requests by Federal agencies. The EPA has determined that this proposed rule will not impose any new record keeping or reporting requirements that would require OMB approval under the provisions of the Paperwork Reduction Act of 1980.

VII. Unfunded Mandate Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, Tribal, and local governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules

with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. When a written statement is needed for an EPA rule, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, giving them meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising them on compliance with the regulatory requirements. The UMRA generally defines a Federal mandate for regulatory purposes as one that imposes an enforceable duty upon state, local or tribal governments or the private sector.

The EPA has determined that this proposed rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Because today's proposed rule directly affects only the Reynolds Gum Springs, Arkansas, facility, EPA finds that the rule does not impose any enforceable duty upon State, local, and tribal governments. Thus, today's rule is not subject to the requirements of sections 203 and 205 of the UMRA.

List of Subjects in 40 CFR Part 261

Environmental Protection, Hazardous waste, Recycling, Reporting and recordkeeping requirements.

Dated: July 16, 1997.

Robert E. Hanneschlager,
Acting Director, Multimedia Planning and Permitting Division.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922 and 6938.

Appendix IX to Part 261—[Amended]

2. In Appendix IX to part 261, table 2 is amended by removing the entry "Reynolds Metals Company", Gum Springs, Arkansas".

[FR Doc. 97-19885 Filed 7-30-97; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 2

[ET Docket No. 97-157; FCC 97-245]

Reallocation of TV Channels 60-69, the 746-806 MHz Band

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: By this Notice of Proposed Rule Making (NPRM), the Commission proposes to reallocate the 746-806 MHz band, currently comprising television (TV) channels 60-69. The Commission proposes to allocate 24 megahertz, at 764-776 MHz and 794-806 MHz, to the fixed and mobile services, and to designate this spectrum for public safety use. The Commission proposes to allocate the remaining 36 megahertz at 746-764 MHz and 776-794 MHz to the fixed, mobile, and broadcasting services; and anticipates that licenses in this portion of the band may be assigned through competitive bidding. These allocations would help to meet the needs of public safety for additional spectrum, make new technologies and services available to the American public, and allow more efficient use of spectrum in the 746-806 MHz band. The Commission also considers issues related to protecting existing and proposed TV stations on channels 60-69 from interference until the transition to digital TV (DTV) is complete, but defer specific interference protection standards to a separate proceeding on service rules in the 746-806 MHz band.

DATES: Comments must be filed on or before September 15, 1997, and reply comments must be filed on or before October 14, 1997.

ADDRESSES: Comments and reply comments should be sent to the Office of Secretary, Federal Communications Commission, Washington, DC 20554. If

participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed.

FOR FURTHER INFORMATION CONTACT:

Sean White, Office of Engineering and Technology, (202) 418-2453, swhite@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rule Making, ET Docket 97-157, FCC 97-245, adopted July 9, 1997, and released July 10, 1997. The full text of this Commission decision is available for inspection and copying during regular business hours in the FCC Reference Center (Room 239), 1919 M Street, NW., Washington, DC. The complete text of this decision also may be purchased from the Commission's duplication contractor, International Transcription Service, Inc., (202) 857-3800, 1231 20th Street, NW., Washington, DC 20036.

Summary of Notice of Proposed Rule Making

1. In this NPRM, the Commission proposes to reallocate 24 megahertz of spectrum at 764-776 MHz and 794-806 MHz to the fixed and mobile services, and reserve this spectrum for the exclusive use of public safety services. The Commission also proposes to reallocate the 746-764 MHz and 776-794 MHz bands to the fixed, mobile, and broadcasting services, and anticipates that licenses in this spectrum will be assigned by competitive bidding.

2. TV channels 60-69 (746-806 MHz) are relatively lightly used for full service television operations. There are currently only 95 full service analog stations, either operating or with approved construction permits on these channels. In the *Sixth Report and Order* in MM Docket No. 87-268 (DTV Proceeding), 62 FR 26684, May 14, 1997, the Commission adopted a Table of Allotments for digital television. This Table provides all eligible broadcasters with a second 6 MHz channel to be used for DTV service during the transition from analog to digital television service. The DTV Table also, *inter alia*, facilitates the early recovery of a portion of the existing broadcast spectrum, specifically, channels 60-69, by minimizing the use of these channels for DTV purposes. The DTV Table provides only 15 allotments for DTV stations on channels 60-69 in the continental United States.

3. In providing for early recovery of spectrum, the Commission also observed that there is an urgent need for additional spectrum to meet important public safety needs, including voice and

data communications, and to provide for improved interoperability between public safety agencies. We indicated that spectrum in the region of the 746-806 MHz band may be appropriate to meet some of these needs. The Commission stated that we would initiate a separate proceeding to reallocate the spectrum at channels 60-69 in the very near future, and that we would give serious consideration to allocating 24 megahertz of this spectrum for public safety use and consider allocating the remaining 36 megahertz in the 746-806 MHz band for assignment by auction.

4. In 1995, the Commission, along with the National Telecommunications and Information Administration, established the Public Safety Wireless Advisory Committee (PSWAC) to study public safety telecommunications requirements. The PSWAC was chartered, *inter alia*, to advise the Commission on total spectrum requirements for the operational needs of public safety entities in the United States through the year 2010. On September 11, 1996, the PSWAC issued its *Final Report*. The PSWAC found that the currently allocated public safety spectrum is insufficient to support current voice and data needs of the public safety community, does not provide adequate capacity for interoperability channels, and is inadequate to meet future needs, based on projected population growth and demographic changes. In the *Final Report*, the PSWAC stated that data communication needs are also expected to grow rapidly in the next few years, and wireless video needs are expected to expand quickly. In addition, new spectrum is required to support new capabilities and technologies, including high speed data and video. The PSWAC found that, in the short term, 24 or 25 megahertz of new public safety spectrum is needed, and concluded that public safety users should be granted access to portions of the unused spectrum in the 746-806 MHz band.

5. The Commission tentatively proposes to allocate the spectrum at TV channels 63, 64, 68, and 69 (the 764-776 MHz and 794-806 MHz bands) for public safety. There are several reasons why the Commission believes these channels would best serve the needs of public safety. These channels are relatively lightly used by full service television broadcasting, so this spectrum would offer the fewest restrictions on public safety operations. Further, since the 794-806 MHz band is subjacent to existing public safety operations in the 806-824 MHz band, it holds the best potential for expansion of