



May 28, 2002

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RE: Submission of Cement Kiln Recycling Coalition in Response to the Office of Management and Budget's Request for Commentors to Identify Examples of Problematic Agency "Guidance" (March 28, 2002 (67 FR 15014-45))

Dear Mr. Morrall:

The Cement Kiln Recycling Coalition (CKRC) is a national trade association representing cement companies with plants that recover energy from waste fuels to manufacture cement. The Office of Management and Budget (OMB) published a Federal Register notice on March 28, 2002 (67 FR 15014-45) entitled "Draft Report to Congress On the Costs and Benefits of Federal Regulations." Chapter IV of the Draft Report asks for certain recommendations from the public regarding federal agencies' requirements.

One portion of Chapter IV is entitled "Review of Problematic Agency Guidance." 67 FR 15034-35. This portion describes a phenomenon in which agencies are issuing various types of "guidance" documents to impose requirements on the public in lieu of undertaking the rulemaking process prescribed by the Administrative Procedure Act (APA). OMB notes that while some types of non-rulemaking "guidance" may be entirely proper, certain types of guidance are not and the federal courts have strongly disapproved of improper guidance. *E.g., Appalachian Power Company v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000), cited and quoted by OMB at 67 FR 15034. CKRC's membership includes cement manufacturing companies that have been directly and adversely affected by EPA's problematic guidance.

Consistent with OMB's request, CKRC submits the attached comment document identifying the Environmental Protection Agency's Site-specific Risk Assessment Guidance as "problematic" and worthy of review and strong consideration under this OMB effort. In the attached comments, CKRC explains how the guidance "imposes costs and obligations on the public that are not fairly discernible from the text of the statute or legislative rule" on which the guidance is based, makes suggestions as to how this serious problem should be remedied, and attempts to estimate the costs of this "regulation by guidance."

If you have any questions or need additional information, please contact me.

Sincerely,

Mike Benoit  
Executive Director

**SUBMISSION OF CEMENT KILN RECYCLING COALITION  
IN RESPONSE TO THE OFFICE OF MANAGEMENT AND BUDGET'S  
REQUEST FOR COMMENTORS TO IDENTIFY EXAMPLES  
OF PROBLEMATIC AGENCY "GUIDANCE"**

**I. Introduction: OMB Concern Over "Guidance" Imposing Costs and Burdens  
"Not Fairly Discernible" From Statutes or Regulations**

The Office of Management and Budget (OMB) published a Federal Register notice on March 28, 2002 (67 FR 15014-45) entitled "Draft Report to Congress On the Costs and Benefits of Federal Regulations." Chapter IV of the Draft Report asks for certain recommendations from the public regarding federal agencies' requirements.

One portion of Chapter IV is entitled "Review of Problematic Agency Guidance." 67 FR 15034-35. This portion describes a phenomenon in which agencies are issuing various types of "guidance" documents to impose requirements on the public in lieu of undertaking the rulemaking process prescribed by the Administrative Procedure Act (APA). OMB notes that while some types of non-rulemaking "guidance" may be entirely proper, certain types of guidance are not and the federal courts have strongly disapproved of improper guidance. *E.g.*, *Appalachian Power Company v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000), cited and quoted by OMB at 67 FR 15034.

Of particular concern to OMB are agency guidance documents that "impose costs or obligations that are not fairly discernible from the underlying statute or legislative rule that the document purports to interpret or implement." 67 FR at 15035, col. 1. OMB notes that such documents are particularly suspect for being legally defective and inappropriate.

OMB asks for commentors to identify examples of "problematic" guidance of national significance, and for suggestions as to how the particular problem should be remedied, including where appropriate "rescission." 67 FR at 15035, col. 3. For any guidance nominated, OMB asks the commentor to explain how the guidance "imposes costs and obligations on the public that are not fairly discernible from the text of the statute or legislative rule" on which the guidance is based, "as well as, to the extent feasible, an estimate of such costs." 67 FR at 15035, col. 3.

## **II. EPA's Issuance of Guidance Imposing Costs and Burdens Not Fairly Discernible from Statutes or Regulations**

### **A. Introduction**

For the last several years, the Environmental Protection Agency (EPA) has imposed a complex, detailed, and costly program for site-specific risk assessments (SSRAs) for one category of facilities under the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§6901, *et seq.* This entire program has been created almost entirely through guidance documents that have never been subjected to notice and comment rulemaking under the APA.

As will be explained below, it is hard to imagine a better example of “problematic” guidance that OMB discusses in its March 28 notice and that the D.C. Circuit disapproved in *Appalachian Power*. For *none* of the very substantial costs and obligations imposed by the guidance are “fairly discernible” from the statute or underlying regulations. Rather, EPA has imposed significant costs and burdens on a segment of the regulated community entirely through guidance.

### **B. CKRC's Interest and Its Petition to EPA**

The Cement Kiln Recycling Coalition (CKRC) is a trade association whose members include cement manufacturing companies that have been directly and adversely affected by EPA's problematic guidance. On February 28, 2002, CKRC filed an administrative petition with EPA regarding this problematic guidance. The CKRC petition requests that EPA immediately stop requiring SSRAs through the RCRA permitting process. According to the petition, EPA has created an SSRA program – which imposes great costs, burdens, and permitting delays on CKRC's members – almost entirely through guidance.

CKRC's petition relates how, similar to the guidance vacated in *Appalachian*, EPA's SSRA program had its genesis in regulations EPA issued through APA rulemaking. CKRC's main complaint, similar to the petitioners in *Appalachian*, is that subsequent guidance documents greatly expanded the scope and duties (along with the costs and burdens) that could be fairly discernible from the terms of regulations.

The petition argues that under the *Appalachian* precedent, EPA must terminate the SSRA program unless and until EPA subjects all of the problematic guidance documents that comprise the SSRA program to APA rulemaking. The petition informs EPA that should EPA fail to grant the relief requested, CKRC may seek vacatur of the SSRA guidance documents in the D.C. Circuit.

A copy of the CKRC petition and accompanying documents are attached. The most essential points are summarized below. References to particular page numbers in the petition will be cited as “Petition at \_\_\_\_.”

### **C. SSRA Background for Hazardous Waste Combustors (HWCs)**

The most common types of HWCs are incinerators, boilers, and industrial furnaces (such as cement kilns and aggregate kilns). EPA has regulated hazardous waste burning in these devices under RCRA for years. For incinerators, EPA issued “subpart O” regulations in the 1980s. For boilers and industrial furnaces (generally referred to as “BIFs”), EPA issued regulations (the “BIF Rules”) in part 266 of 40 C.F.R. in 1991.

Three types of SSRAs are involved in EPA’s program, all of which are designed to predict the level of risk associated with a particular HWC (incinerator, cement kiln, etc.) at a particular site (Petition at 5-6):

(1) A *direct exposure* SSRA predicts risks from human exposure to HWC emissions through inhalation. These have been performed for many years using well-established protocols and there is a fairly high level of confidence in their results.

(2) An *indirect exposure* SSRA predicts risks from human exposure to HWC emissions through indirect, or “multi-pathway” exposure routes. For instance, molecules from an HWC’s emissions may absorb in soil from which a plant is grown, and that plant may be eaten by an animal from which milk is drawn, and that milk may be used to make ice cream. **An indirect exposure SSRA** predicts a human’s risk from the HWC through eating the ice cream in combination with all the other risks from various pathways (*e.g.*, eating the cow and eating vegetables grown in the soil). Compared to direct exposure SSRAs, there is much more room for disagreement regarding the assumptions, methodologies, and results.

(3) An *ecological* SSRA attempts to predict the level of risk to plant and animal life in the area that might be impacted by a HWC’s emissions.

### **D. Regulatory Status Before SSRA Program Launch**

The year 1993 was pivotal in EPA’s SSRA program, and it is necessary to understand the regulatory picture as of that year. EPA’s “subpart O” regulations for incinerators had been on the books for several years, and had been amended several times. The subpart O regulations contained no requirements relating to **SSRAs**. 40 C.F.R. part **264**, subpart O, and part 265, subpart O.

EPA’s “BIF Rules” for boilers, cement kilns, etc., had been on the books for two years. 56 FR 7134, February 21, 1991. The BIF Rules included limited requirements for SSRAs. In particular, the BIF Rules specified that a small sub-class of cement kiln facilities must perform a *direct exposure* SSRA. Petition at **6**. The BIF Rules included the detailed protocols and procedures that must be followed in performing such SSRAs. The BIF Rules contained no

requirements relating to *indirect* exposure or *ecological* SSRAs.

EPA also had issued in 1985 a regulation pursuant to its “omnibus” authority contained in RCRA §3005(c). That statutory provision, added by Congress in 1984, says that each RCRA permit shall contain terms and conditions the Administrator or State determines “necessary to protect human health and the environment.” EPA’s omnibus regulation simply restated the statutory words and added no detail. The omnibus regulation said nothing about SSRAs. Petition at 4-5.

### **E. The Launch: A 1993 Press Release**

Against this regulatory background, former EPA Administrator Carol M. Browner issued a “waste combustion strategy” in 1993 through a press release. Among other things, the press release specified that EPA’s Regions must impose more stringent emission standards on HWCs for certain pollutants than were required by the “subpart O” or BIF Rules. The press release was not accompanied by any regulatory changes – proposed or otherwise – and EPA was soon forced to back off these “regulatory amendments through press release” under the threat of litigation.

The 1993 press release also launched the SSRA program that is the subject of CKRC’s petition. In her press release, Ms. Browner announced that each and every HWC would, effective immediately, be required to perform an indirect exposure SSRA in order to obtain a RCRA permit. This new requirement was not accompanied by any regulatory changes – proposed or otherwise. The press release stated that this new requirement was being imposed pursuant to the RCRA “omnibus” authority. Petition at 7.

As detailed in CKRC’s petition, Ms. Browner’s press release gave birth to a major new SSRA program. In the last several years, EPA has issued literally tens of thousands of pages of guidance documents in various phases that specify requirements for HWCs to perform indirect exposure and ecological SSRAs. These guidance documents are requiring facilities to spend hundreds of thousands, and sometimes over a million, dollars at each facility, even as the guidance continues to evolve in a never-ending fashion. Petition at 7-8.

Since 1993, EPA has neither proposed nor issued a single word in its regulations about SSRAs. If one were to study EPA’s regulations, one would find only what he/she would have found in 1993: a requirement in the BLF Rules that a small segment of the cement kiln population conduct direct exposure SSRAs.

Yet under the current guidance, *all HWCs* are required to perform an *indirect* exposure and *ecological* SSRA. Moreover, none of the procedures and protocols for performing such SSRAs have ever been subjected to APA rulemaking (unlike the procedures and protocols for performing direct exposure SSRAs, which were included in detail in the 1991 BIF Rules).

## **F. Principal Points to CKRC's Legal Argument**

### **1. RCRA Requirements and Practice**

CKRC's petition argues that, even aside from *Appalachian*, RCRA requires that EPA (i) impose its basic requirements on the regulated community through regulations, not guidance; (ii) amend its RCRA regulations to reflect new requirements at least every three years; (iii) provide the details as to what it means to "protect human health and the environment" through regulations, not guidance; and (iv) specify the details as to what is necessary in order to receive a RCRA permit through regulations, not guidance. Petition at 3-4.

The petition also argues that EPA has throughout its history in implementing RCRA imposed detailed requirements through regulation, not guidance. The CKRC petition then argues that EPA has, through its SSRA program, violated all these fundamental principles of RCRA and deviated from its established practices. (For instance, for the "omnibus" regulation on which the SSRA program is allegedly based, EPA has never added a word to the bare-bones regulatory provision since 1987, and has never even mentioned the term **SSRA**, despite the tens of thousands of words in guidance documents setting forth the details of the SSRA program.)

### **2. Appalachian Power**

The petition then turns to the *Appalachian* precedent. The essential point is this: the most fundamental SSRA details that create burdens, costs, and duties for the regulated community are derived only from the guidance and cannot under any fair reading be discerned from the regulations. In other words, if one simply read the regulations, he/she would have no earthly idea as to what was expected of him/her in order to comply with the law.

In fact, he/she would have no idea that an indirect exposure or an ecological SSRA would even be required, much less how to do one. *All* of the requirements, both general and specific, can be ascertained only by reading the guidance. Thus, at the time the regulations were issued, the regulated community had no idea of the costs and burdens that were being imposed. The costs and burdens have emanated almost entirely through guidance. Petition at 9-12.

CKRC believes its facts are even much stronger than the facts that were before the Court in *Appalachian*. In that case, EPA had issued CAA regulations that contained a fair level of detail, but a 19-page guidance document "in effect amended" the regulations by requiring costs in the range of tens of thousands of dollars that could not have been reasonably ascertained from the regulations.

In CKRC's case, EPA had issued some RCRA regulations with absolutely no detail on how to implement the "omnibus" requirement and with very limited requirements for SSRAs (in the BIF Rules). EPA has now issued tens of thousands of pages of guidance imposing detailed

requirements costing each facility hundreds of thousands of dollars that could not have been reasonably ascertained from the regulations. Petition at 12.

We should note that quite recently, the D.C. Circuit issued a new 3-0 decision that strongly reaffirms *Appalachian* in another case involving EPA's abuse of the guidance process. *GE v. EPA*, D.C. Cir. No. 00-1394, May 17, 2002.

### 3. Failure to Provide Ascertainable Standard

A critical SSRA issue is the threshold level for making a "yes-no" decision. That is, at what numeric level of projected risk will EPA deny a RCRA permit or force the applicant to spend more money to control emissions more stringently than required by the BIF or MACT rules? Quite shockingly, *nowhere in all the thousands of pages of SSRA guidance currently in effect does EPA answer that critical policy and legal question.* Various acceptable threshold numbers are bandied about throughout EPA's Regions by word of mouth. While one Region has its own "addendum" specifying recommended numbers, EPA headquarters and the other Regions prefer to have no written rules or published policies on this critical issue.

We submit that for EPA to leave these critical issues totally unanswered in its SSRA regime is not only irresponsible, but it also greatly compounds the overall illegality of the entire regime. The Courts have long required that when EPA creates a permit regime in which applicants must make a showing to EPA in order to receive approval to perform an activity, EPA must provide an "ascertainable standard" for making the yes-no decision. *E.g., South Terminal Corp. v. EPA*, 504 F.2d 646, 669-670 (1<sup>st</sup> Cir. 1974). The Court there vacated an EPA approval process because it left the applicant "utterly without guidance as to what he must prove, and how. The standard is so vague that it invites arbitrary and unequal application." *Id.* at 670.

### **III. Conclusion: OMB Should Direct EPA to Rescind its SSRA Guidance**

We believe the foregoing shows that EPA's SSRA program for HWCs is violative of the APA under the D.C. Circuit's *Appalachian* precedent. We also believe it is a quintessential example of "problematic" agency guidance envisioned in OMB's March 28 notice. Most clearly, the "guidance" imposes significant costs and burdens that are not "fairly discernible" from the terms of the statute or regulations.

