United States
Environmental Protection
Agency

Solid Waste and
Emergency Response
(5305W)

EPA530-R-97-037b
NTIS: PB97-177 430
June 1992

EPA

Background Document for Capacity Analysis for Newly Listed Wastes and Hazardous Debris to Support 40 CFR 268 Land Disposal Restrictions (Final Rule)

Volume 2:
Appendix C - Background Data for Incineration and Cement Kiln Capacity (Part 1)

...ries Center
...NW
...20460

Printed on paper that contains at lest 20 percent postconsumer fiber

CD2F-50046

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Background Document for Capacity Analysis for Newly Listed Wastes and Hazardous Debris to Support 40 CFR 268 Land Disposal Restrictions (Final Rule)

CD2F 002

Volume 2: Appendix A - Background Data for Incineration and Cement Kiln Capacity

United States Environmental Protection Agency
Office of Solid Waste
401 M Street, N.W.
Washington, D.C. 20460

0826

June 1992

10000001

The following information included in EPA's commercial combustion capacity update are included in this document:

Volume 1: Cement Kiln Recycling Coalition surveys

- Ash Grove Cement, Chanute, Kansas
- Ash Grove Cement, Foreman, Arkansas
- Ash Grove Cement, Louisville, Nebraska
- Ash Grove Cement West, Clancy, Montana
- Ash Grove Cement West, Nephi, Utah
- Blue Circle Cement, Atlanta, Georgia
- Blue Circle Cement, Tulsa, Oklahoma
- ESSROC Cement Group, Logansport, Indiana
- ESSROC Cement Group, San Juan, Puerto Rico
- ESSROC Cement Group, Speed, Indiana
- Giant Cement, Harleyville, South Carolina
- Heartland Cement, Independence, Kansas
- Keystone Cement, Bath, Pennsylvania
- Lafarge, Alpena, Michigan
- Lafarge, Demopolis, Alabama
- Lafarge, Fredonia, Kansas

Volume 2: Cement Kiln Recycling Coalition surveys

- Lafarge, Paulding, Ohio
- Lone Star Industries, Greencastle, Indiana
- Medusa Cement, Clinchfield, Georgia
- Medusa Cement, Wampum, Pennsylvania
- National Cement, Lebec, California
- River Cement, Festus, Missouri
- Southdown, Brooksville, Florida
- Southdown, Fairborn, Ohio
- Southdown, Knoxville, Tennessee
- Southdown, Louisville, Kentucky
- Southdown, Odessa, Texas
- Southdown, Pittsburgh, Pennsylvania

Volume 3: Incinerator capacity surveys

- Aptus, Coffeyville, Kansas
- Aptus, Tooele, Utah
- Chemical Waste Management, Chicago, Illinois
- Chemical Waste Management, Port Arthur, Texas
- Chemical Waste Management, Sauget, Illinois
- Rhone-Poulenc, Baton Rouge, Louisiana
- Rhone-Poulenc, Houston, Texas

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 2 7

00000002

Volume 3: Incinerator capacity surveys (continued)

- Rollins, Bridgeport, New Jersey
- Rollins, Baton Rouge, Louisiana
- Rollins, Deer Park, Texas
- Ross, Grafton, Ohio
- ThermalKEM, Rock Hill, South Carolina

Other background information ..

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0828

0000 003

Survey Responses Contained in this Document

Volumes 2 and 3: Appendix A contain surveys completed by firms that are connected with fuels substitution, own cement kilns, and act as fuels blenders, regarding the capacity to burn hazardous wastes under regulation since November 1984 ("newly listed" wastes.) The survey was sponsored by the Cement Kiln Recycling Coalition (CKRC), and completed survey forms were returned to EPA to evaluate and incorporate into the Agency's effort to determine the commercial combustion capacity available in May 1992. In addition to requesting information regarding liquid, containerized solid, dry solid, pumpable and nonpumbable sludge hazardous waste fuel combustion capacity of kilns they own or operate, the survey asked respondents about hazardous waste fuel storage capacity and fuels processing capability, the fuels blenders from whom they receive their hazardous waste (if applicable), and the physical and chemical specifications their fuels must meet.

Volume 4: Appendix A contains voluntary capacity update responses from companies that own commercial hazardous waste incinerator facilities. In addition to supplying information regarding their present and future capacity to burn liquids, pumpable sludges, non-pumpable sludges, containerized solids, and bulk solids, the capacity update form included engineering specifications of incinerator unit(s) at facility, debris and soil acceptance criteria, and waste code acceptability. This document also contains facilities that are expected to come on-line by July 1994. EPA contacted appropriate state regulatory agencies to determine the status of those facilities. Telephone logs of conversations clarifying capacity information can be found at the end of this document.

Some facilities requested that all or part of the information they submitted be maintained as Confidential Business Information. Their responses are included in this document, with the confidential information deleted. Their complete responses can be found in the CBI room at EPA headquarters in Washington, D.C.

The data contained in these capacity update responses was used in EPA's capacity analysis as discussed in Chapter 2 of *Background Document for Capacity Analysis for Newly Listed Wastes and Contaminated Debris To Support 40 CFR 268 Land Disposal Restrictions (Final Rule).*

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 2 9

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F-002

0830

Cement Kiln Surveys

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

A. **Facility Information**

1. Respondent Name and Title: Eric Hansen, V.P. and Technical Director

Company: Ash Grove Cement Co.

Phone number: 913 451-8900

2. Name and address of company that owns the cement kilns at this facility:
Ash Grove Cement Company
8900 Indian Creek Parkway Overland Park, KS 66225

Facility name, location, and address:
Ash Grove Chanute Cement Plant
North Santa Fe Street Chanute, KS 66720

EPA ID of burner: KSD 0212 0312

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Same as above

EPA ID of on-site processor: N/A

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 2
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 2

CD2F 002

0 8 3 1

00000005

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): 100
Processor 1 Petro-Chem Processing Inc. 313-824-5429
Processor 2 Pollution Control Industries of America 219-397-3951
Processor 3 Gibraltar Chemical Resources Inc. 903-877-3227
Processor 4 Chemical Processing 313-824-5429

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): 100
Processor 1 Cecos International Inc. 800-274-5738
Processor 2 Petro-Chem Processing Inc. 313-824-5429
Processor 3 Rollins Chemical Industries 501-778-9055
Processor 4 Chemical Processing 313-824-5429

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

00000006

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0832

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

- [X] Roll-Off Bin
- [X] Steel Drum, specify sizes: 5 – 6.5 gal.
- [X] Poly Drum, specify sizes: 5 – 7.5 gal.
- [ ] Fiber Drum, specify sizes:
- [X] Bag or other flexible container, specify sizes: 8 – 15 gal.
- [ ] Rigid Tote
- [X] Tanker Trucks (transferred to tank)
- [ ] Tanker Trucks (direct feed to kiln)
- [X] Rail car
- [ ] Carboy
- [X] Pallet
- [ ] Other, specify:

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	60,500 gal.	119,500 gal.	1992
Liquid Tanks	76,000 gal.	38,000 gal	1992
Other (specify)			

CD2F 002

0 8 3 3

0000 007

6b. What processing operations do you perform on-site for liquid wastes?[1]

None

6c. What processing operations do you perform on-site for solid wastes?

Bulk solids generated by petroleum refining (EPA waste codes K048-K052) are received in 55 gallon drum roll-off boxes and repackaged into smaller steel containers (5-15 gals) for direct feed into the kilns. Packaged material can be shipped off site to other cement kilns.

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000008

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 3 4

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	27,500	None	75,000	T
Pumpable Sludges				
Nonpumpable Sludges				
Containerized Solids	9,185	None	50,000	T
Bulk Solids	2,700	2700	25,000 tons [illegible] containers	—
Dry Solids				
Total	39,485		125,000	

00000009

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 3 5

Kiln Number: 1 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Wet process rotary cement kiln

Clinker capacity (tons/hr): 31.25 TPH

Thermal input (Btu/ton clinker): 200 MM BTU/Hr

Type of cement product(s) produced in this kiln: Portland Cement

Total hours operating per year on average: 7500

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: X
- Sludge Pump: ___
- Other: (specify) ___

00000010

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 3 6

Kiln Number: 1 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	13,780	37,500	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids	5,143	25,000	T
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of above solids originally generated as solids: NRA (%)

NRA = [illegible]

00000011

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 3 7

Kiln Number: 1 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	2000	24	260	11,000	66%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	8000	24	260	6,000	24%
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

260 days burning fuel out of 310 operating days (84%)

00000012

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0838

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? January, February or March

How long? 3-4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000013

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 3 9

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

SUPPLEMENTAL QUESTION SET FOR ADDITIONAL KILNS

0 8 4 0

00000014

Kiln Number: 2 of 2

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: Wet process rotary cement Kiln

Clinker capacity (tons/hr): 31.25 TPH

Thermal input (Btu/ton clinker): 250 mm BTU/Hr

Type of cement product(s) produced in this kiln: Portland Cement

Total hours operating per year on average: 7500

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: X
- Sludge Pump: ___
- Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 4 1

Kiln Number: 2 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time; residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	13,780	37,500	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids	5,443	25,000	P
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of solids originally generated as solids: NRA (%)

NRA = not readily available

00000016

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0842

Kiln Number: 2 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste, per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	12 000	24	260	11,000	66%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	8000	24	260	[illegible]	24%
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

The maximum practical burning capacity is based on feeding waste to the kiln for 84% of the available operating time. The available operating time is based on operating the kiln [illegible] of the year (30 scheduled days down and 15 unscheduled days). The availability of the kiln for burning waste is [illegible] 71%. This is a conservative estimate.

