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Portland Cement Association

May 28, 2004

Paul Noe  
Office of Information and Regulatory Affairs  
Office of Management and Budget  
New Executive Office Building  
Room 10235  
725 17<sup>th</sup> Street, N.W.  
Washington, D.C. 20503

Dear Mr. Noe:

The Portland Cement Association would like to re-submit a candidate for regulatory review with the Office of Management and Budget (OMB), as requested in the *Federal Register* notice (69 Fed Reg 7987) of February 20, 2004. The Portland Cement Association is a trade association representing cement companies in the United States and Canada. PCA's U.S. membership consists of 45 companies operating 106 plants in 35 states and distribution centers in all 50 states servicing nearly every Congressional district. PCA members account for more than 95 percent of cement-making capacity in the United States and 100 percent in Canada.

We wish to respond to OMB's request for nominations regarding federal agency rules that ought to be rescinded on the grounds that they are outmoded or unnecessary. OMB suggests that in developing their nominations, commenters consider whether the agency has discretion under the statute to modify or rescind the nominated rule.

PCA believes that it has a prime candidate for an unnecessary agency rulemaking, and one which the Environmental Protection Agency (EPA) clearly has the authority to rescind. As will be explained below, this rulemaking relates to cement kiln dust (CKD), a byproduct of the Portland cement manufacturing process. It also relates to the "Bevill amendment" under the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§6901 *et seq.*

The Bevill amendment was enacted in 1980 to govern certain types of industrial wastes deemed to be of high volume but low toxicity. It generally provides that EPA may not regulate certain categories of wastes as hazardous wastes under RCRA Subtitle C, unless the Agency concludes pursuant to a study that a waste is deserving of Subtitle C status. CKD is specified as one of these "Bevill" wastes.

Demonstrably, CKD is the least toxic and least risky of all Bevill wastes. For every other Bevill waste that EPA has studied and made determinations, EPA has determined that RCRA Subtitle C regulation is not warranted. For CKD, however, EPA has issued a determination that Subtitle C regulation is warranted and has issued proposed Subtitle

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C regulations. PCA has steadfastly opposed the EPA regulatory determination and has argued that the Subtitle C rule addressing CKD is not remotely justified. CKD does not warrant such a rule because of: the negligible risk posed by the material, the amount recycled as a raw material and the diminishing amount disposed of at cement plants.

**I. Background to Bevill Amendment and EPA’s Implementation**

For several types of industrial wastes, RCRA requires EPA to take at least two separate administrative steps. First, EPA must study the waste by analyzing it with respect to several criteria set forth in RCRA 8002. This study must be submitted to certain congressional committees, and is often referred to as a Report to Congress.

Second, after submission of the study to Congress, EPA is to make a “determination.” More precisely, EPA must “either determine to promulgate regulations” for the waste under Subtitle C “or determine that such regulations are unwarranted.” RCRA 3001(b)(3)(C). This is usually referred to as a regulatory determination.

In conducting a Bevill study EPA must analyze not only the adverse effects on health and the environment (if any) of the particular waste, but also several other factors specified in RCRA 8002 such as: source and volume of materials generated; documented cases of endangerment from such materials; alternatives to current disposal methods; and the costs of the alternatives.

Thus far, EPA has complied with the Bevill requirements by issuing the following studies (Reports to Congress) and determinations:

|  | <u>Study</u>   | <u>Determination</u>           |
|--|----------------|--------------------------------|
| Mining (extraction and beneficiation of ores and minerals) | December 1985  | July 3, 1986<br>51 FR 24496    |
| Oil and Gas (exploration, development, and production)     | December 1987  | July 6, 1988<br>53 FR 25446    |
| Mining (20 “processing” wastes)                            | July 1990      | June 13, 1991<br>56 FR 27300   |
| Utility (coal-burning wastes – Phase I)                    | March 1988     | August 9, 1993<br>58 FR 42466  |
| Cement Kiln Dust   | December, 1993 | February 5, 1995<br>60 FR 7366 |

Except for CKD, EPA has in this 17-year history always made exactly the same determination: regulation under RCRA Subtitle C is unwarranted. For all wastes studied both before and after CKD, EPA has in effect decided that regulations for non-hazardous solid wastes would suffice to protect human health and the environment.

As CKD is the only waste for which EPA has determined RCRA Subtitle C regulation is appropriate, one might logically conclude that CKD is more toxic or more risky than all of these other Bevill wastes. In fact, however, CKD is the least toxic and risky of all these wastes, and we believe EPA's actions viewed in this light are quintessentially arbitrary and capricious.

## **II. PCA Petition**

On May 11, 2001, PCA (then operating as the American Portland Cement Alliance) filed a rulemaking petition with EPA. A copy is attached. The petition followed by several months a letter to EPA requesting precisely the same relief (letter of Andrew O'Hare to Michael Shapiro dated August 1, 2000), so in fairness the cement industry's requests for relief from EPA have now been pending for almost four years.

The petition cites the foregoing statutory and regulatory history to show that EPA's actions regarding CKD stick out like a sore thumb and are arbitrary and capricious on their face. The petition also demonstrates the following points:

a. The overall risks from CKD are exceedingly low, even under the highly questionable assumptions of EPA's "indirect" exposure risk analysis approach. (Petition at pp. 3-4.) Note that EPA conceded the "indirect" exposure risk assessment showed a total of 0.0006 excess cancer cases per year in a population of 3.4 million individuals living near cement plants, and non-cancer risks were projected at less than one-tenth of one percent. As also shown in the petition, EPA's risk assessment procedure was flawed in several regards in a manner that would skew the results to be artificially high. Indeed, the Agency has acknowledged that the CKD risk assessments need to be redone to conform to the methodology employed for fossil fuel combustion wastes. Using the fossil fuel waste approach would most likely confirm the negligible potential risk associated with CKD.

b. The risks posed by CKD are much lower than risks posed by other Bevill wastes studied both before and after EPA rendered its anomalous CKD determination. (Petition at pp. 4-10.) Several pages are devoted to the fossil-fuel combustion wastes that EPA had determined not worthy of RCRA Subtitle C as recently as May, 2000. Additional discussion covers other Bevill wastes.

c. CKD disposal rates have been decreasing significantly in recent years, making a national regulatory approach even more inappropriate. At the same time, the

amount recycled back to the manufacturing process as a raw material has steadily increased. Petition at 10-11.