OMB asks commentors to submit "recommendations for remedying the problem." We believe the correct remedy here, as specified in our petition, is consistent with the suggestions in OMB's notice. First, OMB's notice suggests "rescission" (at 15035, col. 3). This is the first request for relief contained in our petition.<sup>1</sup> Second, OMB's notice suggests "reissuance through

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<sup>1</sup> "CKRC urges EPA immediately to repeal the regulations it has unlawfully issued. [We referred to the SSRA requirements as "regulations" in this sentence because they have the effect of regulations and RCRA §7704(a) authorizes petitions for the repeal of regulations.] Under applicable case law, the SSRA requirements should be deemed void and of no effect because they are regulations issued without appropriate notice-and-comment rulemaking procedures. In this situation, EPA can and should repeal them without notice and comment by simply

notice and comment rulemaking” (at 15035, col. 3). This again is consistent with our petition, for we state that if and when EPA concludes that SSRAs might be necessary in some situations, EPA should go through an appropriate **APA** rulemaking to impose any such requirements?

We therefore urge OMB to direct EPA to rescind all of the **SSRA** guidance that EPA has issued without rulemaking process. OMB should further direct EPA to consider whether any **SSRA** requirements are necessary for **HWCs**, and if EPA concludes that they are, to issue such requirements using appropriate **APA** rulemaking processes.

We have included a summary of our request on an attached sheet in the format suggested by OMB in its notice at page 15035 (“Format for Suggested Guidance Documents Improvements”).

Respectfully submitted,

COUNSEL



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Cement Kiln Recycling Coalition  
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Date: May 28, 2002

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publishing a notice stating they are withdrawn.” Petition at 3.

<sup>2</sup> “After withdrawing the existing requirements, should **EPA** believe it can establish the need to require **SSRAs** in certain situations, **CKRC** urges EPA to undertake an appropriate notice-and-comment rulemaking process seeking to promulgate regulations establishing such requirements.” Petition at 3.



**ATTACHMENT TO  
SUBMISSION OF CEMENT KILN RECYCLING COALITION  
IN RESPONSE TO THE OFFICE OF MANAGEMENT AND BUDGET'S  
REQUEST FOR COMMENTORS TO IDENTIFY EXAMPLES  
OF PROBLEMATIC AGENCY "GUIDANCE"**

1. Name of Guidance Document:

Several documents collectively comprise the problematic guidance subject to this submission. They are all referenced in the attached Affidavit of Michel R. Benoit. The most basic and significant of the "guidance" documents are:

a. A July, 1998, document entitled "Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities" (HHRAP), posted at EPA's Website at [http://www.epa.gov/earth1r6/6pd/rcra\\_c/protocol/volume\\_1/chpt1-hh.pdf](http://www.epa.gov/earth1r6/6pd/rcra_c/protocol/volume_1/chpt1-hh.pdf).

b. **An** August 1999, document entitled "Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities," (SLERAP), posted at EPA's Website at <http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm>.

c. A July, 2001, document entitled "Risk Burn Guidance for Hazardous Waste Combustion Facilities," (RBGFHWCF) posted on EPA's Web site at <http://www.epa.gov/epaoswer/hazwaste/combust/burn.pdf>.

2. Regulating Agency.

United States Environmental Protection Agency.

3. Citation.

See part 1 above.

4. Authority.

Purportedly under the "omnibus" provision of the federal Resource Conservation and Recovery Act (RCRA), section 3005(c)(3), last sentence (42 U.S.C. §6925(c)(3), last sentence); and "omnibus" provisions in EPA's regulations appearing at 40 C.F.R. §§270.10(k) and 270.32(b)(2).

5. Description of Problem.

CKRC's members that operate cement manufacturing facilities that recover energy from hazardous waste fuel and other hazardous waste combustors (HWCs) are being required, as a condition to obtaining a RCRA permit for hazardous waste combustion, to perform extensive site-specific risk assessments (SSRAs) through detailed and complex protocols even though

neither the requirement to perform such assessments nor the details of the protocols have been subjected to notice-and-comment rulemaking under the Administrative Procedure Act (APA). The requirements are being imposed through “guidance.” None of the many burdensome costs and obligations being imposed on these facilities is “fairly discernible” from the statutory or regulatory authority on which the ”guidance”is purportedly based.

#### 6. Proposed Solution.

- (1) Direct EPA to rescind the existing guidance.
- (2) Direct EPA to consider whether the SSRA program is necessary and, if EPA concludes it is, to undertake a rulemaking process under the APA setting forth the requirements for such a program.

#### 7. Estimate of Economic Impacts.

We are attaching documents showing the SSRA costs incurred at a sampling of five cement manufacturing facilities. In each case, the costs relate to the actual performance of the SSRA, and do not include any costs for control measures that might have been imposed as a result of the SSRA.

The documents show that at these five randomly-selected facilities, the costs averaged more than \$500,000.00 per facility. As we assume there are 14 hazardous waste combustor cement plants that have been or will be required to perform SSRAs, we are assuming the total costs will be in the range of \$7 million for this limited subset of HWCs.

Because the entire universe of HWCs is much larger, the total costs for this sector would be much higher. For example, EPA’s 1999 final rule preamble for “MACT” standards for HWCs says there are 149 hazardous waste incinerator facilities operating 189 individual units in the U.S. and five lightweight aggregate kiln facilities operating 10 individual units. 64 FR 52835, September 30, 1999. We understand from chemical industry sources that approximately 150 chemical manufacturing facilities operate boilers that burn hazardous waste as fuel, and presumably these boilers will be subject to the same SSRA requirements.

As explained above, *none* of these costs are discernible from the text of the statute or regulations. Moreover, we presume that when EPA submitted its “omnibus” regulation to OMB for review in the 1980’s, none of these costs were included with EPA’s cost estimates accompanying the regulations.

The documents attached are:

- (1) Summary of Out-of-pocket Costs for SSRA at Example Facilities
- (2) Summary of Site-Specific, Multi-pathway **Risk** Assessment Activities, Ash Grove Cement Company
- (3) The Addition of Risk Assessment to the Part B Permitting Process, Holnam – Region IV BIF Facilities

(4) Giant Cement Holding, Inc., EPA Site Specific **Risk** Assessment Operational,  
Economic and Permitting Impacts

## Summary of Out-of-Pocket Costs for SSRA at Example Facilities

COMPANY	PLANT	COSTS	SUBTOTAL
<b>Ash Grove</b>			
	Chanute	\$222,421.00*	
	Foreman	\$594,672.00	
			<b>\$817,093.00</b>
<b>Giant</b>			
	Keystone	~\$500,000.00	
			<b>\$500,000.00</b>
<b>Holnam</b>			
	Artesia & Holly Hill		<b>\$1,351,141.00</b>
		5 Facilities	

**\* The out-of-pocket costs at this facility are half the costs of the other plants because Region VII paid for the risk assessment at this facility.**

## Summary of Site-Specific, Multi-pathway Risk Assessment Activities Ash Grove Cement Company

### I. Introduction

In the late 1980s, Ash Grove Cement Company (Ash Grove) obtained interim status under the regulations implementing the Resource Recovery and Conservation Act (RCRA) at 40 CFR 265 to store hazardous waste-derived fuel (HWDF) at three of its cement plants located at Chanute, Kansas, Foreman, Arkansas and Louisville, Nebraska. Subsequently, Ash Grove obtained consolidated RCRA Part B permits for the Chanute and Foreman plants under the RCRA regulations at 40 CFR 264 and 40 CFR 266 to store and burn HWDF. Ash Grove ceased burning HWDF at the Louisville plant prior to completion of the permitting process and closed the HWDF facility at that location. As part of the permitting process at the Chanute and Foreman plants, each of the HWDF operations were subjected to site-specific, multi-pathway risk assessments as recommended by EPA's May 18, 1993 "Hazardous Waste Reduction and Combustion Strategy" using EPA's "omnibus" authority under RCRA. The procedures and levels of involvement by Ash Grove for risk assessments were quite different at each of the plants.

### II. Chanute, Kansas

#### A. Regulatory Setting

The permitting authority for the Chanute plant was divided between the Kansas Department of Health and Environment (KDHE), and EPA Region 7. KDHE had been delegated authority for implementing 40 CFR 264 but the authority for implementing 40 CFR 266 had not been delegated to KDHE. Because the Chanute consolidated Part B permit was slated to become the first such permit issued in the nation, EPA Region 7 took the lead in developing the Chanute risk assessment at the sole expense of the federal government. Ash Grove was not required or allowed to participate in the development and execution of the multi-pathway risk assessment.

#### B. RCRA Cement Kiln Trial Burn Plan

In October 1993, Ash Grove submitted a RCRA cement kiln trial burn plan as part of a RCRA consolidated permit application for the Chanute HWDF facility. To address concerns of the KDHE and EPA Region 7, the trial burn plan was revised in February 1994. The trial burn plan focused on demonstrating compliance with the requirements of 40 CFR 266, subpart H (the boiler and industrial furnace regulations) and was not necessarily developed to gather data to support a site-specific, multi-pathway risk assessment.

#### C. RCRA Cement Kiln Trial Burn

In March and April of 1994, the approved trial burn plan was executed on Kiln Nos. 1 and 2. A trial burn report was prepared and submitted to EPA Region 7 and KDHE in July 1994. A revised trial burn report that clarified the test results was submitted to both agencies in July 1995. The results of the trial burn demonstrated compliance with the requirements of 40 CFR 266, subpart H and supported the permit conditions proposed by Ash Grove in the trial burn report.

#### D. Site-Specific, Multipathway Risk Assessment

EPA Region 7 used a third-party contractor, Science Applications International Corporation (SAIC), to develop and execute a site-specific, multi-pathway risk assessment for the Chanute HWDF facility using emissions data from the 1994 trial burn. The EPA model used for this multi-pathway risk assessment had received considerable criticism by EPA's own Scientific Advisory Board. Ash Grove had a legitimate need to understand the application of the risk assessment model to the Chanute HWDF facility. However, the protocol for the Chanute multi-pathway risk assessment was not made available by EPA Region 7 for comment from Ash Grove or the public.

#### E. Draft RCRA Part B Permit

The public 45-day comment period for the RCRA Part B permit commenced on September 14, 1995. The administrative record supporting the permit decision contained the "1995 Draft Ash Grove Cement Company Multi-pathway Risk Assessment". Included in the draft permit were conditions more stringent than the requirements of 40 CFR 266, subpart H that were apparently based on the results of the multi-pathway **risk** assessment. The administrative record only contained the results of the SAIC-prepared risk assessment and did not contain supporting information or calculations. This was the first opportunity for Ash Grove or other interested parties to see the results of the Chanute risk assessment.

#### F. Ash Grove's Initial Response

To be able to respond to the conclusions of the risk assessment in the short time available during the public comment period for the draft RCRA Part B permit, Ash Grove hired a respected risk assessment consultant, Dr. Kathryn Kelly of Delta Toxicology, Inc. (also d.b.a. Environmental Toxicology Incorporated), to attempt to replicate and/or validate the risk assessment results. Despite oral and written requests, Ash Grove was never provided with the supporting documentation for the **SAIC risk** assessment. Ash Grove repeated these requests in its written comments on the draft permit. Without supporting documentation, Dr. Kelly was required to attempt to "back calculate" the risk assessment results to the data from the 1994 trial burn and other data supplied to EPA by Ash Grove. She was unable to fully replicate the SAIC results or to find justification for certain permit conditions that were more stringent than the relevant requirements contained in 40 CFR 266, subpart H.

#### G. Final Consolidated RCRA Part B Permit

The final Consolidated RCRA Part B permit for the Chanute HWDF facility was issued on August 15, 1996.

#### H. Ash Grove's Appeal

On September 13, 1996, Ash Grove appealed several matters to the Environmental Appeals Board (EAB) contained in the final permit that appeared to have been based on the SAIC multi-pathway risk assessment. Included were annual feed rate limits for mercury and thallium, and provisions for environmental monitoring for these elements.

#### I. EAB Remand

On November 14, 1997, the EAB upheld EPA's performance of a multi-pathway risk assessment for the Chanute HWDF facility and declined to review any of the technical issues regarding the methodology employed by SAIC. However, the EAB remanded the permit limits for annual mercury and thallium feed rates, and the permit requirements requiring environmental monitoring of these elements. EPA Region 7 was required by the EAB to reopen the permit, to explain how the feed rate limits for mercury and thallium were protective of human health and the environment, and to provide a revised explanation of its authority to include environmental monitoring conditions for mercury **and** thallium in the final permit.

#### J. Subsequent Developments

EPA Region 7 never reopened the final 1996 RCRA Part B permit to address the EAB remand. In July 2001, Ash Grove commenced operation of a replacement kiln system of significantly different design at the Chanute plant. The RCRA Part B permit for the Chanute HWDF facility was modified in August 2000 to accommodate the replacement kiln system. The matters contained in

the EAB remand were addressed in the modified permit. **An** explanation was provided for the annual mercury and thallium feed rate limits, and the requirement for environmental monitoring was vacated and reserved. The Chanute plant is currently preparing to execute a Comprehensive Performance Test under the provisions of 40 CFR 63, subpart HHH during which data suitable for a multi-pathway risk assessment will be gathered.

#### K. Costs

The direct billable costs for review of the SAIC multi-pathway risk assessment are listed below. Additional, unquantified internal costs were incurred by Ash Grove staff for its review of the SAIC risk assessment and the subsequent appeal of unsupported permit conditions. Significant additional costs for outside attorney's were required to appeal conditions in the final RCRA permit that were based on undisclosed calculations in the multi-pathway risk assessment.

Environmental Toxicology Incorporated	\$210,994.06
Delta Toxicology	<u>11,427.48</u>
<b>Total</b>	<b>\$222,421.54</b>

#### 111. Foreman. Arkansas

##### A. Regulatory Setting

The Arkansas Department of Environmental Quality (ADEQ) (then Arkansas Department of Pollution Control and Ecology) was one of the first state agencies to be delegated RCRA authority for implementation of 40 CFR 264 and 40 CFR 265. The Boiler and Industrial Furnace regulations at 40 CFR 266, subpart H were not immediately delegated ADEQ upon promulgation in August 1991 but were delegated to ADEQ during 1993.

##### B. RCRA Part B Permit Applications

Prior to delegation of authority to implement 40 CFR 266, subpart H to the ADEQ, Ash Grove was submitting separate RCRA Part B permit applications for the storage of hazardous waste-derived fuel (HWDF) to the ADEQ and for the burning of HWDF to EPA Region 6. EPA Region 6 promptly "called" the Part B permit application for the Foreman plant following the effective date of 40 CFR 266, subpart H in August 1991. The following is the delivery schedule of these documents.

1. October 1988 - Original Part B permit application for HWDF storage to ADEQ
2. August 1990 - Replacement Part B permit application for HWDF storage to ADEQ  
February 1991 - Revised Part B permit application for HWDF storage to ADEQ  
August 1991 - Revised Part B permit application for HWDF storage to ADEQ
3. February 1992 - Original Cement Kiln Part B permit application for burning HWDF to EPA Region 6
4. May 1993 - Revised Cement Kiln Part B permit application for burning HWDF to ADEQ
5. June 1995 - Consolidated Part B permit application for storage and burning of HWDF to ADEQ
6. June 1996 - Revised consolidated Part B permit application for storage and burning of HWDF to ADEQ
7. November 1997 - Revised consolidated Part B permit application for storage and burning of HWDF to ADEQ

## B. RCRA Trial Burns/Certification of Compliance Test Burns

As part of its strategy to promptly process RCRA Part B permit applications for cement kilns in its area of responsibility, EPA Region 6 required the early submission of a RCRA trial burn plan for the Foreman kilns that would eventually become part of the RCRA part B permit application. Ash Grove submitted its first trial burn plan for the Foreman kilns in November 1991. This trial burn would also serve to meet the requirements for a Certification of Compliance (COC) test burn under the regulations at 40 CFR 266, subpart H. The approved trial/COC test burn was executed under the authority of EPA Region 6 in December 1991 for Kiln No. 2 and in July 1992 for Kiln Nos. 1 and 3. Trial/COC test burn reports were submitted to both agencies in May 1992 for Kiln No. 2 and in October 1992 for Kiln Nos. 1 and 3.