00000017

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 4 3

Kiln Number: 2 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? January, February, or March

How long? 3-4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000018

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 4 4 4

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion BTU/#	8000		T
Water Content			
Total Solids Content		30%	T
Total Inorganics Content			
Particle/Object Size		1/8 inch	T
Cyanide Content			
Sulfur Content		3%	R
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content		5%	R
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice, it is due to the quality of the document being filmed.

CD2F 002

0 0 4 5

C0000019

~19.0

"As Received" ~~Contaminated Solids~~ Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify PCB		50 ppm	
Total Specified Metals Content			
Antimony Content			
Arsenic Content		200 ppm	
Barium Content		10,000 ppm	
Beryllium Content			
Cadmium Content		100 ppm	
Chromium Content		1000 ppm	
Copper Content			
Lead Content		2000 ppm	
Mercury Content		10 ppm	
Nickel Content			
Selenium Content		100 ppm	
Silver Content		1000 ppm	
Thallium Content		1000 ppm	
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0046

00000020

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) YES

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 4 7

Containerized Solids Waste Acceptance Limits As Received (Refer to attachment)

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion BTU/lb	6000		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	R
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content		5%	R
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0848

Contaminated

"As Received" ~~Liquid~~ Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify PCB		50 ppm	P
Total Specified Metals Content			
Antimony Content			
Arsenic Content		2000 ppm	P
Barium Content		10 000 ppm	P
Beryllium Content			
Cadmium Content		200 ppm	P
Chromium Content		5000 ppm	P
Copper Content			
Lead Content		10 000 ppm	P
Mercury Content		10 ppm	P
Nickel Content			
Selenium Content		200 ppm	P
Silver Content		1000 ppm	P
Thallium Content		1000 ppm	P
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0849

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: Yes

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0850

Bulk Solids Waste Acceptance Limits As Received

17a. Are your bulk solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17b: yes

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000035 X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 5 1

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)	Y			
Personal Protection Equipment (e.g., Tyvex suits)	Y			
Paper or Cardboard Materials	Y			
Filter Cartridges	Y			
Wood Materials	Y			
Rubber Objects (e.g., tires, hoses)	Y			
PVC Pipe	Y			
Other Plastic Debris	Y			
Glass Debris	Y			
Ceramic Debris (e.g., semiconductors)	N			
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)	N			
Asbestos Materials (e.g., shingles, insulation)	N			
Non-Soil Geologic Material (e.g., rocks)	N			
Concrete Debris	N			
Refractory Brick	N			
Other Bricks	N			
Slag	N			
Intact Batteries	N			
Battery Cases	N	Y		
Electronic Components (e.g., printed circuit boards)	N			
Electrical Wires, Switches, etc.	N			

00000026

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0052

20. Please explain any debris acceptance conditions noted on the previous page:

must be blended to meet fuel specification for solid or liquid fuel.

20a. Do you accept soils? If so, under what conditions or limitations?

Yes, if [illegible] / lb.

00000027

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 5 3

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

Refer to the attach RCRA Part A application.

CD2F 002

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

N/A

0054

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

N/A

00000028

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	US EPA Region 7	IS	
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste	[illegible]	IS	
Air Emission	[illegible]	FP	
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 5 5

00000029

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

June 1992

00000030

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 5 5

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

____ Yes
X No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 5 7

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)	Y			
Personal Protection Equipment (e.g., Tyvex suits)	Y			
Paper or Cardboard Materials	Y			
Filter Cartridges	Y			
Wood Materials	Y			
Rubber Objects (e.g., tires, hoses)	Y			
PVC Pipe	Y			
Other Plastic Debris	Y			
Glass Debris	Y			
Ceramic Debris (e.g., semiconductors)	N			
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)	N			
Asbestos Materials (e.g., shingles, insulation)	N			
Non-Soil Geologic Material (e.g., rocks)	N			
Concrete Debris	N			
Refractory Brick	N			
Other Bricks	N			
Slag	N			
Intact Batteries	N			
Battery Cases	N	Y		
Electronic Components (e.g., printed circuit boards)	N			
Electrical Wires, Switches, etc.	N			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 5 8

00000033

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

For EPA Regional Use Only	EPA United States Environmental Protection Agency Washington, DC 20460 **Hazardous Waste Permit Application** **Part A** *(Read the Instructions before starting)*	For State Use Only
Date Received Month Day Year		

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0859

I. ID Number(s)

A. EPA ID Number	B. Secondary ID Number *(if applicable)*
KSD031203318	

II. Name of Facility

ASH GROVE CEMENT PLANT

III. Facility Location *(Physical address not P.O. Box or Route Number)*

A. Street

NORTH SANTA FE STREET

Street *(continued)*

City or Town	State	ZIP Code
CHANUTE	KS	66720-

County Code *(if known)*	County Name
	NEOSHO

B. Land Type *(enter code)*	C. Geographic Location LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*	D. Facility Existence Date Month Day Year
P	37 41 51.7	095 27 47.4	05 09 1998

IV. Facility Mailing Address

Street or P.O. Box

PO BOX 519

City or Town	State	ZIP Code
CHANUTE	KS	66720-

V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

Name *(last)*	*(first)*
SHEA	JAMES

Job Title	Phone Number *(area code and number)*
PLANT MANAGER	316-431-4500

VI. Facility Contact Address *(See Instructions)*

A. Contact Address Location	Mailing	B. Street or P.O. Box
	X	

City or Town	State	ZIP Code

00000034

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1)												Secondary ID Number (enter from page
K	S	D	0	3	1	2	0	3	3	1	8	

XI. Nature of Business (provide a brief description)

Manufacturing of Portland cement by the wet process - involves:

1) Quarrying and crushing of limestone and acquisition of other raw materials;

2) Grinding of raw materials with water to form a slurry;

3) Pyroprocessing of the slurry in a rotary cement kiln to form Portland Cemen clinker; and

4) Grinding of clinker with gypsum to form Portland Cement.

XII. Process - Codes and Design Capacities

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at the faci Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the addito information. If a process will be used that is not included in the list of codes below, then describe the process (including its des capacity) in the space provided in Item XIII.*

B. PROCESS DESIGN CAPACITY - *For each code entered in column A, enter the capacity of the process.*

1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure enforcement action) enter the total amount of waste for that process unit.*
2. UNIT OF MEASURE - *For each amount entered in column B(1), enter the code from the list of unit measure codes below t describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	DISPOSAL:	
D79	INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY
D80	LANDFILL	ACRE-FEET OR HECTARE-METER
D81	LAND APPLICATION	ACRES OR HECTARES
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	STORAGE:	
S01	CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS
S02	TANK	GALLONS OR LITERS
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	TREATMENT:	
T01	TANK	GALLONS PER DAY OR LITERS PER DAY
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR
T04	OTHER TREATMENT (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided in Item XIII.)	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY

UNIT OF MEASURE	UNIT MEAS COD
GALLONS	G
GALLONS PER HOUR	E
GALLONS PER DAY	U
LITERS	L
LITERS PER HOUR	H
LITERS PER DAY	V
SHORT TONS PER HOUR	D
METRIC TONS PER HOUR	W
SHORT TONS PER DAY	N
METRIC TONS PER DAY	S
POUNDS PER HOUR	J
KILOGRAMS PER HOUR	R
CUBIC YARDS	Y
CUBIC METERS	C
ACRES	B
ACRE-FEET	A
HECTARES	G
HECTARE-METER	F
BTU's PER HOUR	K

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0869

Please print or type in the unshaded areas only

00000035

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
K S D 0 3 1 2 0 3 3 1 8	

XIV. Description of Hazardous Wastes

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A, on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A, on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that processes that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item XIV-D(1).*
3. *Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS (1) PROCESS CODES (enter)									(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 3 4	900	P	T 0 3	D 8 0								
X 2	D 0 0 2	400	P	T 0 3	D 8 0								
X 3	D 0 0 1	100	P	T 0 3	D 8 0								
X 4	D 0 0 2												Includes With Above

