assessing, or documenting quality of healthcare.

(b) *DoD QA Records May Be Authorized for Disclosure or Testimony to the Following:*

(1) A Federal Executive Agency, or private organization, if such medical QA record or testimony is needed by such Agency or organization to perform licensing or accreditation functions related to DoD healthcare facilities or to perform monitoring, required by law, of DoD healthcare facilities.

(2) An administrative or judicial proceeding commenced by a present or former DoD healthcare provider concerning the termination, suspension, or limitation of clinical privileges of such healthcare provider.

(3) A governmental board or Agency or a professional healthcare society or organization, if such medical QA record or testimony is needed by such board, Agency, society, or organization to perform licensing, credentialing, or the monitoring of professional standards of any healthcare provider who is, or was, a member or an employee of the Department of Defense.

(4) A hospital, medical center, or other institution that provides healthcare services, if such medical QA record or testimony is needed by such institution to assess the professional qualifications of any healthcare provider who is, or was, a member or employee of the Department of Defense and who has applied for, or has been granted, authority or employment to provide healthcare services in or on behalf of such institution.

(5) An officer, employee, or contractor of the Department of Defense who has a need for such record or testimony to perform official duties.

(6) A criminal or civil law enforcement agency or instrumentality charged under applicable law with the protection of the public health or safety, if a qualified representative of such agency or instrumentality makes a written request that such record or testimony be provided for a purpose authorized by law.

(7) An administrative or judicial proceeding commenced by a criminal or civil law enforcement agency or instrumentality referred to in paragraph (b)(6) of this section, but only for the subject of such proceeding.

(c) *Aggregate Statistical Information.* Nothing in this part shall be construed as authorizing or requiring the withholding, from any person or entity, aggregate statistical information on the result of DoD medical QA programs.

(d) *Congressional Requests.* Nothing in this part shall be construed as authority to withhold any medical quality assurance record from a committee of either House of Congress, any joint committee of Congress, or the General Accounting Office if such record pertains to any matter within their respective jurisdictions.

Dated: August 20, 1991.

Linda M. Bynum,

Alternate OSD Fedeal Register Liaison Officer, Department of Defense.

[FR Doc. 91-20240 Filed 8-23-91; 8:45 am]

BILLING CODE 3810-01-M

DEPARTMENT OF THE INTERIOR

National Park Service

RIN 1024-AB76

36 CFR Part 7

Fishing Regulations; Sequoia and Kings Canyon National Parks, CA

AGENCY: National Park Service, Interior.

ACTION: Final rule.

SUMMARY: This rulemaking amends the finishing regulations for Sequoia and Kings Canyon National Parks by terminating closures on 42 miles of streams and providing for fishing in almost all streams and lakes throughout these parks. The parks' research and monitoring programs have identified a need to restore the natural distribution and abundance of native species, and to help retard expansion of introduced species. This amendment addresses these concerns and provides, on an annual basis, for regulatory adjustments based upon ongoing research and monitoring. The park superintendent will be able to annually incorporate season opening and closing dates and other provisions issued by the State of California as well as to make other necessary modifications with respect to fishing restrictions. Such provisions and modifications will be annually documented in the compendium of Superintendent's Orders and made available to the public. The effects of this rulemaking on anglers will be minimal. Anglers will have to be able to identify fish species to make appropriate keep or release decisions, and will also be expected to be knowledgeable about their location and elevation in backcountry areas to assure compliance with annual Superintendent's Orders specific to location.

EFFECTIVE DATE: September 25, 1991.

FOR FURTHER INFORMATION CONTACT: Harold Werner, Fish and Wildlife Biologist, Sequoia and Kings Canyon National Parks, Three Rivers, CA 93271, Telephone: (209) 565-3341, Extension 221.

SUPPLEMENTARY INFORMATION:

Background

Recreational fishing is a valid visitor activity in Sequoia and Kings Canyon National Parks. It is recognized as such by National Park Service policy and also mandated in legislation for Sequoia National Park (16 U.S.C. 45b) enacted in 1926. Existing regulations applicable to fishing in these Parks are codified in 36 CFR 7.8(b), which identify approximately 45 miles of streams that are closed to fishing. This includes approximately three miles of stream in the Soda Springs drainage which are closed to protect a threatened species, the Little Kern golden trout.

The pristine distribution of trout in Sequoia and Kings Canyon National Parks has been obscured by a long history of fish introduction that began in the 1850's and became widespread by the 1870's. Available information indicates that the parks' high elevation lakes and streams were barren of fish, although in some areas native trout did range upwards to 9,000 feet. Rainbow trout were native to the streams on the west side of these parks, and Golden trout were found at the south side of Sequoia National Park. As a result of fish introduction these species became established parkwide. In addition, eastern brook trout and brown trout were introduced to these parks. Brook trout dominate many of the parks' high lakes and brown trout are widespread in rivers and streams below 10,000 feet.

Monitoring of fish populations in the Kaweah River drainage from 1980 through 1985 showed a significant displacement of native trout by introduced brown trout as a proportion of the fish population. During that five-year period, brown trout increased from five percent to 12 percent of the surveyed population. The impact was greatest at low elevations, particularly where roadways make rivers easily accessible. It is believed this impact resulted in part because rainbow trout are easier to catch and thus harvested disproportionately more than brown trout, and because of predation on rainbow trout by large brown trout. Rainbow trout were impacted least in areas closed to fishing.

The objectives of the fishery management program in Sequoia and Kings Canyon National Parks are to:

(a) Protect and restore native fish populations, and meet the requirements of the Endangered Species Act;

(b) Permit and maintain quality fishing opportunities consistent with National Park Service policies and specific statutory mandates contained in the early legislation of Sequoia National Park.

Attainment of these objectives may be obtained within a controlled program of allowing angler harvests to help restore a survival advantage of rainbow and golden trout within their pristine range, and retard or eliminate continued expansion by introduced brown trout. This regulation serves these objectives by establishing Superintendent's Orders which may include: (1) Restrictions on the species and numbers of fish taken; (2) bait and terminal gear restrictions; and (3) fishing method or possession limit restrictions at various sites and elevations based on native fish distribution patterns and human developments. Ongoing monitoring and research will continue to measure the effectiveness of these regulations in terms of meeting fisheries management objectives. When a change is required this regulation authorizes quick response by the superintendent to protect this resource and meet recreational goals by making local, routine changes in restrictions through Superintendent's Orders in a timely manner.

The Superintendent's Orders regarding fishing restrictions will be reviewed at least annually and any changes will be made a part of the parks' compendium. Public notice of restrictions established by the superintendent will be provided through signs, maps, brochures, newspaper notices or other appropriate methods as required by 36 CFR 1.7. Detailed information pertaining to the nature and extent of fishing restrictions will be readily available to anglers in the parks. Permanent or otherwise significant closures are subject to the rulemaking requirements of 36 CFR 1.5(b) and will continue to be codified in 36 CFR 7.8(b).

Summary of Public Comments

The National Park Service published a proposed rulemaking in the **Federal Register** on October 30, 1990 (55 FR 45619) and provided a 30 day period for public comments on the proposed revisions. A total of three (3) written comments were received, all three from organizations. There were no comments received from private individuals.

Analysis of Public Comments

All three organizations supported the proposed regulations. One organization specifically mentioned their agreement with the opening of 42 miles of previously closed streams to recreational fishing. Another organization that commented felt that the regulations would be of a benefit to the parks' fisheries. The third organization specifically mentioned their support of catch and release fishing to perpetuate wild trout, and were also supportive of the regulation. There were no general or specific comments opposing or making recommendations to change the regulation.

After reviewing all comments and having received no recommendations for changes, the National Park Service has determined that the regulation as previously published requires no changes of substance. An editorial change has been made to § 7.8(b)(1) by the insertion of the word "parks'" before the phrase "Resources Management Plan" to clarify that the reference is to the single Resource Management Plan for Sequoia and Kings Canyon National Parks. In addition, paragraphs (b)(3) and (b)(4) of the proposed rule have been switched in order. An editorial change has also been made to the final paragraph (b)(4)—proposed as paragraph (b)(3)—to clarify that it is also prohibited to fish in closed waters. This paragraph now reads that "Fishing in closed waters or in violation of a condition or restriction established by the Superintendent is prohibited."

This does not change the substance of the proposed regulation, but simply highlights that fishing is prohibited in all areas which are closed to fishing by Superintendent's Orders. Other than these changes, the regulation as previously proposed is published as a final rule.

Drafting Information

The primary author of these regulations is Harold Werner, Fish and Wildlife Biologist, Sequoia and Kings Canyon National Parks.

Paperwork Reduction Act

This rulemaking does not contain information collection requirements that require approval by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.*

Compliance With Other Laws

The National Park Service has determined that this document is not a "major rule" under Executive Order 12291 (February 19, 1981), 46 FR 13193. In accordance with the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, which became effective January 1, 1981, the NPS has determined that these final regulations will not have a significant economic effect on a substantial number of small entities, nor does it require a preparation of a regulatory analysis. The economic effects of this rulemaking are local in nature and negligible in scope. It may have some minor effect on the types, but not quantity, of fishing supplies sold in the immediate area. The National Park Service has determined that this rulemaking will not have a significant effect on the quality of the human environment, health, and safety.

The NPS has reviewed this rule as directed by Executive Order 12360, "Government Actions and Interference with Constitutionally Protected Property Rights," to determine if this rule has "policies that have taking implications." The NPS has determined that this rule does not have taking implications since it regulates activities on federal land.

In accordance with the requirements of the National Environmental Policy Act, 42 U.S.C. 4321, *et seq.*, an Environmental Assessment for fisheries management alternatives was prepared and placed on public review from March 12, 1987 until June 30, 1987. A Finding of No Significant Impact was approved on December 14, 1987.

List of Subjects in 36 CFR Part 7

National parks; Reporting and recordkeeping requirements.

In consideration of the foregoing, 36 CFR chapter I is amended as follows:

PART 7—SPECIAL REGULATIONS, AREAS OF THE NATIONAL PARK SYSTEM

1. The authority citation for part 7 continues to read as follows:

Authority: 16 U.S.C. 1, 3, 9a, 4621(k); section 7.96 also issued under D.C. Code 8–137 (1981) and D.C. Code 40–721 (1981).

2. Section 7.8 paragraph (b) is revised to read as follows:

§ 7.8 Sequoia and Kings Canyon National Parks.

(a) * * *

(b) *Fishing.*

(1) Fishing restrictions, based on management objectives described in the parks' Resources Management Plan, are established annually by the Superintendent.

(2) The Superintendent may impose closures and establish conditions or restrictions, in accordance with the criteria and procedures of §§ 1.5 and 1.7 of this chapter, on any activity pertaining to fishing including, but not limited to, species of fish that may be taken, seasons and hours during which fishing may take place, methods of taking, size, location and elevation, and possession limits.

(3) Soda Springs Creek drainage is closed to fishing.

(4) Fishing in closed waters or in violation of a condition or restriction established by the Superintendent is prohibited.

* * * * *

Dated: July 5, 1991.

Scott Sewell,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 91-20308 Filed 8-23-91; 8:45 am]

BILLING CODE 4310-70-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 261

[SW-FRL-3985-7]

Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Final Denial

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA or Agency) today is announcing its decision to deny the petition submitted by Bethlehem Steel Corporation (BSC), Lackawanna, New York, to exclude, on a one-time basis, certain solid wastes generated at its facility from the lists of hazardous wastes contained in 40 CFR 261.31 and 261.32. This action responds to a delisting petition submitted under 40 CFR 260.20, which allows any person to petition the Administrator to modify or revoke any provision of parts 260 through 265 and 268 of title 40 of the Code of Federal Regulations, and under 40 CFR 260.22, which specifically provides generators the opportunity to petition the Administrator to exclude a waste on a "generator-specific" basis from the hazardous waste lists. This rulemaking finalizes the proposed denial for BSC's petitioned waste published on April 7, 1989 (see 54 FR 14101). The effect of this action is that this waste must continue to be handled as hazardous in accordance with 40 CFR parts 260 through 268, and the permitting standards of 40 CFR part 270.

EFFECTIVE DATE: August 26, 1991.

ADDRESSES: The public docket for this final rule is located at the U.S. Environmental Protection Agency, 401 M Street, SW. (room M2427), Washington, DC 20460, and is available for viewing from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays. Call (202) 475-9327 for appointments. The reference number for this docket is "F-90-B5DF-FFFFF". The public may copy material from any regulatory docket at a cost of $0.15 per page.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA Hotline, toll free at (800) 424-9346, or at (703) 920-9810. For technical information concerning this notice, contact Chichang Chen, Office of Solid Waste (OS-343), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 382-7392.

SUPPLEMENTARY INFORMATION:

I. Background

A. Authority

Under 40 CFR 260.20 and 260.22, facilities may petition the Agency to remove their wastes from hazardous waste control by excluding them from the lists of hazardous wastes contained at 40 CFR 261.31 and 261.32. Petitioners must provide sufficient information to EPA to allow the Agency to determine (1) that the waste to be excluded is not hazardous based upon the criteria for which it was listed, and (2) that no other hazardous constituents or factors that could cause the waste to be hazardous are present.