A second trial/COC test burn was conducted under the authority of the ADEQ. The trial burn plan was submitted to ADEQ in June 1994. The approved trial/test burn was executed on Kiln Nos. 1 and 2 during November 1994 and on Kiln No. 3 during January 1995. Reports of this trial/test burn were submitted to the ADEQ in June 1995. The results of this trial/test burn were to serve as inputs for a multi-pathway risk assessment for the Foreman HWDF facility.

Because the RCRA ~~Part~~ B permit had not been issued, a third COC test burn was required to meet the time-sensitive testing requirements of 40 CFR 266, subpart H. With prior agreement between Ash Grove and the ADEQ, the results of this COC test burn would be used to refresh and/or validate the data from the 1994-95 RCRA trial burn and to obtain additional data for the multi-pathway risk assessment. In June 1997, a COC test plan was submitted to the ADEQ. The COC testing was executed in December 1997 and January 1998. The report of this testing was submitted to the ADEQ in April 1998.

## C. Total Organic Emissions Testing

In August 1997, EPA Region 6 provided its comments to Ash Grove on the June 1997 test burn plan. Among these comments was a request that Ash Grove perform a Total Organic Emissions (TOE) test during the test burn described in the plan. The alleged purpose of the TOE test was to assign risk values to unidentified organic emissions from the Foreman cement kilns. In all tests of Ash Grove kilns burning hazardous waste, Ash Grove had identified and quantified every potentially toxic organic compound for which there was an approved test method. Since the TOE test was not part of an established regulatory regime, Ash Grove was unfamiliar with the TOE test or the intended use of the TOE test results in the multi-pathway risk assessment. Ash Grove requested that EPA provide an explanation of the purpose of the test and provide the test method because it was not available in the standard literature. After receipt of the TOE test method, Ash Grove and the ADEQ identified several shortcomings in the proposed TOE test method and the method by which the TOE test results would be applied to the multi-pathway risk assessment.

Following a series of contentious meetings and communications between EPA Region 6, the ADEQ and Ash Grove, agreement was reached on January 16, 1998 to perform an augmented TOE test on Kiln No. 3 at the Foreman plant. There was further agreement as to how the TOE test results would be utilized in the multi-pathway risk assessment. Additional emissions data thought necessary by EPA Region 6 for the multi-pathway risk assessment were to be gathered during the TOE test. Because of issues involving timing, logistics and technology, the TOE test burn was conducted independently of the 1997-98 COC test burn. A TOE test burn plan was submitted to the ADEQ in May 1998. The approved TOE test was executed on Kiln No. 3 in August 1998. METCO Environmental



served as the stack-testing contractor. CH2M HILL assisted in preparation of the TOE test bum plan and the test bum report, and provided third-party quality assurance/quality control supervision during execution of the TOE test bum. A report of the TOE test results was submitted to the ADEQ in February 1999.

#### D. Site-Specific, Multi-pathway Risk Assessment

In 1994, Ash Grove employed ENSR Consulting and Engineering (ENSR) to develop a protocol for a screening level multi-pathway risk assessment for the Foreman HWDF facility. This protocol was developed and submitted to the ADEQ for comment and approval in August 1994. Subsequently, additional EPA guidance for the conduct of multi-pathway risk assessments at combustion facilities burning hazardous waste became available. Based on this new guidance, EPA Region 6 and ADEQ provided extensive comments on the proposed ENSR protocol. Consequently, the multi-pathway risk assessment protocol required multiple revisions and/or replacement.

In July 1995, Dr. Kathryn Kelly of Delta Toxicology, Inc. (also d.b.a. Environmental Toxicology International) was engaged by Ash Grove to develop a new work-plan for a multi-pathway risk assessment for the Foreman HWDF facility. She commenced work on a draft work-plan in October 1995 and incorporated the earlier agency comments on the ENSR draft protocol. This work-plan was developed in full cooperation with and under the supervision of the ADEQ. The original draft of the new work-plan was submitted to ADEQ in May 1996. After modifications of the work-plan to resolve concerns of the ADEQ and EPA Region 6, the work-plan was approved by ADEQ in September 1997.

Unknown to Ash Grove, EPA Region 6 had been developing its own multi-pathway risk assessment for the Foreman facility using draft guidance that had not been subjected to public review and comment. Several of the comments from EPA Region 6 on the Ash Grove work-plan and the subsequent multi-pathway risk assessment arose from the results of this undisclosed multi-pathway risk assessment, and were the result of misunderstandings and inappropriate assumptions about the facility, its surroundings and its operation. The EPA Region 6 multi-pathway risk assessment is dated May 1997.

In June 1998, Ash Grove submitted to ADEQ the initial draft of the multi-pathway risk assessment prepared by Dr. Kelly. After comment by ADEQ and EPA Region 6 through ADEQ, an updated multi-pathway risk assessment was submitted to ADEQ in December 1998. Throughout preparation of the multi-pathway risk assessment, there was extensive communication and cooperation between Ash Grove, Dr. Kelly and ADEQ. Results of the TOE testing were later incorporated into the multi-pathway risk assessment.

#### E. Final RCRA Part B Permit

Then final RCRA Part B permit for the Foreman HWDF facility was issued by the ADEQ on July 31, 2000. The permit conditions were based, in part, on the findings and conclusions of the cooperative multi-pathway risk assessment. Ash Grove did not appeal any of the conditions of the final permit.

#### F. Costs

The direct billable costs for development of the multi-pathway risk assessment for the Foreman HWDF facility are listed below. Included are costs of preparation for and execution of a TOE test that was a required by EPA Region 6 as a prerequisite to the risk assessment but that was beyond the regulatory requirements prescribed by 40 CFR 266, subpart H. Additional, un-quantified internal costs were incurred by Ash Grove staff for its participation in the development of the multi-pathway risk assessment and the

execution of the TOE test.

ENSR	\$33,705.84
Delta Toxicology	367,017.63
METCO Environmental	122,545.91
CH2M HILL	<u>71,403.24</u>
<b>Total</b>	<b>\$594,672.62</b>

**The Addition of Risk Assessment  
to the  
Part B Permitting Process**

**Holnam – Region 4 BIF Facilities**

**Please Note: Holnam Inc. changed its name to Holcim (US) Inc. on December 12, 2001. Since activities and appropriate documents referred to in this summary are associated with the company's former name, references to the company are as Holnam. Future reports or documents will refer to the company as Holcim.**

Holnam uses hazardous waste as a fuel supplement at *two* of the company's cement manufacturing facilities in EPA Region 4; one in Holly Hill, South Carolina (Holly Hill), and one in Artesia, Mississippi (Artesia). Safety-Kleen partners with Holnam in the waste-derived fuels program at these sites and, as such, has participated in the permitting efforts described herein. While both companies have been equally involved, Holnam's name will be used throughout the document to represent the joint effort and to simplify the discussion.

The facilities have been working through various aspects of the RCRA Part B permitting process for an unusually extended period—Holly Hill for over 12 years (Part B submitted in 1989) and Artesia for over 8 years (Part B submitted in 1993). The RCRA permitting process has taken many twists over the time period that Holnam has been engaged in the activity. With new guidance and interpretations of the rules consistently occurring during this time, reaching the point of approvals for the final permits has become an elusive and moving target. The two facilities have been taxed with meeting changing requirements and, therefore, frequently new approaches on a continual basis. Despite the frequent use of guidance to validate new requirements, Holnam has worked cooperatively with EPA and the respective state agencies to arrive at mutually agreeable solutions wherever possible.

The most significant changes to the permitting process requirements resulted from the EPA's National Combustion Strategy. In accordance with the strategy, EPA Region 4 began pursuing the permitting process more aggressively. In late 1996, the requirement to perform a multi-pathway risk assessment and corresponding "risk burn" stack emissions test was first formally communicated to affected facilities with a new schedule for conducting and completing permit reviews. Essentially, the traditional Part B permitting process which required a Part B application and trial burn plan to be submitted, reviewed and approved, became a three part process with the risk assessment component requiring significant additional resources. The risk assessment part of the permitting process became increasingly time consuming and costly during the ensuing years.

Since late 1996, the two facilities have been actively working with EPA Region 4 and

the corresponding state agencies to complete the permitting process. The facilities have enjoyed a very good working relationship with the agencies, and have worked together cooperatively to define the details of the risk elements of the permitting process in an effort to arrive at a mutually agreeable approach.

The additional work required has been very challenging, costly and resource intensive resulting in few, if any, conclusive additional environmental protection benefits. As referenced above, regardless of meeting regulatory requirements established through the permit process or adequately providing information requested by the Agency through its application of guidance, there seemed always to be additional details to address. Nevertheless, the facilities have worked hard to address all of the issues that have arisen, and continue to work through the remainder of the process in an effort to obtain final Part B permits.

The following paragraphs document the past and pending permitting process at the two facilities. A summary of costs and timeline of events for the risk assessment element of the permitting process is also included. This information also demonstrates how the Agency's use of guidance, beyond the normal requirements of the rules, has created a constantly shifting end-point requiring unnecessary and extensive time and capital.

### **Holly Hill Facility**

The Holly Hill facility started burning hazardous waste in 1989 when South Carolina DHEC issued the plant a Part B storage permit. The finalization of the BIF rules required the facility to submit an application to modify its permit to add the BIF portions. The modification was submitted in 1992, along with a trial burn plan. The storage permit was scheduled for renewal in 1994, and the facility submitted a new application (October 24, 1994) which incorporated the BIF components from the 1992 submittal. Neither application received significant review by the EPA or SCDHEC until the renewed Agency permitting effort that started in late 1996.

In order to get a quick start on the renewal process, EPA shared a generic Notice of Deficiency (NOD) with Region 4 facilities that explained the detailed needs for collecting information and performing a risk assessment. Further guidance was provided when EPA hosted a 3-day risk assessment workshop in January 1997. Holly Hill received its first NOD on the Part B application in April 1997, which officially included the "requirements for conducting a multi-pathway, site-specific risk assessment to define protective emission limits." From that point until late 1999 the facility worked closely with EPA, SCDHEC and consultants to prepare an administratively and technically complete Part B application and trial burn plan (including all the risk elements), and a risk assessment protocol that met the new requirements outlined in the 1997 NOD.

Many of the details of testing for the risk elements, and preparing a risk protocol that met EPA's objectives, took the most considerable amount of research, meetings, and technical document development over the next three years. The trial burn/risk burn plan, and the

original risk assessment protocol were submitted in July 1997. Initial comments were received from EPA in October and November 1997. Several meetings were held thereafter with the Agency to address follow-up issues. Another NOD was received from EPA on the trial burn/risk burn plan and the risk protocol in July 1998. A revised protocol and Trial Burn/risk burn plan were submitted to EPA in October 1998. Additional meetings were held with the EPA and SCDHEC, and the final issues were resolved by June 3 1999. At that point the final trial burn plan and risk protocol were sent to EPA. The plans were approved, and sent for public notice prior to the November 1999 trial burn start date. The trial burn/risk burn was performed from November 1999 to January 2000 (two separate test events to address the two kilns) in accordance with the approved trial burn/risk burn plan.

In addition to the facility meetings and technical work, the BIF cement kilns in Region 4 decided to form a work group for multi-facility and multi-agency discussions on topics related to hazardous waste combustion facilities. The work group was used to perform technical research and communication on issues that affected all the facilities, with a significant amount of time spent from 1997 - 1999 on risk assessment and risk burn related issues. The emphasis of industry was to try to define an approach that could be implemented and accomplished in a reasonable timeframe, rather than one resembling a research project.

During the summer and fall of 1999, plans were initiated to modernize the Holly Hill plant by permitting a single new kiln at the existing site. The new kiln would replace the two existing kilns and concurrently increase the plant's cement manufacturing capacity in order to meet growing demand in the southeast market. The plans were finalized in late 1999. Facility and project personnel met with the agencies to determine the most appropriate course to transfer the RCRA permitting process to the new kiln rather than continue spending resources on the two existing kilns that ultimately would be shut down prior to receiving their final Part B permit. Additionally, the new kiln would be subject to HWC MACT standards upon startup. It was determined that future resources should be spent on permitting and associated risk components for the new kiln, as opposed to continuing on permitting the existing kilns.

In order to start the permitting process for the new kiln, a revised Part B application was submitted to replace the application that was currently under review. As part of the submittal, a "predictive" risk assessment was required, with the study being performed using the already approved risk assessment protocol. The Agency indicated that this step was necessary to evaluate emissions with respect to protecting human health and the environment. The risk assessment and Part B application addressing the new kiln system were submitted in June 2000. The Agency reviewed the documents and sent NODs to the facility in November 2000 (risk assessment) and Feb 2001 (permit application), respectively. A revised preliminary risk assessment addressing the NOD issues was submitted in May 2001. Additional comments were addressed in late 2001.

The most recent development with the Holly Hill permitting process that is

indicative of the Agency's tendency to inappropriately use guidance is seen in the most recent Part B NOD. The document contained requests to insert risk based provisions into the WAP and BIF sections, even though the predictive risk assessment did not demonstrate the need for additional permit conditions. Holnam subsequently submitted a revised Part B application in August 2001, which addressed the company's understanding of a compromise with respect to risk-related issues. Facility personnel are currently discussing with the Agency why the omnibus provisions are relevant, or even warranted, since established thresholds for risk assessment were achieved.

Work is continuing at this time toward a final Part B permit, which is expected in mid-2002. Finally, once the new kiln is operational and a risk burn is performed, an update of the **risk** assessment will be required using actual data from the test results. At that time the RCRA permit may again be addressed. Depending on how conservative the EPA requires the risk assessment to be, permit limits might be required to be adjusted.

### Artesia Facility

The Artesia facility started burning hazardous waste as fuel in September 1993 as an interim status facility. A Part B application was submitted in December 1993, which included the storage and BIF units. The facility received their first NOD on their Part B application on June 16, 1997, which was similar to that received by Holly Hill. Artesia's NOD also addressed the need for the risk assessment and risk burn to be added to the permitting process. Based on the NOD, the facility submitted a revised Part B permit application and trial burn plan in October 1997, and proceeded on the risk assessment pathway in conjunction with Holly Hill,

In order to conserve resources, the two facilities worked together on the risk assessment and trial burn/risk burn planning process, essentially treating it as one project. Although the permit writer's time schedule was different for the two facilities, the coordination and agreements made for the Holly Hill facility from late 1996 until late 1999 were also being made with participation from, and on behalf of the Artesia facility. Actual submittal dates varied somewhat, as shown on the attached timeline. The Artesia trial burn/risk burn plan and risk assessment protocols were finally approved in February 2000. The trial burn/risk burn test was performed in June 2000, and the report was submitted in the Fall of that year.