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 6 1

00000036

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from pag

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTI (If a code is not entered in
1	D 0 3 6	2.0×10^8	P	S 0 1 S 0 2 T 0 4	T 0 1
2	D 0 3 7	" "	P	" " "	"
3	D 0 3 8	" "	P	" " "	"
4	D 0 3 9	" "	P	" " "	"
5	D 0 4 0	" "	P	" " "	"
6	D 0 4 1	" "	P	" " "	"
7	D 0 4 2	" "	P	" " "	"
8	D 0 4 3	" "	P	" " "	T 0 1
9	F 0 0 1	5.0×10^8	P	" " "	
10	F 0 0 2	" "	P	" " "	
11	F 0 0 3	" "	P	" " "	
12	F 0 0 4	" "	P	" " "	
13	F 0 0 5	" "	P	" " "	
14	F 0 0 6	1.0×10^8	P	" " "	
15	F 0 0 7	" "	P	" " "	
16	F 0 0 8	" "	P	" " "	
17	F 0 0 9	" "	P	" " "	
18	F 0 1 0	" "	P	" " "	
19	F 0 1 1	" "	P	" " "	
20	F 0 1 2	" "	P	" " "	
21	F 0 1 9	" "	P	" " "	
22	F 0 2 4	" "	P	" " "	
23	F 0 2 5	" "	P	" " "	
24	F 0 2 8	" "	P	" " "	
25	F 0 3 4	" "	P	" " "	
26	F 0 3 5	" "	P	" " "	
27	F 0 3 7	" "	P	" " "	
28	F 0 3 8	" "	P	" " "	
29	F 0 3 9	" "	P	" " "	
30	K 0 0 1	" "	P	" " "	
31	K 0 0 2	" "	P	" " "	
32	K 0 0 3	" "	P	" " "	
33	K 0 0 4	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0862

00000037

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K005	1.0×10^8	P	S01 S02 T04	
2	K006	" "	P	" " "	
3	K007	" "	P	" " "	
4	K008	" "	P	" " "	
5	K009	" "	P	" " "	
6	K010	" "	P	" " "	
7	K011	" "	P	" " "	
8	K013	" "	P	" " "	
9	K014	" "	P	" " "	
10	K015	" "	P	" " "	
11	K016	" "	P	" " "	
12	K017	" "	P	" " "	
13	K018	" "	P	" " "	
14	K019	" "	P	" " "	
15	K020	" "	P	" " "	
16	K021	" "	P	" " "	
17	K022	" "	P	" " "	
18	K023	" "	P	" " "	
19	K024	" "	P	" " "	
20	K025	" "	P	" " "	
21	K026	" "	P	" " "	
22	K027	" "	P	" " "	
23	K028	" "	P	" " "	
24	K029	" "	P	" " "	
25	K030	" "	P	" " "	
26	K031	" "	P	" " "	
27	K032	" "	P	" " "	
28	K033	" "	P	" " "	
29	K034	" "	P	" " "	
30	K035	" "	P	" " "	
31	K036	" "	P	" " "	
32	K037	" "	P	" " "	
33	K038	1.0×10^8	P	S01 S02 T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0863

00000038

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from pag

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTI (If a code is not entered in
1	K 0 3 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	K 0 4 0	" "	P	" " "	
3	K 0 4 1	" "	P	" " "	
4	K 0 4 2	" "	P	" " "	
5	K 0 4 3	" "	P	" " "	
6	K 0 4 4	" "	P	" " "	
7	K 0 4 5	" "	P	" " "	
8	K 0 4 6	" "	P	" " "	
9	K 0 4 7	" "	P	" " "	
10	K 0 4 8	2.0×10^8	P	" " "	
11	K 0 4 9	" "	P	" " "	
12	K 0 5 0	" "	P	" " "	
13	K 0 5 1	" "	P	" " "	
14	K 0 5 2	" "	P	" " "	
15	K 0 6 0	1.0×10^8	P	" " "	
16	K 0 6 1	" "	P	" " "	
17	K 0 6 2	" "	P	" " "	
18	K 0 6 4	" "	P	" " "	
19	K 0 6 5	" "	P	" " "	
20	K 0 6 6	" "	P	" " "	
21	K 0 7 1	" "	P	" " "	
22	K 0 7 3	" "	P	" " "	
23	K 0 8 3	" "	P	" " "	
24	K 0 8 4	" "	P	" " "	
25	K 0 8 5	" "	P	" " "	
26	K 0 8 6	" "	P	" " "	
27	K 0 8 7	" "	P	" " "	
28	K 0 8 8	" "	P	" " "	
29	K 0 9 0	" "	P	" " "	
30	K 0 9 1	" "	P	" " "	
31	K 0 9 3	" "	P	" " "	
32	K 0 9 4	" "	P	" " "	
33	K 0 9 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0864

00000039

EPA ID Number (enter from page 1): K S D 0 3 2 0 3 3 1 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)									D. Processes (2) Process Description (If a code is not entered in D(1))
1	K 0 9 6	1.0×10^5	P	S	0	1	S	0	2	T	0	4	
2	K 0 9 7	" "	P		"			"			"		
3	K 0 9 8	" "	P		"			"			"		
4	K 0 9 9	" "	P		"			"			"		
5	K 1 0 0	" "	P		"			"			"		
6	K 1 0 1	" "	P		"			"			"		
7	K 1 0 2	" "	P		"			"			"		
8	K 1 0 3	" "	P		"			"			"		
9	K 1 0 4	" "	P		"			"			"		
10	K 1 0 5	" "	P		"			"			"		
11	K 1 0 6	" "	P		"			"			"		
12	K 1 1 1	" "	P		"			"			"		
13	K 1 1 2	" "	P		"			"			"		
14	K 1 1 3	" "	P		"			"			"		
15	K 1 1 4	" "	P		"			"			"		
16	K 1 1 5	" "	P		"			"			"		
17	K 1 1 6	" "	P		"			"			"		
18	K 1 1 7	" "	P		"			"			"		
19	K 1 1 8	" "	P		"			"			"		
20	K 1 2 3	" "	P		"			"			"		
21	K 1 2 4	" "	P		"			"			"		
22	K 1 2 5	" "	P		"			"			"		
23	K 1 2 6	" "	P		"			"			"		
24	K 1 3 1	" "	P		"			"			"		
25	K 1 3 2	" "	P		"			"			"		
26	K 1 3 6	" "	P		"			"			"		
27	P 0 0 1	" "	P		"			"			"		
28	P 0 0 2	" "	P		"			"			"		
29	P 0 0 3	" "	P		"			"			"		
30	P 0 0 4	" "	P		"			"			"		
31	P 0 0 5	" "	P		"			"			"		
32	P 0 0 6	" "	P		"			"			"		
33	P 0 0 7	1.0×10^5	P	S	0	1	S	0	2	T	0	4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F.002

0 8 6 5

00000040

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTI (If a code is not entered in
1	P008	1.0×10^8	P	S01 S02 T04	
2	P009	" "	P	" " "	
3	P010	" "	P	" " "	
4	P011	" "	P	" " "	
5	P012	" "	P	" " "	
6	P013	" "	P	" " "	
7	P014	" "	P	" " "	
8	P015	" "	P	" " "	
9	P016	" "	P	" " "	
10	P017	" "	P	" " "	
11	P018	" "	P	" " "	
12	P020	" "	P	" " "	
13	P021	" "	P	" " "	
14	P022	" "	P	" " "	
15	P023	" "	P	" " "	
16	P024	" "	P	" " "	
17	P026	" "	P	" " "	
18	P027	" "	P	" " "	
19	P028	" "	P	" " "	
20	P029	" "	P	" " "	
21	P030	" "	P	" " "	
22	P031	" "	P	" " "	
23	P033	" "	P	" " "	
24	P034	" "	P	" " "	
25	P036	" "	P	" " "	
26	P037	" "	P	" " "	
27	P038	" "	P	" " "	
28	P039	" "	P	" " "	
29	P040	" "	P	" " "	
30	P041	" "	P	" " "	
31	P042	" "	P	" " "	
32	P043	" "	P	" " "	
33	P044	1.0×10^6	P	S01 S02 T04	