B. History of this Rulemaking

Bethlehem Steel Corporation (BSC), located in Lackawanna, New York, petitioned the Agency to exclude from hazardous waste control, on a one-time basis, a specific waste that it had generated. After evaluating the petition, EPA proposed, on April 7, 1989, to deny BSC's petition to exclude its waste from the lists of hazardous waste under 40 CFR 261.31 and 261.32 (see 54 FR 14101). On January 29, 1990, the Agency re-opened the comment period to enable public review of information supporting the proposed delisting health-based level for benzo(a)pyrene. (See 55 FR 2847).

This rulemaking addresses public comments received on the proposal and finalizes the proposed decision to deny BSC's petition.

II. Disposition of Delisting Petition

A. Bethlehem Steel Corporation, Lackawanna, New York

1. Proposed Exclusion

BSC petitioned the Agency for an exclusion of its ammonia still lime sludge, presently listed as EPA Hazardous Waste No. K060, and contained in an on-site 5.4 acre landfill. BSC based its petition on the claim that the constituents of concern, although present in the waste, are present in either insignificant concentrations or, if present at significant levels, are essentially in immobile forms. Additionally, BSC claims that this waste is not hazardous on any other basis (*i.e.*, there are no additional constituents or factors that could cause the waste to be hazardous).

In support of its petition, BSC submitted (1) detailed descriptions of its manufacturing process, including schematic diagrams; (2) a list of raw materials and Material Safety Data Sheets (MSDS) for all tradename materials that might be expected to have contributed to the waste; (3) total constituent and EP leachate analyses for the EP toxic metals, nickel, and cyanide on several samples of the petitioned waste; (4) total constituent analyses for sulfide on samples of the petitioned waste; (5) total oil and grease analysis data on samples of the petitioned waste; (6) results from characteristics testing for ignitability, corrosivity, and reactivity; (7) total constituent analyses of the petitioned waste for the organic constituents for which the waste was listed (naphthalene and phenolics), as well as benzene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and tetrachloroethylene; and (8) ground-water monitoring data collected from wells monitoring the on-site landfill.

The Agency evaluated the information and analytical data provided by BSC in support of its petition and determined that the hazardous constituents found in the petitioned waste could pose a threat to human health and the environment. Specifically, the Agency used its vertical and horizontal spread (VHS) model and Organic Leachate Model (OLM) to predict the potential mobility of the hazardous constituents found in the petitioned waste. The Agency also evaluated ground-water monitoring information submitted in support of BSC's petition. Based on these evaluations, the Agency determined that BSC failed to substantiate its claim that the hazardous constituents of concern will not leach and migrate at concentrations above health-based levels. See 54 FR 14101, April 7, 1989, for a more detailed explanation of why EPA proposed to deny BSC's petition.

2. Agency Response to Public Comments

The Agency received comments on the proposed rule from three interested parties. One interested party submitted comments on both the proposed denial and the information supporting the proposed health-based level for benzo(a)pyrene. (See 55 FR 2847, January 29, 1990.) The first commenter supported the Agency's proposed decision to deny the petition, but

expressed the following concerns: (1) That the Agency failed to evaluate total levels of hazardous constituents in the waste, (2) that the VHS model's assumptions concerning reasonable worst-case management/disposal scenarios are not suitably conservative, and (3) that the VHS model understates the environmental risks created by large-quantity waste generators. Because the Agency, based in part on the VHS model as currently constituted, already had sufficient bases to deny BSC's petition for the waste, as detailed in the proposed rule, and the concerns raised by the commenter do not affect EPA's decision to deny this petition, the Agency did not assess whether the additional bases for denial, suggested by the commenter, should be included as part of the rationale for denying the petition. Therefore, the Agency does not address those comments in today's rule.

The remaining two commenters opposed the Agency's denial decision for a number of reasons. The comments submitted related to the following areas: (1) Accuracy of predicted leachable lead concentrations, (2) accuracy and significance of predicted leachable benzo(a)pyrene concentrations, (3) the Agency's use of the OLM and VHS model, (4) authority for use of ground-water data as a basis for denial, (5) significance of ground-water contamination, and (6) petition completeness. The specific comments made by these two commenters regarding the Agency's proposed decision to deny the petition, and the Agency's response to them, are discussed below.

a. Accuracy of Predicted Leachable Lead Concentrations

Comment: One commenter claimed that the petition was for a one-time exclusion of about 170,000 cubic yards of waste, not a volume of waste generated annually (170,000 cubic yards/year of waste) as described in the discussion of the use of the VHS model (54 FR 14106).

Response: The Agency agrees with the commenter's statement that the petition was written to include only the 170,000 cubic yards of waste that has been placed in the landfill in question. Further, the Agency notes that the petition does not consider any waste that might be generated at the facility in the future or any other materials that might be placed in the landfill in question. That clarification, however, does not affect the compliance-point concentrations for the petitioned waste generated by the Agency using the VHS model.

Comment: One commenter claimed that the petitioned waste is a mixture of a K060-listed hazardous waste and solid wastes that are exempt from classification as hazardous waste as set forth in 40 CFR 261.4(b)(7) (the "Bevill exemption"). As such, based upon the proposed clarification of the interaction between 40 CFR 261.4(b)(7) and 40 CFR 261.3(a)(2)(iv) (*i.e.*, the mixture rule), which was published by the Agency on April 17, 1989 at 54 FR 15316, and 15336–37, the commenter believed that the petitioned mixture is itself exempt from classification as hazardous waste. (The Agency notes that this clarification was finalized on September 1, 1989 at 54 FR 36592 and 36622–23). The commenter made specific reference to the Agency's proposed position that "If the mixture exhibits one or more hazardous characteristics that are exhibited by the Bevill waste but not by the non-excluded characteristic waste, then the mixture is not a hazardous waste." (See 54 FR 15337).

Response: The Agency disagrees with the commenter's interpretation of the clarification of the applicability of the mixture rule to mining waste. The clarification specifically discusses the Agency's resolution to apply the mixture rule in almost all circumstances. (See 54 FR 15336, 54 FR 36622). It further explains that "mixtures of one or more listed hazardous wastes and a large volume low hazard mineral processing waste will be considered a hazardous waste unless and until the mixture is delisted." (See 54 FR 15336, 54 FR 36622). Thus, the mixture rule, even as modified in the final mining waste exclusion rule, still applies to BSC's petitioned waste because the petitioned waste is a mixture of a solid waste and a listed (K060) hazardous waste (not a characteristic hazardous waste which the commenter references).

Comment: Two commenters claimed that the Agency's evaluation of the petition relies on data from a pre-petition submission that were never intended to be of the integrity required for a formal delisting petition. To support this claim, one commenter submitted a copy of a May 11, 1989 letter which had been sent to BSC from the contractor responsible for collecting these pre-petition samples; this letter provides information about the 1984 sampling work conducted for BSC. This letter also identifies the laboratories used by the contractor to sample and analyze the pre-petition samples.

Response: The Agency recognizes that the proposed denial of BSC's petition is based, in part, on analytical data submitted in the pre-petition. In fact, BSC was notified, by letter, of the Agency's intentions to use these data on June 13, 1988 (see the RCRA public docket for the proposed rule for a copy of this letter). As previously explained to BSC, the Agency agrees that samples collected without concern for chain-of-custody protocol may be of questionable integrity. Nevertheless, the Agency believes that the data submitted by BSC, whether intended to be part of a petition or not, and even in the absence of documentation regarding chain-of-custody and quality assurance/quality control (QA/QC) procedures, indicate that at least some of the petitioned waste contains hazardous constituents in a form that presents a hazard to human health and/or the environment (most notably, the presence of significant levels of leachable lead). Thus, the Agency believes that the analytical data submitted for these pre-petition samples may be considered during the evaluation of the petition unless BSC can demonstrate that the analytical data submitted are invalid (e.g., through evidence of equipment contamination or improper handling).

Furthermore, the Agency notes that certain information contained in the May 11, 1989 letter is inconsistent. Item 6 of the letter explains that no chain-of-custody records for the BSC sampling event exist in the contractor's file; however, Item 7 of the same letter states that the work conducted by the contractor "was done in three (3) phases and the report documenting these phases and the chain-of-custody practices is attached." (The attachment described was not submitted by the commenter.) The Agency interprets this information to mean that (1) specific records are not available for the BSC sampling event, and (2) general chain-of-custody practices followed by the contractor, apparently for the BSC sampling event, are documented. The Agency also wishes to note that the commenters did not discuss whether information concerning QA/QC procedures followed by the laboratories was available.

Comment: One commenter determined that the four leachable lead values which fail the VHS model evaluation would all be considered outliers if all data events (a total of 19 samples) were taken into consideration together for means of evaluation using the Dixon Extreme Value Test (a statistical procedure which the Agency has used in previous delisting decisions to identify statistical outliers).

Response: The Agency acknowledges that the Dixon Extreme Value Test has been used, in previous delisting

evaluations, to determine whether a seemingly high value is an outlier. However, the Agency notes that the Dixon Test is based on the assumption that only one sample in a given data set is a potential outlier. Stated another way, the test is inappropriate as applied by the commenter for identifying multiple outliers.

Further, the Agency believes that it is inappropriate to pool numerous data sets of sampling data for the purposes of conducting an outlier analysis without considering the sample collection procedures followed. In particular, sample collection procedures for the three BSC sampling events, as discussed in the proposed decision (see 54 FR 14104), relied on both grab and composite sampling techniques. BSC's grab samples represent the composition of a specific portion of the petitioned waste at a specific location in the unit. BSC's composite samples were composited from a number of grab samples collected from various locations in the unit, thus, effectively "pooling" the data during sample collection rather than analysis. Because of differences such as these, the Agency does not believe that one should assume that all data can be pooled together, rather one should consider whether separate analysis of each data set, or separate analysis of grab and composite samples, may be more appropriate. For example, if the Dixon Test is applied to the data for the first data set (a total of 6 samples), none of the points are determined to be outliers using the Dixon Test.

Comment: One commenter explained that EPA's own guidance recommends using confidence intervals during the statistical analysis of sampling data collected to determine whether a waste is hazardous. The commenter claimed that EPA's "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods," U.S. EPA, Office of Solid Waste and Emergency Response, Publication SW–846, indicates that the upper limit of the 90th percent confidence interval should be compared to the applicable regulatory threshold to determine if a waste contains the chemical contaminant of concern at a hazardous level. Based on the 95th percent upper confidence limit, the commenter calculated that the theoretical compliance-point concentration for leachable lead in the petitioned waste is 0.021 ppm, which is less than the regulatory level of concern of 0.050 ppm.

Response: The Agency, in its evaluation of delisting petitions, historically relied on the maximum observed concentration of a contaminant to evaluate whether a waste is hazardous. As explained at 50 FR 48909–10, November 27, 1985, the Agency believes the use of the mean value, 95th percent upper confidence limit, or the maximum value may be appropriate in different cases depending upon the process generating the waste, the homogeneity of the waste, the procedures followed during sample collection, and the number of samples collected. For example, if the Agency believes that the petitioned waste is homogenous, the sampling was comprehensive, and enough samples were taken to adequately define the mean values, then the Agency may consider using the mean value in its evaluation. In its evaluation of BSC's petitioned waste, the Agency chose to use the maximum leachable concentrations of lead because BSC had not conducted sufficient sampling to justify the use of a statistical evaluation in the determination of the hazard posed by the waste. Specifically, the Agency did not consider the 19 samples sufficient to comprise a large enough data set to allow the use of any value (such as the average) other than the maximum observed value for lead. The Agency believes that, based on the volume of waste and the variation in analytical results, BSC did not collect and analyze a sufficient number of samples to warrant the use of a mean value.

The Agency also notes that the commenter, in calculating the upper 95 percent confidence level for the leachable lead data, did not include 4 of the lead levels because the data points were termed "outliers". As noted previously in this notice, EPA does not believe the high lead levels can be ignored as outliers. If the Agency had chosen to evaluate the upper 95th confidence level, it would have evaluated all of the lead data (including using the reported detection limits for samples in which lead was not detected). Using all of the available data, the mean would be 0.20 ppm, with an upper 95 percent confidence of 0.93 ppm. Thus, if the Agency had considered the upper 95th confidence level for BSC's leachable lead data in its VHS model analysis of the waste, the calculated lead level at the compliance point (0.31 ppm) would still exceed EPA's level of concern.

Comment: One commenter argued that the application of the VHS model is inappropriate for evaluating the transport of lead from BSC's petitioned waste because the model does not account for the attenuation of lead that is likely to occur due to high concentrations of dissolved carbonates in the ground water and the nature of the slag material through which it travels.

Response: As discussed in the proposed rule (see 54 FR 14103), Agency delisting decisions are waste-specific, not disposal-site specific. They are formulated by evaluating the hazard of a petitioned waste in a non-Subtitle C regulated management setting. Delisting evaluations which consider the site of disposal (*e.g.*, a specific disposal site where the underlying material or ground water, such as suggested by the commenter, promotes attenuation) could not predict future storage or disposal conditions that may be pertinent if the waste were removed from the present disposal site, a situation which could occur if BSC's waste were to be excluded from subtitle C regulation. For this reason, the Agency believes that the assumption of no attenuation in the VHS model is a reasonable worst case. Furthermore, BSC did not provide any quantitative way to account for possible attenuation of lead, nor did BSC document how (or at what levels) carbonate in the ground water or slag material would ensure lead levels would be adequately attenuated.