In July 2001, an NOD was received addressing both the Part B permit application submitted in 1997 and the Fall 2000 trial burn report. The NOD required information to be included in the Part B permit application to address the inclusion of risk based limits. At this point, Holnam's position is that the risk assessment process is not developed enough to demonstrate any need for additional permit conditions. The final **risk** assessment will be performed once the trial burn/risk burn report is approved. Based on the current envisioned schedule, the facility will be performing the risk assessment and finalizing the Part B permit application by mid-2002. The permitting process beyond

that point is expected to take at least another 1-1/2 years, at which time the HWC MACT requirements will also be in place.

**CONSULTANT COSTS & ESTIMATES**

Information was compiled regarding total consultant costs for performing the additional risk related permit requirements at both facilities. The following table provides costs of the major components of gathering data for, and performing the risk assessment. The costs include already incurred and anticipated future costs for the risk assessment consultant. In addition, costs are also included for permitting and stack testing consultants who performed incremental work related to permitting the two facilities.

<b>Consultant Costs</b>	<b>Costs 1996-2001</b>	<b>Anticipated costs 2001-2003</b>	<b>Total Project costs</b>
Risk Assessment Costs	\$542,039	\$186,258	\$728,297
Risk Burn Costs	\$438,790	\$150,000	\$588,790
Part B-risk limit costs	\$22,054	\$12,000	\$34,054
			<b>\$1,351,141</b>

Supplemental to the costs for consultants, Holnam and Safety-Kleen environmental staff has devoted time to the permit process far above what their normal duties would typically require.

The following provides an estimate of hours spent to date by Holnam and Safety-Kleen personnel on the risk related components of the permitting process for the two facilities.

Man-hours for Holnam/Safety Kleen personnel performing and directing risk related projects	4,550 (approximately 2.5 man-years)
Travel costs for meetings	\$30,000

When considering the total costs to the two facilities for the additional risk related portion of permitting the hazardous waste burning activities, the project totaled over 1.6 million dollars. This is obviously a very significant cost with respect to the overall permitting project.

**CONCLUSION**

Holnam is proud of the environmental benefit the company provides by utilizing hazardous waste as fuel in the energy intensive cement manufacturing process. The company understood the commitment and costs that would be incurred for permitting the facilities when the original decision was made to commence. However, the additional requirements introduced through the National Combustion Strategy, and its ensuing

guidance, have necessitated significant amounts of additional time and related costs to the task of obtaining permits.

The addition of the risk portion of the permitting process has especially increased the amount of resources at both the facilities and the agencies. As described above, there have been many iterations of NODs, and it has taken a considerable amount of research to develop information pertaining to the growing and changing field of risk assessment. The process has been overly burdensome and resource intensive, especially when compared to the negligible, if any, environmental benefits that the process has added.

Holnam has continued to work closely with the agencies and looks forward to final issuance of Part B permits. The company believes that by being diligent and cooperative in the process, it has enjoyed a mutually beneficial relationship. However, a constantly moving end-point due to the Agency's inappropriate use of guidance, and the related resources required to respond, have created a permit process above and beyond that required by regulation or necessary to protect human health and the environment.



Giant Cement Holding, Inc.  
 EPA Site Specific Risk Assessment  
 Operational, Economic, and Permitting Impacts

1. COSTS

Contractor Dollar Costs

Facility	Contractor RAWP Development	Contractor Risk Assess. Final Report	Contractor Testing Costs (2)	Total Contractor Costs (\$)
Solite Cascade LWA	\$40,000	\$50,000	\$20,000	\$110,000
Solite Arvonía LWAK	\$40,000	\$50,000	\$20,000	\$110,000
Keystone Cement				\$500,000

In House Man Hour Costs

In House RAWP Development	In House Risk Assess. Final Report	In House Testing Hours (1)	Total Man-Hours (hrs)
100	100	192	392
100	100	72	272
			n

Note: Costs are approximate

(1) In house man-hours due to sampling, etc. (2 people x 12 hours/test x No. of tests per facility)

(2) Cascade and Arvonía did not perform separate "Risk Burns." Therefore, additional stack costs are reduced







3. Permitting Issues Related to Risk Assessment:

Cascade/Arvonja: These are light-weight aggregate kiln facilities.

1. Annual average metal feed rate g/hr limitations based on risk assessment data
2. Permit condition that excludes waste codes that have not been accepted previously. Condition requires facility to demonstrate that any new codes are representative of the types of materials burned during Trial Burn
3. Additional limitations for metals that have not been regulated prior to risk assessment (e.g. - nickel, selenium)
4. Requirement for routine organic testing in waste fuel
5. Routine stack testing for all emission limitations (metals, chlorides, etc.)

Keystone Cement Plant

1. Different metal feed rate g/hr limitations based on risk assessment data

BEFORE THE ADMINISTRATOR OF THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

\_\_\_\_\_  
CEMENT KILN RECYCLING )  
COALITION, )  
)  
)  
Petitioner, )  
)  
)  
CHRISTINE T. WHITMAN, )  
ADMINISTRATOR, )  
UNITED STATES ENVIRONMENTAL )  
PROTECTION AGENCY, )

Respondent. \_\_\_\_\_

**PETITION UNDER RCRA §7004(a)**  
**FOR (1) REPEAL OF REGULATIONS**  
**ISSUED WITHOUT PROPER LEGAL PROCESS**  
**AND (2) PROMULGATION OF REGULATIONS**  
**IF NECESSARY WITH PROPER LEGAL PROCESS**

1. General Background and Summary of Relief Sought.

a. General Background.

This Petition relates to EPA’s actions under the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§6901, *et seq.*, and particularly RCRA’s “omnibus authority” (RCRA §3005(c), last sentence). Through this Petition, the Cement Kiln Recycling Coalition (CKRC) requests that EPA immediately cease imposing expensive and time-consuming requirements on CKRC’s members on the basis of omnibus authority “guidance” that has never been subjected to notice-and-comment rulemaking under the Administrative Procedure Act (APA), 5 U.S.C. §§551, *et seq.* Should EPA continue to believe some form of these requirements are appropriate, we request that EPA issue such requirements by following notice-and-comment rulemaking procedures.

CKRC members operate cement kilns that recover energy by burning hazardous waste fuel (HWF). These kilns are already subject to emission standards and other operating requirements contained in regulations EPA has issued under RCRA and the Clean Air Act (CAA), 42 U.S.C. §7401, *et seq.* These

regulations impose many costly substantive and procedural requirements on CKRC's members. These regulations contain detailed provisions requiring that in certain circumstances, a site-specific risk assessment (**SSRA**) be performed to determine whether additional restrictions should be imposed.

Each cement kiln that burns HWF is required by RCRA §3005 to obtain a RCRA permit for that activity. In its so-called-“omnibus” provision, RCRA states that each permit “shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment.” RCRA §3005(c), last sentence. The omnibus authority was added to RCRA in 1984.

Over the years, EPA has published many detailed and prescriptive regulations setting forth the requirements that applicants must follow in order to obtain a RCRA permit. Yet for the last eight years, EPA has been establishing entirely outside the rulemaking process a new SSRA program for cement kilns and other hazardous waste combustors (HWCs) regulated by RCRA (such as incinerators, boilers, and light-weight aggregate kilns). Through a number of “guidance” documents, EPA has established highly detailed and very costly and time-consuming requirements for *HWCs* to perform SSRAs as a condition to receiving a RCRA permit. EPA has claimed these SSRA “guidance” documents are based on RCRA omnibus authority.

These new SSRA requirements add significantly to the substantive and procedural burdens for HWCs that EPA has imposed through its regulations. EPA's “guidance” for SSRAs does not by any stretch of the imagination explain, clarify, interpret, or elaborate upon burdens and duties that EPA has established in its regulations - rather, the “guidance” *creates* significant new burdens and duties not found in EPA's regulations.

b. Summary of Relief Sought.

This Petition is filed under RCRA §7004(a), which provides:

Petition. -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 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.

CKRC believes the **SSRA** guidance documents EPA has issued over the years are, under relevant case law, regulations that have been issued without following legally-prescribed procedures for notice-and-comment rulemaking. As explained below, CKRC does not believe these SSRA requirements are in any

event necessary or appropriate. Moreover, even if EPA somehow established a need for such type of requirements in certain circumstances, CKRC believes such requirements could only be imposed after EPA had issued them as regulations following appropriate rulemaking procedures.

CKRC accordingly seeks two basic types of relief under RCRA §7004(a):

(1) Repeal of regulations. CKRC urges EPA immediately to repeal the regulations it has unlawfully issued. Under applicable case law, the SSRA requirements should be deemed void and of no effect because they are regulations issued without appropriate notice-and-comment rulemaking procedures. In this situation, EPA can and should repeal them without notice and comment by simply publishing a notice stating they are withdrawn.

(2) Promulgation of regulations. After withdrawing the existing requirements, should EPA believe it can establish the need to require SSRAs in certain situations, CKRC urges EPA to undertake an appropriate notice-and-comment rulemaking process seeking to promulgate regulations establishing such requirements.

We note that RCRA §7006(a)(1) provides the right to judicial review of the Administrator's action in "denying any petition for the promulgation, amendment or repeal of any regulation." CKRC wishes to stress that it fully intends to pursue its judicial review rights, and that this Petition states *two independent requests* for action under RCRA §7004(a).

Accordingly, CKRC will consider a failure by EPA to grant relief on its first basic request within a reasonable time as establishing the right for CKRC to seek judicial review. In other words, even if EPA were to initiate some rulemaking action in response to CKRC's second basic request, if that action is not accompanied by a repeal of the current regulations within a reasonable time, CKRC will be prepared to initiate judicial review over EPA's failure to grant the relief requested in CKRC's first basic request. As explained in parts 8 and 9 below, we believe a reasonable time for acting on our first request is no more than a few months from now.

## 2. The Statutory and Regulatory Setting.

In 1991, pursuant to RCRA §3004(q), EPA issued emission standards and

other procedural requirements for cement kilns, boilers, and other industrial furnaces that burn hazardous waste. 40 C.F.R. part 266, subpart H (generally known as the “BIF Rules”). In 1999, EPA issued new standards under its CAA “maximum achievable control technology,” or “MACT,” authority for cement kilns that burn hazardous waste and other HWCs. 40 C.F.R. part 63, subpart EEE (generally known as the “HWC MACT Rules”). Once the MACT Rules take effect, they will supplant the BIF Rules.

RCRA gives EPA broad rulemaking authority: “In carrying out this Act, the Administrator is authorized to (1) prescribe in consultation with Federal, State, and regional authorities, such regulations as are necessary to carry out his *[sic]* functions under this Act . . . .” RCRA §2002(a). RCRA also requires that “each regulation promulgated under this Act shall be reviewed and, where necessary, revised not less frequently than every three years.” RCRA §2002(b).

RCRA §3005 requires EPA to issue regulations containing RCRA permit application requirements. For instance, RCRA §3005(a) requires EPA to promulgate regulations requiring hazardous waste treatment, storage, and disposal facilities to have permits. More particularly, RCRA §3005(b) provides as follows: “(b) Requirements of Permit Application. – Each application for a permit under this section shall contain such information *as may be required under regulations promulgated by the Administrator . . . .*” (Emphasis added.)

EPA has issued regulations on numerous occasions setting forth requirements for various types of facilities to obtain RCRA permits, and, pursuant to RCRA §3005(b), specifying detailed information that must be included in permit applications. These requirements, codified in 40 C.F.R. part 270, are exhaustive and detailed. They go well beyond the bare words of the statute to provide detailed substantive and procedural requirements filling 75 pages in the Code of Federal Regulations.

These regulations also contain sections setting forth additional details of “specific” information relating to HWCs that go well beyond the bare words of the statute. *See* §270.19 (entitled “Specific part B information requirements for incinerators”), and §270.22 (entitled “Specific part B information requirements for boilers and industrial furnaces [*e.g.*, cement kilns] burning hazardous waste”). “Part B” is the element of a RCRA permit application that contains the most comprehensive and detailed site-specific information. *See* §270.1(b).

When EPA issued its original part 270 regulations, it clearly envisioned (consistent with RCRA §3005(b)) that the details of any information required to be included in a RCRA permit application would be specified in part 270 regulations. As provided in §270.1(b): “part B [of the application] must be submitted in narrative form and contain the information set forth in the applicable sections of §§270.14 through 270.29.” It is also clear from a review of these

provisions that **EPA's** regulatory requirements provide many details going beyond the simple words of the statute.

In 1984, Congress added the so-called “omnibus” provision to RCRA: “Each permit issued under this section shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment.” RCRA §3005(c)(3), last sentence. **EPA's** elaboration upon its omnibus authority for RCRA permits through actual regulations, in stark contrast to its practice respecting other RCRA permit requirements, has been virtually non-existent. In 1985, **EPA** issued the following regulation:

Each permit issued under section 3005 of this act shall contain terms and conditions as the Administrator or State Director determines necessary to protect human health and the environment.

50 FR 28752 (July 15, 1985), adding new 40 C.F.R. §270.32(b)(2).

This added virtually nothing to the statutory language: except for omitting “such” and adding “Director,” the regulation merely parroted the statute *verbatim*. In 1987, EPA added the following to its RCRA permit regulations:

The Director may require a permittee or an applicant to submit information in order to establish conditions under §§270.32(b)(2) and 270.50(d) of this chapter.

52 FR 45799 (December 1, 1987), adding new 40 C.F.R. §270.10(k).

**As** can be seen above, §270.32(b)(2) was the “omnibus” language added in 1985. Section 270.50(d) relates to certain facilities not relevant to this Petition.

Thus, **EPA** has broad authority to issue regulations as may be necessary to carry out its authorities under RCRA, and specifically requires EPA to issue regulations prescribing requirements for information that is to be included in RCRA permit applications. RCRA also requires **EPA** to review and revise these regulations where necessary at least every three years. **EPA** has exercised this authority and issued detailed regulations in 40 C.F.R. part 270 that have been amended many times over the last 20 years.

Yet even though omnibus authority has been included in RCRA since 1984, EPA has never issued regulations specifying detailed information to be submitted for any type of facility to implement this omnibus authority. Rather, EPA's regulations respecting its omnibus authority (that have not been amended in the last 14 years) provide no more detail than the statute provides. **As** will be seen, EPA has chosen to flesh out its omnibus authority through guidance rather than



regulations.

3. Evolution of SSRA Requirements and CKRC's Concerns.

a. SSRA Basics.

An SSRA is a resource-intensive, site-specific inquiry into the effects various exposure levels of certain substances potentially emitted by a facility (such as a cement kiln) would have on (1) the health of humans (in the case of a human health SSRA) or (2) the viability of non-human organisms such as plants and animals (in the case of an ecological SSRA). See attached Affidavit at ¶2.

A human health **SSRA** may be of two basic types. First, a “direct” exposure assessment focuses only on inhalation of substances by humans. It attempts to predict the health impact on humans breathing air in the vicinity of a facility, where substances that may be emitted by the facility may be inhaled in various predicted concentrations. Affidavit at ¶3.