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0866

00000041

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P 0 4 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	P 0 4 6	" "	P	" " " "	
3	P 0 4 7	" "	P	" " " "	
4	P 0 4 8	" "	P	" " " "	
5	P 0 4 9	" "	P	" " " "	
6	P 0 5 0	" "	P	" " " "	
7	P 0 5 1	" "	P	" " " "	
8	P 0 5 4	" "	P	" " " "	
9	P 0 5 7	" "	P	" " " "	
10	P 0 5 8	" "	P	" " " "	
11	P 0 5 9	" "	P	" " " "	
12	P 0 6 0	" "	P	" " " "	
13	P 0 6 2	" "	P	" " " "	
14	P 0 6 3	" "	P	" " " "	
15	P 0 6 4	" "	P	" " " "	
16	P 0 6 5	" "	P	" " " "	
17	P 0 6 6	" "	P	" " " "	
18	P 0 6 7	" "	P	" " " "	
19	P 0 6 8	" "	P	" " " "	
20	P 0 6 9	" "	P	" " " "	
21	P 0 7 0	" "	P	" " " "	
22	P 0 7 1	" "	P	" " " "	
23	P 0 7 2	" "	P	" " " "	
24	P 0 7 3	" "	P	" " " "	
25	P 0 7 4	" "	P	" " " "	
26	P 0 7 5	" "	P	" " " "	
27	P 0 7 6	" "	P	" " " "	
28	P 0 7 7	" "	P	" " " "	
29	P 0 7 8	" "	P	" " " "	
30	P 0 8 1	" "	P	" " " "	
31	P 0 8 2	" "	P	" " " "	
32	P 0 8 4	" "	P	" " " "	
33	P 0 8 5	1.0×10^6	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0867

00000042

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)										D. PROCESSES (2) PROCESS DESCRIPTIC (If a code is not entered in I
1	P 0 8 7	1.0×10^8	P	S	0	1	S	0	2	T	0	4		
2	P 0 8 8	" "	P		"			"			"			
3	P 0 8 9	" "	P		"			"			"			
4	P 0 9 2	" "	P		"			"			"			
5	P 0 9 3	" "	P		"			"			"			
6	P 0 9 4	" "	P		"			"			"			
7	P 0 9 5	" "	P		"			"			"			
8	P 0 9 6	" "	P		"			"			"			
9	P 0 9 7	" "	P		"			"			"			
10	P 0 9 8	" "	P		"			"			"			
11	P 0 9 9	" "	P		"			"			"			
12	P 1 0 1	" "	P		"			"			"			
13	P 1 0 2	" "	P		"			"			"			
14	P 1 0 3	" "	P		"			"			"			
15	P 1 0 4	" "	P		"			"			"			
16	P 1 0 5	" "	P		"			"			"			
17	P 1 0 6	" "	P		"			"			"			
18	P 1 0 7	" "	P		"			"			"			
19	P 1 0 8	" "	P		"			"			"			
20	P 1 0 9	" "	P		"			"			"			
21	P 1 1 0	" "	P		"			"			"			
22	P 1 1 1	" "	P		"			"			"			
23	P 1 1 2	" "	P		"			"			"			
24	P 1 1 3	" "	P		"			"			"			
25	P 1 1 4	" "	P		"			"			"			
26	P 1 1 5	" "	P		"			"			"			
27	P 1 1 6	" "	P		"			"			"			
28	P 1 1 8	" "	P		"			"			"			
29	P 1 1 9	" "	P		"			"			"			
30	P 1 2 0	" "	P		"			"			"			
31	P 1 2 1	" "	P		"			"			"			
32	P 1 2 2	" "	P		"			"			"			
33	P 1 2 3	1.0×10^8	P	S	0	1	S	0	2	T	0	4		

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0868

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D.(1))
1	U 0 0 1	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 0 0 2	" "	P	" " " "	
3	U 0 0 3	" "	P	" " " "	
4	U 0 0 4	" "	P	" " " "	
5	U 0 0 5	" "	P	" " " "	
6	U 0 0 6	" "	P	" " " "	
7	U 0 0 7	" "	P	" " " "	
8	U 0 0 8	" "	P	" " " "	
9	U 0 0 9	" "	P	" " " "	
10	U 0 1 0	" "	P	" " " "	
11	U 0 1 1	" "	P	" " " "	
12	U 0 1 2	" "	P	" " " "	
13	U 0 1 4	" "	P	" " " "	
14	U 0 1 5	" "	P	" " " "	
15	U 0 1 6	" "	P	" " " "	
16	U 0 1 7	" "	P	" " " "	
17	U 0 1 8	" "	P	" " " "	
18	U 0 1 9	" "	P	" " " "	
19	U 0 2 0	" "	P	" " " "	
20	U 0 2 1	" "	P	" " " "	
21	U 0 2 2	" "	P	" " " "	
22	U 0 2 3	" "	P	" " " "	
23	U 0 2 4	" "	P	" " " "	
24	U 0 2 5	" "	P	" " " "	
25	U 0 2 6	" "	P	" " " "	
26	U 0 2 7	" "	P	" " " "	
27	U 0 2 8	" "	P	" " " "	
28	U 0 2 9	" "	P	" " " "	
29	U 0 3 0	" "	P	" " " "	
30	U 0 3 1	" "	P	" " " "	
31	U 0 3 2	" "	P	" " " "	
32	U 0 3 3	" "	P	" " " "	
33	U 0 3 4	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0869

00000044

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)										D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(
1	U 0 3 5	1.0×10^8	P	S 0 1	S 0 2	T 0 4								
2	U 0 3 6	" "	P	"	"	"								
3	U 0 3 7	" "	P	"	"	"								
4	U 0 3 8	" "	P	"	"	"								
5	U 0 3 9	" "	P	"	"	"								
6	U 0 4 1	" "	P	"	"	"								
7	U 0 4 2	" "	P	"	"	"								
8	U 0 4 3	" "	P	"	"	"								
9	U 0 4 4	" "	P	"	"	"								
10	U 0 4 5	" "	P	"	"	"								
11	U 0 4 6	" "	P	"	"	"								
12	U 0 4 7	" "	P	"	"	"								
13	U 0 4 8	" "	P	"	"	"								
14	U 0 4 9	" "	P	"	"	"								
15	U 0 5 0	" "	P	"	"	"								
16	U 0 5 1	" "	P	"	"	"								
17	U 0 5 2	" "	P	"	"	"								
18	U 0 5 3	" "	P	"	"	"								
19	U 0 5 5	" "	P	"	"	"								
20	U 0 5 6	" "	P	"	"	"								
21	U 0 5 7	" "	P	"	"	"								
22	U 0 5 8	" "	P	"	"	"								
23	U 0 5 9	" "	P	"	"	"								
24	U 0 6 0	" "	P	"	"	"								
25	U 0 6 1	" "	P	"	"	"								
26	U 0 6 2	" "	P	"	"	"								
27	U 0 6 3	" "	P	"	"	"								
28	U 0 6 4	" "	P	"	"	"								
29	U 0 6 5	" "	P	"	"	"								
30	U 0 6 6	" "	P	"	"	"								
31	U 0 6 7	" "	P	"	"	"								
32	U 0 6 8	" "	P	"	"	"								
33	U 0 6 9	1.0×10^8	P	S 0 1	S 0 2	T 0 4								

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0870

00000015

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 0 7 0	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 0 7 1	" "	P	" " " "	
3	U 0 7 2	" "	P	" " " "	
4	U 0 7 3	" "	P	" " " "	
5	U 0 7 4	" "	P	" " " "	
6	U 0 7 5	" "	P	" " " "	
7	U 0 7 6	" "	P	" " " "	
8	U 0 7 7	" "	P	" " " "	
9	U 0 7 8	" "	P	" " " "	
10	U 0 7 9	" "	P	" " " "	
11	U 0 8 0	" "	P	" " " "	
12	U 0 8 1	" "	P	" " " "	
13	U 0 8 2	" "	P	" " " "	
14	U 0 8 3	" "	P	" " " "	
15	U 0 8 4	" "	P	" " " "	
16	U 0 8 5	" "	P	" " " "	
17	U 0 8 6	" "	P	" " " "	
18	U 0 8 7	" "	P	" " " "	
19	U 0 8 8	" "	P	" " " "	
20	U 0 8 9	" "	P	" " " "	
21	U 0 9 0	" "	P	" " " "	
22	U 0 9 1	" "	P	" " " "	
23	U 0 9 2	" "	P	" " " "	
24	U 0 9 3	" "	P	" " " "	
25	U 0 9 4	" "	P	" " " "	
26	U 0 9 5	" "	P	" " " "	
27	U 0 9 6	" "	P	" " " "	
28	U 0 9 7	" "	P	" " " "	
29	U 0 9 8	" "	P	" " " "	
30	U 0 9 9	" "	P	" " " "	
31	U 1 0 1	" "	P	" " " "	
32	U 1 0 2	" "	P	" " " "	
33	U 1 0 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0871