Comment: Two commenters noted that lead concentrations measured in actual ground-water samples are consistently below EPA's health-based level. One of the commenters also believed that actual ground-water monitoring data supports BSC's claim that the petitioned waste is not hazardous.

Response: The Agency agrees that lead concentrations measured in BSC's ground-water samples are below the corresponding health-based level. However, benzene, phenanthrene, barium, fluorene, anthracene, 1,1-dichloroethane and 2,4,6-trichlorophenol were detected in BSC's ground-water samples at concentrations above the corresponding health-based levels.

The Agency uses models such as the OLM and VHS model to estimate the potential migration of hazardous constituents from the unregulated disposal of petitioned wastes. The Agency also considers any other available information, such as ground-water monitoring data relevant to the petitioned waste, to characterize the impact on ground-water quality (if any) from the disposal of the waste. Because of the differences between the hypothetical VHS landfill and BSC's landfill, the Agency recognizes that the calculated compliance-point concentrations for lead in BSC's waste

may not necessarily correspond directly with ground-water monitoring data. To summarize, the Agency used VHS model results in conjunction with actual ground-water monitoring data to fully evaluate (not to verify) the impacts of the disposal of BSC's waste. As discussed in the proposal, the VHS model predicts that, in regard to lead, BSC's waste has the potential to contaminate ground water above delisting levels of concern.

b. Accuracy and Significance of Predicted Leachable Benzo(a)pyrene Concentrations

Comment: One commenter claimed that analytical data for benzo(a)pyrene provided in BSC's November 1984 submittal were not obtained in accordance with EPA Publication SW-846 and, therefore, should not be used to evaluate the petition. The commenter further provided a summary of differences between this non-SW-846 method and the SW-846 method for benzo(a)pyrene. In addition, the commenter stated that no QA/QC data were provided for the non-SW-846 benzo(a)pyrene analyses.

Response: With regard to BSC's use of a non-SW-846 method to quantify benzo(a)pyrene, the Agency does not believe that the commenter provided sufficient information to demonstrate that the non-SW-846 method is not comparable or that the laboratory performing the analysis provided data of questionable validity. In fact, without adequate documentation of QA/QC procedures (which the commenter explained are not available), the Agency does not believe that the analytical results should be disregarded. The Agency believes that the data submitted by BSC, even in the absence of documentation regarding QA/QC procedures, indicate that at least some of the petitioned waste may contain constituents in a form that presents a hazard to human health and/or the environment.

Comment: Two commenters stated that the Agency has not considered the fact that ground-water samples analyzed show the absence of detectable concentrations of benzo(a)pyrene.

Response: As stated previously in this notice, the Agency used VHS model results in conjunction with actual ground-water monitoring data to fully evaluate (not to verify) the impacts of the disposal of BSC's waste. Because of the differences between the hypothetical VHS landfill and BSC's landfill, the Agency recognizes that the calculated compliance-point concentrations for benzo(a)pyrene in BSC's waste would not necessarily correspond directly with ground-water monitoring data.

Comment: One commenter claimed that the delisting health-based level used by the Agency for benzo(a)pyrene is of questionable authority and integrity. The commenter criticized the technical merits of the proposed benzo(a)pyrene health-based level on numerous accounts, including that the Agency's proposed level ignores well-documented studies regarding the presence of benzo(a)pyrene in the environment and that benzo(a)pyrene criteria established or proposed by other authorities range from 0.00003 to 0.01 ppm. The commenter claimed that the Agency has not provided the scientific and regulated community a reasonable opportunity to review and comment on the proposed level or its use in the evaluation of data. The commenter specifically noted that the documentation provided for the proposed benzo(a)pyrene health-based level was dated December 28, 1989, eight months after the proposed denial of BSC's petition. Further, the commenter stated that the Agency's health-based level for benzo(a)pyrene has not been finalized or subjected to the basic due process requirements of public notice and comment as required by both RCRA and the Administrative Procedure Act.

Response: The Agency believes that appropriate rulemaking procedures were followed in proposing the benzo(a)pyrene health-based level of 0.000003 used in the Agency's initial evaluation of BSC's delisting petition. The use of that level was subject to public comment and response during the initial comment period for the proposed delisting decision and significantly, during the extended comment period pertaining specifically to the proposed health-based level for benzo(a)pyrene. The Agency notes that this same commenter chose to provide comments during both of these periods.

The Agency reviewed the information that the commenter provided regarding the 0.000003 ppm proposed delisting health-based level for benzo(a)pyrene, particularly the various benzo(a)pyrene criteria that are recommended, proposed, or promulgated by other authorities. However, EPA's Office of Drinking Water has proposed a maximum contaminant level (MCL) drinking water standard of 0.0002 ppm for benzo(a)pyrene. (See 55 FR 30370, July 25, 1990). Therefore, at this time, the Agency believes that it is appropriate, in BSC's case, to withdraw as a basis of petition denial the finding of significant concentrations of benzo(a)pyrene in the petitioned waste. This action does not affect the Agency's decision to deny BSC's petition. Regardless of the determination of an appropriate health-based level for benzo(a)pyrene and subsequent evaluation of petition data, information provided by BSC in its petition indicates that the landfill waste contains significant levels of leachable lead and that the landfill may be adversely impacting ground-water quality at the Lackawanna, New York site.

c. The Agency's Use of the OLM and VHS Model

Comment: One commenter claimed that the waste will continue to be subject to regulation following its delisting, as it will come within the scope of the State of New York's solid waste regulations. The commenter believed, therefore, that the use of the OLM and VHS model is inappropriate because their use is justified only by the need to model "unregulated disposal".

Response: The Agency evaluates all delisting petitions with the understanding that, if the petitioned waste is excluded, it will be removed from Federal regulation as a hazardous waste. EPA also recognizes that future handling and management of the excluded waste will be regulated by the state in accordance with subtitle D criteria. Nevertheless, the Agency maintains that its formulation of a delisting decision is waste-specific, not disposal-site specific. As stated previously in today's notice, the Agency does not believe that delisting evaluations should be based on the prediction of future storage or disposal conditions (such as the waste remaining in place or being transported only within the state) because once delisted, a waste can be disposed in any subtitle D facility. For this reason, the Agency believes that it is appropriate to model a reasonable worst-case scenario. In addition, because each state has the authority to implement its own subtitle D programs, EPA does not believe that it is appropriate to make specific assumptions concerning the implementation of a specific state's subtitle D program. Finally, EPA notes that the commenter did not offer any specific alternative to the Agency's use of the OLM/VHS model, given the apparent regulatory controls maintained by the State for solid wastes.

Comment: Two commenters believed that the Agency's strict adherence to the use of the OLM and VHS model in evaluating BSC's petition is inconsistent with the decision of the Court in *McLouth Steel Products Corp.* v. *Thomas*, 838 F. 2d 1317 (DC Cir. 1988). The commenters stated that, based on

the *McLouth* decision, the Agency is required to remain open to all challenges to the use of the VHS model, including its application to each delisting case, if the Agency chooses to treat the model as a non-binding policy. The commenters' concerns regarding the application of the models were two-fold: (1) The models are inappropriate given the regulatory framework under which the delisted waste would be managed, and (2) the models are subject to numerous technical assumptions and inaccuracies.

Response: The Agency disagrees with the commenters on both points and maintains that the models have been used appropriately in the evaluation of BSC's petitioned waste. Despite the commenter's claims to the contrary, the Agency holds that the VHS model has been applied with discretion. The subject waste is extremely large in volume and basically solid in nature. If delisted, the Agency believes that economic and engineering considerations would dictate that the waste be placed in a landfill. The VHS model is designed to model a reasonable worst-case scenario, specifically an unregulated municipal landfill; thus, the Agency believes the use of the VHS model is appropriate in this case. With respect to the commenters' claims concerning the "technical assumptions and inaccuracies" of the models, each of those claims has been addressed in separate portions of today's notice.

Comment: Two commenters stated that the VHS model is fundamentally flawed by its neglect of attenuation and biodegradation during the course of pollutant migration from the landfill to a receptor.

Response: The Agency disagrees with the commenters and notes that attenuation was considered during the development of the VHS model. As discussed previously, Agency delisting decisions are waste-specific, not disposal-site specific. To model the degree of attenuation and biodegradation a chemical compound will exhibit in soil, the Agency would need to consider the physical and chemical properties of the compound under investigation, the site-specific physical and chemical properties of the soil environment, and site-specific climatic parameters such as precipitation quantity and intensity. Furthermore, a variety of site conditions may lead to mobilization of waste constituents (*e.g.*, mobilization by infiltration with leachate originating from other co-disposed waste and the possible exceedance of the soil's attenuation capacity). Due to the wide variability in attenuation and biodegradation dynamics and the need to employ a conservative approach, the Agency believes that the generic assumption of no attenuation in the VHS model is a reasonable worst case.

The Agency recognizes that some organic compounds may be partially transformed to other species (potentially less toxic) by a variety of chemical and biological processes within the ground-water zone. Unfortunately, the available data on biodegradation of complex organics is rather limited, and such information as has been published mainly derives from the study of wastewater treatment plants, which may not be analogous to the subsurface environment. Until better models and data become available, and are consistent with the conservative approach to delisting, the Agency believes that it is appropriate to rely on the VHS model for the evaluation of BSC's landfilled waste. Finally, the commenters did not provide any specific alternatives to the OLM/VHS model that would allow the attenuation/biodegradation mechanism to be better evaluated.

Comment: One commenter claimed that the VHS model does not incorporate factors reflective of the subject waste's low permeability.

Response: The Agency believes that, unless the petitioned waste's permeability is zero and can be expected to remain so indefinitely, contaminants will eventually emerge from the landfill. Further, the permeability of BSC's waste is, to some extent, a site-specific factor. For example, if the waste is disturbed, or in fact moved from its present location (as it could be if delisted), its permeability may change depending on the way in which it settles in its new location. Further, the petitioner has not supplied sufficient data to estimate the permeability of the waste even in its present location. Permeability studies were conducted on only three samples, two of which were described as "oily." In fact, the samples collected in support of BSC's petition exhibited oil and grease levels less than or equal to 0.93 percent. Furthermore, the commenter did not indicate how the permeability of the waste could be used to predict constituent leaching.

Comment: One commenter stated that the accuracy of the OLM for low contaminant solubilities is suspect. The commenter further explained that the OLM is statistically derived from a database that relates an organic contaminant's water solubility and its concentration in the waste to the contaminant's concentration in the extract. Since the model is statistically derived, its most accurate predictions are made in the central part of the distribution. Benzo(a)pyrene's extremely low solubility in water, combined with the very low concentrations of benzo(a)pyrene in the waste, render the model suspect in this case. The commenter also cited data previously published by EPA that indicated a concentration of 1 ppm benzo(a)pyrene in waste is expected to generate a level of 8.1×10^{-8} ppm in the leachate.

Response: The Agency believes that the OLM remains a useful tool for the evaluation of delisting petitions, and has worked carefully to incorporate the best available scientific information in its formulation. The development of the model was based on a data set containing more than 1000 points, and the parameters were revised to address public comments received on its initial proposed use (see 50 FR 48953, November 27, 1985; 51 FR 27061, July 29, 1986; and 51 FR 41082, November 13, 1986). The original OLM proposal (see 50 FR 48955) presented a three-part equation: linear leaching behavior between 0 and 1 ppm, linear behavior between 1 and 10 ppm (the transition range), and logarithmic leaching behavior above 10 ppm. It was this initial version of the OLM that led to the predicted level of benzo(a)pyrene cited by the commenter. After receiving public comment, the Agency decided to abandon this "multiple-curve" approach as unreliable and to develop the OLM on the basis of a larger data set (51 FR 27061).

d. Authority For Use of Ground-water Data as a Basis for Denial

The Agency received two comments regarding the Agency's use of ground-water monitoring data as a basis for denying delisting petitions. The first comment questioned the Agency's authority for considering ground-water monitoring data in the evaluation of delisting petitions. The second challenged the Agency's justification for evaluating ground-water data in certain special cases, such as BSC's.

Comment: One commenter claimed that the Agency's authority to consider ground-water data in the evaluation of delisting petitions has not been formally authorized.

Response: In its evaluation of delisting petitions, the Agency normally assesses the potential for toxic constituents to migrate from the petitioned waste into ground water. Although EPA uses models to predict the transport of waste constituents, EPA views ground-water

monitoring data from an adequate well system as important information in determining that the petitioned waste has not had (or could not have) an adverse impact on ground water. Therefore, the Agency routinely evaluates ground-water monitoring data for petitions involving on-site and dedicated off-site land-based hazardous waste management units. The Agency believes that a petitioned waste's potential to contribute to ground-water contamination is a sufficient basis for denial of a petition because the Agency, in its evaluation of a petition, must determine whether factors (including additional constituents) could cause the petitioned waste to be hazardous (see 40 CFR 260.22(a)(2)). The Agency's authority for requesting ground-water monitoring data from petitioners, information that is needed to evaluate the petition, is found in 40 CFR 260.22(j): "After receiving a petition for an exclusion, the Administrator may request any additional information which he may reasonably require to evaluate the petition." EPA recently proposed amendments to clarify the Agency's authority to consider ground-water monitoring data in evaluating delisting petitions (see October 12, 1989, 54 FR 41930).