An “indirect” exposure assessment focuses on “multi-pathways” (beyond direct inhalation) by which humans may become exposed to substances potentially emitted by a facility. For instance, a substance emitted into the air may be deposited in soil in which a tomato is grown, and that tomato may be eaten by a human. Or alfalfa may be grown in that soil, and the alfalfa may be eaten by a cow, which then gives milk ingested by a human. The indirect assessment attempts to predict the health impacts to humans who might be exposed to the substance in this “indirect” manner. It is generally recognized that the techniques for conducting direct exposure risk assessments are much more refined and widely accepted in the scientific community than the techniques for conducting indirect exposure **risk** assessments, and there is much greater room for error and debate with respect to indirect assessments. Affidavit at ¶3.

A third type of SSRA is an ecological risk assessment. Such an assessment goes beyond human health concerns and attempts to predict quantified effects of both direct and indirect exposures on non-human receptors such as plants, animals, fish, soil, and water bodies. Affidavit at 73.

Performing an SSRA requires the gathering and processing of reams of scientific and engineering data and the utilization of significant time and effort of experts. CKRC's members' experience has shown that a complete SSRA costs hundreds of thousands of dollars to perform and, with the so-called “risk bum” associated with the SSRA, the total costs for a single cement kiln facility have gone over \$1,000,000. Affidavit at ¶8(n).

b. Limited SSRA Requirements Originally Issued Through Rulemaking.

In 1991, EPA issued the BIF Rules. 40 C.F.R. part 266, subpart H, 56 FR 7134 *et seq.* The BIF Rules contained no requirement for an ecological risk assessment.

With respect to human health risk assessments, the BIF Rules contained no requirement for an indirect exposure **SSRA**.

The BIF Rules required a direct exposure risk assessment, but only for two limited types of HWCs: (1) HWCs equipped with a dry particulate control device operating in a temperature range of 450-750° F, and (2) HWCs operating under an “alternative” hydrocarbon limit allowed in other sections of the BIF Rules. The BIF Rules specified the risk assessment procedures to be followed in conducting these SSRAs in great detail. 40 C.F.R. §266.104(e)(1)-(4).

A critical issue in performing an SSRA is the threshold level for making a “yes-no” decision. That is, at what numeric level of projected risk will the risk be deemed unacceptable, thus forcing the applicant either to further control its emissions or to be denied the ability to recover energy from hazardous waste?

The BIF Rules provided a specific answer to this question for the direct exposure risk assessments required in the rules. The BIF Rules required that the facility meet a projected **risk** level of an increased lifetime cancer risk to the hypothetically maximum exposed individual of 1 in 100,000. 40 C.F.R. §266.104(e), first paragraph.

c. Greatly Expanded SSRA Requirements Subsequently Issued Through “Guidance.”

In 1993, former Administrator Browner announced her “Draft Combustion Strategy.” In a press release and in documents issued with the press release (dated May 18, 1993), she issued a new requirement that, effective immediately, **every** HWC applying for a RCRA permit would have to have an *indirect* exposure risk assessment. She stated that this new requirement was based upon EPA’s “omnibus” authority under RCRA. Ms. Browner neither proposed nor issued any amendments to the BIF Rules in part 266 or EPA’s RCRA permit regulations in part 270 regarding this new requirement. To this day, EPA has never proposed or issued any regulations respecting this requirement.

In November, 1994, Ms. Browner issued a “final” combustion strategy as a follow-up to her “draft” of 1993. The “final” strategy is posted on EPA’s Website at <http://www.epa.gov/epaoswer/hazwaste/combust/general/strat-2.txt>. Her 1994 strategy said EPA would, for HWCs, “continue the current policy that risk assessments should be completed prior to making final permit determinations.”

(Page 25 of **26** on Website locator cited immediately above.)

Over the last seven years, EPA has produced thousands of pages of memoranda and “guidance” documents – but not one word in proposed or final regulations – specifying new and ever-changing requirements for HWCs to perform SSRAs. The process is recounted in some detail in the attached Affidavit.

The attached Affidavit makes several key points:

(i) One critical issue is whether an **SSRA** need be performed at all for a HWC that will be receiving a RCRA permit when the HWC is in full compliance with the BIF Rules and/or the HWC MACT Rules. CKRC does not believe a cement kiln that complies with the BIF Rules and/or the HWC MACT Rules need be subjected to any form of **SSRA**, and has stated its position to EPA many times over the years.

(ii) EPA’s position on this issue has evolved somewhat since 1994, and is at best confusing and inconsistent from document to document. EPA’s position is particularly inconsistent when comparing the written words to actual practice. EPA has stated in several documents that an SSRA will not necessarily be required for each HWC, and has offered a confusing array of criteria that are supposedly to be used on a case-by-case basis for determining whether to require an **SSRA**. In practice, however, it appears that **EPA** will require an SSRA for *every* cement kiln – even when a kiln is in full compliance with the new MACT requirements – and one EPA Region has issued guidance confirming this. It is also apparent that an indirect exposure SSRA will be required, and that an ecological SSRA will be required.

(iii) None of EPA’s positions on this critical issue has ever been subjected to notice-and-comment rulemaking under the **APA** since 1991. If one were to refer to EPA’s regulations, one would be led to believe (by the 1991 BIF Rules) that only a very limited subset of cement kilns would be required to perform an SSRA, and that only a direct exposure SSRA would be required in those instances. Not one word has been added to EPA’s regulations that would expand the regulatory **SSRA** requirements beyond this limited subset of facilities. Moreover, not one word has been added to EPA’s regulations that sets forth any provisions relating to either (i) indirect exposure risk assessments for human health or (ii) ecological **risk** assessments.

(iv) Another critical issue is precisely how an SSRA should be conducted if one is required. In the BIF Rules, for those limited situations when a direct exposure SSRA was required, the regulations themselves contained detailed procedures and protocols to be followed. Yet for the much more burdensome

indirect exposure human health SSRAs and the ecological SSRAs that EPA has been requiring, the procedures and protocols have been developed entirely through guidance. They have in fact been developed in a confusing pattern of drafts over a number of years in a seemingly endless fashion.

(v) CKRC believes, and has stated for the record many times, that EPA's "guidance" procedures and protocols generally contain overly-conservative assumptions on the true nature of potential risks and that the combination of many overly-conservative assumptions produces SSRA results that significantly overstate the true nature of the potential risks presented by a facility. This over-conservatism has direct adverse effects on CKRC's members, because it can result in significantly more burdensome and expensive requirements being imposed, and can even result in the denial of a permit. Yet CKRC and its members have been denied an opportunity to present their concerns to EPA through the notice-and-comment rulemaking process.

(vi) CKRC's members are being forced to incur significant expenditures of time, money, and staff resources in attempts to comply with ever-increasing and ever-changing demands from EPA staff regarding the performance of SSRAs, and even where the results of such efforts may ultimately not lead to a permit denial or the imposition of more stringent emission limitations, CKRC's member companies are being forced by EPA's non-rulemaking "guidance" to incur these significant expenditures. CKRC's members have in fact spent millions of dollars thus far in performing risk assessments under EPA's SSRA guidance. One cement kiln facility spent approximately \$1,300,000.00 on one risk assessment along with the requisite "risk burn."

(vii) A critical SSRA issue is the threshold level for making a "yes-no" decision. That is, at what numeric level of projected risk will EPA deny a RCRA permit or force the applicant to spend more money to control emissions more stringently than required by the **BIF** or MACT rules? Quite shockingly, *nowhere in all the thousands of pages of SSRA guidance currently in effect does EPA answer that critical policy and legal question.* Various acceptable threshold numbers are bandied about throughout EPA's Regions by word of mouth. While one Region has its own "addendum" specifying

recommended numbers, EPA headquarters and the other Regions prefer to have no written rules or published policies on this critical issue.

#### 4. The D.C. Circuit's *Appalachian* Decision and Relevance to EPA's SSRA Guidance.

On April 14, 2000, the United States Court of Appeals for the District of Columbia Circuit issued its 3-0 opinion in *Appalachian Power Co. v. EPA*, 208 F.3d 1015 (D.C. Cir. 2000). We note that the D.C. Circuit has exclusive

jurisdiction to review national regulations issued under RCRA, and will also have exclusive jurisdiction to review EPA's response to this Petition (see part 9 below).

The Appalachian petitioners sought judicial vacatur of EPA's requirements contained in a "guidance document." Petitioners argued that the requirements contained in the challenged document were in effect rules rather than guidance, and that they could not be implemented without first being subjected to notice-and-comment rulemaking. 208 F.3d at 1024.

The D.C. Circuit agreed with the petitioners. Because the guidance was "in practical effect" a rule that had never been subjected to notice and comment, the D.C. Circuit ruled that the guidance "must be set aside in its entirety" and the Court prohibited permitting authorities from utilizing it in making permit decisions. *Id.* at 1028.

The Court's explanation of the background to *Appalachian* shows a striking similarity to the SSRA situation:

The phenomenon we see in this case is familiar. Congress passes a broadly worded statute. The agency follows with regulations containing broad language, open-ended phrases, ambiguous standards and the like. Then as years pass, the agency issues circulars or guidance or memoranda, explaining, interpreting, defining and often expanding the commands in the regulations. One guidance document may yield another and then another and so on. Several words in a regulation may spawn hundreds of pages of text as the agency offers more and more detail regarding what its regulations demand of regulated entities. **Law** is made, without notice and comment, without public participation, and without publication in the Federal Register or the Code of Federal Regulations. With the **advent** of the Internet, the agency does not need these official publications to ensure widespread circulation; it can inform those affected simply by posting its new guidance or memoranda or

policy statement on its Website. **An** agency operating in this way gains a large advantage. It can issue or amend its real rules, i.e., its interpretative rules and policy statements, quickly and inexpensively without following any statutorily prescribed procedures. The agency may also think there is another

advantage – immunizing its lawmaking from judicial review.

208 F.3d at 1020, internal quotations and citations omitted, emphasis supplied.

We believe the “phenomenon” described in *Appalachian* is fully exemplified by the facts presented in this Petition. In fact, we believe our Petition more completely and more strikingly illustrates the “phenomenon” than the facts in *Appalachian*.

At issue in *Appalachian* was an EPA document called “Periodic Monitoring Guidance” (PMG). Section 502(b) of the Clean Air Act directs EPA to issue “minimum elements” of State permit programs, including “monitoring and reporting requirements.” (CAA §502(b)(2).) In 1992, EPA issued a short regulation implementing this authority. In relevant part, the regulation provided:

Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), [each permit shall contain] periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit, as reported pursuant to paragraph (a)(3)(iii) of this section.

40 C.F.R. §70.6(a)(3), 208 F.3d at 1017-18.

Based on this regulation, EPA issued its 19-page PMG as a “guidance document.” The PMG instructed permitting authorities with a much greater level of detail than EPA’s regulation on the issue of how much monitoring is “sufficient.” The PMG included a list of six factors (that were not exclusive) for permitting authorities to consider on a case-by-case basis to make this decision. *Id.* at 1027. EPA had issued earlier versions of the PMG and solicited public comment, *id.* at 1022, and was at the time working on even more refined guidance. *Id.* at 1024. The PMG also included a disclaimer:

The policies set forth in this paper are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

*Id.* at 1023.

The D.C. Circuit ruled that despite this “disclaimer,” the PMG had the practical effect of requiring parties to take actions going beyond the regulations

and that the PMG must be vacated because EPA failed to follow rulemaking procedures. *Id.* at 1028. The Court was unmoved by EPA’s argument that the PMG was undergoing revision and “subject to change.” *Id.* at 1022. The Court ruled that the fact that “a law may be altered in the future has nothing to do with whether it is subject to judicial review at the moment.” *Id.*

The D.C. Circuit enunciated a four-part test for determining whether a document labeled “guidance” is nevertheless binding:

If an agency [1] acts as if a document issued at headquarters is controlling in the field, if it [2] treats the document in the same manner as it treats a legislative rule, if it [3] bases enforcement actions on the policies or interpretations formulated in the document, if it [4] leads private parties or State permitting authorities to declare permits invalid unless they comply with the terms of the document, then the agency’s document is for all practical purposes “binding.”

*Id.* at 1021.

Our situation is highly analogous to the situation in *Appalachian*. First, there is broad statutory authority with little Congressional embellishment. In 1984, Congress added the so-called “omnibus” provision to RCRA: “Each permit issued under this section [RCRA §3005] shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment.” RCRA §3005(c)(3), last sentence. And as explained above, RCRA gives EPA broad rulemaking authority: “In carrying out this Act, the Administrator is authorized to (1) prescribe in consultation with Federal, State, and regional authorities, such regulations as are necessary to carry out his functions under this Act . . . .” RCRA §2002(a).<sup>1</sup>

Yet EPA’s elaboration upon its omnibus authority - through actual regulations - has been exceptionally paltry. In fact, EPA’s efforts have been even worse than the efforts the Court disapproved in *Appalachian*. As explained above, in 1985, EPA issued the following regulation:

Each permit issued under section 3005 of this act shall contain terms and conditions as the Administrator or State Director determines necessary to protect human health and the environment.

50 FR 28752 (July 15, 1985), adding new 40 C.F.R. §270.32(b)(2).

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<sup>1</sup> RCRA also requires that “each regulation promulgated under this Act shall be reviewed and, where necessary, revised not less frequently than every three years.” RCRA §2002(b).

This added virtually nothing to the statutory language: except for omitting “such” and adding “Director,” the regulation merely parroted the statute *verbatim*. Then in 1987, EPA added the following to its RCRA permit regulations:

The Director may require a permittee or an applicant to submit information in order to establish conditions under §§270.32(b)(2) and 270.50(d) of this chapter.

52 FR 45799 (December 1, 1987), adding new 40 C.F.R. §270.10(k).

Thus, EPA’s regulations address the statutory omnibus authority in only two places, and the two provisions total 53 words. EPA has not touched these regulations since 1987. Without attempting to amend or supplement the 53 words in the regulations, however, EPA has issued literally hundreds of thousands of words of “guidance” directing its Regional Offices and the States on the requirements of a new SSRA permitting regime. Thus, compared to the 19-page guidance vacated in *Appalachian*, our facts present a far stronger case.

Currently, this SSRA “guidance” is embodied largely in two documents. These two documents are the July, 1998 “Human Health Risk Assessment Protocol” or “HHRAP,” Affidavit at ¶8(h), and the August, 1999 “Screening Level Ecological Risk Assessment Protocol” or “SLERAP,” Affidavit at ¶9(a). Like the PMG in *Appalachian*, both the HHRAP and SLERAP have gone through various drafts on which public comment has been submitted. Affidavit at 778, 9. Both are still “subject to change,” but both are most definitely now being used in the field. Affidavit at ¶¶8(k), 9. Both documents contain a “disclaimer” that *Appalachian* ruled ineffectual. Affidavit at ¶¶8(m), 9(e).