### **III. Unacceptability of Retaining Status Quo**

EPA personnel might argue that PCA and its members are not adversely affected by the current situation, because the CKD regulatory determination imposes no requirements in and of itself and EPA has merely proposed, but never finalized, Subtitle C regulations. If EPA were simply to never finalize the proposal, so this argument would go, PCA and its members will never be harmed.

We anticipated this argument in the petition and strongly disagreed with it. We explained that CKD is now singled-out by EPA for regulation as a hazardous waste under RCRA Subtitle C, even though EPA has never gone this far for any of the riskier Bevill wastes. We explained that EPA has thus unfairly discriminated against CKD with the potential for injury to PCA's members. As long as the current CKD Bevill determination remains in effect, parties may unfairly place CKD in a different category than other materials with ramifications that could be felt in the marketplace, in regulatory decisionmaking, and in possible tort suits. For instance, a plaintiff in a toxic tort action involving CKD may unfairly seek to capitalize on the fact that of all the wastes EPA has ever studied in the 20 years of Bevill implementation, CKD is the only one that EPA deemed sufficiently hazardous to trigger a positive Bevill determination. State and regional environmental decision makers could also treat CKD unfairly in countless other ways because CKD currently stands as the only Bevill waste to have triggered a positive Bevill determination.

While the facts and the record before EPA would make such a characterization grossly unfair, as long as EPA's Bevill determination stands, the potential for abuse will remain. PCA's members may have to incur additional costs and burdens to defend against such unfair and unwarranted allegations. PCA concluded that the record must out of fairness be set straight to avoid unfair injury to its members, and the only way this can be done is for EPA to formally withdraw the proposed Subtitle C regulations and reverse its Bevill determination.

### **IV. Lack of Meaningful EPA Response After Almost Four Years**

It has now been 45 months since we wrote to EPA seeking this relief and over three years our rulemaking petition was filed. Thus far, EPA staff has been cordial in their willingness to meet with PCA personnel, but EPA does not appear poised to take any final action in response to our requests.

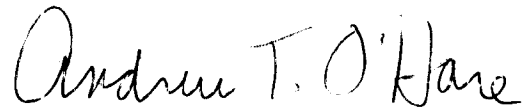
EPA did release a notice of data availability on July 25, 2002. However, this notice ignored the principal arguments made by the cement industry in the rulemaking petition, failed to appropriately address the negligibility of the risks to human health and the environment posed by CKD, and further delayed a final disposition of this issue.

An examination of the record as reflected in our attached petition will show conclusively that Subtitle C regulation of CKD is not only totally unnecessary and a waste of government time and resources, but is also illegal. While OMB need not resolve the legal issues, the lack of necessity makes EPA's actions here a strong candidate for high priority treatment.

**V. Conclusion**

For all the foregoing reasons, we respectfully urge OMB to include EPA's current CKD rulemaking under OMB's list of high priority rules that are unnecessary. We urge OMB to direct EPA to proceed expeditiously to reverse its Bevill determination with respect to CKD, and to withdraw its proposed regulations under RCRA Subtitle C regarding CKD.

Sincerely,

A handwritten signature in black ink that reads "Andrew T. O'Hare". The signature is written in a cursive, slightly slanted style.

Andrew T. O'Hare  
Vice President

**ATTACHMENT TO  
SUBMISSION OF PORTLAND CEMENT ASSOCIATION  
IN RESPONSE TO THE OFFICE OF MANAGEMENT AND BUDGET'S  
REQUEST FOR COMMENTORS TO IDENTIFY EXAMPLES  
OF UNNECESSARY RULES**

I. Name of Regulation

EPA's Regulatory Determination Under RCRA Regarding Cement Kiln Dust and  
EPA's Proposed Rulemaking Under RCRA Regarding Cement Kiln Dust

II. Regulating Agency

Environmental Protection Agency

III. Citation

Regulatory Determination: 60 FR 7366, February 5, 1995  
Proposed Regulations: 64 FR 45631, August 20, 1999

IV. Authority

Purportedly under "Bevill" Amendment to the Resource Conservation and  
Recovery Act (RCRA), RCRA §§3001(b)(3)(A)(iii), 8002(0)

V. Description of Problem

Of several types of industrial wastes EPA has studied under the "Bevill"  
amendment, cement kiln dust (CKD) is the least toxic. For every other "Bevill" waste  
EPA has studied before and after it studied CKD, EPA has determined the waste does  
not warrant regulation under RCRA Subtitle C (hazardous waste authority). Yet for the  
least toxic of these wastes – CKD – EPA has determined Subtitle C regulation is  
warranted and EPA has proposed regulations. This situation places PCA members in a  
very unfair situation.

VI. Proposed Solution

OMB should instruct EPA to reverse the regulatory determination and withdraw  
the proposed regulations as soon as possible.

VII. Estimate of Economic Impacts

A Subtitle C rulemaking would be unduly burdensome on the cement industry. In  
the proposed rule, the Agency claims that: "the rule would require incremental

compliance costs for the portland cement industry of about \$44 million per year.” The Agency then makes the assumption that the costs will be passed onto the consumer.

The EPA assumption is premised upon conclusions contained in an Economic Impact Analysis prepared by EPA. PCA was highly critical of the EIA, primarily because of the incorrect Agency conclusions concerning the domestic cement market. EPA failed to assess the impact cement imports have on cement pricing. Importers will not be subject to the higher production costs of domestic producers, resulting in a significant potential disadvantage for U.S. manufacturers.