Comment: One commenter noted that EPA granted several exclusions despite the unavailability of ground-water data (*i.e.*, General Electric at 52 FR 29847, August 12, 1987) or despite evidence suggesting ground-water contamination (*i.e.*, Vulcan Materials at 53 FR 29058, August 2, 1988; and Merck & Company at 53 FR 37601, September 27, 1988).

Note: The commenter cited 50 FR 29846 in reference to an exclusion granted despite the unavailability of ground-water monitoring data. The citation 50 FR 29846 corresponds to a notice of IRS Systems of Records. The Agency assumes, as discussed further below, that the commenter actually meant to cite 52 FR 29847 which granted General Electric an exclusion.

Response: In August of 1984, BSC was sent a letter requesting, among other things, ground-water monitoring data in support of their petition. In November of 1984, the Agency sent letters to all active petitioners, including BSC, to inform them of the expected changes in the delisting process as a result of the impending passage of the Hazardous and Solid Waste Amendments (HSWA) of 1984. Petitioners were informed that ground-water monitoring data would be required in many cases. Most petitioners, including BSC, supplied the necessary information.

The commenter believes that the Agency should not deny BSC's petition based on ground-water monitoring information because other petitioners have been granted exclusions without consideration of ground-water monitoring data (*i.e.*, General Electric at 52 FR 29847). In the case of General Electric's (GE) petition, submission of groundwater monitoring data was neither required nor available for the petitioned waste at the time the Agency proposed to grant that petition. The Agency determined that GE's waste was not hazardous, based, in part, on predictions concerning what the concentration of constituents of concern in groundwater would be, and the Agency concluded that GE's exclusion should be finalized without additional ground-water information.

In BSC's case, however, ground-water monitoring data existed at the time the Agency proposed to deny BSC's petition (and these data continue to be generated), and thus served as an appropriate and valid basis for measuring the mobility and hazard associated with the petitioned waste.

The commenter also contended that the Agency's use of ground-water data in the evaluation of delisting petitions is subject to question since the Agency previously granted exclusions despite evidence suggesting ground-water contamination (*i.e.*, Vulcan Materials at 53 FR 29058, Merck & Company at 53 FR 37601). As was the case for the petitions cited by the commenter, petitioners have the option to present demonstrations to the Agency that ground-water monitoring data, for wells which monitor units in which petitioned wastes are managed, do not represent the actual impact of petitioned wastes on ground-water quality. In the cases of Vulcan Materials and Merck and Company, the Agency determined after detailed review of comprehensive ground-water monitoring and waste characterization information that the petitioned wastes were not a source of ground-water contamination. (See Vulcan Materials, 53 FR 29065–66; Merck & Company, 53 FR 37606).

Comment: The commenter further claimed that consideration of ground-water data in the evaluation of delisting petitions is not technically justified in all cases. Unilateral application of a policy specifying that ground-water contamination is grounds for denial of a delisting petition is inappropriate because in some cases site-specific ground-water monitoring data are not reflective of a waste's leaching characteristics. These cases include older facilities and facilities at which multiple waste management units are present in close proximity. Given the Lackawanna facility's age (operations began in the early 1900s) and the number of proximate on-site solid waste management units (discussed further below), the commenter believed that ground-water monitoring data for the unit containing the petitioned waste are not reflective of the waste's leaching characteristics and, therefore, should not be used as grounds for denial of the petition.

Response: Because the delisting process is intended for those wastes which clearly do not pose a hazard to human health or the environment, the Agency believes that evidence that a waste has caused or may cause ground-water contamination is sufficient basis to deny a petition. However, as the commenter acknowledged in the previous comment, the Agency has and will consider petitioners' demonstrations that ground-water monitoring data, for wells which monitor units in which petitioned wastes are managed, do not represent the actual impact of petitioned wastes on ground-water quality (*e.g.*, Vulcan Materials at 53 FR 29058, and Merck & Company at 53 FR 37601). The following section of today's notice addresses such a demonstration made by the commenter.

e. Significance of Ground-Water Contamination

In the proposed denial, the Agency stated that data from the analysis of samples collected from the existing ground-water monitoring system at BSC's landfill (known as Hazardous Waste Management Area 2 or HWM–2) indicate that the petitioned waste may have contributed to ground-water contamination. Specifically, seven constituents were detected in ground water at concentrations which exceed the health-based levels used in delisting decision-making. These constituents were benzene, phenanthrene, barium, fluorene, anthracene, 1,1-dichloroethane, and 2,4,6-trichlorophenol.

One commenter believed that the ground-water data presented by the Agency in the proposed denial, when reviewed in proper context, do not support the conclusion that the petitioned waste may be adversely impacting ground-water quality at the site. In support of their arguments, the commenter submitted the following additional data:

1. The results of Toxicity Characteristic Leaching Procedure (TCLP, SW–846 Method 1311) analyses of samples composited from full-depth corings obtained from the petitioned unit and Solid Waste Management Units (SWMUs) S–5, S–6, S–7, and S–11/S–22 (see Figure 1 for unit locations).

2. The results of the analysis of a ground-water sample collected March 1989 from Well MW-11. Well MW-11 is located about 800 to 900 feet east of HWM-2 (see Figure 2). The sample was analyzed for the six organic compounds listed in the proposal which were detected in HWM-2 monitoring wells at concentrations greater than the health-based levels. The commenter also submitted ground-water elevation data measured in March 1989 to support the contention that Well MW-11 is upgradient of HWM-2 and its associated wells.

3. Usage and content descriptions, as well as a location map (Figure 1), of 29 SWMUs identified by the National Enforcement Investigation Center's (NEIC) mid-1988 investigation of BSC's Lackawanna facility (a copy of this report can be found in the RCRA public docket for today's notice). NEIC tentatively identified a total of 110 SWMUs which it believes could have or did receive materials containing hazardous constituents. The commenter states that 29 of the 110 SWMUs (including HWM-2) are located in the Slag Fill Area identified in Figure 1. BSC created the Slag Fill Area by depositing excess blast furnace and steelmaking slags (along with smaller amounts of iron and steel scrap) on the shore of Lake Erie. The fill was deposited to an average height of about 30 feet above the mean Lake Erie water level and resulted in extending the Lake Erie shoreline by approximately 1700 feet westward.

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FIGURE 1

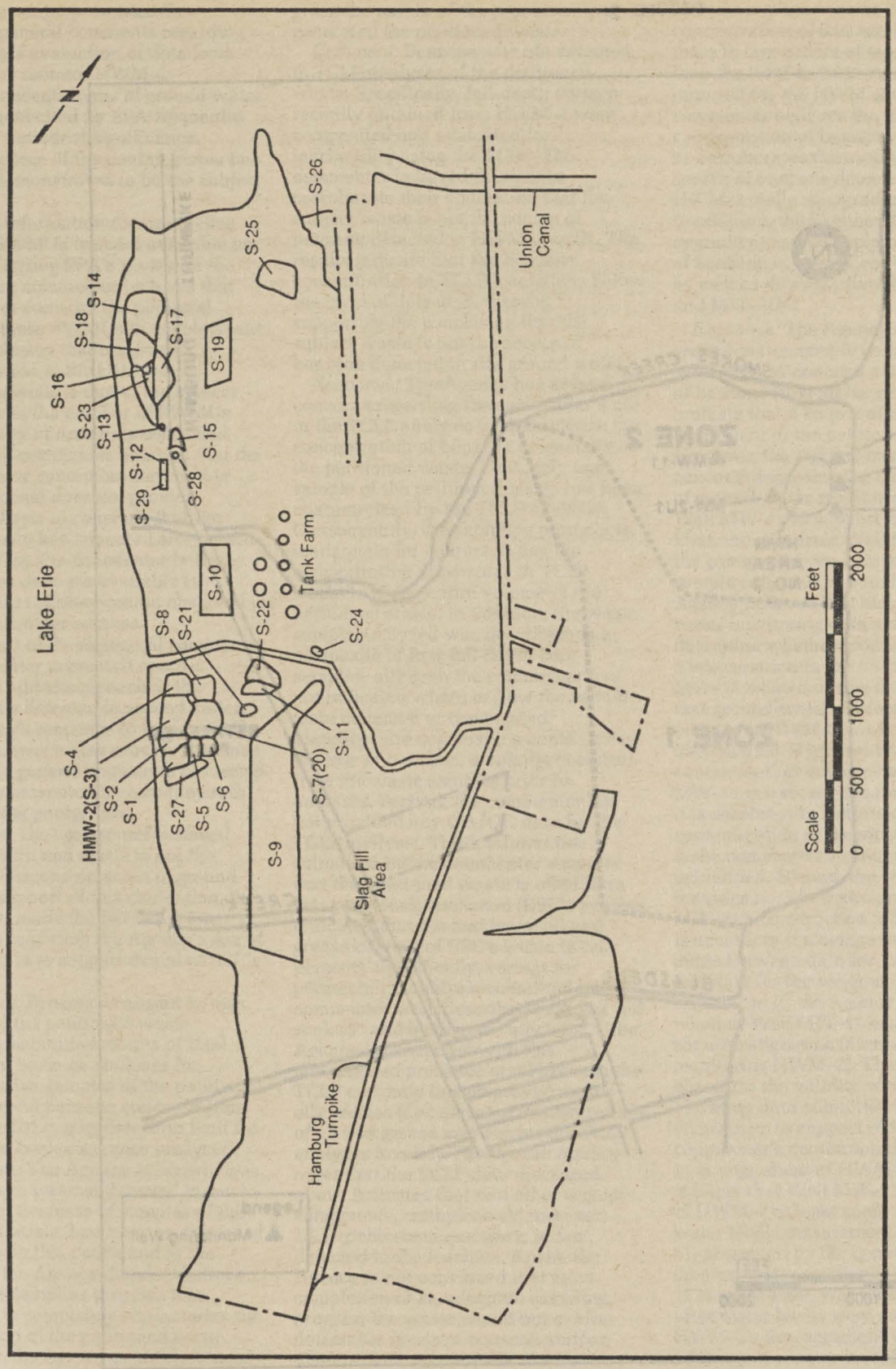
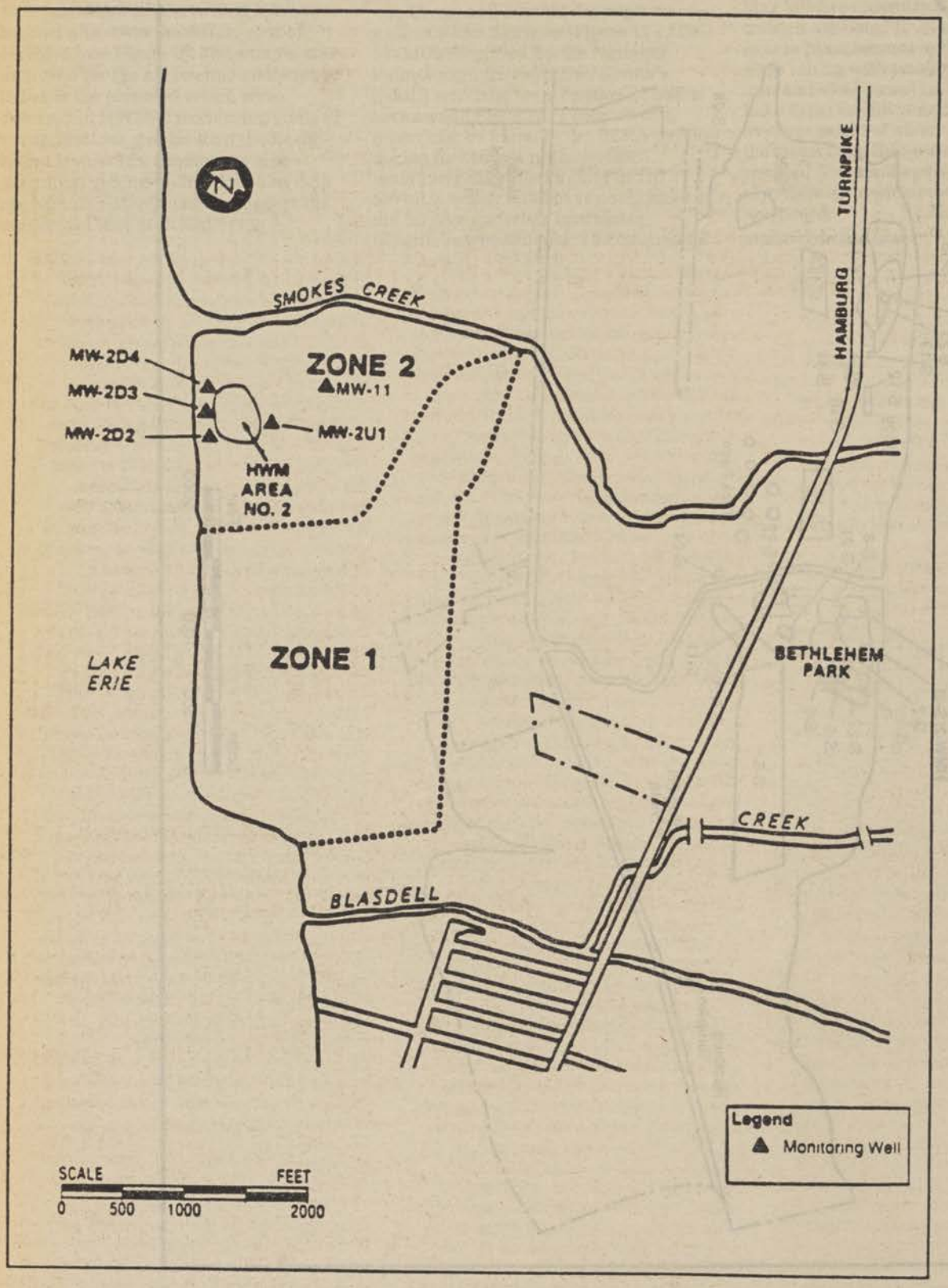