0000 0046

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTIC (If a code is not entered in C
1	U 1 0 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 0 6	" "	P	" " "	
3	U 1 0 7	" "	P	" " "	
4	U 1 0 8	" "	P	" " "	
5	U 1 0 9	" "	P	" " "	
6	U 1 1 0	" "	P	" " "	
7	U 1 1 1	" "	P	" " "	
8	U 1 1 2	" "	P	" " "	
9	U 1 1 3	" "	P	" " "	
10	U 1 1 4	" "	P	" " "	
11	U 1 1 5	" "	P	" " "	
12	U 1 1 6	" "	P	" " "	
13	U 1 1 7	" "	P	" " "	
14	U 1 1 8	" "	P	" " "	
15	U 1 1 9	" "	P	" " "	
16	U 1 2 0	" "	P	" " "	
17	U 1 2 1	" "	P	" " "	
18	U 1 2 2	" "	P	" " "	
19	U 1 2 3	" "	P	" " "	
20	U 1 2 4	" "	P	" " "	
21	U 1 2 5	" "	P	" " "	
22	U 1 2 6	" "	P	" " "	
23	U 1 2 7	" "	P	" " "	
24	U 1 2 8	" "	P	" " "	
25	U 1 2 9	" "	P	" " "	
26	U 1 3 0	" "	P	" " "	
27	U 1 3 1	" "	P	" " "	
28	U 1 3 2	" "	P	" " "	
29	U 1 3 3	" "	P	" " "	
30	U 1 3 4	" "	P	" " "	
31	U 1 3 5	" "	P	" " "	
32	U 1 3 6	" "	P	" " "	
33	U 1 3 7	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 7 2

Please [illegible]

00000017

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in C.1)
1	U 1 3 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 4 0	" "	P	" " " "	
3	U 1 4 1	" "	P	" " " "	
4	U 1 4 2	" "	P	" " " "	
5	U 1 4 3	" "	P	" " " "	
6	U 1 4 4	" "	P	" " " "	
7	U 1 4 5	" "	P	" " " "	
8	U 1 4 6	" "	P	" " " "	
9	U 1 4 7	" "	P	" " " "	
10	U 1 4 8	" "	P	" " " "	
11	U 1 4 9	" "	P	" " " "	
12	U 1 5 0	" "	P	" " " "	
13	U 1 5 1	" "	P	" " " "	
14	U 1 5 2	" "	P	" " " "	
15	U 1 5 3	" "	P	" " " "	
16	U 1 5 4	" "	P	" " " "	
17	U 1 5 5	" "	P	" " " "	
18	U 1 5 6	" "	P	" " " "	
19	U 1 5 7	" "	P	" " " "	
20	U 1 5 8	" "	P	" " " "	
21	U 1 5 9	" "	P	" " " "	
22	U 1 6 0	" "	P	" " " "	
23	U 1 6 1	" "	P	" " " "	
24	U 1 6 2	" "	P	" " " "	
25	U 1 6 3	" "	P	" " " "	
26	U 1 6 4	" "	P	" " " "	
27	U 1 6 5	" "	P	" " " "	
28	U 1 6 6	" "	P	" " " "	
29	U 1 6 7	" "	P	" " " "	
30	U 1 6 8	" "	P	" " " "	
31	U 1 6 9	" "	P	" " " "	
32	U 1 7 0	" "	P	" " " "	
33	U 1 7 1	1.0×10^6	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 7 3

00000045

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(
1	U 1 7 2	1.0×10^3	P	S 0 1 S 0 2 T 0 4	
2	U 1 7 3	" "	P	" " "	
3	U 1 7 4	" "	P	" " "	
4	U 1 7 6	" "	P	" " "	
5	U 1 7 7	" "	P	" " "	
6	U 1 7 8	" "	P	" " "	
7	U 1 7 9	" "	P	" " "	
8	U 1 8 0	" "	P	" " "	
9	U 1 8 1	" "	P	" " "	
10	U 1 8 2	" "	P	" " "	
11	U 1 8 3	" "	P	" " "	
12	U 1 8 4	" "	P	" " "	
13	U 1 8 5	" "	P	" " "	
14	U 1 8 6	" "	P	" " "	
15	U 1 8 7	" "	P	" " "	
16	U 1 8 8	" "	P	" " "	
17	U 1 8 9	" "	P	" " "	
18	U 1 9 0	" "	P	" " "	
19	U 1 9 1	" "	P	" " "	
20	U 1 9 2	" "	P	" " "	
21	U 1 9 3	" "	P	" " "	
22	U 1 9 4	" "	P	" " "	
23	U 1 9 6	" "	P	" " "	
24	U 1 9 7	" "	P	" " "	
25	U 2 0 0	" "	P	" " "	
26	U 2 0 1	" "	P	" " "	
27	U 2 0 2	" "	P	" " "	
28	U 2 0 3	" "	P	" " "	
29	U 2 0 4	" "	P	" " "	
30	U 2 0 5	" "	P	" " "	
31	U 2 0 6	" "	P	" " "	
32	U 2 0 7	" "	P	" " "	
33	U 2 0 8	1.0×10^9	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 7 4

Form E [illegible]

00000049

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1):

XIV Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	D. Processes (2) Process Description (If a code is not entered in D(1))
1	U 2 0 9	1.0×10^5	P	S 0 1 S 0 2 T 0 4	
2	U 2 1 0	" "	P	" " " "	
3	U 2 1 1	" "	P	" " " "	
4	U 2 1 3	" "	P	" " " "	
5	U 2 1 4	" "	P	" " " "	
6	U 2 1 5	" "	P	" " " "	
7	U 2 1 6	" "	P	" " " "	
8	U 2 1 7	" "	P	" " " "	
9	U 2 1 8	" "	P	" " " "	
10	U 2 1 9	" "	P	" " " "	
11	U 2 2 0	" "	P	" " " "	
12	U 2 2 1	" "	P	" " " "	
13	U 2 2 2	" "	P	" " " "	
14	U 2 2 3	" "	P	" " " "	
15	U 2 2 5	" "	P	" " " "	
16	U 2 2 6	" "	P	" " " "	
17	U 2 2 7	" "	P	" " " "	
18	U 2 2 8	" "	P	" " " "	
19	U 2 3 4	" "	P	" " " "	
20	U 2 3 5	" "	P	" " " "	
21	U 2 3 6	" "	P	" " " "	
22	U 2 3 7	" "	P	" " " "	
23	U 2 3 8	" "	P	" " " "	
24	U 2 3 9	" "	P	" " " "	
25	U 2 4 0	" "	P	" " " "	
26	U 2 4 3	" "	P	" " " "	
27	U 2 4 4	" "	P	" " " "	
28	U 2 4 6	" "	P	" " " "	
29	U 2 4 7	" "	P	" " " "	
30	U 2 4 8	" "	P	" " " "	
31	U 2 4 9	" "	P	" " " "	
32	U 3 2 8	" "	P	" " " "	
33	U 3 5 3	1.0×10^5	P	S 0 1 S 0 2 T 0 4	

X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 7 5

00000650

EPA I.D. Number (enter from page 1): K S D 0 3 1 2 0 3 3 1 8

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTI (If a code is not entered in
1	U 3 5 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0876

Please print or type in ELITE type (12 characters per inch) in the unshaded areas only. 00000051

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
K S D 0 3 1 2 0 3 3 1 8	

XIV. Description of Hazardous Waste (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 6.

Line Number	Additional Process Codes (enter)

XV. Map

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner Signature	Date Signed
Name and Official Title (type or print)	
Operator Signature	Date Signed
Name and Official Title (type or print)	

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (refer to instructions for more information)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 7 7

A. **Facility Information**

1. Respondent Name and Title:
ERIC HANSEN - VICE PRESIDENT AND TECHNICAL DIRECTOR

Company:
ASH GROVE CEMENT CO

Phone number:
913 451 8900

2. Name and address of company that owns the cement kilns at this facility:
Ash Grove Cement Company
8900 Indian Creek Parkway, Overland Park, KS 66235

Facility name, location, and address:
Ash Grove Foreman Cement Plant
Highway 128 West Foreman AR 71836

EPA ID of burner: ARD982512270

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Same as above

EPA ID of on-site processor: N/A

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 1
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 1

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 7 8

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): 100
Processor 1 Petro-Chem Processing Inc. 212-224-5424
Processor 2 Gibraltar Chemical Resources Inc. 903-277-3227
Processor 3 Laidlaw Environmental Services, Inc. 318-783-2624
Processor 4 Rineco Chemical Industries 501-778-9089

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): 100
Processor 1 Rineco Chemical Industries 501-778-9089
Processor 2 Laidlaw Environmental Services Inc. 318-783-2624
Processor 3 OHM Corporation 404-361-6181
Processor 4 Gibraltar Chemical Resources Inc. 903-877-3227

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0879

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

- ___ Roll-Off Bin
- X Steel Drum, specify sizes: 5 – 6.5 gal.
- X Poly Drum, specify sizes: 5 – 7.5 gal.
- ___ Fiber Drum, specify sizes: ___
- X Bag or other flexible container, specify sizes: 8 – 15 gal.
- ___ Rigid Tote
- X Tanker Trucks (transferred to tank)
- ___ Tanker Trucks (direct feed to kiln)
- X Rail car
- ___ Carboy
- X Pallet
- ___ Other, specify: ___

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	60,000 gal.	120,000 gal.	1992
Liquid Tanks	60,000 gal.	60,000 gal.	1992
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 8 0

00000054

X

6b. What processing operations do you perform on-site for liquid wastes?[1]

None

6c. What processing operations do you perform on-site for solid wastes?