Finally, and perhaps most importantly, the purported benefits outlined by EPA in the proposal are highly suspect, as they rely on conclusions in flawed risk assessments concerning theoretically impacted indirectly exposed populations (e.g., subsistence farmers and fishermen). PCA is certain that the size of these potentially affected populations would diminish considerably if the risk assessments were conducted properly. The net effect would make an already outlandish cost to benefit ratio that much more so.

BEFORE THE ADMINISTRATOR OF THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AMERICAN PORTLAND CEMENT  
ALLIANCE,

Petitioner,

CHRISTINE T. WHITMAN,  
ADMINISTRATOR,  
UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY,

Respondent.

**RULEMAKING PETITION OF THE  
AMERICAN PORTLAND CEMENT ALLIANCE  
RELATING TO CEMENT KILN DUST**

1. General Background

This rulemaking petition relates to EPA's actions under the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§6901, *et seq.*, and particularly the so-called "Bevill Amendment" to RCRA (RCRA §§3001(b)(3)(A)(iii), 8002(o)). Under the Bevill Amendment, specified types of materials cannot be regulated as "hazardous wastes" under Subtitle C of RCRA unless and until EPA undertakes and completes certain studies and rulemaking steps.

Under RCRA §3001(b)(3)(C), EPA is obligated to make a "Regulatory Determination" for each Bevill waste. The Regulatory Determination is to follow one of two courses for the waste in question: (i) a determination to promulgate Subtitle C regulations; or (ii) a determination that Subtitle C regulations are unwarranted.

One of the types of materials Congress specified as a "Bevill waste" is cement kiln dust (CKD) waste. The American Portland Cement Alliance (APCA) is the umbrella trade association of virtually all companies that manufacture portland cement, and APCA's members generate CKD as a by-product of the manufacturing process.

EPA completed its Bevill study on CKD pursuant to RCRA §8002(o) in 1993, and issued the study in the form of a Report to Congress on December 30, 1993. (See 59 FR 709 *et seq.*, January 6, 1994.) EPA then issued a Regulatory Determination for CKD under



RCRA §3001(b)(3)(C). The CKD Regulatory Determination is published at 60 FR 7366 *et seq.*, February 5, 1995.

In its implementation of the Bevill Amendment since 1980, EPA had issued several Regulatory Determinations for various Bevill wastes prior to issuing its CKD Regulatory Determination. In every one of these prior Regulatory Determinations, EPA determined that no Subtitle C regulation of any kind was warranted.

Nevertheless, in its 1995 CKD Regulatory Determination, EPA determined that Subtitle C regulations should be developed. While EPA found that subjecting CKD management to the full panoply of RCRA Subtitle C regulations on an unconditional basis would not be appropriate, EPA nevertheless determined that CKD should be regulated under a “conditional exclusion” regime in which Subtitle C hazardous waste regulations could be triggered in the event various management standards were violated.

In 1999, to follow up on its 1995 Regulatory Determination, EPA issued proposed regulations for CKD. 64 FR 45631, *et seq.*, August 20, 1999. EPA proposed a comprehensive and complex set of management standards for CKD that would be implemented by the States as a general rule under their RCRA Subtitle D (non-hazardous waste) authorities. The proposed regulations contain provisions, however, that would trigger Subtitle C hazardous waste jurisdiction and regulation in the event certain Subtitle D requirements were violated.

In 2000, EPA issued another Regulatory Determination under the Bevill Amendment. The Bevill wastes at issue are known as wastes from the combustion of fossil fuels, or “FFC Wastes.” In this Regulatory Determination, EPA determined that no Subtitle C regulation of any kind was warranted. 65 FR 32214, *et seq.*, May 22, 2000. No further Bevill studies or Regulatory Determinations appear to be currently underway or on the drawing boards, according to EPA’s most recent regulatory agenda.

Thus, in its implementation of the Bevill Amendment over the years, EPA has issued a Regulatory Determination that some type of Subtitle C controls are warranted only once: for CKD. For every other Bevill waste on which EPA has taken action, both before and after the CKD Regulatory Determination, EPA has determined that no Subtitle C regulation whatever is warranted.

As we will explain further below, we believe this singling out of CKD for Subtitle C treatment is grossly unfair and has no basis in science or law. We will show that the risks to human health and the environment from CKD are exceedingly low, particularly in comparison to other Bevill wastes EPA has addressed both before and after it issued its CKD Regulatory Determination. (It is important to stress that we agree with all the other Bevill determinations. Even though the other Bevill wastes are comparatively more toxic than CKD waste, the risks they pose are still far too insignificant to warrant Subtitle C regulation.)

We will also show that the continually diminishing level of CKD land disposed in the U.S. can be (and is) being managed in a fully protective manner under state law. We will also explain why, even if EPA were now to decide not to issue final CKD rules as a follow-up to its August, 1999 proposed CKD rules, it is fundamentally unfair and unacceptable to keep those proposed rules pending and to leave the 1995 Regulatory Determination unchanged.

We are accordingly petitioning the EPA Administrator to take two actions with respect to CKD under the Bevill amendment:

- (1) withdraw the proposed CKD rules of August 20, 1999; and
- (2) reverse the CKD Regulatory Determination of February 5, 1995, and instead issue a new Regulatory Determination, consistent with every other Bevill determination that EPA has issued before or since, that no Subtitle C regulation is warranted for CKD.

## 2. Overall CKD Risks Are Quite Low, Even Under EPA's Extremely Conservative "Indirect" Exposure Risk Analysis Approach

One of the primary factors EPA cited in support of subjecting CKD to RCRA Subtitle C was the potential impact on subsistence farmers and fisherman through indirect exposure to CKD through the food chain. EPA restated these potential risks in the proposed rule, as follows:

Potential Cancer Risks: "The overall population cancer risk can be characterized as follows: A total of 0.0006 excess cancer cases per year could potentially occur within this population of 3.4 million [estimated population of individuals residing near cement plants] due to indirect exposures." (64 FR 45637)

Potential Non-cancer Risks: "The overall population non-cancer effects can be characterized as follows: less than one-tenth of one percent among the population of 3.4 million." (64 FR 45637)

Clearly these are negligible to non-existent risks. Not explained in conjunction with the statements above, however, is the approach EPA used to develop the conclusions. EPA relied solely on screening assessments to generate the conclusions. Such assessments employ assumptions about site circumstances drawn from complex risk assessment models, not from actual sites. At a minimum, EPA should have tested the validity of the results of the screening assessments with a representative set of site-specific assessments. APCA is confident that the site-specific risks are much lower. Notably, EPA's cancer risk conclusion is extrapolated for all cement plants. Fewer than 40 cement plants in the U.S. dispose of significant amounts of CKD.