N
Lake Erie
S-4
HMW-2(S-3)
S-2
S-1
S-27
S-5
S-6
S-8
S-21
S-10
S-22
S-9
S-7(20)
S-11
S-24
Tank Farm
Slag Fill Area
Hamburg Turnpike
S-29
S-12
S-28
S-15
S-13
S-23
S-16
S-18
S-14
S-17
S-19
S-25
S-26
Union Canal
Scale
0
500
1000
2000
Feet

FIGURE 2



29

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The commenter presented the following general comments regarding the Agency's evaluation of data from wells which monitor HWM-2:

1. The concentrations of ground-water contaminants cited by EPA frequently are not of statistical significance.

2. The source of the contaminants has not been demonstrated to be the subject waste.

3. Since information regarding Slag Fill Area SWMUs was not available nor requested during EPA's review of the petition, the commenter believes that EPA did not consider the potential impact of these SWMUs in development of its conclusion that observed contamination in the HWM-2 monitoring wells is due to the subject waste. Given the number of SWMUs and diversity of materials contained therein, the commenter believes that the ground-water contamination cited in EPA's proposal does not provide sufficient basis to conclude that the subject waste has impacted site ground water. In fact, the commenter believes that enough data are available to conclude that contamination observed is indeed from other sources.

In support of these general comments, the commenter presented specific comments addressing each of the constituents detected in ground water. The Agency's response to these specific comments, which also provide response to the three general comments discussed above, are presented by constituent in the following paragraphs.

Benzene. The commenter believed that the petitioned waste is not the source of benzene detected in ground water. In support of this contention, the commenter made the following four assertions regarding the Agency's use of benzene data to support denial of BSC's petition.

Comment: Benzene is absent in bulk samples of the petitioned waste. Previously submitted results of total constituent benzene analyses for representative samples of the petitioned waste showed benzene concentrations below the 0.01 mg/kg detection limit for each of the twelve samples analyzed.

Response: The Agency acknowledges that benzene was not detected in total constituent analyses of samples of the petitioned waste; however, as discussed previously in this notice and in the proposal, the Agency does not believe that BSC's sampling program was adequate to completely characterize the composition of the petitioned waste. Therefore, the Agency is not convinced that upon completion of an adequate sampling program the waste would not exhibit detectable levels of benzene, given the nature of the processes that generated the petitioned waste.

Comment: Benzene was not detected in TCLP analyses of the petitioned waste. Specifically, full-depth corings recently obtained from HWM-2 were composited and evaluated for leachability using the TCLP. The commenter believed these data corroborate their contention that the subject waste is not the source of benzene detected in HWM-2 wells. The results indicate that the benzene concentration in TCLP leachate is below the level of detection, thereby supporting the conclusion that the subject waste is not the source of benzene detected in site ground water.

Response: The Agency has several concerns regarding the commenter's use of the TCLP analysis to characterize the concentration of benzene in leachate of the petitioned waste. First, only one sample of the petitioned waste has been characterized by the TCLP analysis. Consequently, the sampling protocol is inadequate for characterizing the concentration of benzene in TCLP leachate of the entire volume of the petitioned waste. In addition, the waste sample analyzed was described as a composite of four full-depth core samples, although the commenter has not indicated where or how the samples were collected or composited. Inappropriate compositing could cause the loss of benzene, a volatile chemical, from the waste samples prior to analyses. Second, the commenter has not provided any QA/QC data for the TCLP analysis. Third, information submitted by the commenter suggests that the petitioned waste is oilier than was previously indicated (BSC's petition indicated that the maximum oil and grease content of BSC's waste is 0.93 percent). Specifically, corings for permeability analysis submitted by the commenter were described as being "oil soaked" and having an "oily odor". The Agency is concerned with this unexplained presence of oil because the TCLP currently has no provisions for oily wastes (*i.e.*, elevated concentrations of oil and grease may render the TCLP analyses invalid). Finally, the Agency notes that the TCLP data discussed above indicates that two other organic compounds, methylene chloride and 1,1,1-trichloroethane, were, in fact, detected in the leachate. Again, the Agency is not convinced that upon completion of an adequate sampling program the waste would not exhibit detectable levels of benzene and/or other organic compounds.

Comment: Well MW-11 exhibits elevated levels of benzene. Data recently obtained from Well MW-11 indicate a ground-water benzene concentration of 0.99 mg/L, which is three to four orders of magnitude higher than the 0.005 to 0.039 mg/L values reported for the HWM-2 wells. The commenter believes the elevated concentration of benzene in Well MW-11 corroborates the assertion that the source of benzene detected in the HWM-2 wells is upgradient of HWM-2. In addition, the likelihood of an upgradient source explains the presence of benzene in upgradient Well MW-2U1 as well as downgradient Wells MW-2D3 and MW-2D4.

Response: The Agency agrees that the ground-water sample collected from Well MW-11 contains a concentration of benzene (0.99 mg/L) which might indicate that a source of benzene exists upgradient of the petitioned waste. However, the Agency has several concerns regarding the commenter's use of ground-water monitoring data from Well MW-11 to support this assertion. First, the data from Well MW-11 that the commenter presents are from a sample collected in March 1989. The Agency believes that historical ground-water monitoring data are necessary to determine whether ground-water contamination in the vicinity of Well MW-11 existed during the period of time that ground-water contamination in the vicinity of HWM-2 has been documented. If ground-water contamination in the vicinity of Well MW-11 is a recent occurrence, such that it is unrelated to historic ground-water contamination in the vicinity of HWM-2, the commenter's concerns are unjustified. Second, the commenter provides no information concerning MW-11's construction. This information is necessary if a comparison is to be made between data for Well MW-11 and data for the wells monitoring HWM-2 (*e.g.*, the Agency needs to know whether Well MW-11 is monitoring the same stratigraphic interval as the wells monitoring HWM-2). Third, the Agency questions the validity of water level elevation data submitted by the commenter in support of the commenter's contention that Well MW-11 is upgradient of HWM-2. Although it is likely that Well MW-11 is upgradient of HWM-2 at least some of the time, the water level measurement for Well MW-11, presented by the commenter to confirm their assertion that Well MW-11 is upgradient, was made five days after water levels were measured in HWM-2's downgradient wells. (In addition, the water level for HWM-2's designated upgradient well was measured the day following the downgradient well measurements.) It is

inappropriate, particularly in a case such as BSC's where ground-water flow direction is expected to fluctuate as a result of influence from Lake Erie, to compare water levels measured five days apart. Fourth, the commenter fails to present March 1989 benzene data for the four wells which monitor HWM-2. These data are necessary to assist in evaluating the relationship between Well MW-11 and the wells that monitor HWM-2. Similarly, the commenter provides only results of the analysis of the MW-11 sample for the six organic contaminants detected in ground water collected from HWM-2 wells. A complete set of analytical data for Well MW-11 is necessary to make a correlation between data from Well MW-11 and data from HWM-2 monitoring wells.

The Agency agrees that data from Well MW-11 suggest that benzene detected in designated upgradient Well MW-2U1 may result from a contaminant source upgradient of HWM-2; however, concentrations of benzene reported in ground-water samples collected from the wells designated as downgradient of HWM-2 have contained higher concentrations of benzene than Well MW-2U1. If, as the commenter suggests, benzene contamination is originating from a source upgradient of HWM-2, the Agency would expect HWM-2's upgradient well to contain greater concentrations of benzene than the downgradient wells, since the upgradient well is closer to Well MW-11, the location of the elevated benzene concentrations. Since samples collected from wells downgradient of HWM-2 have contained benzene concentrations greater than that reported for Well MW-2U1, the Agency believes there is sufficient basis to conclude that wastes contained in HWM-2 may be contributing to the benzene contamination of the ground water. In addition, as stated in the proposal, the upgradient well's close proximity to the landfill, the low hydraulic gradient across the landfill, and fluctuations in ground-water flow caused by nearby lake Erie, suggest that the upgradient well could also intercept flow from the petitioned unit. Thus, the contamination observed in the upgradient well may result from migration of constituents from the landfill.

Comment: Elevated benzene levels detected in TCLP leachate generated from samples from three other Slag Fill Area SWMUs provide sufficient evidence to demonstrate that the low levels of benzene contamination observed in the HWM-2 monitoring wells are not due to the petitioned waste. TCLP leachate benzene concentrations reported for SWMUs S-5 (0.110 mg/L, approximately 150 feet southeast of HWM-2) and S-11/S-22 (36.0 mg/L, approximately 1000 feet northeast of HWM-2) support the conclusion that benzene contamination observed in HWM-2 wells is not the result of the petitioned waste.

Response: As discussed previously in today's notice, the Agency is concerned with the adequacy of the sampling protocol used to collect the samples for TCLP analysis, the omission of appropriate QA/QC data, and the reported "oily" nature of the waste. In addition, the Agency does not believe that the presence of benzene in TCLP leachates generated from samples collected from SWMUs located in the vicinity of HWM-2 is sufficient basis to disregard the petitioned waste as a potential source of benzene contamination. The Agency also disagrees with the commenter that the levels of benzene contamination reported in wells that monitor HWM-2 are "low." The highest concentration of benzene reported in a well that monitors HWM-2 is 0.041 mg/L (11/6/87), a value which is over eight times the delisting health-based level (0.005 mg/L). Finally, while the TCLP data suggest that other sources of benzene contamination may exist at the BSC facility, the commenter did not provide any conclusive data to demonstrate that the petitioned unit is not contributing to contamination of the ground water.

Phenanthrene, Anthracene, and Fluorene. The commenter believed that phenanthrene, anthracene, and fluorene in ground water may originate from other Slag Fill Area SWMUs, particularly those used for management of tar wastes. Although specific data from BSC's recent SWMU characterization program were not available for these constituents, the commenter made the following two assertions regarding the Agency's use of phenanthrene, anthracene, and fluorene data to support denial of BSC's petition.

Comment: The presence of other tar constituents (such as pyridine, benzene, and toluene) in TCLP leachate from SWMUs S-11 and S-22 support the contention that the source of tar constituents detected in ground water is upgradient of HWM-2. Moreover, the existence of upgradient SWMUs helps explain the fact that phenanthrene, anthracene, and fluorene were detected in upgradient well MW-2U1 as well as downgradient wells MW-2D2, MW-2D3, and MW-2D4.

Response: The Agency does not believe that the presence of pyridine, benzene, and toluene in TCLP leachate from SWMUs S-11 and S-22 in any way demonstrates that phenanthrene, anthracene, and fluorene could not have migrated from the petitioned waste to ground water. First, BSC never analyzed the petitioned waste for either phenanthrene, anthracene, or fluorene; therefore, there does not exist adequate basis for concluding that phenanthrene, anthracene, or fluorene are not present in the petitioned waste (also see the Agency's response to the comment that follows). Second, the commenter has not provided the Agency with the phenanthrene, anthracene, or fluorene concentrations in wastes contained in SWMUs located in the vicinity of HWM-2. Third, the commenter has not provided the Agency with ground-water monitoring information which demonstrates that phenanthrene, anthracene, or fluorene are present in ground water upgradient of the petitioned unit. In fact, phenanthrene, anthracene, and fluorene were undetected in the ground-water sample recently collected from Well MW-11. Fourth, although SWMUs S-11 and S-22 might be hydraulically upgradient of HWM-2, the commenter has presented no hydrogeologic information confirming that hydraulic connection between these units exists. Lastly, as explained previously in this notice, the Agency believes that water level data indicate that ground-water contamination observed in the designated upgradient well may result from migration of constituents from the landfill.