None

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 8 1

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	31,116	None	103,680	T
Pumpable Sludges	Received in containers			
Nonpumpable Sludges	[illegible]			
Containerized Solids	10,619	None	66,816	P
Bulk Solids				
Dry Solids	Received in containers			
Total	41,735		170,496	

00000056

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0882

Kiln Number: 1 of 3

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Wet process rotary cement kiln

Clinker capacity (tons/hr): 36 TPH

Thermal input (Btu/ton clinker): 260 mm BTU/Hr

Type of cement product(s) produced in this kiln: Portland Cement

Total hours operating per year on average: 7,800

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: X
Sludge Pump: ___
Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 8 3

00000057

Kiln Number: 1 of 3

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	10,372	34560	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids	3,540	22272	P
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of above solids originally generated as solids: NRA (%)

NRA = Not readily available

00000058

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 0 4

Kiln Number: 1 of 3

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	*Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	8,000	≥4	*360	11,000	33%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	6400	≥4	290		15%
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

* Feed rate of pumpable limited to 8000 #/hr when all three kilns are running. The limit is increased to 16000 #/hr when only two kilns are running and to 22,000 #/hr when only one kiln is running. Therefore, the days feeding waste is increased to 360 since if this kiln was not running, another kiln would be burning the waste.

00000059

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0885

Kiln Number: 1 of 3

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? January or February

How long? 2 weeks, only 1 kiln out of three are shut down at a time. Same capacity since rinsing kiln can increase use.

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000060

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0886

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

SUPPLEMENTAL QUESTION SET FOR ADDITIONAL KILNS

Kiln #2

0 8 8 7

00000061

Kiln Number: 2 of 3

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: wet process rotary cement kiln

Clinker capacity (tons/hr): 36 TPH

Thermal input (Btu/ton clinker): 260 mm BTU/Hr

Type of cement product(s) produced in this kiln: Portland cement

Total hours operating per year on average: 7,900

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: X
Sludge Pump: ___
Other: (specify) ___

00000062

X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 8 8

Kiln Number: 2 of 3

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	10,372	34,560	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids	3,540	22,272	T
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of solids originally generated as solids: NRA (%)

NRA - Not readily available.

00000063

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 8 9

Kiln Number: 2 of 3

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	8,000	24	* 365	11,000	33%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	640	24	290	6,000	15%
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

* See note on page 8

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 0

Kiln Number: 2 of 3

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? January or February

How long? 2 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 9 1

00000065

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 2

SUPPLEMENTAL QUESTION SET FOR ADDITIONAL KILNS

Kiln #3

Kiln Number: 3 of 3

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 3

Type of Kiln: Wet process rotary cement kiln

Clinker capacity (tons/hr): 50 TPH

Thermal input (Btu/ton clinker): 7.2×10^6 BTU/ton 360 mm BTU/Hr.

Type of cement product(s) produced in this kiln: Portland cement

Total hours operating per year on average: 7,800

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: X
- Sludge Pump: ___
- Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000067

Kiln Number: 3 of 3

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	10,372	34,560	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids	3,540.	22,272	P
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of solids originally generated as solids: NRA (%)

NRA = Not applicable

00000068

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 4

Kiln Number: 3 of 3

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	8,000	24	* 360	11,000	25%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	6400	24	290	6,000	10%
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

see note on page 8

00000069

NOTICE: If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 5

Kiln Number: 3 of 3

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? January or February

How long? 2 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this, Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 6

Liquid Waste Acceptance Limits As Received (Refer to attachment)

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion BTU/#	9000		T
Water Content			
Total Solids Content		30%	T
Total Inorganics Content			
Particle/Object Size		1/8"	T
Cyanide Content			
Sulfur Content		1%	P
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content		10%	P
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000071

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 8 6 7

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		50 ppm	P
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify PCB		50 ppm	P
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify As, Cd, Cr, Pb, Hg, Se, Ag		0.3% TOTAL	P
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 8

00000072

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) Y

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 9 9

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		
Water Content			
Total Solids Content			
Total Inorganics Content	40%		
Particle/Object Size			
Cyanide Content			
Sulfur Content	1%		
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content	2%		
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000074

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0000

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		50 ppm	P
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify PCB		50 ppm	P
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		200 ppm	P
Chromium Content			
Copper Content			
Lead Content			
Mercury Content		10 ppm	P
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify As, Cd, Cr, Pb, Hg, Se, Ag		0.72 % TOTAL	P
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 1

00000075

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: Yes

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations –			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

0 9 0 2

00000076

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)	Y			
Personal Protection Equipment (e.g., Tyvex suits)	Y			
Paper or Cardboard Materials	Y			
Filter Cartridges	Y			
Wood Materials	Y			
Rubber Objects (e.g., tires, hoses)	Y			
PVC Pipe	Y			
Other Plastic Debris	Y			
Glass Debris	Y			
Ceramic Debris (e.g., semiconductors)	N			
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)	N			
Asbestos Materials (e.g., shingles, insulation)	N			
Non-Soil Geologic Material (e.g., rocks)	N			
Concrete Debris	N			
Refractory Brick	N			
Other Bricks	N			
Slag	N			
Intact Batteries	N			
Battery Cases	N			
Electronic Components (e.g., printed circuit boards)	N			
Electrical Wires, Switches, etc.	Y			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 3

20. Please explain any debris acceptance conditions noted on the previous page:

N/A

20a. Do you accept soils? If so, under what conditions or limitations?

Yes, if BTU exceed 5,000 BTU/lb.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 4

00000076

C. Permit Conditions

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

Refer to the attached RCRA Part A Application

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

N/A

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

N/A

00000079

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 5

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	US EPA Region 6	IS	
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission	Arkansas Department [illegible]	F F	
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0906

X

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

Dec 1992

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 7

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

X Yes
___ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

June 1992

b) Effect on hazardous waste capacity:

Conduct test burn to change air permit in order to increase waste capacity. Successful compliance test will increase permitted feed capacity from 66,816 tons per year to 90,000 tons per year. Compliance testing will also broaden fuel specification.

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 8

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)	Y			
Personal Protection Equipment (e.g., Tyvex suits)	Y			
Paper or Cardboard Materials	Y			
Filter Cartridges	Y			
Wood Materials	Y			
Rubber Objects (e.g., tires, hoses)	Y			
PVC Pipe	Y			
Other Plastic Debris	Y			
Glass Debris	Y			
Ceramic Debris (e.g., semiconductors)	N			
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)	N			
Asbestos Materials (e.g., shingles, insulation)	N			
Non-Soil Geologic Material (e.g., rocks)	N			
Concrete Debris	N			
Refractory Brick	N			
Other Bricks	N			
Slag	N			
Intact Batteries	N			
Battery Cases	N	Y		
Electronic Components (e.g., printed circuit boards)	N			
Electrical Wires, Switches, etc.	N			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 0 9

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

For EPA Regional Use Only	EPA United States Environmental Protection Agency Washington, DC 20460 # Hazardous Waste Permit Application # Part A *(Read the Instructions before starting)*	For State Use Only
Date Received Month Day Year		

I. ID Number(s)

A. EPA ID Number	B. Secondary ID Number *(if applicable)*
ARD981512270	

II. Name of Facility

ASH GROVE CEMENT PLANT

III. Facility Location *(Physical address not P.O. Box or Route Number)*

A. Street: HIGHWAY 108 WEST

Street *(continued)*:

City or Town	State	ZIP Code
FOREMAN	AR	71836-

County Code *(if known)*	County Name
	LITTLE RIVER

B. Land Type *(enter code)*	C. Geographic Location LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*	D. Facility Existence Date Month Day Year
P	334040	094251	052719861

IV. Facility Mailing Address

Street or P.O. Box: PO BOX 130

City or Town	State	ZIP Code
FOREMAN	AR	71836-

V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

Name *(last)*	*(first)*
GORDON	JAMES

Job Title	Phone Number *(area code and number)*
PLANT MANAGER	501-542-6217

VI. Facility Contact Address *(See Instructions)*

A. Contact Address Location	Mailing	B. Street or P.O. Box
	X	

City or Town	State	ZIP Code

00000084

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0910

00000085

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0024; EPA No. 2246

EPA I.D. Number (enter from page 1): ARD981512270

Secondary ID Number (enter from page 1):

VII. Operator Information (see instructions)

Name of Operator: ASH GROVE CEMENT COMPANY

Street or P.O. Box: PO BOX 130

City or Town: FOREMAN

State: AR

ZIP Code: 71836

Phone Number (area code and number): 501-542-6217

B. Operator Type: P

C. Change of Operator Indicator: Yes [ ] No [X]

Date Changed: Month / Day

VIII. Facility Owner (see instructions)

A. Name of Facility's Legal Owner: ASH GROVE CEMENT COMPANY

Street or P.O. Box: PO BOX 25900

City or Town: OVERLAND PARK

State: KS

ZIP Code: 66225

Phone Number (area code and number): 913-451-8900

B. Owner Type: P

C. Change of Owner Indicator: Yes [ ] No [X]

Date Changed: Month / Day

IX. SIC Codes (4-digit, in order of significance)

Primary	Secondary
3241 (description) Hydraulic (Portland) Cement	(description)
Secondary	**Secondary**
(description)	(description)

X. Other Environmental Permits (see instructions)

A. Permit Type (enter code)	B. Permit Number	C. Description
N	ARO042846	NPDES Permit
E	75-AR-5	Air Permit

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0911

00000086

Please print or type in the EPA ID Number (12 characters) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
A R D 9 5 1 5 1 2 2 7 0	

XI. Nature of Business (provide a brief description)

Manufacturing of Portland Cement by the wet process - involves:

1) Quarrying and crushing of limestone and acquisition of other raw materials.