Making matters worse, EPA relied on high end point estimates rather than central tendency values when selecting input parameters for the screening risk assessments. This approach violates EPA's own guidance on risk assessments. The guidance stipulates that

central tendency values be employed when the data is available or obtainable. (Policy for Risk Characterization at the U.S. Environmental Protection Agency; Science Policy Council, U.S. EPA, February 1995).

### 3. Risks Posed by CKD Lower than Risks Posed by Other Bevill Wastes

#### a. Comparison of Alleged Damages Associated with CKD and FFC Wastes

In conducting studies of various Bevill wastes as required under Section 8002 of RCRA, Congress instructed EPA to determine whether there were “documented cases in which danger to human health and the environment has been proved.” RCRA §8002(o)(4). For CKD, EPA interpreted this statutory direction to include both acute and chronic effects and impairment to ecological receptors. “Proven” damage cases were identified as those that met the EPA “test of proof” criteria. The criteria fall into three categories: (1) data from scientific investigations, (2) administrative actions, such as enforcement notices, and (3) court decisions. (Technical Background Document for the Report to Congress on Remaining Wastes from Fossil Fuel Combustion: Potential Damage Cases, March 15, 1999, pages 1-1 and 1-2).

A comparison of EPA’s analysis of damage cases for CKD and FFC wastes shows that EPA took very inconsistent approaches to the disadvantage of CKD. For in searching for CKD damage cases, EPA surveyed a far greater percentage of facilities in its database than for FFC facilities and applied far more lax criteria for deciding what was “proven damage” for CKD when compared to the criteria employed for FFC wastes.

EPA identified 19 “proven” damage cases among the 127 active and inactive cement manufacturing sites studied by the Agency. Seven of these cases involved alleged damage to groundwater and/or surface water. Twelve cases involved exceedances of opacity, a surrogate standard for particulate matter. (Report to Congress on Cement Kiln Dust, Volume II: Methods and Findings, December 1993, pages 5-4 and 5-5) Most notably, EPA found “no direct impacts on human health” from any of the alleged damage cases identified in the Report to Congress. (Report to Congress on Cement Kiln Dust, Page 5-5)

All of the seven cases alleging groundwater and/or surface water contamination address historical contamination resulting from management practices no longer employed at these sites. Two of the seven cases involved exceedances of secondary MCLs (e.g., pH and total dissolved solids). None of the cases involved human exposure.

For the twelve cases involving opacity exceedances, there were no indications that the underlying particulate matter standards were exceeded. In addition, these cases—for the most part—merely involved alleged one-time exceedances of an opacity standard. Moreover, several of the “damage” cases address opacity exceedances associated with clinker coolers or other pollution control devices at the cement plant. These process units do not collect CKD, and, thus, the alleged “damage” was not caused by CKD. Only those pollution control devices associated with the cement kiln collect CKD.

Furthermore, the so-called opacity exceedances were based on “notices of violation.” The fact that a facility has received such a notice represents only an allegation, not a “proven” case. In any event, it is exceedingly difficult to equate a one-time opacity violation with a “damage” to health or the environment. Many particulate matter standards are set at technology-based levels, not on health-based levels. The fact that there is a one-time violation of a technology-based standard does not mean that there has been any health or environmental damage. Moreover, even where a particulate matter standard may be health-based, it is commonly based on an assumption of continuous exposure over an extended period of time. A single opacity violation even in these circumstances does not constitute damage to health or the environment.

EPA identified only 11 “proven” damage cases and 36 potential damage cases in the FFC Report to Congress, (Report to Congress, Wastes from the Combustion of Fossil Fuels, Volume 2, March 1999). However, EPA restricted its search for damage to only 5 of the 50 states in the United States and focused only on FFC waste facilities at electric utilities. In addition, the Agency did not assess the FFC waste sites for opacity standard exceedances nor did EPA count secondary MCL exceedances as “proven” damage (as was done for CKD).

In commenting on the FFC Report to Congress, environmental groups alleged that there were numerous additional damage cases in 13 states not studied by EPA. In responding to questions posed by the Office of Management and Budget on a March 5, 2000 draft of the FFC Waste Regulatory Determination, the Agency stated that “it is highly likely that numerous other cases of proven and potential damage exist in the remaining 32 states” (i.e., those not studied by EPA or the environmental groups). (Regulatory Determination for Fossil Fuel Combustion Wastes, Compendium, Office of Management and Budget and Federal Inter-agency Review, May 4, 2000, Docket Number FF2F-S0002 [March, 16, 2000, “EPA Response to OMB Questions of March 9, 2000,” page 10])

The approach used by EPA for FFC wastes contrasts sharply with that used for CKD. For CKD, the Agency went to great lengths to assess damage not only at the 115 operating cement plants but also at 12 inactive plants. In contrast, the Agency examined only a small percentage of the 440 utility plant and 958 non-utility plants that manage FFC wastes. There is no record of the Agency looking for information on inactive or closed FFC waste facilities. It is reasonable to assume that there must be many such sites given the size of the universe of active plants. In addition, included in the “proven” damage cases for CKD were cases involving secondary MCL exceedances (e.g., pH, total dissolved solids). EPA ignored such exceedances for FFC wastes sites when assessing proven damage. Commenters on the FFC Report to Congress identified at least 19 cases of potential damage attributable to secondary MCL exceedances. Notably, two of the seven groundwater/surfacewater cases identified for CKD involved only secondary MCLs. (Report to Congress on Cement Kiln Dust, Volume II: Methods and Findings, December 1993, pages 5-6 through 5-8)

