# Regulatory Determination on Waste From Fossil Fuel Combustion

## **BACKGROUND**

The Resource Conservation and Recovery Act, Section 3001(b)(3)(C) required EPA to determine whether fossil fuel combustion wastes warranted regulation as hazardous waste. This information paper summarizes EPA's regulatory determination as it appeared in the May 22, 2000 Federal Register, 65 FR 32214, "Notice of Regulatory Determination on Wastes From the Combustion of Fossil Fuels." This is the second part of a two-part evaluation by EPA regarding whether fossil fuel combustion (FFC) waste should be regulated under RCRA.

In Part 1, EPA addressed "high volume coal combustion wastes (e.g. bottom ash and fly ash) generated at electric utility and independent power producing facilities (non-utility electric power producers that are not engaged in any other industrial activity) and managed separately from other fossil fuel combustion waste". In 1993 EPA issued a regulatory determination that exempted Part 1 waste from regulation as hazardous waste.

Part 2 is the subject of this information paper. It addresses all other FFC waste not previously covered under Part 1.

### **APPLICABILITY**

This regulatory determination applies to generators of fossil fuel combustion wastes. It is known that the Department of Defense disposes of coal ash in onsite landfills, offsite landfills, and in vacated mines. It is also known that DoD uses coal ash as road bed and for landfill cover. All of these activities are impacted by this regulatory determination.

### WASTES EVALUATED UNDER PART 2

Under Part 2, EPA evaluated whether the following wastes required additional regulation:

- Large-volume coal combustion wastes generated at electric utility and independent power producing facilities that are co-managed together with certain other coal combustion wastes;
- Coal combustion wastes generated at non-utilities;
- Coal combustion wastes generated at facilities with fluidized bed combustion technology;
- Petroleum coke combustion waste;
- Wastes from the combustion of mixtures of coal and other fuels (i.e. co-burning of coal with other fuel where the coal is at least 50% of the total fuel);
- Waste from the combustion of oil: and
- Wastes from the combustion of natural gas.

# HTRW Center of Expertise Environmental Regulatory Fact Sheet 00-06

The conclusions were:

- Regulation of coal combustion waste as hazardous waste is not warranted.
- Some FFC wastes do not warrant any additional regulation.
- National regulations under non-hazardous waste authorities, Subtitle D, are needed for coal combustion wastes that are disposed in landfills and surface impoundments.
- National regulations under RCRA non-hazardous waste authorities and/or under the Surface Mining Control and Reclamation Act (SMCRA) are needed to address placement of coal combustion wastes in surface or underground mines.

## <u>WASTE WHICH EPA DETERMINED DO NOT REQUIRE ADDITIONAL</u> REGULATION

Of the FFC wastes evaluated in Part 2, EPA concluded that no additional regulation is needed at this time for:

- oil combustion waste,
- natural gas combustion waste, or
- coal combustion wastes that are used beneficially (other than for minefilling).

Beneficial use of coal combustion wastes include:

- waste stabilization:
- beneficial construction applications (e.g. cement, concrete, brick and concrete products, road bed, structural fill, blasting grit, wall board, insulation, roofing materials);
- agricultural applications (e.g. as a substitute for lime); and
- other applications (absorbents, filter media, paints, plastics and metal manufacture, snow and ice control, waste stabilization).

### UNIQUELY ASSOCIATED WASTE

In addition to FFC waste being exempt from hazardous waste regulation, according to EPA, "uniquely associated wastes" co-managed with FFC waste are also exempt. If managed separately, however, a hazardous waste determination must be made for this waste.

Uniquely associated wastes are "low volume" wastes that are related to the main fuel combustion process. EPA states that unless there are some unusual site-specific circumstances, the following are considered uniquely associated waste:

- coal pile runoff.
- coal mill rejects and waste coal,
- air heater and precipitator ashes,
- floor and yard drains and sumps,
- wastewater treatment sludges, and
- boiler fireside chemical cleaning wastes.

# HTRW Center of Expertise Environmental Regulatory Fact Sheet 00-06

Waste not considered uniquely associated include:

- boiler blowdown,
- cooling tower blowdown and sludges,
- intake or makeup water treatment and regeneration wastes,
- boiler waterside cleaning wastes,
- lab waste,
- general construction and demolition debris,
- general maintenance wastes, and
- spillage or leakage of materials used in the processes that generate these wastes.

## **CONCLUSION**

EPA will be pursuing development of national regulations under RCRA Subtitle D and/or SMCRA to control the disposal of coal combustion wastes that are disposed in landfills or surface impoundments or used to fill surface or underground mines. Department of Defense installations generating such waste should be aware of the following:

- Generators currently landfilling coal combustion waste on-site may want to investigate options for beneficial reuse as a means of remaining exempt from regulation.
- Generators who intend to continue to landfill coal combustion waste on-site will
  want to follow development of the new rule to ensure their disposal areas are able to
  meet new requirements.
- Generators who will be disposing of coal combustion waste offsite, whether in landfills or mines, will need to re-evaluate receiving facilities to ensure they meet new requirements, once developed.
- Generators of waste not considered "uniquely associated waste" that comes in contact with FFC waste should be evaluating these wastes to determine whether they are subject to RCRA hazardous waste regulation.