

RCRA DOCKET

PUBLIC COMMENTS

RE:

F - 93 - RCKA - FFFFF

Comments submitted by

The Greene Environmental Coalition
P.O. Box 266
Yellow Springs
Ohio 45387

tel: (513) 767-2109

RCRA DOCKET
Public Comments
Re: F-93-RCKA-FFFFF
Submitted by
The Greene Environmental Coalition
Greene County, Ohio

Over the last century, the production of **portland** cement in this country has accelerated dramatically. During this period, the disposal of cement kiln dust has been handled with inadequate or non-existent concern for environmental consequences. A number of environmental damage cases across the country have been documented by the EPA itself. Many have been found by concerned citizens, not the regulatory agencies. The US EPA must now take decisive and comprehensive action to guarantee that existing problems will be remediated promptly and that they will never happen again.

1. STORAGE/DISPOSAL

CKD, because of its high level of hazardous contaminants, must be handled much more rigorously than in the past.

All CKD must be tested to determine appropriate toxicity classification.

In the case of CKD from non-hazardous **"fueling"** operations that **does** not test hazardous, the EPA must develop new and better standards for management and "beneficial" use

All **CKD** from non-hazardous fueling operations **which tests** out hazardous must be classified as hazardous waste and therefore, be **subject to** subtitle C landfill criteria.

If there is any resumption of hazardous waste **"fueling"** in cement kilns, all CKD from these operations must be classified as hazardous waste and be subject to subtitle C landfill criteria.

These measures will ensure the highest level of protection (currently available) to groundwater, surface water and the air. All other suggested modes of handling are of unknown safety with regard to protection of the environment, and must at this point be considered unfavorable and unwarranted risks to the environment which will likely set the stage for future contamination and cleanup problems and huge attendant expense not to mention increased health risks.

2. TESTING

The TCLP test for CKD contamination is an inadequate test and must be abandoned because it fails to accurately represent contaminant leachability from CKD in the real world environment. TCLP does not

test a sample under acidic circumstances. TCLP does not even determine leachability under the prolonged and slightly acidic conditions of rainwater. In this regard, it should be noted that with both the EPA and industry TCLP tests pH 8.5 was the lowest achieved. It is no surprise that virtually all samples "pass" the TCLP test of non-leachability, and yet the country has numerous sites currently leaching a variety of contaminants into the environment.

Furthermore the TCLP test does not attempt to ascertain all of the contaminants that a CKD sample may contain. EPA must adopt a policy of rigorous handling and monitoring of CKD as a hazardous waste. In order to do this, accurate records must be kept that reveal the actual contaminants contained in any given quantity of CKD. Thus, future regulators will be able to monitor management sites containing CKD and know what to be looking for in the event of a failure in the facility's containment structure. To achieve this, we recommend at a minimum the adoption industry wide of the fully analytical testing similar to the Toxic EP.

3. FAULTY RISK ASSESSMENT CRITERIA

The US EPA decision to calculate risks that do not incorporate data from known damage sites is inadequate and unacceptable. Since there are a wide range of operational problems (eg fugitive dust from combustion upsets, grinding operations, transport, etc.) that are commonplace within the industry, EPA must use empirical data rather than theoretical data to calculate risks.

Furthermore, many of the samples provided by industry are in EPA's own words suspect (p 3-53, paragraph #2), and themselves render the risk assessment invalid.

Were there no problems with modeling and accuracy of data, the EPA's own calculations force the conclusion that eve CKD from non-hazardous waste burners poses unacceptably high risks and must be regulated under subtitle C. (see pp 6-50 exhibit 620 upper bound risk to sustenance fisherman of 6.7/100 and a risk of 7.2/1000 in sustenance farmers. This does not even factor in the additional risks assumed by these individuals due to their proximity to a cement kiln. It is a fact that in Greene County, Ohio, and numerous other locations around the country, there are farmers who live adjacent to CKD management sites who eat beef they produce. They also eat fish from and recreate in local ponds and streams. (In fact, The Greene Environmental Coalition has sued Southdown in Federal Court citing violations of the Clean Water Act for allowing CKD leachate to enter Mud Run Creek, a tributary of Ohio's only native trout stream.) The EPA must factor such real world data in their risk calculations, and inform the public they are doing so through notices in farm bureaus, and the like.

4. DIOXIN STANDARD FOR CKD

The EPA must develop a dioxin standard for CKD. The urgency of this item can not be over emphasized. We cite:

H. **Muto** & Y. Takizawa, "Potential Health Risks via Inhalation/Ingestion Exposure to Polychlorinated Dibenzop-Dioxins and **DiBenzo-Furans**" Bulletin of Environmental Contamination & Toxicology, 1992, **Vol** 49, pp 701-707.