It is especially remarkable that the Agency made no effort to identify damages resulting from exceedances of opacity or particulate matter standards at FFC facilities as

EPA did for cement plants. Utility boilers and non-utility boilers are equipped with pollution control equipment similar to that employed by cement plants to capture particulate matter. It is, therefore, reasonable to assume that these facilities could also periodically exceed state or federal standards for opacity or particulate matter. Consequently, the damage assessment conducted for FFC wastes was limited only to impacts on groundwater and/or surface water. APCA believes that a review of utility and non-utility records of compliance with opacity standards would reveal numerous alleged one-time opacity exceedances. While APCA maintains that such exceedances have no relationship to substantive impacts on human health or the environment, APCA believes that the inclusion of this category of “damage” in the roster of cases for FFC waste facilities would indeed dwarf the number of cases identified by EPA for CKD.

In summary, APCA strongly endorses EPA’s conclusion that the minimal environmental damage attributable to FFC wastes supports the determination that the use of Subtitle C authorities is not warranted for these wastes. APCA strongly believes that there is no way the Agency could not come to the same conclusion for CKD were the Agency to apply the logic used for assessing the significance of FFC damage cases to those for alleging CKD damage. Indeed, EPA further dismissed the FFC damage cases in the Regulatory Determination. The Agency stated:

Although these damage cases indicate that coal combustion wastes can present risks to human health and the environment, they also show the effectiveness of states’ responses when damages were identified. None of these cases involved actual human exposure. (65 FR 32225)

This statement applies equally to CKD. In short, the record shows that had EPA applied the same decisionmaking criteria to CKD as it did for FFC wastes, there is no rational or logical way EPA could have determined that CKD warranted Subtitle C treatment. As EPA was correct in deciding that FFC wastes should not be subjected to Subtitle C, we believe it is incumbent upon EPA to reverse its CKD determination.

In this regard, we should note that the following statement from the FFC determination is particularly unfair and inaccurate:

Our principal basis for determining that CKD when managed in land-based units would no longer remain exempt from being regulated as a hazardous wastes was our concern about generally poor management practices characteristic of that industry. Our conclusion was further supported by the extremely high percentage of proven damage cases occurring at active CKD sites for which ground water monitoring data was available. (65 FR 32224)

As to the “extremely high percentage of proven damage cases,” the discussion above shows the absurdity of such a characterization. As to the “generally poor management practices characteristic of [the Portland cement manufacturing] industry,” we take vigorous exception. These remarks are unfair and wholly without foundation. The fact that EPA had to stretch its criteria so far to come up with its few “proven” CKD damage cases after surveying every facility in our industry is itself testimony to the fact that our members have

been disposing of CKD in a responsible manner over the years. In addition, the record in this rulemaking is replete with evidence of Portland cement manufacturers utilizing even more comprehensive controls on CKD management throughout the U.S. We object most vigorously to EPA's unfair characterization of our members' practices in the quote above, and urge EPA to correct the record in this regard at the earliest opportunity.

**b. Comparative Leachability of Toxic Constituents from CKD and FFC Wastes**

As part of APCA's effort to demonstrate that the proposed CKD rule is inappropriate in its treatment of cement kiln dust, we have conducted a comparative analysis of the potential for metals to leach from CKD and from FFC wastes. The first analysis concerns the volume of wastes produced. This is an important measure of relevant toxicity, as the larger the volume of waste disposed, the greater the potential for environmental consequences. This logic also extends to the comparative number of sites managing the wastes. The more sites, the greater the potential for environmental consequences.

**Table 1**

**Types of Fossil Fuel Combustion Wastes with Available Annual Waste Volumes**

|   |                         |
|---|-------------------------|
| <u>Coal-fired utility large-volume wastes</u> | 105 million tons        |
| Fly ash                                       | 60 million tons         |
| Bottom ash                                    | 17 million tons         |
| Boiler slag                                   | 3 million tons          |
| FGD waste                                     | 25 million tons         |
| <br><u>Non-utility coal combustion wastes</u> | <br>5.8 million tons    |
| <br><u>Oil combustion wastes</u>              | <br>20,500-105,500 tons |
| <br><u>Fluidized bed combustion wastes</u>    | <br>9-13 millions tons  |

Source: Report to Congress Wastes from the Combustion of Fossil Fuels, Volume 2, March 1999.

Table 1 outlines the volumes of various fossil fuel combustion wastes, as described in the U.S. EPA Report to Congress on wastes from fossil fuel combustion. These volumes compare to a total of 11 million tons of CKD generated in 1998. Of this figure, only 3 million tons was disposed of in on-site monofills and other landfills. Moreover, the volume of CKD produced and disposed has fallen sharply in recent years, as more plants recycle the majority of their waste. (See Section 4.) Over 70% of all CKD generated in the U.S. in 1998 was recycled as a raw material in the manufacturing process. FFC wastes cannot be recycled in this manner. Thus, all FFC wastes must be managed on-site in disposal units or used beneficially offsite.

The next step was to examine the toxicity characteristic leaching procedure (TCLP) values for CKD and fossil fuel combustion wastes. This procedure is designed to estimate the potential for leaching of the analyzed compound beyond the liner of a landfill. A 1992 report of the Portland Cement Association examined the TCLP concentrations for all 12 RCRA metals at 97 U.S. cement plants, the majority of the facilities in the United States.

In all cases, the average TCLP values for CKD were far below the RCRA limits, typically at least one and often more than two orders of magnitude lower than the limit. The average values did not include non-detects, which for several compounds—including arsenic—comprised over 50 percent of the results. If these samples had been included into the computation, even at the detection limit, the industry averages would have been even lower.