Just as the PMG set forth six non-exclusive factors to consider on a case-by-case basis in determining whether a monitoring requirement is sufficient, the HHRAP and SLERAP set forth eight and twelve non-exclusive factors, respectively, for determining whether an **SSRA should** be performed. Affidavit at ¶¶7(i), 7(k). More significantly, the *Appalachian* Court found the “guidance” required expensive monitoring more frequently than could be fairly inferred from the regulations. 208 F.3d at 1027. The **SSRA** situation is off the charts on that score, for nothing in EPA’s omnibus regulations even mentions the possibility of EPA’s expensive **SSRAs**, and EPA’s BIF Rules require only direct exposure SSRAs for a very limited subset of HWCs. While the *Appalachian* Court was confronted with new tests costing “tens of thousands of dollars,” *id.*, the SSRAs each cost *hundreds* of thousands of dollars. With the requisite “risk burn” costs added in, one CKRC member facility has been forced to spend approximately \$1.3 million. Affidavit at ¶8(n). (In fact, the “risk burn” requirement is a creation of EPA guidance. Affidavit at ¶7(o)-(q).)

The attached Affidavit also shows that the four-part test enunciated in



*Appalachian* has squarely been met in the SSRA situation. As for the first two parts, EPA is acting as if the documents are controlling in the field and treating the documents as legislative rules. Affidavit ¶¶7(d), 8(d), 8(i), 8(k), 8(n), 8(p), 8(o), 9(a). As for the third part, EPA has made RCRA permits contingent upon an SSRA so it is “enforceable.” (Operation without a valid permit is a criminal violation. RCRA §3008(d)(2)(A).) As for the fourth part, the entire thrust of the SSRA guidance is to make permits unobtainable unless the detailed requirements of the guidance are followed.

To conclude this legal discussion, we emphasize that even going beyond *Appalachian*, EPA’s failures to undertake rulemaking for its SSRA regime for HWCs stand in stark defiance and contrast to RCRA’s explicit requirements and EPA’s practices over the years. As explained above, RCRA §3005(b) requires EPA to specify in its regulations the type of information that must be included in RCRA permit applications. In fact, 40 C.F.R. §270.1(b) states that RCRA permits must contain the information specified in EPA’s regulations contained in part 270, and EPA over the years has typically included quite detailed information in part 270 (e.g., §§270.19, 270.22). EPA’s conduct in the case of SSRAs for HWCs thus can be seen as not only violative of RCRA rulemaking procedures, but also as an aberration in the manner EPA has been administering the RCRA permit program.

This aberration cannot be explained, it should be added, on some alleged ground that SSRA policies and procedures do not lend themselves to articulation through the rulemaking process. Such a claim is flatly belied by EPA’s efforts in issuing the BIF Rules which, as explained above, not only clearly specify factors for deciding which HWCs must be subjected to an SSRA, but also specify detailed procedures and protocols for conducting such SSRAs.

In this regard, we also note it appears highly aberrational that EPA would single out HWCs for such unique treatment. Hazardous waste landfills, land farms, surface impoundments, and waste piles are among the types of facilities that must receive RCRA permits. See 40 C.F.R. part 264. Such facilities obviously present potential risks to human health and the environment, and in fact for years, it has been firm Congressional and EPA policy that storage and disposal on land poses the greatest threat to human health and the environment, and therefore is the least favored hazardous waste management option. Yet EPA has never sought to impose SSRA requirements for RCRA permitting of these facilities in an across-the-board fashion, either through rulemaking or otherwise.

##### 5. Failure of SSRA Guidance to Address A Critical Legal and Policy Issue.

As explained in the attached Affidavit at ¶10, a critical legal and policy issue in conducting an SSRA is the threshold level for making a “yes-no”

decision. In other words, at what numeric level of projected risk would EPA find that a RCRA permit must be denied? This is the level that will either force a CKRC member to stop burning hazardous waste or force the member to expend additional sums to control emissions and/or implement other measures going beyond the BIF Rules and the MACT Rule.

For the situations in which the BIF Rules require an SSRA, the BIF Rules provide a specific answer to this question (as explained in part 3(b) above): no excess cancer risk to the maximum exposed individual above 1 in 100,000. 40 C.F.R. §266.104(e), first sentence. Yet for all of the indirect exposure and ecological risk assessments required by EPA's guidance, *nowhere in any currently effective guidance document does EPA answer this question.*

Rather, the Regions and EPA headquarters simply spread the word from mouth to mouth from time to time about what the appropriate levels might be. While one EPA Region has an "Addendum" that addresses this issue, the other nine Regions and Headquarters do not. Affidavit at ¶10(d). This creates not only a moving target problem already described at length in the attached Affidavit, but much worse, a "hidden and moving target" problem.

Quite simply, CKRC's members and others are not even informed through the guidance as to precisely what it is they must show in order to secure a permit. All they know is that they must satisfy a particular permit writer's whims on a particular day (or series of days). One permit writer in Region *a* might decide on one day that he/she feels that a 0.5 non-cancer risk would be just about right; another permit writer in Region *b* might decide on another day that he/she would really rather have a 0.25 non-cancer risk. Hundreds of thousand dollars and/or a RCRA permit denial could be riding on these totally arbitrary decisions by the permit writers.

We submit that for EPA to leave these critical issues totally unanswered in its SSRA regime is not only irresponsible, but it also greatly compounds the overall illegality of the entire regime. The Courts have long required that when EPA creates a permit regime in which applicants must make a showing to EPA in order to receive approval to perform an activity, EPA must provide an "ascertainable standard" for making the yes-no decision. *E.g., South Terminal Corp. v. EPA*, 504 F.2d 646, 669-670 (1<sup>st</sup> Cir. 1974). The Court there vacated an EPA approval process because it left the applicant "utterly without guidance as to what he must prove, and how. The standard is so vague that it invites arbitrary and unequal application." *Id.* at 670.

We submit that the SSRA regime **EPA** has created is on its face defective

for the same reasons. Applicants receive no notice as to what they must prove, and there is no protection against arbitrary and unequal application among various Regions and even among various permit writers in the same Region. Courts have held for decades that laws must give individuals fair notice of the standards by which their conduct will be judged, and where persons of common intelligence can differ as to a law's meaning, it is impermissibly vague. *Papachristou v. City of Jacksonville*, 405 U.S. 156, 162 (1972); *Smith v. Goguen*, 415 U.S. 566, 572 (1974).

6. CKRC's Attempts To Convince EPA to Discontinue Its SSRA Policies Pending Rulemaking in Light of *Appalachian*.

On June 30, 2000, CKRC's counsel sent a letter to EPA's General Counsel. The letter set forth CKRC's views on why it believed EPA's SSRA guidance was illegal under *Appalachian*. CKRC requested "that EPA cease imposing any requirements pursuant to these policies unless and until EPA has undertaken and completed appropriate rulemaking proceedings in accord with *Appalachian Power*." *Id.*

CKRC was concerned that the Court's issuance of *Appalachian* might be construed as opening a judicial review window, and that a failure to seek review within 90 days of *Appalachian's* issuance date (April 14, 2000) might foreclose CKRC from challenging EPA's SSRA requirements in the D.C. Circuit. Accordingly, as a protective matter, on July 10, 2000 CKRC filed a petition for review of EPA's SSRA requirements (No. 00-1302). EPA sought dismissal of CKRC's petition, and on December 19, 2000, the Court issued an order granting EPA's motion and ruling that *Appalachian* did not open a new judicial review window.

On August 10, 2000, while CKRC's petition in No. 00-1302 was still pending, EPA issued a "Final Rule Fact Sheet" (FRFS). This FRFS affirmed EPA's intent to go forward with its **SSRA** requirements. The FRFS also confirmed that certain **SSRA** "guidance" documents for which EPA had solicited public comment should continue to be utilized without further revision. CKRC filed another protective petition for review on September 28, 2000, (No. 00-1423) based on the possibility that the FRFS had opened another window for judicial review, and that **CKRC** could later be prejudiced by not filing a judicial petition within 90 days of the **FRFS** issuance.

On February 2, 2001, EPA filed a motion to dismiss No. 00-1423 for lack of jurisdiction. On April 11, 2001, the D.C. Circuit granted EPA's motion. The Court ruled that the FRFS did not constitute a "regulation or requirement"

conferring jurisdiction under the judicial review provision of RCRA (§7006(a)).

EPA never responded to CKRC's letter of June 30, 2000, apparently because CKRC filed its protective judicial review petitions. Since the D.C. Circuit has dismissed both CKRC petitions, CKRC has continued to try to convince EPA informally that EPA should cease implementation of its SSRA program unless and until EPA goes through appropriate rulemaking procedures, and CKRC intends to continue to try to convince EPA to follow this course.

In the meantime, however, CKRC is taking the opportunity to file this Petition. CKRC hopes that this Petition will serve as a focal point for CKRC's concerns among EPA staff and others in the government. Moreover, as explained below, the filing of this Petition will help assure CKRC of judicial review rights should its efforts to persuade EPA be unsuccessful.

#### 7. 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.

Our Petition fits within the types of actions contemplated by RCRA §7004(a). As explained above, we are petitioning the Administrator to repeal the **SSRA** regulations EPA has been issuing for a number of years under the guise of guidance. Consistent with *Appalachian*, we seek immediate suspension by EPA of all use of its current guidance respecting SSRAs for HWCs and immediate cessation of all implementation of the SSRA program based on this guidance. (This Petition, it should be noted, does not relate to those portions of the BIF Rules that require SSRAs in limited circumstances, as those provisions have been issued with proper notice-and-comment rulemaking procedures.)

After EPA repeals the current improperly-issued regulations, should EPA believe the need can be established for SSRA requirements, we are petitioning EPA to undertake a rulemaking process under RCRA in which EPA would promulgate regulations that will (1) specify criteria for determining whether and to what extent an SSRA may be required at a particular facility, and (2) specify the protocols and procedures for conducting any such SSRAs.

EPA has published regulations, codified at 40 C.F.R. 5260.20, 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 Cement Kiln Recycling Coalition, with its principal office at Suite 710, 1730 K Street, N.W., Washington, D.C., 20006 .

(2) CKRC represents virtually every cement company affected by EPA's **SSRA** guidance requirements. These members of CKRC are currently being adversely affected by the guidance requirements, and would be subject to the regulations requested by this Petition. Accordingly, CKRC 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 2-6 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 . . . .

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 on our Petition. It also underscores our point that in light of all the circumstances, EPA now has a duty to suspend the permit regime it has been implementing through the **SSRA** guidance unless and until EPA completes the rulemaking process sought by this Petition.

#### 8. EPA's Duty to Act Within A Reasonable Time.

As shown in part 7 above, RCRA and the **APA** require EPA to respond to this Petition and "conclude" this matter within a reasonable time. Cases in the D.C. Circuit make clear that the Court will enforce this requirement, and that if there is unreasonable delay, we may pursue an action in the D.C. Circuit to

compel EPA to act. *United Technologies Corp. v. Thomas*, 821 F.2d 714, 721 (D.C. Cir. 1987).

While the phrase “reasonable time” is subjective, the D.C. Circuit has had no problem applying case-by-case judgment to hold agencies to this duty. *Telecommunications Research and Action Center v. FCC*, 750 F.2d 70 (D.C. Cir. 1984). The Court in that case discussed six factors that might be considered on a case-by-case basis, *id.* at 80, and quoted approvingly from another D.C. Circuit case (*MCI v. FCC*, 627 F.2d 322, 340-41) holding a reasonable time for an agency as “encompassing months, occasionally a year or two, but not several years or a decade.” *Id.*

We close with two points on the need for expeditious action. First, our letter to EPA’s general counsel of June 30, 2000 put EPA on complete notice of the actions requested by this Petition and the grounds on which we are relying. We thus believe any calculations of “reasonable time” must fairly be considered to run from that date.

Second, we realize that a reasonable time to undertake and complete a rulemaking process must be calculated to account for intra- and inter-agency review, collection of data, contracting for the writing of background and response to comments documents, etc. This process can reasonably be expected to take many months.

EPA need spend little time or effort, however, in talung administrative action responsive to our first basic request. As EPA commenced and is implementing its entire SSRA program with nothing more than memoranda and guidance documents, EPA need not go through a notice and comment process to terminate it. A simple Federal Register notice announcing that the guidance is being withdrawn pending consideration of possible future rulemaking efforts should suffice.

As such an action is compelled by the law under the D.C. Circuit’s *Appalachian* precedent, EPA would clearly have good cause to terminate the program without first proposing to terminate it. As there need be no inter-agency review in circumstances such as these, it appears to us that no more than a few months is needed to take this action.

#### 9. Intent to Seek Judicial Review.

If EPA denies this Petition, CKRC will have the right to seek judicial review in the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit), 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*). Moreover, as shown in the cases discussed in part 8 above, we will have the right to seek judicial review of a failure to act within a reasonable time.

As also explained above, we believe a reasonable time for suspending the current program through repeal of the illegally-issued guidance will expire much earlier than a reasonable time for undertaking and completing a new rulemaking process. We believe no more than a few months is needed for EPA to repeal the current guidance. As we have stressed in part 1 above, our petition includes two independent requests and we are prepared to pursue our judicial review rights on our first request if EPA does not grant the relief requested in the next few months.

Respectfully submitted,

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Executive Director  
Cement Kiln Recycling Coalition  
(202) 466-7699

Date: February \_\_\_\_\_, 2002

BEFORE THE ADMINISTRATOR OF THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

<u>CEMENT KILN RECYCLING COALITION,</u>	)
	)
Petitioner,	)
	)
	)
CHRISTINE T. WHITMAN,	)
ADMINISTRATOR,	)
UNITED STATES ENVIRONMENTAL	)
PROTECTION AGENCY,	)
	)
_____ Respondent.	)

AFFIDAVIT OF MICHEL R. BENOIT

1. My name is Michel R. Benoit. I have been Executive Director of the Cement Kiln Recycling Coalition (CKRC) since 1994. Prior to that time, I was an officer of CKRC and have been closely associated with all of CKRC's activities since its founding in 1990.

2. I am providing this Affidavit in support of CKRC's efforts to obtain relief with respect to EPA's requirements for site-specific risk assessments (SSRAs) for hazardous waste combustors (HWCs) such as the cement kilns owned and operated by CKRC's members that burn hazardous waste for energy recovery. An SSRA is a detailed, resource-intensive inquiry into the effects various exposure levels of certain substances potentially emitted by a facility (such as a cement kiln) would have on (1) the health of humans in the vicinity of the facility (in the case of a human health SSRA) or (2) the viability of non-human organisms such as plants and animals in the vicinity of the facility (in the case of an ecological SSRA).

3. Before proceeding further, I should briefly explain the difference between a "direct" exposure risk assessment and an "indirect" exposure risk assessment. A "direct" exposure assessment focuses only on inhalation of substances by humans. It attempts to predict the health impact on humans breathing air in the vicinity of a facility, where substances that may be emitted by the facility may be inhaled in various predicted concentrations. An "indirect" exposure assessment focuses on "multi-pathways" (beyond direct inhalation) by which humans may become exposed to substances emitted by a facility. For instance, a substance emitted into the air may be deposited in soil in which a tomato is grown, and that tomato may be eaten by a human. Or alfalfa may be grown in that soil and that alfalfa may be eaten by a cow, which then gives milk ingested by a human. The indirect assessment attempts to predict the health impacts to



humans who might be exposed to the substance in this “indirect” manner. It is generally recognized that the techniques for conducting direct exposure risk assessments are much more refined and widely accepted in the scientific community than the techniques for conducting indirect exposure risk assessments, and there is much greater room for error and debate with respect to indirect assessments. Another type of SSRA is an ecological risk assessment. Such an assessment goes beyond human health concerns and attempts to predict quantified effects of both direct and indirect exposures on non-human receptors such as plants, animals, fish, soil, and water bodies.