In this article, the authors state that background exposure to these compounds (1 picogram/kg of body weight/day) is already at the toxicity threshold (1-10 picograms/kg/day). By our (Greene Environmental Coalition) calculations, the risks the authors cite when compared to cigarette smoking indicate that it could be as much as 16 times riskier for the average person living anywhere simply to eat food than to smoke approx. 1 pack of cigarettes a day over the course of his/her lifetime. The large risks described here are those resulting from background exposure to Dioxin everywhere and do not even begin to describe the increased risks associated with elevated exposure for those living in proximity to cement kilns.

5. CLEAN UP OF EXISTING CKD WASTE MANAGEMENT UNITS (WMU)

It is imperative that US EPA mandate the prompt and total clean up of existing CKD **WMUs** that pose an existing or future hazard to the environment. According to **EPA's** own report (p 4-9), "**39%** of the **WMUs** have none of the environmental controls listed in exhibit 4-4..." The existence of environmental damage in CKD landfills may be a RCRA violation for operators that burn, or have burned hazardous waste. The EPA must restart the process of scoring and listing old CKD sites on the Superfund. When identified, the EPA must act to bring about timely and total clean up of damage sites. Partial amelioration, monitoring wells, etc. are unacceptable stop gap measures.

6. HAZARDOUS WASTE INCINERATION IN CEMENT KILNS

It is abundantly clear from **EPA's** own study that CKD produced under conventional fueling operations is an immense environmental problem in its own right. Hazardous waste fueling only compounds the problem through the production of more toxic CKD, elevated metals levels, increased volumes of CKD, and many additional problems. Current ineffective testing continues to mask the increased toxicity of CKD from hazardous waste burning.

We recommend NO CONTINUED HAZARDOUS WASTE INCINERATION IN CEMENT KILNS.

If the EPA decides to allow the continuation of hazardous waste "**fueling**" in cement kilns, then licensing and operation requirements for these facilities must mirror those for Hazardous

Waste Incinerators (**HWIs**). Currently, because hazardous waste burning cement kilns are so much more loosely regulated than **HWIs**, disposal of hazardous waste through the cement kiln venue is dramatically cheaper. We argue, that not only are the more loosely regulated cement kiln incinerators an increased health and environmental risk, but that they undercut the development of high market costs for the disposal of hazardous waste. This in turn undercuts incentives for producers to change operations in order to reduce Hazardous Waste production in the first place. With this in mind, if the EPA allows hazardous waste incineration to continue in cement kilns (and other **BIFs**) then the resultant ash, in this case **CKD**, must be treated as hazardous and subject to subtitle C management.

7. RADIOACTIVITY

With regard to the testing of CKD for radioactivity, it appears to us that the testing procedure (radio gamma ray spectroscopy) used by the EPA to test selected sites was inadequate. Radio gamma ray spectroscopy is unable by itself to detect the presence all of the radioactive isotopes that may be present from natural sources, or resulting from spiked fuels.

But, even assuming EPA test procedures to have been complete and adequate, we have trouble with the fallout scenario explanation. For example, Cesium 137, Plutonium 239 and Plutonium 238 are entirely man made materials and are always present with Strontium 90 and others in fallout situations. To support the fallout EPA hypothesis, Strontium 90 as well as, Strontium 89, Cobalt 58, and Cobalt 60 should have been found to be present, but were not. The test results indicate to us that, in addition to natural occurring radioactivity, and fallout, radioactive contamination of fuel stocks is also likely. Given the huge amounts of radioactive waste and the very lucrative marketplace for its disposal argue further that fuel stocks at these sites were probably spiked.

See Abner attachment for expansion of issue.

8. FUGITIVE CKD

Fugitive CKD resulting from wind blowing across uncovered piles (especially in dry climates), incomplete filtration, outright bag house failures, and combustion upsets is a major concern. **It is** a known, though as yet unquantified, factor in all cement operations. These dust particles are laden with toxic materials because of the fact that they offer a tremendous amount of surface onto which hazardous materials can adsorb. Needless to say, fugitive dust, like all CKD, is more toxic when resulting from hazardous waste fueling practices.

It is our recommendation that while fugitive CKD must be minimized, it is to some extent unavoidable. As a result, its impact on public health and the environment should be minimized by abandoning hazardous waste fueling in cement kilns.

9. PENALTIES FOR CKD VIOLATIONS

In addition to adopting much more rigorous standards for the testing, transport, and subsequent management of CKD, the EPA must develop substantial penalties for violations. These must bear a logical relationship to the revenues that hazardous waste burners stand to realize. Penalties must be spelled out and non-negotiable, and not subject to agency discretion. In this regard, serious violations should be met with suspension and/or revocation of permits. Financial penalties must be equal to or greater than revenues for given time periods. If the EPA implements small penalties, they will be regarded by the companies as simply one of their "costs of doing business."

10. AND FROM THE CEMENT INDUSTRY

As a final note, we refer the EPA to the enclosed document from Edgar Marsden of Southdown Corporation. In it is revealed industry's own recognition of the seriousness of the CKD problem. This lends further credence to the legitimacy and urgency of the above recommendations. It shows that the EPA must take the most vigorous steps possible to ensure rigorous, safe management and consistent industry compliance with regulations.