Out of 1164 analyses (97 samples times 12 compounds), there were only 4 instances when the measured value exceeded the RCRA limit. There were two exceedances each for two compounds. In both cases, the readings came from two different kilns in the same plant and one of the two was only slightly above the limit. Moreover, both plants with exceedances recycle the majority of their CKD to the manufacturing process. Consequently, though the plants dispose of only a small amount of CKD, the in-process recycling has the effect of concentrating some metals in the CKD.

Table 2 compares the CKD findings with those for several fossil fuel combustion wastes. Coal utility fly ash, with annual volumes of 60 million tons—compared to 11 million tons or less of CKD—had higher average TCLP values than CKD for each metal analyzed, except for barium, selenium, and silver. FBC combined ash had higher values than CKD for arsenic, mercury, antimony, and barium. The EPA report did not include a volume for this particular waste, but the annual volume for all three FBC wastes is cited as 9-13 million tons.

While the volume of oil combustion wastes (OCW) is low, these wastes provide another example of fossil fuel combustion wastes that have higher TCLP values than CKD. OCW wastes typically have higher TCLP concentrations than CKD for arsenic, cadmium, chromium, and nickel, with some higher values for lead, mercury, and chromium.

Finally, and perhaps most importantly, the rate at which fossil fuel combustion wastes exceed the RCRA TCLP limit is greater than that for CKD. The exceedance rates are compared in the bullets following Table 2. All of the information assembled in Tables 1 and 2 was collected from EPA documents on the fossil fuel combustion wastes, except for the CKD data. The CKD data was derived from “An Analysis of Selected Trace Metals in Cement and Kiln Dust, Portland Cement Association, 1992.

We again stress that we strongly support EPA’s determination not to subject FFC wastes to Subtitle C. Even though FFC wastes are generally more toxic than CKD wastes and are generated and disposed at much higher volumes than CKD wastes, FFC wastes still fall far short of presenting the degree of risk that would warrant Subtitle C

regulation. This simply accentuates the degree of unfairness in EPA's regulatory determination for CKD.

**TABLE 2: COMPARATIVE TCLP FOR CKD AND SELECTED FOSSIL FUEL COMBUSTION WASTE (AVERAGE MG/L)**

| Metal     | RCRA Limit | CKD    | Coal Util. Fly Ash <sup>1</sup> | OCW <sup>2</sup> Fly Ash | OCW Bottom Ash | OCW SSB Solids | FBC <sup>3</sup> Comb. Ash |
|-----------|------------|--------|---------------------------------|--------------------------|----------------|----------------|----------------------------|
| Antimony  | 1.0        | 0.012  | n/a <sup>4</sup>                | n/a                      | n/a            | n/a            | 0.121                      |
| Arsenic   | 5.0        | 0.066  | 0.563                           | 0.319                    | 0.391          | 0.0666         | 0.102                      |
| Barium    | 100.0      | 1.04   | 0.382                           | 0.370                    | 1.88           | 0.647          | 1.22                       |
| Beryllium | 0.007      | 0.0004 | n/a                             | n/a                      | n/a            | n/a            | n/a                        |
| Cadmium   | 1.0        | 0.0288 | 0.078                           | 0.160                    | 0.130          | 0.0187         | 0.0181                     |
| Chromium  | 5.0        | 0.10   | 0.556                           | 0.447                    | 0.387          | 0.0621         | 0.0667                     |
| Lead      | 5.0        | 0.349  | 0.455                           | 0.164                    | 1.23           | 0.0824         | 0.13                       |
| Mercury   | 0.2        | 0.0018 | 0.0048                          | 0.0011                   | 0.00133        | 0.00267        | 0.002                      |
| Nickel    | 70.0       | 0.13   | n/a                             | n/a                      | 30.7           | 28.8           | 0.121                      |
| Selenium  | 1.0        | 0.152  | 0.037                           | 0.0622                   | 0.0887         | 0.0605         | 0.0584                     |
| Silver    | 5.0        | 0.07   | 0.012                           | 0.0248                   | 0.0542         | 0.0353         | 0.0253                     |
| Thallium  | 7.0        | 0.38   | n/a                             | n/a                      | n/a            | n/a            | n/a                        |

- The total percentage of TCLP exceedences for CKD was 0.3%, 4 analyses out of 1164 (97 samples times 12 compounds).
- The total percentage of exceedences for coal utility fly ash is 2%<sup>5</sup> or 6 times higher than that for CKD.
- The total percentage of exceedences for oil-combustion wastes is 2.8%, 9 sites out of 320 (40 sites times 8 compounds)<sup>6</sup>. This is more than 8 times the exceedence rate for CKD.

c. Comparison With Other Bevill Wastes

EPA has studied numerous other Bevill wastes including those from the mining and oil and gas exploration and production industries. These wastes were generally much more likely to fail the toxicity characteristic than either FFC wastes or CKD. Nonetheless, EPA

<sup>1</sup> Averages do not include non-detects, which, for antimony, arsenic, cadmium, nickel, and selenium, comprise over 50% of the results. Computing these into the average, even at the detection limit, would bring the resulting averages far lower.

<sup>2</sup> Oil Combustion Wastes.

<sup>3</sup> Fluidized Bed Combustion Combined Ash.

<sup>4</sup> "n/a" indicates that data on the fossil fuel values for these metals are not available in the EPA documents.

<sup>5</sup> Source: Draft Regulatory Determination on Wastes from the Combustion of Fossil Fuels. March 2000.

<sup>6</sup> Source: U.S. EPA, Report to Congress: Wastes from the Combustion of Fossil Fuels, Volume 2, Methods, Findings, and Recommendations. Page 6-14.



determined that these much higher volume waste stream with a greater tendency to fail the toxicity characteristic should be exempted from Subtitle C regulation.