4. CKRC has been following EPA’s issuance of SSRA requirements for several years, and CKRC has become increasingly concerned about the content of those requirements. As explained further below, CKRC’s members have been forced to spend millions of dollars to perform SSRAs over the last eight and a half years, and they have incurred substantial roadblocks and delays in obtaining RCRA permits because of the SSRA requirements. CKRC has been particularly concerned about the seemingly ever-changing nature of “drafts” that have been and are being used by EPA’s regional offices to review cement kiln permit applications.

5. CKRC has also become acutely concerned with EPA’s requirements respecting whether an SSRA will be required at all. As explained below, since 1993 EPA has imposed a requirement that every HWC cement kiln seeking a RCRA permit must perform an SSRA. This requirement was apparently based upon the assumption (with which we do not agree) that the 1991 **BIF** Rules were not adequate to protect human health and the environment at each facility. We **had** always understood from EPA headquarters officials as they developed the 1999 MACT Rule, however, that they believed the MACT emission standards – which would set much more stringent emission standards than the BIF Rules – would be more than adequate to protect public health and the environment. Thus, we believed that when cement kilns complying with the new MACT standards sought RCRA permits, the requirement to perform an SSRA would terminate.

6. EPA has recently been stating, however, that SSRAs will be required even for MACT-compliant HWCs. EPA’s pronouncements have been somewhat inconsistent and confusing in this regard, but it is clear that EPA is not terminating its requirement to perform SSRAs just because a facility is meeting MACT standards. (As explained in ¶8(r) below, the fact that a few of the MACT standards issued in September 1999 were modified by “interim” standards issued February 13, 2002, does not in any respect change our view that SSRAs are not necessary for MACT-compliant and/or BIF-compliant facilities.)

7. A review of the evolution of EPA’s requirements regarding whether an SSRA must be required will help illustrate our concern.

a. In 1991, EPA issued the BIF Rules. 40 C.F.R. part **266**, subpart H, 56 FR 7134 *et seq.* The BIF Rules contained no requirement for an indirect exposure SSRA. The BIF Rules required a direct exposure **risk** assessment for two types of HWCs: (1) HWCs equipped with a dry particulate control device operating in a temperature range of 450-750° F, and (2) HWCs operating under an “alternative” hydrocarbon limit allowed in other sections of the BIF Rules. The BIF Rules specified the risk assessment procedures to be followed in conducting these

SSRAs. 40 C.F.R. §266.104(e)(1)-(4).

b. In 1993, EPA Administrator Browner announced her “Draft Combustion Strategy.” In a press release and in documents issued with the press release (dated May 18, 1993), she issued a new requirement that, effective immediately, *every* HWC applying for a RCRA permit would have to have an *indirect* exposure risk assessment. She stated that this new requirement was based upon EPA’s “omnibus” authority under RCRA. Ms. Browner neither proposed nor issued any amendments to the BIF Rules or EPA’s omnibus regulations regarding this new requirement. To this day, EPA has never proposed or issued any regulations respecting this requirement.

c. In November, 1994, EPA issued a “final” combustion strategy as a follow-up to Ms. Browner’s “draft” of 1993. The “final” strategy is posted on EPA’s Website at <http://www.epa.gov/epaoswer/hazwaste/combust/general/strat-2.txt>. The 1994 strategy said EPA would “continue the current policy that risk assessments should be completed prior to making final permit determinations.” (Page 25 of 26 on Website locator cited immediately above.)

d. Over the next few years, every time a member of CKRC went through the RCRA permit application process, the member was required by EPA to perform an indirect exposure SSRA in accordance with the combustion strategy policy. I am aware that in certain documents EPA is now saying that its policy has been to “strongly recommend” that an indirect exposure SSRA be conducted for every facility. There was absolutely no wording in either the May 1993 or November 1994 combustion strategy documents that could be read as a “recommendation,” however. The language of the documents was to direct an SSRA in all cases, pure and simple, and that in fact has been EPA’s practice over the years. I am aware of absolutely no situation in which an SSRA has not been required for an HWC cement kiln seeking a RCRA permit.

e. CKRC has never agreed that it was appropriate for **EPA** to require SSRAs for all facilities, because in CKRC’s view, the BIF Rules have been fully adequate to protect human health and the environment at all sites. Consistent with its obligation under RCRA, EPA found that the BIF Rules were protective of human health and the environment. *E.g.*, 56 FR 7145, 7146, 7163-64, 7171-72 (February 21, 1991). The BIF Rules have been fully in force since August, 1991. *Id.*

f. Parties filing comments on EPA’s proposed BIF Rules had expressed concern that the proposed standards did not explicitly account for indirect exposure risks. In issuing its BIF Rules, EPA found in response to these comments that the BIF Rules were based upon many redundant conservative assumptions, so that any concerns over so-called “indirect exposure” risks were offset by these overly-conservative assumptions. 56 FR at 7169.

g. CKRC has been even more concerned, therefore, about whether any more SSRAs should be required for facilities that will be in compliance with the new MACT rules EPA issued for HWCs on September 30, 1999 (64 FR 52828). As the new MACT rules are significantly more stringent than the BIF Rules (64 FR at 52840), CKRC believes it is even more inappropriate for SSRAs to be required in the future. (As explained in ¶8(r) below, the fact that EPA recently issued “interim” MACT standards to replace some of the standards issued

September 30, 1999 does not change our views.)

h. EPA has addressed the issue of whether SSRAs will be required in the future (for MACT-compliant facilities) in several stages, which are at best confusing. EPA has never proposed or issued any regulations for public comment to address this issue - all of its pronouncements have come in the form of “guidance documents,” letters, Federal Register preamble statements, and “fact sheets.”

i. In a July, 1998, document called “Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities” (HHRAP), EPA issued eight factors that the permitting authority is to consider regarding each permit application to determine whether an SSRA (“*human health and ecological*”) is necessary. See pp. 1-3, 1-4 of HHRAP, posted at EPA’s Website at [http://www.epa.gov/earth1r6/6pd/rcra\\_c/protocol/volume\\_1/chpt1-hh.pdf](http://www.epa.gov/earth1r6/6pd/rcra_c/protocol/volume_1/chpt1-hh.pdf). EPA said that such a list was not exclusive. *Id.*, at 1-4.

j. Then in the preamble to its final MACT rules for HWCs (signed by the Administrator in July, 1999), EPA set forth eight non-exclusive factors. 64 FR 52842. While these eight factors overlap somewhat with the eight factors in the July 1998 HHRAP, they are not the same. Some of the HHRAP factors have been dropped and new factors have been added.

k. Then in a document issued in August 1999, entitled “Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities,” (hereafter, the “SLERAP”), EPA issued *twelve* factors that the permitting authority is to consider regarding each permit application to determine whether an SSRA (“*human health and ecological*”) is necessary. See pp. 1-6, 1-7 of SLERAP, posted at EPA’s Website at <http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm>. EPA said that such a list was not exclusive. *Id.* at 1-7. This list of twelve appears to be roughly some combination of the overlaps between the previous two non-identical lists of eight factors, but the wording is not identical so it is impossible to tell how the three lists (July, 1998; July, 1999; August, 1999) interrelate.

l. EPA’s MACT preamble indicated that incorporation of risk-based limits “is not anticipated for the vast majority of hazardous waste combustors,” 64 FR at 52843, and that EPA did “not anticipate that a large number of SSRAs will need to be performed” for MACT-compliant facilities. 64 FR at 52842.

m. Ms. Browner signed the MACT rule preamble making the above-quoted statements on July 30, 1999. 64 FR at 53027. She seemed to be indicating that while the need for an SSRA would have to be evaluated on a case-by-case basis for MACT-compliant facilities, such SSRAs would probably not need to be required in a significant number of cases. Thus far, however, every indication CKRC members have received from EPA personnel in discussing specific facilities is that EPA will continue to require an SSRA in every case. Certainly this is the explicit policy of EPA Region VI (headquartered in Dallas, and covering Texas, Arkansas, New Mexico, Oklahoma, and Louisiana). On September 14, 1999, Region VI sent a letter to all of its State agencies stating that an SSRA would continue to be necessary in every case. (Letter of Stephen A. Gilrein, EPA, to Dale Burnett, Texas Natural Resource Conservation Commission,

September 14, 1999, attached to this Affidavit as Attachment 1.) I am not aware of any policy or statement by any EPA official that indicates an intent to disclaim this Region VI policy, and so far as I can tell based upon agency actions, it appears to be the *de facto* policy of all EPA regions.

n. EPA has issued a “Fact Sheet” regarding SSRAs and posted the document on its Website at <http://www.epa.gov/epaoswer/hazwaste/combust/toolkit/ssrapofs.pdf>. In the Federal Register of September 20, 2000, EPA stated that this document had been released on August 10, 2000. 65 FR 56798. In this document, EPA says that for MACT-compliant sources, permitting authorities need to “evaluate the need for an SSRA on a case-by-case basis.” It is not clear from this document whether EPA intends for either of its previous “eight factor” lists or its more recent “twelve factor” list to be applied to this evaluation, as EPA makes no explicit reference to factors to consider. Rather, EPA simply lists certain documents to be referred to “For More Information.” Quite confusingly, EPA lists *all three* of the overlapping documents - the 1998 HHRAP, the 1999 MACT preamble, and the 1999 SLERAP - without indicating which should override the other in case of inconsistencies. Thus, in its most recent statement (of which we are aware), EPA referred approvingly to both lists of eight factors, even though they are not the same, and the slightly more recent list of twelve factors, and has given absolutely no clue as to how these three separate lists are supposed to relate to each other.

o. EPA has recently continued its practice of raising the expectation in “guidance” that SSRAs will not often be required, then turning around and doing just the opposite in practice. On October 11, 2001, EPA announced the availability of yet another SSRA guidance document: “Risk Burn Guidance for Hazardous Waste Combustion Facilities,” EPA530-R-01-001 (July 2001). 66 FR 51953, October 11, 2001. This document is posted on EPA’s Web site at <http://www.epa.gov/epaoswer/hazwaste/combust/burn.pdf>.

p. The Risk Burn Guidance contains hundreds of pages of details specifying data-collection, test condition, and reporting requirements that are to be used when conducting SSRAs for HWCs. Like all the other guidance documents to which my members are subject, not one word of this cumbersome and burdensome “guidance” was issued through notice-and-comment rulemaking procedures.

q. On page 12 of Chapter 1 of the Risk Burn Guidance, EPA says once again that HWCs complying with the new MACT standards are generally not expected to present unacceptable risks, and therefore only in “some” cases should an SSRA be warranted. Despite this, there is absolutely no situation in which I am aware that any of my members is not being required to perform an SSRA when seeking a RCRA permit or a RCRA permit modification.

r. It appears EPA had intended to clarify this, as EPA’s Website has said for over a year there is a document to be released in Fall, 2000 entitled “SSRA Guiding Factors and How to Use Them.” See <http://www.epa.gov/epaoswer/hazwaste/combust/toolkit/factsheet.htm?t=2>. It is now February, 2002, however, and EPA has still never released this document.

8. CKRC has been equally concerned about the development of the specific procedures and protocols for performing a human health SSRA. As noted above, the BIF Rules contain

detailed procedures and protocols for conducting the direct exposure SSRAs that are required of some facilities. Over the last seven years, however, EPA has issued a series of requirements solely through non-rulemaking “guidance” on how indirect exposure SSRAs must be performed. Virtually all of the “guidances” have been labeled “Draft,” and EPA often solicits informal written comments and conducts “peer review” regarding the “Drafts,” but EPA has consistently required that the “Drafts” be used in the meantime to make permitting decisions through the SSRA process. Every one of the risk assessments that has been required of my members’ facilities thus far has been performed through use of one of these “Drafts.” More specifically:

a. When Ms. Browner issued her 1993 “Draft” Combustion Strategy requiring indirect SSRAs in all cases, she stated as follows: “These [SSRAs] should be done in accordance with EPA’s draft indirect risk assessment guidance. EPA is currently developing updated, final guidance on conducting risk assessments at combustion facilities, including consideration of risks from indirect exposures. Until this national risk assessment guidance is completed, all risk assessments at combustion facilities will be done on a site-by-site basis.”

b. In a Federal Register notice of November 22, 1993, EPA announced it was soliciting comments on a “draft Addendum” to a 1990 “interim final” document entitled “Methodology for Assessing Health Risks Associated With Indirect Exposure to Combustor Emissions.” 58 FR 61688. EPA had never subjected the 1990 “interim final” document to rulemaking, and EPA was not proposing to subject the “draft Addendum” to the “interim final” document to rulemaking.

c. Then on May 5, 1994, the Director of EPA’s Office of Solid Waste (OSW) issued a memorandum to EPA’s regional offices entitled “Revised Draft of Risk Assessment Implementation Guidance for Hazardous Waste Combustion Facilities.” Attached to the Director’s Memorandum was a new 16-page single-spaced “Guidance Document” dated April 15, 1994 with two attachments totaling 34 pages. (Some pages were dated April 15, 1994, and other pages were dated April 22, 1994.) The Memorandum stated that the attachment represented EPA’s “latest revision to the implementation guidance for conducting risk assessments at RCRA hazardous waste combustion units.” (This guidance will hereafter be referred to as the “1994 Guidance.”)

d. The OSW Director’s Memorandum solicited comments from the Regional offices on the 1994 Guidance, but made clear that the 1994 Guidance was to be used in conducting SSRAs in the meantime. (The 1994 Guidance was to be used in connection with EPA’s 1990 “Interim Final” guidance and 1993 “Draft Addendum.” When I refer to the 1994 Guidance below, I am including the 1990 and 1993 documents by reference.) At the beginning of the 1994 Guidance Document, EPA included the following disclaimer:

NOTICE: The recommendations set out in this document are not final Agency action, but are intended solely as guidance. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation against the United States. EPA officials may decide to follow the guidance provided in this memorandum, or to act at variance

with the guidance, based on an analysis of specific site circumstances.  
The Agency also reserves the right to change this guidance.

e. The next time EPA announced that a new Draft guidance document was available for use (and more public comment) was in 1998 (see part 8(h) below). In the intervening four years, however, my members experienced much additional confusion and costly delay because EPA was in the process of revising the 1994 Guidance and different Regional offices took different approaches to whether the 1994 Guidance should be supplemented or replaced with newer developing guidance as a RCRA permit process proceeded.

f. In EPA Region VII, for instance, one of my member companies performing an **SSRA** based on the 1994 Guidance was told, based on consultation with EPA headquarters personnel, to supplement the 1994 Guidance with some newer risk assessment procedures derived from the risk assessment that EPA headquarters had used in developing the new MACT rule for HWCs. This new risk assessment guidance was developed by Research Triangle Institute, and is known as the "RTI 1996" risk assessment approach. Changing the guidance midstream in the **SSRA** process caused considerable delays, confusion, and extra cost over the three years it took to complete the **SSRA** for this facility.