Comment: Phenanthrene, anthracene, and fluorene are not reasonably expected to have occurred in the petitioned waste. The commenter believed that during the tar recovery process, phenanthrene, anthracene, and fluorene, because of their high molecular weights and high boiling points, would have tended to remain in the tar portion of the system. Consequently, phenanthrene, anthracene, and fluorene would not be present in the aqueous portion of the system which, ultimately, is the material which is routed to the ammonia stills. The commenter believed that the fact that phenanthrene, anthracene, and fluorene "are not listed as cause for concern" in the background listing document for K060 supports their contention. In addition, although BSC has not been required to provide waste sampling data for phenanthrene, anthracene, and fluorene, BSC has analyzed the petitioned waste for other PAHs (*i.e.*, naphthalene, benzo(a)pyrene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene). Concentrations of all of the

higher molecular weight PAHs (benzo(a)pyrene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene) were consistently reported to be below the 0.010 mg/kg detection limit in samples of the petitioned waste. The commenter believed that given their relatively high molecular weights, phenanthrene, anthracene, and fluorene should also not be expected to originate from the petitioned waste, despite their detection in HWM-2 monitoring wells.

Response: Although phenanthrene, anthracene, and fluorene may not be expected to occur in ammonia still lime sludge, the commenter has not provided information that demonstrates that these constituents are not expected to occur in the other wastes which comprise approximately 98 percent of the petitioned waste. In addition, because the tar fraction of the coke oven gas is in contact with the weak ammonia liquor (WAL) fraction while the coke oven gas is being cooled and before decanting occurs, the Agency believes that higher molecular weight and higher boiling point constituents could be derived from the ammonia still lime sludge portion of the waste, particularly if at any time in the past the separation process was operated inefficiently. The fact that (benzo(a)pyrene, identified by the commenter as a high molecular weight, high boiling point constituent, has been detected in the petitioned waste, confirms the Agency's belief. Although the commenter claimed that benzo(a)pyrene has not been detected in the petitioned waste, BSC reported to the Agency the results of the analysis of six waste samples in which benzo(a)pyrene was detected (see the petitioner's November 19, 1984 submittal in the RCRA public docket for the proposed rule). As the commenter noted, naphthalene, a PAH with a molecular weight similar to those of phenanthrene, anthracene, and fluorene, has also been detected in the petitioned waste (see the RCRA public docket for the proposed rule for a copy of the results of samples collected in April, 1984).

Barium. The commenter claimed that EPA's concern regarding barium concentrations in ground water does not justify petition denial. The commenter made the following specific comments regarding the Agency's use of barium data to support denial of BSC's petition.

Comment: The Agency's use of barium data ignores the fact that actual waste data exhibit leachate concentrations well below the delisting health-based level. EP toxicity test data submitted July 18, 1984 and April 16, 1985 indicate leachable barium concentrations ranging from 0.24 to 0.645 ppm, all of which are below the 1.0 mg/L (ppm) National Interim Primary Drinking Water Standard.

Response: As presented in the proposal, the maximum EP leachate concentration of barium in samples of the petitioned waste was, in fact, higher than the range presented in the petitioner's comment (1.48 ppm, middle sample #7, March, 1984). Therefore, the Agency does not agree that leachable barium levels are below the 1.0 mg/L (ppm) drinking water standard.

Comment: The Agency's use of barium data ignores the fact that waste data exhibit VHS model-predicted compliance-point concentrations well below the delisting health-based level. EPA's own application of the conservative VHS model predicts worst-case barium compliance point concentrations to be only 0.23 mg/L, a concentration below the health-based level used in delisting decision-making.

Response: As stated previously in this notice, the Agency uses VHS model results in conjunction with actual ground-water monitoring data to fully evaluate (not to verify) the impacts of the disposal of BSC's waste. Because of the differences between the hypothetical VHS landfill and BSC's landfill, the Agency recognizes that the calculated compliance-point concentrations for barium in BSC's waste would not necessarily correspond directly with ground-water monitoring data.

Comment: EPA does not consider the complete ground-water monitoring database available and relies on data from a single nearly four-year-old sampling event. Thorough review of the complete ground-water monitoring database for the HWM-2 wells reveals that the June 1985 barium values reported in the proposal are anomalies or erroneous and actual barium levels in site ground water are considerably lower. Barium concentrations for all but one of the 43 barium values reported during the eleven sampling rounds for barium to date are below the 1.0 mg/L drinking water standard currently in effect. The averages and upper confidence limits for each well are also below the current 1.0 mg/L drinking water standard. In addition, barium values from subsequent sampling rounds are consistently lower than the June 1985 values.

Response: The commenter did not provide any information (e.g., appropriate laboratory or field reports) to demonstrate that any of the barium values detected in ground water are erroneous. Furthermore, the Agency disagrees with the commenter's method for concluding that the barium value which exceeds the health-based level is erroneous and/or anomalous. The statistical analysis employed by the commenter defines the interval within which the true mean of the barium concentrations will fall with a specified confidence (in the commenter's case, 95 percent). The Agency, in its evaluation of delisting petitions, recognizes that ground-water data exhibit natural variation, and does not consider the mean of the ground-water data to be representative of the true potential impact of the waste on the environment.

For the purposes of delisting, detection of a hazardous constituent in ground water at a concentration exceeding the health-based level is regarded as basis for concern. Therefore, for the purposes of delisting, constructing tolerance intervals would be a more appropriate statistical analysis of the barium data. Tolerance limits will estimate the interval within which a specified proportion of the barium concentration measurements will fall with a given degree of confidence.

The Agency constructed tolerance intervals for the monitoring well data presented by the commenter. The tolerance intervals were constructed to contain 95 percent of the barium data with 95 percent confidence. The upper limit of the tolerance interval calculated for each of the monitoring wells was as follows: MW-2U1, 1.072 ppm; MW-2D2, 1.312 ppm; MW-2D3, 1.006 ppm; and MW-2D4, 1.332 ppm. Because each of these values exceeds the delisting health-based level for barium (1.0 ppm), more that 5 percent of the barium concentration measurements for the HWM-2 monitoring wells would be expected to exceed the delisting health-based level for barium. (For further information, see "Statistical Analysis of Ground-water Monitoring Data at RCRA Facilities—Interim Final Guidance," April 1989; statistical calculations used to determine the upper limit of the tolerance interval for BSC's barium data are located in the RCRA public docket for today's notice.)

Comment: The results for the sampling rounds in which the higher barium concentrations were reported are based on the analyses of unfiltered ground-water samples. Since the samples were not filtered prior to analysis, the commenter believes the reported barium concentration is biased upward by the relatively high concentrations of suspended solids in the HWM-2 wells. (The commenter reported that the concentration of suspended solids in the HWM-2 wells was occasionally greater than 100 mg/

L). The commenter believes that consequently the true mobile barium concentrations in HWM-2 ground water are likely to be less than the values obtained from analysis of unfiltered samples. The commenter notes that the eight most recent sampling rounds (two for dissolved barium and six for total barium conducted over a nearly 4-year period) indicate that barium concentrations are well below levels of regulatory concern.

Response: The Agency requests that petitioners submit total (unfiltered) metals results for ground-water samples. For the purposes of the delisting program, the Agency considers filtering samples prior to acid preservation to be an unacceptable technique. (See Superfund Ground-Water Issue—Ground Water Sampling for Metals Analyses in the RCRA public docket for today's notice.) Consequently, the Agency does not intend to disregard results of barium analyses performed on unfiltered ground-water samples.

1,1-Dichloroethane. The commenter believed that 1,1-dichloroethane detected in ground-water collected from well monitoring HWM-2 is the result of an upgradient source, and does not believe that detection of 1,1-dichloroethane in ground-water samples collected from HWM-2 wells provides sufficient basis to conclude that the petitioned waste contains leachable 1,1-dichloroethane. Although the recently conducted tests on wastes from slag fill area SWMUs provide no data on 1,1-dichloroethane leachate concentrations exhibited by other on-site wastes, the commenter made the following assertions in support of their conclusion that the petitioned waste is not the source of 1,1-dichloroethane reported in wells that monitor HWM-2.

Comment: 1,1-Dicholorethane is not expected to be present in ammonia still lime sludge because (1) it is a chlorinated solvent, and (2) it is not expected in cokemaking wastes, based on the list of toxic pollutants used for the development of effluent limitation guidelines and standards for the Coke Making Subcategory of the Iron and Steel Industry.

Response: Although 1,1-dichloroethane may not be expected to occur in ammonia still lime sludge, the commenter has not provided information that demonstrates that 1,1-dichloroethane is not expected to occur in the other wastes which comprise approximately 98 percent of the petitioned waste. Consequently, the Agency believes that because BSC has not analyzed the petitioned waste for 1,1-dichloroethane, there is no basis for concluding that 1,1-dichloroethane is not present in the petitioned waste (also see the Agency's response to the following comment).

Comment: There exist a number of SWMUs in the slag fill area. In addition, when detected, 1,1-dichloroethane has been found in upgradient as well as downgradient wells. The likelihood of an upgradient source helps explain the 1,1-dichloroethane concentrations detected in wells upgradient and downgradient of HWN-2. In addition, recent analysis of a ground-water sample collected from Well NW-11 indicates a 1,1-dichloroethane concentration of 4.3 mg/L. This value is three orders of magnitude higher than the concentrations detected in the HWM-2 wells and supports the beliefs that the source of 1,1-dichloroethane is not the petitioned waste.

Response: The Agency agrees that it is possible that 1,1-dichloroethane contamination detected in wells which monitor HWN-2 may originate from a source other than the petitioned waste. However, the Agency does not believe sufficient data exist to demonstrate that the petitioned waste has not contributed to the 1,1-dichloroethane contamination detected in ground water collected from HWN-2 wells. First, BSC has not analyzed the petitioned waste for 1,1-dicholorethane. Second, BSC has not provided the Agency with either adequate ground-water monitoring information collected upgradient of HWN-2, or waste analysis data for SWMUs located in the vicinity of HWN-2, that demonstrate that 1,1-dichloroethane originates from an upgradient source. Third, as explained previously in this notice, the Agency believes that, as a result of fluctuations in ground-water flow direction, ground-water contamination observed in the designated upgradient well may result from migration of constituents from the landfill.

2,4,6-Trichlorophenol. The commenter believes that 2,4,6-trichlorophenol concentrations reported in ground water samples collected from HWN-2 monitoring wells are not reflective of leaching characteristics of the petitioned waste. The commenter made the following comments regarding the Agency's use of 2,4,6-trichlorophenol data to support denial of BSC's petition.

Comment: The statistical basis for the Agency's use of 2,4,6-trichlorophenol data to support denial of BSC's petition is questionable. The statistical validity of values reported at the detection limit does not provide sufficient basis for concluding that hazardous constituents are present at levels of concern. The agency has ignored 2,4,6-trichlorophenol data which indicate that 2,4,6-trichlorophenol concentrations have consistently been below detection in all but the June 6, 1986 sampling round cited by EPA.

Response: The commenter has not provided any statistical analysis to support its contention that values reported at the detection limit are not statistically valid, thus, the Agency continues to believe that the concentrations reported at the detection limit indicate that the petitioned waste may be contributing to ground-water contamination. Furthermore, the commenter has not provided any information (*e.g.*, appropriate laboratory or field reports) which demonstrates that the values reported at the detection limit are in error. Consequently, the Agency believes that the 2,4,6-trichlorophenol data represent the true concentrations of 2,4,6-trichlorophenol in ground water. The Agency is concerned that levels of 2,4,6-trichlorophenol may in fact be present in ground water at concentrations above health-based levels, but at or somewhat below the reported detection limits. Because the delisting process is intended for those wastes which clearly do not pose a hazard to human health or the environment, the Agency believes that evidence that a waste may have caused ground-water contamination supports denial of a petition. However, as noted previously, the Agency will consider demonstrations that ground-water monitoring data for wells which monitor the unit in which a petitioned waste is managed do not represent the actual impact of the petitioned waste on ground-water quality. Data submitted by petitioner which indicate that 2,4,6-trichlorophenol concentrations have been below detection in all but the June 6, 1986 sampling round do not constitute an adequate demonstration.

Comment: The commenter maintains that recently available TCLP data for the petitioned waste indicate that 2,4,6-trichlorophenol concentrations in the TCLP leachate are below the level of detection.

Response: The Agency presented its concerns regarding TCLP analyses of the petitioned waste previously in this notice.

f. Petition Completeness

Comment: One commenter, noting the Agency's statement at 54 FR 14106 that "the sampling and analysis program conducted in support of the petition (is) incomplete", complained that the petitioner supplied information in good faith. In addition, the commenter explained that although EPA's petition requirements have changed

substantially since the original submission, the petitioner has been and is willing to work with EPA to develop information needed for a comprehensive characterization of the waste.

Response: The Agency acknowledges that BSC responded in good faith to delisting information requests. However, regardless of BSC's willingness to supply additional information, at this time EPA firmly believes that the petitioned waste poses a threat to human health and the environment based on the Agency's evaluation of waste composition data and ground-water monitoring data submitted to date. Furthermore, the Agency maintains that BSC has not provided a convincing demonstration that the petitioned waste is not hazardous. The Agency believes that additional sampling and analysis to "complete" the existing petition will only serve to delay the same conclusion. The Agency notes, however, that BSC has the option to submit a new petition in the future that specifically addresses the concerns raised in the proposed rule (*i.e.*, the petition should contain a complete characterization of the petitioned waste and a demonstration that conclusively shows that the petitioned waste could not have contributed to existing ground-water contamination at the site). If a new petition is submitted, the Agency would evaluate both new and existing data to determine whether the petitioned waste has posed, or may potentially pose, a threat to human health or the environment. At that time also, the Agency would determine whether the new data sets are sufficiently comprehensive and of sufficient quality to justify discarding older data sets.