A simple analysis for two wastes from the mineral processing industry (Regulatory Determination, 56 FR 27300), presents a stark comparison with the data for CKD. Calcium wastewater treatment sludge from primary copper processing was found to consistently exceed the EP toxicity test (precursor to the TCLP) for select metals, including arsenic, cadmium and selenium. These exceedances were ten to hundreds of times over the hazardous waste regulatory limits. In the Report to Congress for oil and gas wastes, EPA found that some constituents of concern presented potential cancer risks of  $1 \times 10^{-4}$  (or one in 10,000) from direct exposures to the wastes at 5% of the sites that were studied. (Report to Congress, Management of Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy, December 1987, Executive Summaries, page 43). See also Exhibit 1-1 to APCA's comments of April 1994 on EPA's CKD Report to Congress (pages 1-11, 1-12).

In sum, the potential risk posed to human health and the environment by CKD are considerably lower than those for other Bevill waste streams (that are also generated in much greater volumes) for which EPA determined Subtitle C was not warranted.

4. In Recent Years, CKD Disposal Rates Have Been Diminishing, Recycling Has Increased and Management Practices have Been Enhanced

Table 3 demonstrates the diminishing levels of CKD disposed in recent years as more plants recycle the dust back into the process. This table focuses on the 37 plants that together accounted for 95 percent of the CKD landfilled in the United States in 1998. Thirty-five of these plants responded to a 2000 survey conducted by APCA. The purpose of the survey was to add additional data to a CKD trend analysis begun in 1990. Four surveys have been conducted by APCA to gather this CKD information.

**Table 3: CKD Landfilled by Most Significant Contributors**

| <u>Year</u> | <u>27 Plants Responding 4 Years</u> |                         | <u>34 Plants Responding 3 Years</u> |                         |
|-------------|-------------------------------------|-------------------------|-------------------------------------|-------------------------|
|             | <u>CKD Disposed</u>                 | <u>Clinker Produced</u> | <u>CKD Disposed</u>                 | <u>Clinker Produced</u> |
| 1990        | 2,147,515                           | 20,016,697              |                                     |                         |
| 1995        | 2,212,098                           | 22,123,886              | 2,737,664                           | 26,912,034              |
| 1998        | 2,012,207                           | 23,173,258              | 2,473,295                           | 28,388,643              |
| 2000        | 1,673,537                           | 24,341,501              | 2,100,534                           | 29,480,110              |

Table 3 demonstrates that the amount of CKD disposed by the most significant disposers of the dust has been reduced by over 22 percent since 1990, while during the same period clinker production among these same plants has increased by almost 22 percent. In other words, in a time when production increases would typically result in increased CKD disposal, the falling disposal volumes demonstrate a strong trend towards alternative practices to minimize CKD disposal. The principle reason for this trend is that more CKD is

being recycled as a raw material, a very positive movement up the waste management hierarchy.

Another way of examining this progress is a ratio of CKD disposal to clinker production. This ratio has dropped from 0.107 in 1990 to 0.069 in 2000 for the 27 plants responding to all four surveys.

Another trend identified in recent surveys is a reduction in the total amount of CKD generated by the industry. This results from the many manufacturing improvements that have been undertaken and completed by the industry since 1990. As more and more plants utilize the preheater/precalciner process of cement manufacturing, less CKD is generated, since it is recycled into the process in a closed loop system. This of course means that less CKD is available for disposal. APCA envisions a time in the not so distant future when there will be virtually no CKD disposal.

As the number of plants generating CKD diminishes, the amount of CKD landfilled is also reduced. This further focuses the majority of active CKD landfill sites on fewer plants in fewer states, bolstering APCA's position that state regulation—as needed—is a more appropriate means of addressing CKD disposal than is federal regulation. Another interesting trend in the 2000 survey was the reclamation of CKD from existing CKD management units for use as a raw material. Four plants that responded to the 2000 survey removed over 11,000 tons of CKD from existing units for this purpose. Additional plants that were not asked to respond to the 2000 survey are also engaged in this practice.

At the same time, CKD management techniques have improved. Of the 35 plants responding to the 2000 survey, 34 (97%) practice landfill dust control techniques, 30 (86%) CKD compaction, 32 (91%) road-dust control, and 27 (77%) water runoff control. In addition, 20 (57%) have groundwater monitoring and 11 leachate control systems. The landfills at 24 of the plants have been permitted or approved by the state, with seven more having already applied for a permit or in the process of doing so. As plants take the steps necessary to ensure safe disposal of CKD—through voluntary measures and cooperation with state authorities—the need for federal regulation of these practices is further diminished.

##### 5. Preserving the Current Bevill Status Quo for CKD is Fundamentally Unfair and Legally Unacceptable

We believe all the forgoing shows that CKD is less toxic and poses fewer potential risks to human health and the environment than any other Bevill waste EPA has addressed, both before and after CKD. Yet CKD is now singled-out by EPA for regulation as a hazardous waste under RCRA Subtitle C, even though EPA has never gone this far for any of the riskier Bevill wastes.

We believe EPA has thus unfairly discriminated against CKD with the potential for injury to APCA's members. As long as the current CKD Bevill determination remains in effect, parties may unfairly place CKD in a different category than other materials with

ramifications that could be felt in the marketplace, in regulatory decisionmaking, and in possible tort suits. For instance, a plaintiff in a toxic tort action involving CKD may unfairly seek to capitalize on the fact that of all the wastes EPA has ever studied in the 20 years of Bevill implementation, CKD is the only one that EPA deemed sufficiently hazardous to trigger a positive Bevill determination.

While the facts and the record before EPA would make such a characterization grossly unfair, as long as EPA's Bevill determination stands, the potential for abuse will remain. APCA's members may have to incur additional costs and burdens to defend against such unfair and unwarranted allegations. State and regional environmental decisionmakers could also treat CKD unfairly in countless other ways because CKD currently stands as the only Bevill waste to have triggered a positive Bevill determination.

This is why we cannot be satisfied with a "no further action" result in this matter. In other words, we cannot accept a response from EPA in which it merely commits not to finalize the current proposed Subtitle C regulations and leave the 1995 regulatory determination standing. The record must out of fairness be set straight to avoid unfair injury to our members, and the only way this can be done is for EPA to formally withdraw the proposed Subtitle C regulations and reverse its Bevill determination. Only in this manner will CKD – which again is less problematical than all other Bevill wastes that EPA has been addressed – be placed within its proper status under RCRA.