2) Grinding of raw materials with water to form a slurry.

3) Pyroprocessing of the slurry in a rotary cement kiln to form Portland Cement clinker.

4) Grinding of clinker with gypsum to form Portland Cement.

XII. Process - Codes and Design Capacities

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at this facility. Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided in Item XIII.*

B. PROCESS DESIGN CAPACITY - *For each code entered in column A, enter the capacity of the process.*

1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process unit.*
2. UNIT OF MEASURE - *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	DISPOSAL:	
D79	INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY
D80	LANDFILL	ACRE-FEET OR HECTARE-METER
D81	LAND APPLICATION	ACRES OR HECTARES
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	STORAGE:	
S01	CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS
S02	TANK	GALLONS OR LITERS
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	TREATMENT:	
T01	TANK	GALLONS PER DAY OR LITERS PER DAY
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR
T04	OTHER TREATMENT (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundment or incinerators. Describe the processes in the space provided in Item XIII.)	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
GALLONS PER HOUR	E
GALLONS PER DAY	U
LITERS	L
LITERS PER HOUR	H
LITERS PER DAY	V
SHORT TONS PER HOUR	D
METRIC TONS PER HOUR	W
SHORT TONS PER DAY	N
METRIC TONS PER DAY	S
POUNDS PER HOUR	J
KILOGRAMS PER HOUR	R
CUBIC YARDS	Y
CUBIC METERS	C
ACRES	B
ACRE-FEET	A
HECTARES	Q
HECTARE-METER	F
BTU's PER HOUR	K

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 1 2

00000087

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page
A R D 9 8 1 5 1 2 2 7 0	

XII. Process - Codes and Design Capacities (continued)

EXAMPLE FOR COMPLETING ITEM XII (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line Number	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	FOR OFFICIAL USE ONLY
X 1	S 0 2	600	G	0 0 2	
X 2	T 0 3	20	E	0 0 1	
1	S 0 1	180,000	G	0 0 1	
2	S 0 2	180,000	G	0 0 6	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

NOTE: If you need to list more than 12 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for additional treatment processes in Item XIII.

XIII. Additional Treatment Processes (follow instructions from Item XII)

Line Number (enter numbers in sequence with Item XII)	A. PROCESS CODE	B. TREATMENT PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	D. DESCRIPTION OF PROCESS
0 3	T 0 4	63.29	D	0 0 3	Recycling of hazardous waste as fuel substitute in cement kilns, order to manufacture Portland ce
	T 0 4				
	T 0 4				
	T 0 4				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 1 3

00001086

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
A R D 9 8 1 5 1 2 2 7 0	

XIV. Description of Hazardous Wastes

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that processes that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item XIV-D(1).*
3. *Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number		A. EPA HAZARD WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS (1) PROCESS CODES (enter)									D. PROCESS (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X	1	K	0	5	4	900	P	T	0	3	D	8	0				
X	2	D	0	0	2	400	P	T	0	3	D	8	0				
X	3	D	0	0	1	100	P	T	0	3	D	8	0				
X	4	D	0	0	2												Included With Above

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 1 4

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	D001	5.0×10^8	P	S01 S02 T04	
2	D004	2.0×10^8	P	" " "	
3	D005	" "	P	" " "	
4	D006	" "	P	" " "	
5	D007	" "	P	" " "	
6	D008	" "	P	" " "	
7	D009	" "	P	" " "	
8	D010	" "	P	" " "	
9	D011	" "	P	" " "	
10	D012	" "	P	" " "	
11	D013	" "	P	" " "	
12	D014	" "	P	" " "	
13	D015	" "	P	" " "	
14	D016	" "	P	" " "	
15	D017	" "	P	" " "	
16	D018	" "	P	" " "	
17	D019	" "	P	" " "	
18	D020	" "	P	" " "	
19	D021	" "	P	" " "	
20	D022	" "	P	" " "	
21	D023	" "	P	" " "	
22	D024	" "	P	" " "	
23	D025	" "	P	" " "	
24	D026	" "	P	" " "	
25	D027	" "	P	" " "	
26	D028	" "	P	" " "	
27	D029	" "	P	" " "	
28	D030	" "	P	" " "	
29	D031	" "	P	" " "	
30	D032	" "	P	" " "	
31	D033	" "	P	" " "	
32	D034	" "	P	" " "	
33	D035	2.0×10^8	P	S01 S02 T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 1 5

Please print or type in the unshaded areas only (12 characters per inch) [illegible]

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	D 0 3 6	2.0×10^5	P	S 0 1 S 0 2 T 0 4	
2	D 0 3 7	" "	P	" " " "	
3	D 0 3 8	" "	P	" " " "	
4	D 0 3 9	" "	P	" " " "	
5	D 0 4 0	" "	P	" " " "	
6	D 0 4 1	" "	P	" " " "	
7	D 0 4 2	" "	P	" " " "	
8	D 0 4 3	" "	P	" " " "	
9	F 0 0 1	5.0×10^8	P	" " " "	
10	F 0 0 2	" "	P	" " " "	
11	F 0 0 3	" "	P	" " " "	
12	F 0 0 4	" "	P	" " " "	
13	F 0 0 5	" "	P	" " " "	
14	F 0 0 6	1.0×10^8	P	" " " "	
15	F 0 0 7	" "	P	" " " "	
16	F 0 0 8	" "	P	" " " "	
17	F 0 0 9	" "	P	" " " "	
18	F 0 1 0	" "	P	" " " "	
19	F 0 1 1	" "	P	" " " "	
20	F 0 1 2	" "	P	" " " "	
21	F 0 1 9	" "	P	" " " "	
22	F 0 2 4	" "	P	" " " "	
23	F 0 2 5	" "	P	" " " "	
24	F 0 2 8	" "	P	" " " "	
25	F 0 3 4	" "	P	" " " "	
26	F 0 3 5	" "	P	" " " "	
27	F 0 3 7	" "	P	" " " "	
28	F 0 3 8	" "	P	" " " "	
29	F 0 3 9	" "	P	" " " "	
30	K 0 0 1	" "	P	" " " "	
31	K 0 0 2	" "	P	" " " "	
32	K 0 0 3	" "	P	" " " "	
33	K 0 0 4	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000090

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 1 6

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	K005	1.0 x 10[illegible]	P	S01 S02 T04	
2	K006	" "	P	" " "	
3	K007	" "	P	" " "	
4	K008	" "	P	" " "	
5	K009	" "	P	" " "	
6	K010	" "	P	" " "	
7	K011	" "	P	" " "	
8	K013	" "	P	" " "	
9	K014	" "	P	" " "	
10	K015	" "	P	" " "	
11	K016	" "	P	" " "	
12	K017	" "	P	" " "	
13	K018	" "	P	" " "	
14	K019	" "	P	" " "	
15	K020	" "	P	" " "	
16	K021	" "	P	" " "	
17	K022	" "	P	" " "	
18	K023	" "	P	" " "	
19	K024	" "	P	" " "	
20	K025	" "	P	" " "	
21	K026	" "	P	" " "	
22	K027	" "	P	" " "	
23	K028	" "	P	" " "	
24	K029	" "	P	" " "	
25	K030	" "	P	" " "	
26	K031	" "	P	" " "	
27	K032	" "	P	" " "	
28	K033	" "	P	" " "	
29	K034	" "	P	" " "	
30	K035	" "	P	" " "	
31	K036	" "	P	" " "	
32	K037	" "	P	" " "	
33	K038	1.0 x 10[illegible]	P	S01 S02 T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 1 1

Please print or type in the unshaded areas only (enter characters per line, in the unshaded areas only)