g. Moreover, EPA Region IV conducted a workshop to educate interested parties on **SSRA** requirements in 1997. At that workshop, Region IV stated that **SSRAs** should incorporate requirements from a new document known variously as the draft "North Carolina protocol" or "RTI 1997." Two of my member facilities that were required to undergo the **SSRA** process during this time period were accordingly required to use a procedure based largely on the RTI 1997 document. Region IV personnel also told my members that if and when EPA released its new (1998) guidance, they may have to adjust their protocols for any new or revised requirements emanating from the 1998 guidance depending upon the timing of the protocol development.

h. On October 30, 1998, EPA published a Federal Register notice announcing that a new (July, 1998) draft guidance document was available for use in conducting **SSRAs** and announced that written public comments would be accepted and that there would be a "peer review" process to evaluate the July 1998 draft. 63 FR 58381. The new draft is entitled "Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities" (HHRAP). (This is the same document referred to in part 7(i) above.)

i. EPA's Federal Register notice made abundantly clear that even though the HHRAP was a "draft" and subject to public comment, it was to be *used immediately* in conducting **SSRAs** in connection with ongoing RCRA permitting activities. EPA stated that the HHRAP "contains the Office of Solid Waste's recommended approach for conducting site-specific risk assessments on RCRA hazardous waste combustors." 64 FR at 58382. EPA also stated: "OSW intends to use the results of the risk assessments to provide a basis for risk management decisions in hazardous waste combustor permitting and to ensure that the permits are protective of human health and the environment." *Id.*

j. The Federal Register announcement stated that the HHRAP would serve to “update and replace” the 1994 Guidance. *Id.* EPA’s announcement completely ignored the fact that my members had been subjected to additional SSRA guidance (particularly RTI 1996 and RTI 1997, as explained in parts 8(f) and (g) above) in the interim. Chapter 1 of the HHRAP refers to the RTI 1996 and RTI 1997 documents, however. (See pp. 1-9, 1-10.)

k. On August 2, 1999, EPA issued some “Errata” to the 1998 HHRAP. This document may be found on EPA’s Website at <http://www.epa.gov/epaoswer/hazwaste/combust/errata79.pdf>. In the cover memo to the Errata (also found at the same link cited immediately above), EPA made abundantly clear that the 1998 HHRAP *is being used* to conduct SSRAs: “the protocol has been used in a number of site-specific risk assessments on RCRA hazardous waste combustors.”

l. The 1998 HHRAP (with 1999 Errata) is a massive and complex document. It can be found at EPA’s Website at <http://www.epa.gov/epaoswer/hazwaste/combust/risk.htm>. It totals more than 545 pages with appendices, and is organized as follows:

34 pages -	Chapter One - Introduction (23 pages roman, 11 pages Arabic)
85 pages -	Chapter Two - Facility Characterization
69 pages -	Chapter Three - Air Dispersion and Deposition Modeling
<b>24</b> pages -	Chapter Four - Exposure Scenario Identification
90 pages -	Chapter Five - Estimation of Media Concentrations
16 pages -	Chapter Six - Quantifying Exposure
13 pages -	Chapter Seven - Risk and Hazard Characterization
9 pages -	Chapter Eight - Uncertainty Interpretation
2 pages -	Chapter Nine - Completion and Follow-On Activities
22 pages -	List of References
130 pages -	Appendices
31 pages -	Additional Tables
20 pages -	Errata

There are also many documents included at the same Website that provide back-up data and chemical values. A listing of the complete organization of the HHRAP information on EPA’s Website is attached hereto as Attachment 2.

m. The HHRAP begins with the following disclaimer:

This document provides guidance to U.S. EPA Regions and States on how best to implement RCRA and U.S. EPA’s regulations to facilitate permitting decisions for hazardous waste combustion facilities. It also provides guidance to the public and to the regulated community on how U.S. EPA intends to exercise its discretion in implementing its regulations. The document does not substitute for U.S. EPA’s regulations, nor is it a regulation itself. Thus, it cannot impose legally-binding requirements on U.S. EPA, States, or the regulated community. It may not apply to a particular situation based upon the circumstances. U.S.

EPA may change this guidance in the future, as appropriate.

n. Despite this “Disclaimer,” EPA is in fact requiring that SSRAs be performed in connection with RCRA permits for hazardous waste combustors. Under the current draft (1998) and prior drafts, every one of my members have been required to undertake an SSRA in connection with obtaining a RCRA permit. The SSRA process has typically cost my members in the general range of \$100,000 to \$500,000 per risk assessment, with one going as high as \$800,000. (Because of these SSRA requirements, EPA Regions have also required that more risk data be added to traditional “trial burns” by the performance of “risk burns.” This often adds even more costs in the range of an additional \$100,000 to \$500,000.)

o. It should be noted that even though the drafts have been referred to as “guidance,” they are worded in such a way as to channel the decisionmaker’s discretion quite narrowly and in fact, EPA’s regional permit writers have treated them as if they were regulations. Just a few examples from the HHRAP will help illustrate this point:

- Chapter 2 involves facility characterization. It has several sections that describe the minimum type of information that must be included in an **SSRA**. Each section has a highlighted box entitled “Recommended Information for Risk Assessment Report.” *E.g.*, 2-16, 2-27. It is clear that this information is much more than “recommended,” however, as EPA mandates on page 2-1 (emphasis added): “At a *minimum*, the basic facility information listed in the highlighted box at the end of this and other sections should be considered in the risk evaluation.”

- On page 2-6, EPA requires that “every trial burn or “risk burn” *should include, at a minimum*, the following tests: Method 0010, [etc.]” (Emphasis added.)

- On page 2-14, EPA states as follows: “Facilities may use emission rate data from other combustion units only to determine whether the construction of a new combustion unit should be completed. After a combustion unit has been constructed, *U.S. EPA OSW will require an additional risk assessment* using emission rates collected during actual trial burn conditions.” (Emphasis added.)

- On page 2-31, EPA states the following requirement: “Risk assessments conducted for cement manufacturing facilities *should, at a minimum*, evaluate the fugitive emissions due to CKD on a qualitative basis.” (Emphasis supplied.)

- On page 2-34, EPA requires as follows: “As illustrated in Figure 2-3, *seven steps should be followed to identify the COPCs that will be evaluated for each facility.*” (Emphasis added.)

- On page 2-36, EPA requires as follows: “Regardless of the type ~~of~~ hazardous waste being burned in the combustion unit, *every risk assessment should include PCDD/PCDFs and PAHs* (the rationale for including these compounds is discussed in greater detail in Sections 2.3.1 and 2.3.2).” (Emphasis added.)



- On page 2-58, EPA requires: “Therefore, unless site-sampling or process-specific information is provided, the worst-case assumption - that 100 percent of the facility chromium emissions are in the hexavalent form - should be used.”

p. The foregoing list of examples is but a small sampling. The reader will find by performing a word search on the word “should” in EPA’s HHRAP that EPA’s guidance document repeatedly directs Regional permit writers to conduct SSRAs using very tightly-defined parameters and protocols. My members have found that this is exactly how the guidance is implemented in the field - it is regarded by the Regions and the States as rules that must be adhered to. My members have consistently been told by Regional and State officials that they cannot obtain a RCRA permit for their facility unless they first perform an SSRA, and that the SSRA must be performed using whatever version of the guidance is then current.

q. On May 11, 2000, EPA issued a Federal Register notice announcing that it was conducting a “peer review” process on the HHRAP. 65 FR 30406. The notice made clear that the guidance “contains OSW’s recommended approach for conducting site-specific risk assessments on RCRA hazardous waste combustors.”

r. CKRC has filed written comments on various drafts of EPA’s human health SSRA guidance, including the HHRAP (CKRC comments filed January 28, 1999). Because EPA has never proposed any of these drafts as rules, EPA has had no obligation to consider and respond to CKRC’s comments, and in fact each successive draft issued by EPA shows that EPA is not taking CKRC’s comments seriously and is not providing reasoned responses to CKRC’s comments. CKRC’s comments have shown, in our view, that the HHRAP (and predecessor drafts) is designed and implemented to consistently and significantly overstate the true nature of risks presented by a hazardous waste combustion facility. Our comments have also shown that the HHRAP procedures are far more costly and burdensome than necessary to adequately evaluate human health risks from a facility. Moreover, we believe our comments have shown that there is *no need at all* for any SSRA for MACT-compliant facilities. (The fact that EPA issued a few modifications to the MACT standards in the form of “interim” standards on February 13, 2002, does not in any respect change our views on this subject. See 67 FR 6792, *et seq.*, February 13, 2002. EPA specifically found that the interim standards “preserve **critical** parts of the September 30, 1999 rule unchanged, and achieve approximately 93 percent of the emissions reductions for existing sources which the original rule would have attained.” *Id.* at 6795-96. Moreover, the September 1999 MACT levels were far more stringent than necessary to protect public health and the environment, and the few modifications associated with the interim standards do not in any significant degree reduce the protectiveness of the MACT rules. *Id.* at 6805. They will still be far more stringent than the BIF Rules, which in our view were fully protective of human health and the environment.) Yet EPA continues, as is demonstrated by its July 2000 “Fact Sheet” on SSRAs, to reject CKRC’s comments without even directly referring to them and insist that SSRAs continue to be required on a case-by-case basis (or, in the case of Region VI, at *all* facilities).

9. CKRC has been equally concerned about the development of the specific procedures and protocols for performing an ecological SSRA. More specifically:

a. On February 11, 2000 EPA issued a Federal Register notice announcing the availability of a new draft entitled "Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities." 65 FR 7012. (Hereafter, "SLERAP.") The notice states that the SLERAP "contains the Office of Solid Waste's recommended approach for conducting site-specific ecological risk assessments on hazardous waste combustors under the RCRA program." *Id.* The SLERAP can be found at EPA's Website at <http://www.epa.gov/epaoswer/hazwaste/combust/ecorisk.htm>.

b. The SLERAP had been preceded by earlier EPA draft guidances for ecological risk assessments that had not focused on hazardous waste combustion facilities. Some of my members had been required to address ecological risks in their overall SSRAs using these earlier drafts.

c. Now that the SLERAP has been issued, EPA officials have told my members that all SSRAs conducted in the future for hazardous waste combustion permits under RCRA must be conducted using the SLERAP in addition to the HHRAP. The document states in the introduction that it is intended to provide a "prescriptive tool to support permitting of hazardous waste combustion facilities." SLERAP at 1-1.

d. The SLERAP is a massive and complex document. It totals more than 339 pages with appendices, and is organized as follows:

- 41 pages - Chapter One - Introduction (27 pages roman, 14 pages Arabic)
- 80 pages - Chapter Two - Facility Characterization
- 112 pages - Chapter Three - Air Dispersion and Deposition Modeling
- 39 pages - Chapter Four - Problem Formulation
- 30 pages - Chapter Five - Analysis
- 15 pages - Chapter Six - Risk Characterization
- 22 pages - List of References

(plus thousands of pages in eight Appendices)

e. The SLERAP begins with the following disclaimer:

This document provides guidance to U.S. EPA Regions and States on how best to implement RCRA and U.S. EPA's regulations to facilitate permitting decisions for hazardous waste combustion facilities. It also provides guidance to the public and to the regulated community on how U.S. EPA intends to exercise its discretion in implementing its regulations. The document does not substitute for U.S. EPA's regulations, nor is it a regulation itself. Thus, it cannot impose legally-binding requirements on U.S. EPA, States, or the regulated community. It may not apply to a particular situation based upon the circumstances. U.S. EPA may change this guidance in the future, as appropriate.

f. It should be noted that even though the SLERAP has been referred to as "guidance," it

is worded in such a way as to channel the decisionmaker's discretion in the field quite narrowly. All of the points made about the wording of the HHRAP in parts 8(o) and 8(p) above apply with equal force to the SLERAP.

g. In two different places on EPA's Website (cited above in part 9(a)), EPA refers to an SLERAP Document dated "November 1999." We have been unable to locate any such document. The link from EPA's Website directs us only to an August, 1999 document.

h. CKRC has filed written comments on EPA's SLERAP (CKRC comments filed August 9, 2000). Because EPA has never proposed this draft as a rule, EPA has had no obligation to consider and respond to CKRC's comments. CKRC's comments have shown, in our view, that the SLERAP is designed to overstate the true nature of risks presented by a hazardous waste combustion facility. Our comments have also shown that the SLERAP procedures are far more costly and burdensome than necessary to adequately evaluate ecological risks from a facility. Moreover, we believe our comments have shown that there is *no need at all* for any SSRA for MACT-compliant facilities. Yet EPA continues, as is demonstrated by its August 10, 2000 "Fact Sheet" on SSRAs, to reject CKRC's comments without even directly referring to them and insist that SSRAs continue to be required on a case-by-case basis (or, in the case of Region VI, at *all* facilities).

10. CKRC is also concerned about another critical policy and legal issue. This concerns the issue of what level of risk will be deemed acceptable when one is required to perform an **SSRA**.

a. The end point of an SSRA is to arrive at some numerical level of quantitative risk that is projected to be associated with the emissions from an HWC. For a human health SSRA, this is generally divided along two lines of inquiry, the cancer risk and the non-cancer risk. For cancer risk, a risk level is usually expressed in the projected potential increase in the risk of cancer cases in a particular size of population; for instance, one projected per 100,000 population, or one projected per 10,000 population, etc. For non-cancer risk, there is a "hazard index" that can be calculated from adding together the sum of various "hazard quotients" for various constituents. A hazard index may often be expressed as 1.0, 0.5, 0.25, etc., with **each** level below 1.0 reflecting a more conservative approach. For ecological risk, an "ecological index" is derived from "ecological quotients" in much the same manner as non-cancer health risks.

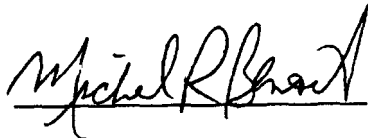
I should note that in perspective, these risk numbers are usually only a small fraction of the **risk** levels associated with normal activities in everyday life. Moreover, the extremely conservative assumptions derived from EPA's SSRA policies about potential emissions and potential biological uptake result in highly unrealistic estimates of both exposures and risks.

b. One of the most critical questions in the entire **SSRA** process is: what is the threshold numerical increment to existing risk levels at which an incremental risk will be deemed unacceptable? In other words, at what point will my members be forced to spend additional sums (sometimes very large sums) to achieve levels or implement measures going beyond the MACT rules in order to obtain a permit, or else suffer the denial of a RCRA permit?

c. This is obviously a crucial legal and policy issue, *yet nowhere in the thousands of pages of SSRA guidance that EPA has issued that are currently effective does EPA answer that question.* I am informed by my members that **EPA** Regional personnel generally have certain risk levels they will look for through word-of-mouth guidance that spreads among Regions and through **EPA** headquarters and the Regions.

d. For instance, the word-of-mouth human health cancer incremental risk threshold is (these days) generally deemed to be 1 in 100,000 cancer cases. The threshold for non-cancer human health **risks** is generally a hazard index of 0.25. The threshold for ecological risks is generally a hazard index of 1.0. I have been informed that one **EPA** Region has issued its own, region-specific “addendum” to national **SSRA** guidance expressing that Region’s policy on these levels, but that no other Region has followed suit. I understand the general preference among the Regions and **EPA** headquarters is not to have a firm policy on acceptable levels of **risk**.

I declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in black ink, appearing to read "Michel R. Benoit", written over a horizontal line.

Michel R. Benoit

Dated: February \_\_, 2002