We also believe that the current situation places EPA's decisionmaking in a *per se* arbitrary and capricious status and that a reviewing Court would easily agree with us. For EPA to subject less risky material to Subtitle C while exempting riskier material (both before and after addressing the less risky material) is, we submit, a clear violation of reasoned decisionmaking requirements. *Motor Vehicle Mfrs. Ass'n v. State Farm*, 463 U.S. 29, 43 (1983); *CMA v. EPA*, 217 F.3d 861, 865 (D.C. Cir. 2000).

#### 6. Legal Authority Under Which Petition Is Filed.

RCRA §7004(a) provides as follows:

Any person may petition the Administrator for the promulgation, amendment, or repeal of any regulation under this Act. Within a reasonable time following receipt of such a petition, the Administrator shall take action with respect to such petition and shall publish notice of such action in the Federal Register, together with the reasons therefor.

We believe that our petition fits within the types of actions contemplated by RCRA §7004(a). In essence we are petitioning EPA *not* to promulgate the proposed regulations it has issue for CKD, and we believe this falls within the category of actions envisioned by the phrase "promulgation of a regulation." We are also in essence petitioning EPA for the repeal of a proposed regulation, and we believe this similarly falls within the contemplation of §7004(a). In addition, we are in effect petitioning EPA for the repeal of a Regulatory

Determination and the promulgation of a new Regulatory Determination, and once again, we believe these actions fall within the contemplation of §7004(a).

EPA has published regulations, codified at 40 C.F.R. §266.20, prescribing requirements for RCRA rulemaking petitions. Subsection (b) of this section requires that each petition must be submitted to the Administrator by certified mail, and we have complied with this requirement. In order to comply with the remainder of the requirements in subsection (b), we state the following:

(1) Petitioner is the American Portland Cement Alliance (APCA), located at 1225 Eye Street, N.W., Suite 300, Washington, D.C. 20005.

(2) APCA represents virtually every cement company affected by the CKD Regulatory Determination and that would be subject to the proposed Subtitle C regulations if finalized. Accordingly, it has a vital interest in the subject of this petition.

(3) We have described the proposed action in part 1 above.

(4) We have explained the need and justification for the proposed action in parts 2-5 above.

Additional authority for this petition is found in §553(e) of the Administrative Procedure Act (APA), 5 U.S.C. §553(e), which provides as follows:

Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.

APA §551(2) defines “rule” in part as:

[T]he whole or part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy . . . .

We believe this provision confers jurisdiction for this petition even if RCRA §7004(a) did not. If, for instance, one were to take the view that a Regulatory Determination is not a “regulation” under RCRA §7004(a), a Regulatory Determination is nevertheless most clearly a “rule” under the APA. We are petitioning both for the repeal of one rule (the 1995 CKD Regulatory Determination) and for the issuance of another rule (a new Regulatory Determination declaring that Subtitle C regulations are unwarranted for CKD). Most certainly a Regulatory Determination that Subtitle C regulations are warranted is an agency statement of general applicability and future effect, and it is designed to implement law and policy. Exactly the same can be said for a Regulatory Determination that no Subtitle C regulations are warranted.

In addition, APA §555(b) provides that “within a reasonable time each agency shall proceed to conclude a matter presented to it.” We believe this provides independent

grounds for our petition, and places upon EPA a non-discretionary duty to take action our petition. It also underscores our point that in light of all the circumstances, EPA now has a duty to conclude the rulemaking it has already initiated by withdrawing its proposed rules and reversing the CKD Regulatory Determination.

#### 7. Intent to Seek Judicial Review

If EPA denies this petition, APCA will have the right to seek judicial review in either the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) or in a United States District Court. RCRA §7006(a)(1) provides for D.C. Circuit review of, among other things, action of the Administrator “in denying any petition for the promulgation, amendment, or repeal of any regulation under this Act.” We believe it is clear that a *failure to act* within a reasonable time is equivalent to a denial. *See, e.g.*, APA §551(13) (“agency action” includes *failure to act*).

If for some reason it were found that this petition did not fit within a strict construction of the clause in RCRA §7006(a)(1) conferring jurisdiction to the D.C. Circuit, judicial review of a denial (or failure to act within a reasonable time) would lie in an appropriate federal district court under 28 U.S.C. §1331 (general federal question jurisdiction) as well as the APA §704.

We note that APA §704 provides that “Agency action made reviewable by statute *and final agency action for which there is no other adequate remedy in a court* are subject to judicial review.” (Emphasis added.) Thus, even if RCRA does not make denial of this petition (or failure to act on it) judicially reviewable, the APA would because there would be no other adequate remedy in Court. There is no question that an agency’s failure to act within a reasonable time would be covered, as the APA §551(13) defines “agency action” to include the “failure to act.” Moreover, APA §706(1) authorizes courts to “compel agency action unlawfully withheld or unreasonably delayed.”

Alternatively, we believe the agency’s denial of this petition, or failure to act within a reasonable time, would be reviewable under the APA under the logic of the D.C. Circuit’s recent decision in *Barrick Goldstrike Mines v. Browner*, 215 F.3d 45, 49 (D.C. Cir. 2000).

If EPA denies this petition or fails to act upon this petition within a reasonable time, we fully intend to pursue our judicial review rights. We believe that EPA’s other Bevill decisions, both prior and subsequent to the CKD Regulatory Determination, on their face show EPA’s CKD Regulatory Determination to be arbitrary and capricious and believe that a reviewing Court would accordingly vacate the CKD Regulatory Determination. *See CMA v. EPA*, 217 F.3d 861 (D.C. Cir. 2000).

As shown in the discussion above, jurisdiction to review EPA’s denial or failure to act on this petition would lie either in the D.C. Circuit or in a federal district court. Depending upon possible future refinements in the case law, we reserve the right to seek judicial review in either or both of these fora.