Comment: One commenter believed that BSC dutifully attempted to" meet EPA's evolving delisting requirements and that they should be given the opportunity to submit additional information to complete the petition. The commenter stated further that the Agency's denial of BSC's petition should not be based on incomplete information especially if the incomplete information would be considered inadequate to support an exclusion.

Response: The agency does not believe that it is necessary to require a petitioner to submit a "complete" petition if the available information in an incomplete petition is sufficient to demonstrate that the petitioned waste is a hazardous waste. To do so would place an unnecessary expense and burden on the petitioning facility. For example, the Agency believes that it would be unreasonable to require a facility to provide extensive analytical results for hazardous organic constituents if the petitioned waste was already shown to exhibit significant levels of chromium and cadmium. Furthermore, the Agency believes that there is a fundamental difference between a petition that is denied and one that is granted. A petitioned waste that is denied an exclusion must continue to be handled as a hazardous waste, therefore, the absence of information in the petition will not impact the ultimate fate of the waste. A petitioned waste not impact the ultimate fate of the waste. A petitioned waste that is delisted, however, is removed from subtitle C regulation. Thus, it is imperative that a petition for a waste likely to be excluded contain all necessary information concerning hazardous constituents that exist or may exist in the petitioned waste, pursuant to 40 CFR 260.22, so that the Agency can effectively evaluate the potential hazards of the petitioned waste.

Comment: One commenter expressed concern that the Agency failed to inform BSC, until the proposed rule, that at least 23 composite samples should be collected from the 5.4 acre landfill as part of a complete demonstration. The commenter further noted that the Agency's mention of sampling requirements "long after the fact implies that BSC's delisting effort has been simply awaiting denial" despite repeated Agency requests for additional information.

Response: The Agency recognizes that BSC was not specifically instructed to collect 23 samples. However, BSC was informed at a meeting on July 17, 1987 (between BSC and EPA representatives) that the number of samples collected is inadequate to characterize the waste. Further, the Agency disagrees with the commenter's implication that the Agency unnecessarily collected information even though a denial decision had been reached. The Agency acknowledges that the petition review process has evolved over the past several years. During this time, the Agency provided notice of delisting criteria to the public in numerous ways. For example, on February 5 and 7, 1985, the Agency conducted two public hearings to discuss the recent changes to the delisting program as a result of HSWA, including the adoption of models in the delisting review process, requirements for submitting a petition, and special requirements for petroleum refinery and multiple waste treatment facilities. On May 28, 1985, the Agency published information regarding the availability of a guidance manual that would provide facilities with information on submitting a complete petition (see 50 FR 21607). Despite the Agency's efforts to educate the regulated community, BSC apparently was not informed or aware of standard delisting protocol. The Agency regrets this apparent oversight, but does not believe that it ultimately affects the final decision to deny BSC's petition because sufficient data exist that indicate that the petitioned waste is hazardous.

The Agency also notes that it will, as it has in past decisions, consider sampling strategies that deviate from the recommended standard protocol. In BSC's case, however, the Agency believed that it was appropriate to discuss the inadequacies of the sampling procedures in the proposed rule particularly in light of the large volume of petitioned waste and the lack of analytical data available to characterize the entire content of the petitioned landfill. Had the Agency not discussed BSC's sampling procedures, other potential petitioners or BSC themselves might have wrongly concluded that the sampling procedures were adequate. Finally, the Agency wishes to note that its request for information throughout the evaluation of BSC's petition was consistent with the need to obtain necessary information about the petitioned waste.

Comment: One commenter expressed concern that the Agency, in the proposed denial of BSC's petition, regarded BSC's "indicator approach" (for evaluating the presence of hazardous organic constituents) as insufficient. Specifically, the commenter explained that the Agency reviewed BSC's sampling and analysis plan, which included the "indicator approach," and subsequently indicated Agency concurrence by requesting analytical data for an additional three hazardous constituents.

Response: The Agency recognizes that the commenter may be correct in inferring that the Agency had ample opportunities to comment on the "indicator approach." The Agency also recognizes that at one time EPA staff may have suggested to BSC that this approach might be adequate. Nevertheless, after re-evaluation of this approach, and the analytical data submitted for the "indicator" constituents, the Agency maintains its position regarding the inadequacies of BSC's indicator approach (see 54 FR 14107 for more details). HSWA required the Agency to consider, during its review of petitioned wastes, any factors (including additional constituents) which could potentially cause a

petitioned waste to be hazardous. The Agency believes that its evaluation of the adequacy of BSC's indicator approach is consistent with the HSWA requirement to consider other factors. Specifically, in BSC's case, the Agency does not believe that the "indicator approach" completely demonstrated that other hazardous constituents are not present in the petitioned waste below levels of concern. Furthermore, the Agency believes that, regardless of whether it concurred in the past or now concurs with BSC's indicator approach, the petitioner has not demonstrated that the petitioned waste is not hazardous.

Comment: One commenter noted that, although the Agency claimed that a more complete characterization of the petitioned waste might demonstrate the presence of additional hazardous constituents, the opposite may be the case. Specifically, the commenter explained that additional analyses may demonstrate that the petitioned waste does not contain hazardous levels of additional constituents, including those detected in the ground water. The commenter further claimed that the following information is available to support this type of demonstration: (1) the demonstrated existence of solid waste management units in the vicinity of BSC's landfill—units which may have received wastes containing hazardous constituents; (2) available TCLP data that indicate that the wastes contained in these solid waste management units may be the source of organic constituents present in ground water; and (3) ground-water monitoring data that indicate contamination in monitoring wells upgradient of the petitioned unit.

Response: The Agency, of course, recognizes that additional characterization of the petitioned waste may support BSC's claim that the petitioned waste is not hazardous. However, as discussed previously in today's notice, BSC neither provided a complete characterization of the petitioned waste nor a demonstration that conclusively shows that the petitioned waste could not have contributed to existing ground-water contamination at the site. Without these demonstrations, the Agency believes that it is appropriate to finalize its decision to deny BSC's petition. In addition, BSC's former waste management practices, as reflected in the number of solid waste management units in the vicinity of the petitioned landfill, only heighten EPA's concern regarding possible unidentified contaminants in the petitioned waste. Furthermore, the TCLP data submitted by the same commenter, as noted earlier, suggests that other constituents (*i.e.*, methylene chloride and 1,1,1-trichloroethane) are, in fact, present in the waste. The Agency maintains that the exact composition of the waste in the petitioned landfill as well as nearby solid waste management units is generally unclear.

3. Final Agency Decision

For the reasons stated in the proposal, the Agency believes that BSC's petitioned waste should not be excluded from hazardous waste control. The Agency, therefore, is denying Bethlehem Steel Corporation's petition for exclusion of its ammonia still lime sludge described in its petition as EPA Hazardous Waste No. K060 and contained in its landfill at its Lackawanna, New York facility. The effect of this rule is that this petitioned waste must continue to be handled as hazardous in accordance with 40 CFR parts 260 through 268 and the permitting standards of 40 CFR part 270.

III. Effective Date

This rule is effective immediately. The Hazardous and Solid Waste Amendments 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. That is the case here because this rule does not change the existing requirements for persons generating hazardous wastes. This facility has been obligated to manage its waste as hazardous before and during the Agency's review of its petition. Because a six-month deadline is not necessary to achieve the purpose of section 3010, EPA believes that the denial should be effective immediately. These reasons also provide a basis for making this rule effective immediately under the Administrative Procedure Act, pursuant to 5 U.S.C. 553(d).

IV. Regulatory Impact

Under Executive Order 12291, EPA must judge whether a regulation is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. The denial of this petition does not impose an economic burden on this facility because, prior to submitting and during the review of the petition, this facility should have continued to handle its waste as hazardous. The denial of this petition means that BSC must continue managing this waste as hazardous in a manner in which it has been doing, economically and otherwise. There is no additional economic impact, therefore, due to today's rule. This rule is not a major regulation, therefore, no Regulatory Impact Analysis is required.

V. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601–612, whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis which describes the impact of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The Administrator or delegated representative may certify, however, that the rule will not have a significant economic impact on a substantial number of small entities.

This amendment does not have a significant adverse economic impact on small entities. The facility included in this notice does not constitute a small entity. Accordingly, I hereby certify that this regulation will not have a significant economic impact on a substantial number of small entities. This regulation, therefore, does not require a regulatory flexibility analysis.

VI. Paperwork Reduction Act

Information collection and recordkeeping requirements associated with this final rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96–511, 44 U.S.C. 3501 *et. seq.*) and have been assigned OMB Control Number 2050–0053.

List of Subjects in 40 CFR Part 261

Hazardous materials, Waste management and disposal, Recycling.

Authority: Sec. 3001(f) RCRA, 42 U.S.C. 6921(f).

Dated: August 6, 1991.

Don R. Clay,

Assistant Administrator, Office of Solid Waste and Emergency Response.

[FR Doc. 91–19759 Filed 8–23–91; 8:45 am]

BILLING CODE 6560-50-M

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40 CFR Parts 271 and 272

[FRL-3987-2]

Louisiana; Final Authorization of State Hazardous Waste Management Program Agency

AGENCY: Environmental Protection Agency.

ACTION: Immediate final rule.

SUMMARY: The State of Louisiana has applied for final authorization of revisions to its hazardous waste

program under the Resource Conservation and Recovery Act (RCRA). The Environmental Protection Agency (EPA) has reviewed the State of Louisiana's application and has made a decision, subject to public review and comment, that Louisiana's hazardous waste program revision satisfies all of the requirements necessary to qualify for final authorization. Thus, EPA intends to approve Louisiana's hazardous waste program revisions, subject to the authority retained by EPA in accordance with the Hazardous and Solid Waste Amendments of 1984. Louisiana's application for program revision is available for public review and comment.

Final authorization for State of Louisiana shall be effective on August 26, 1991, unless EPA publishes a prior **Federal Register** action withdrawing this immediate final rule. All comments on Louisiana's program revision application must be received by the close of business September 25, 1991.

ADDRESSES: Copies of the Louisiana program revision application and the materials which EPA used in evaluating the revision are available from 8:30 a.m. to 4 p.m., Monday through Friday at the following addresses for inspection and copying: Louisiana Department of Environmental Quality, H.B. Garlock Building, 7290 Bluebonnet Street, Baton Rouge, Louisiana 70810, phone (504) 765-0232, U.S. EPA, Region 6, Library, 12th Floor, First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, Dallas, Texas 75202, phone (214) 655-6444; and U.S. EPA, Headquarters, Library, PM 211A, 401 M Street SW., Washington, DC 20460. Written comments, referring to Docket Number LA-91-1, should be sent to the Louisiana Project Officer, Grants and Authorization Section (6H-HS), RCRA Programs Branch, U.S. EPA, Region 6, First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, Dallas, Texas 75202, phone (214) 655-6760.

FOR FURTHER INFORMATION CONTACT: Dick Thomas, Grants and Authorization Section, RCRA Programs Branch, U.S. EPA Region 6, First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, Dallas, Texas 75202, phone (214) 655-6760.

SUPPLEMENTARY INFORMATION:

A. Background

States with final authorization under section 3006(b) of the Resource Conservation and Recovery Act ("RCRA or the Act"), 42 U.S.C. 6926(b), have a continuing obligation to maintain a hazardous waste program that is equivalent to, consistent with, and no less stringent than the Federal hazardous waste program. In addition, as an interim measure, the Hazardous and Solid Waste Amendments of 1984 (Pub. L. 98-616, November 8, 1984, hereinafter "HSWA") allow States to revise their programs to become substantially equivalent instead of equivalent to RCRA requirements promulgated under HSWA authority. States exercising the latter option receive "interim authorization" for the HSWA requirements under section 3006(g) of RCRA, 42 U.S.C. 6926(g), and later apply for final authorization for the HSWA requirements.

Revisions to State hazardous waste programs are necessary when Federal or State statutory or regulatory authority is modified or when certain other changes occur. Most commonly, State program revisions are necessitated by changes to EPA's regulations in 40 CFR parts 260-266, 268 and 124 and 270.

B. Louisiana

Louisiana initially received final authorization on February 7, 1985 (See 50 FR 3348) to implement its base hazardous waste management program. Louisiana received authorization for revisions to its program on January 29, 1990 (See 50 FR 4889). On October 28, 1990, Louisiana submitted a complete program revision application for additional program approvals. Today, Louisiana is seeking approval of its program revision in accordance with § 271.21(b)(3).

EPA has reviewed the State of Louisiana's application, and has made an immediate final decision that Louisiana's hazardous waste program revision satisfies all of the requirements necessary to qualify for final authorization. Consequently, EPA intends to grant final authorization for the additional program modifications to Louisiana. The public may submit written comments on EPA's final decision up until September 25, 1991. Copies of Louisiana's application for program revision are available for inspection and copying at the locations indicated in the "Addresses" section of this notice.

Approval of Louisiana's program revision shall become effective in 60 days unless an adverse comment pertaining to the State's revision discussed in this notice is received by the end of the comment period. If an adverse comment is received, EPA will publish either (1) a withdrawal of the immediate final decision or (2) a notice containing a response to comments which either affirms that the immediate final decision takes effect or reverses the decision.

The Louisiana program revision application includes State regulatory changes that are equivalent to the rules promulgated in the Federal RCRA implementing regulations in 40 CFR parts 260 through 266, and 270 that were published in the **Federal Register** (FR) through September 9, 1987. A provision that is not being proposed for approval at this time is § 3006(f), Availability of Information, requirements. That submission is being reviewed separately, at the request of the State. This proposed approval includes, therefore, only the provisions that are listed in the chart below. This chart lists the State analogs that are being recognized as equivalent to the appropriate Federal requirements.

Federal citation	State analog
1. Radioactive Mixed Waste requirements, July 3, 1986 (51 FR 24504)	Louisiana Revised Statutes (LRS) 30: 2153 (1); Louisiana Administrative Code (LAC) 33:V.109.
2. Liability Coverage—Corporate Guarantee, July 11, 1986 (51 FR 25350)	LRS 30: 2180 A(1)., LHWR Secs. 3715 A., B., G., as amended May 20, 1990, effective June 20, 1990; 3719 G., H., as amended May 20, 1990, effective June 20, 1990; 4411 A., B., as amended November 20, 1987, effective December 20, 1987; 4411 G. as amended May 20, 1990, effective June 20, 1990.

Federal citation	State analog
3. Standards for Hazardous Waste Storage and Treatment Tank Systems, July 14, 1986 (51 FR 25422) as amended August 15, 1986 (51 FR 29430).	LRS 30: 2180 A(1)., LHWR Secs. 109 as amended May 20, 1990, effective June 20, 1990; 517 as amended July 1990, effective August 20, 1990; 523 as amended March 1990, effective July 1990; 1109 E.1. as amended March 20, 1990, effective April 20, 1990; 1109 E.7.b.-c. as amended March 20, 1990, effective April 20, 1990; 1509 B. as amended November 20, 1987, effective December 20, 1990; 1529 C.2. as amended November 20, 1987, effective December 20, 1990; 1901 as amended November 20, 1987, effective December 20, 1987; 1903 A.-D., effective December 20, 1987; 1905 A.-G. as amended November 20, 1987, effective December 20, 1987; 1907 A.-G. as amended November 20, 1988, effective December 20, 1988; 1907 H. and I., effective December 20, 1987; 1909 A.-C. as amended November 20, 1987, effective December 20, 1987; 1911 A.-D. effective December 20, 1987; 1913 A.-F. effective December 20, 1987; 1915 A.-C. effective December 20, 1987; 1917 A. and B. effective December 20, 1987; 1919 A. and B. effective December 20, 1987; 3105.Table 1 as amended May 20, 1990, effective June 20, 1990; 3501 C. as amended November 20, 1987, effective December 20, 1987; 3701 B. effective March 20, 1984; 4303 as amended March 20, 1990, effective April 20, 1990; 4313 effective December 20, 1987; 4317 as amended November 20, 1987, effective December 20, 1987; 4357 as amended March 20, 1990, effective April 20, 1990; 4377 as amended March 1990, effective July 20, 1990; 4397 as amended August 1987, effective November 20, 1987; 4431 effective March 20, 1984; 4431 A.1. and 2. effective December 20, 1987; 4433 A.-D. as amended November 20, 1987, effective December 20, 1987; 4435 A.-G. as amended November 20, 1987, effective December 20, 1987; 4437 A.-I. as amended November 20, 1987, effective December 20, 1987; A. and B. as amended November 20, 1987, effective December 20, 1987; 4440 A.-C. effective December 20, 1987; 4441 A.-F. effective December 20, 1987; 4442 as amended March 20, 1989, effective April 20, 1989; 4443 as amended November 20, 1987, effective December 20, 1987; 4444 as amended March 20, 1989, effective April 20, 1989; 4445 effective March 20, 1984; 4901 E. as amended May 20, 1990, effective June 20, 1990.
4. Corrections to Listings of Commercial Chemical Products and Appendix VIII Constituents, August 6, 1986 (51 FR 28296).	LRS 30: 2180 A(1)., LHWR Secs. 4901.E. as amended March 1990, effective July 20, 1990; 3105 as amended September 1989, effective May 20, 1990.
5. Listing of Spent Pickle Liquor, as amended May 28, 1986 (51 FR 19320) and September 22, 1986 (51 FR 33612).	LHWR Sec. 4901 as amended July 1990, effective August 1990.
6. Revised Manual SW-846; Amended Incorporation by Reference, March 16, 1987 (52 FR 8072).	LRS 30: 2180 A(1)., LHWR Secs. 105 I.1. as amended through August 20, 1987.
7. Closure/Post-Closure Care for Interim Status Surface Improvement, March 19, 1987 (52 FR 8704).	LRS 30: 2180 A(1)., LHWR Secs. 4457 A.(1) and (2) and 4457 B., as amended June 20, 1989, effective July 20, 1989.
8. Definition of Solid Waste as amended April 11, 1985 (50 FR 14216) and August 20, 1985 (50 FR 33541) and June 5, 1987 (52 FR 21306).	LRS 30: 2153(1), LAC 33: V.109, LHWR Secs. 4901.D., as amended May 20, 1990, effective June 20, 1990; 4139 A.1(c), as amended May 20, 1989, effective June 20, 1989,
9. Amendment to part B Information Requirements for Disposal Facilities June 22, 1987 (52 FR 23447, as amended on September 9, 1987 (52 FR 33936).	LRS 30: 2180 A(1)., LHWR Secs. 517 T.4(e) and (f), as amended August 20, 1987, effective September 20, 1987.

The Louisiana program revision application includes State regulatory changes that are more stringent than the Federal RCRA regulations. Federal regulations provide that the owner or operator provide additional information and engineering feasibility plan requirements under certain conditions as contained in 40 CFR 270.14. Louisiana regulations require that the owner or operator of a facility where hazardous waste constituents have been detected in the groundwater always submit an engineering feasibility plan for a corrective action program. The Federal regulations allow some variance of this requirement through 40 CFR 264.98(h)(5), and an owner or operator may submit a proposed permit schedule in lieu of submittal of the plan. In addition, the Federal regulations allow a permit to contain a schedule for future submittal of corrective action plans and groundwater monitoring program description (as required in 40 CFR 270.14(c)(8) (iii) and (iv) in lieu of actually providing the documents at that time. The Louisiana regulation does not provide for the inclusion of such a schedule for future submittal of the required documents in the permit.

Other Louisiana regulations that are more stringent include those that allow qualified companies that treat, store or dispose of hazardous waste to use a corporate guarantee to satisfy liability assurance requirements as indicated in 40 CFR 264.147, 264.151, and 265.147. The Louisiana regulations require facilities outside Louisiana to use a corporate guarantee to satisfy liability assurance requirements, while the Federal regulations do not include this requirement.

The final area of the Louisiana regulations that are more stringent include regulations that require companies that generate, treat or store hazardous waste in tanks to comply with tank standards equivalent to those found in 51 FR 29430 (August 15, 1986). Federal regulations at 40 CFR 264.192(f) do not include a requirement that accounts for rainfall patterns. Louisiana regulations, however, require that in considering the potential adverse effects of a release on groundwater quality for the granting of a variance based on a demonstration of no substantial present or potential hazard, the patterns of rainfall in the region be taken into account.

The public also needs to be aware that some provisions of the State's hazardous waste management program are not part of the Federally authorized State program. These non-authorized provisions are not part of the RCRA Subtitle C program because they are "broader in scope" than RCRA subtitle C. See 40 CFR 271.1(i). As a result, State provisions which are "broader in scope" than the Federal program are not covered for purposes of EPA enforcement in Part 272. "Broader in scope" provisions will not be enforced by EPA; the State, however, will continue to enforce such provisions.

The State's list of chemical compounds at Louisiana Revised Statutes (LRS) 30:2180 A(1) and Louisiana Hazardous Waste Regulations (LHWR) sections 4901.E. as amended March 1990, effective July 20, 1990; 3105

as amended September 1989, effective May 20, 1990, which corresponds to 40 CFR Part 261.33 and Appendix VIII that were published in the FR through August 6, 1986, are broader in scope because the Louisiana Regulations include more chemical compounds than the Federal regulations. The additional State-listed chemical compounds are not part of the authorized program.

Another area of the Louisiana regulations deemed to be broader in scope are those dealing with small quantity generators. The Federal regulations require companies that generate, treat, or store hazardous waste in tanks to comply with tank standards equivalent to those published through August 15, 1986. These Federal regulations refer to a generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month. The Louisiana regulations are broader in scope because they consider a generator to be one who generates less than 100 kilograms in a calendar month.

C. Decision

I conclude that Louisiana's application for program revision meets all of the statutory and regulatory requirements established by RCRA. Accordingly, Louisiana is granted final authorization to operate its hazardous waste program as revised.

Louisiana now has responsibility for permitting treatment, storage, and disposal facilities within its borders and implementing the aspects of the RCRA program described in its revised program application, subject to the limitations of the HSWA. Louisiana also has primary enforcement responsibilities, although EPA retains the right to conduct inspections under Section 3007 of RCRA and to take enforcement actions under Section 3008, 3013 and 7003 of RCRA.

D. Codification in Part 272

EPA uses Part 272 for codification of the decision to authorize Louisiana's program and for incorporation by reference of those provisions of Louisiana's statutes and regulations that EPA will enforce under section 3008, 3013 and 7003 of RCRA. EPA is reserving amending part 272, subpart T, until a later date.

Compliance with Executive Order 12291: The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

Certification Under the Regulatory Flexibility Act: Pursuant to the provisions of 4 U.S.C. 605(b), I hereby certify that this authorization will not have a significant economic impact on a substantial number of small entities. This authorization effectively suspends the applicability of certain Federal regulations in favor of Louisiana's program, thereby eliminating duplicative requirements for handlers of hazardous waste in the State. It does not impose any new burdens on small entities. This rule, therefore, does not require a regulatory flexibility analysis.

List of Subjects in 40 CFR Parts 271 and 272

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Authority: This notice is issued under the authority of Sections 2002(a), 3006 and 7004(b) of the Solid Waste Disposal Act as amended 42 U.S.C. 6912(a), 6926, 6974(b).

Dated: August 7, 1991.

Robert E. Layton, Jr.,

Regional Administrator.

[FR Doc. 91-20121 Filed 8-23-91; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 90-392; RM-7234]

Radio Broadcasting Services; Lometa, TX

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Commission, at the request of Don Werlinger, allots Channel 270A to Lometa, Texas. See 55 FR 36298, September 5, 1990. Channel 270A can be allotted to Lometa, Texas, in compliance with the Commission's minimum distance separation requirements with a site restriction of 3.6 kilometers (2.3 miles) east to avoid a short-spacing to Station KQXT(FM), Channel 270C1, San Antonio, Texas. The coordinates for the allotment of Channel 270A at Lometa are North Latitude 31-13-14 and West Longitude 98-21-15. This proceeding is terminated.

EFFECTIVE DATE: October 7, 1991. The window period for filing applications will open on October 8, 1991, and close on November 7, 1991.

FOR FURTHER INFORMATION CONTACT: Pamela Blumenthal, Mass Media Bureau, (202) 654-6530.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Report and Order, MM Docket No. 90-392, adopted August 12, 1991, and released August 21, 1991. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Dockets Branch (room 230), 1919 M Street, NW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, Downtown Copy Center, (202) 452-1422, 1714 21st Street, NW., Washington, DC 20036.

List of Subjects in 47 CFR Part 73

Radio broadcasting.

PART 73—[AMENDED]

1. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303.

§ 73.202 [Amended]

2. Section 73.202(b), the Table of FM Allotments under Texas, is amended by adding Channel 270A, Lometa.

Federal Communications Commission.

Michael C. Ruger,

Assistant Chief, Allocations Branch, Policy and Rules Division, Mass Media Bureau.

[FR Doc. 91-20434 Filed 8-23-91; 8:45 am]

BILLING CODE 6712-01-M

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47 CFR Part 73

[MM Docket No. 89-620; RM-7125]

Radio Broadcasting Services; Hayward, WI

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: This document grants a Petition for Reconsideration filed by Pine-Aire Broadcasting Corporation, Inc., thereby substituting Channel 222C3 for Channel 221A, Hayward, Wisconsin, and modifying the license for Station WRLS-FM. See 55 FR 38571, September 19, 1990. Canadian concurrence has been obtained for the allotment of Channel 222C3 at Hayward at coordinates 46-06-47 and 91-20-07. With this action, this proceeding is terminated.

EFFECTIVE DATE: October 7, 1991.

FOR FURTHER INFORMATION CONTACT: Kathleen Scheuerle, Mass Media Bureau, (202) 634-6530.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Memorandum Opinion and Order, MM