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K 0 3 9	1.0×10^5	P	S 0 1 S 0 2 T 0 4	
2	K 0 4 0	" "	P	" " "	
3	K 0 4 1	" "	P	" " "	
4	K 0 4 2	" "	P	" " "	
5	K 0 4 3	" "	P	" " "	
6	K 0 4 4	" "	P	" " "	
7	K 0 4 5	" "	P	" " "	
8	K 0 4 6	" "	P	" " "	
9	K 0 4 7	" "	P	" " "	
10	K 0 4 8	2.0×10^5	P	" " "	
11	K 0 4 9	" "	P	" " "	
12	K 0 5 0	" "	P	" " "	
13	K 0 5 1	" "	P	" " "	
14	K 0 5 2	" "	P	" " "	
15	K 0 6 0	1.0×10^5	P	" " "	
16	K 0 6 1	" "	P	" " "	
17	K 0 6 2	" "	P	" " "	
18	K 0 6 4	" "	P	" " "	
19	K 0 6 5	" "	P	" " "	
20	K 0 6 6	" "	P	" " "	
21	K 0 7 1	" "	P	" " "	
22	K 0 7 3	" "	P	" " "	
23	K 0 8 3	" "	P	" " "	
24	K 0 8 4	" "	P	" " "	
25	K 0 8 5	" "	P	" " "	
26	K 0 8 6	" "	P	" " "	
27	K 0 8 7	" "	P	" " "	
28	K 0 8 8	" "	P	" " "	
29	K 0 9 0	" "	P	" " "	
30	K 0 9 1	" "	P	" " "	
31	K 0 9 3	" "	P	" " "	
32	K 0 9 4	" "	P	" " "	
33	K 0 9 5	1.0×10^5	P	S 0 1 S 0 2 T 0 4	

00000098

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0918

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	K 0 9 6	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	K 0 9 7	" "	P	" " "	
3	K 0 9 8	" "	P	" " "	
4	K 0 9 9	" "	P	" " "	
5	K 1 0 0	" "	P	" " "	
6	K 1 0 1	" "	P	" " "	
7	K 1 0 2	" "	P	" " "	
8	K 1 0 3	" "	P	" " "	
9	K 1 0 4	" "	P	" " "	
10	K 1 0 5	" "	P	" " "	
11	K 1 0 6	" "	P	" " "	
12	K 1 1 1	" "	P	" " "	
13	K 1 1 2	" "	P	" " "	
14	K 1 1 3	" "	P	" " "	
15	K 1 1 4	" "	P	" " "	
16	K 1 1 5	" "	P	" " "	
17	K 1 1 6	" "	P	" " "	
18	K 1 1 7	" "	P	" " "	
19	K 1 1 8	" "	P	" " "	
20	K 1 2 3	" "	P	" " "	
21	K 1 2 4	" "	P	" " "	
22	K 1 2 5	" "	P	" " "	
23	K 1 2 6	" "	P	" " "	
24	K 1 3 1	" "	P	" " "	
25	K 1 3 2	" "	P	" " "	
26	K 1 3 6	" "	P	" " "	
27	P 0 0 1	" "	P	" " "	
28	P 0 0 2	" "	P	" " "	
29	P 0 0 3	" "	P	" " "	
30	P 0 0 4	" "	P	" " "	
31	P 0 0 5	" "	P	" " "	
32	P 0 0 6	" "	P	" " "	
33	P 0 0 7	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0919

Please print or type in the unshaded areas only (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P 0 0 9	1.0×10^5	P	S 0 1 S 0 2 T 0 4	
2	P 0 0 9	" "	P	" " " "	
3	P 0 1 0	" "	P	" " " "	
4	P 0 1 1	" "	P	" " " "	
5	P 0 1 2	" "	P	" " " "	
6	P 0 1 3	" "	P	" " " "	
7	P 0 1 4	" "	P	" " " "	
8	P 0 1 5	" "	P	" " " "	
9	P 0 1 6	" "	P	" " " "	
10	P 0 1 7	" "	P	" " " "	
11	P 0 1 8	" "	P	" " " "	
12	P 0 2 0	" "	P	" " " "	
13	P 0 2 1	" "	P	" " " "	
14	P 0 2 2	" "	P	" " " "	
15	P 0 2 3	" "	P	" " " "	
16	P 0 2 4	" "	P	" " " "	
17	P 0 2 6	" "	P	" " " "	
18	P 0 2 7	" "	P	" " " "	
19	P 0 2 8	" "	P	" " " "	
20	P 0 2 9	" "	P	" " " "	
21	P 0 3 0	" "	P	" " " "	
22	P 0 3 1	" "	P	" " " "	
23	P 0 3 3	" "	P	" " " "	
24	P 0 3 4	" "	P	" " " "	
25	P 0 3 6	" "	P	" " " "	
26	P 0 3 7	" "	P	" " " "	
27	P 0 3 8	" "	P	" " " "	
28	P 0 3 9	" "	P	" " " "	
29	P 0 4 0	" "	P	" " " "	
30	P 0 4 1	" "	P	" " " "	
31	P 0 4 2	" "	P	" " " "	
32	P 0 4 3	" "	P	" " " "	
33	P 0 4 4	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000094

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice, it is due to the quality of the document being filmed.

CD2F 002

0920

Please print or type in ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0039; Expires 9-30-93

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P 0 4 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	P 0 4 6	" "	P	" " " "	
3	P 0 4 7	" "	P	" " " "	
4	P 0 4 8	" "	P	" " " "	
5	P 0 4 9	" "	P	" " " "	
6	P 0 5 0	" "	P	" " " "	
7	P 0 5 1	" "	P	" " " "	
8	P 0 5 4	" "	P	" " " "	
9	P 0 5 7	" "	P	" " " "	
10	P 0 5 8	" "	P	" " " "	
11	P 0 5 9	" "	P	" " " "	
12	P 0 6 0	" "	P	" " " "	
13	P 0 6 2	" "	P	" " " "	
14	P 0 6 3	" "	P	" " " "	
15	P 0 6 4	" "	P	" " " "	
16	P 0 6 5	" "	P	" " " "	
17	P 0 6 6	" "	P	" " " "	
18	P 0 6 7	" "	P	" " " "	
19	P 0 6 8	" "	P	" " " "	
20	P 0 6 9	" "	P	" " " "	
21	P 0 7 0	" "	P	" " " "	
22	P 0 7 1	" "	P	" " " "	
23	P 0 7 2	" "	P	" " " "	
24	P 0 7 3	" "	P	" " " "	
25	P 0 7 4	" "	P	" " " "	
26	P 0 7 5	" "	P	" " " "	
27	P 0 7 6	" "	P	" " " "	
28	P 0 7 7	" "	P	" " " "	
29	P 0 7 8	" "	P	" " " "	
30	P 0 8 1	" "	P	" " " "	
31	P 0 8 2	" "	P	" " " "	
32	P 0 8 4	" "	P	" " " "	
33	P 0 8 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 2 1

Please print or type in the EPA ID Number (enter from page 1)

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P 0 3 7	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	P 0 8 8	" "	P	" " " "	
3	P 0 8 9	" "	P	" " " "	
4	P 0 9 2	" "	P	" " " "	
5	P 0 9 3	" "	P	" " " "	
6	P 0 9 4	" "	P	" " " "	
7	P 0 9 5	" "	P	" " " "	
8	P 0 9 6	" "	P	" " " "	
9	P 0 9 7	" "	P	" " " "	
10	P 0 9 8	" "	P	" " " "	
11	P 0 9 9	" "	P	" " " "	
12	P 1 0 1	" "	P	" " " "	
13	P 1 0 2	" "	P	" " " "	
14	P 1 0 3	" "	P	" " " "	
15	P 1 0 4	" "	P	" " " "	
16	P 1 0 5	" "	P	" " " "	
17	P 1 0 6	" "	P	" " " "	
18	P 1 0 7	" "	P	" " " "	
19	P 1 0 8	" "	P	" " " "	
20	P 1 0 9	" "	P	" " " "	
21	P 1 1 0	" "	P	" " " "	
22	P 1 1 1	" "	P	" " " "	
23	P 1 1 2	" "	P	" " " "	
24	P 1 1 3	" "	P	" " " "	
25	P 1 1 4	" "	P	" " " "	
26	P 1 1 5	" "	P	" " " "	
27	P 1 1 6	" "	P	" " " "	
28	P 1 1 8	" "	P	" " " "	
29	P 1 1 9	" "	P	" " " "	
30	P 1 2 0	" "	P	" " " "	
31	P 1 2 1	" "	P	" " " "	
32	P 1 2 2	" "	P	" " " "	
33	P 1 2 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0922

Please print or type in ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	U001	1.0×10^8	P	S01 S02 T04	
2	U002	" "	P	" " "	
3	U003	" "	P	" " "	
4	U004	" "	P	" " "	
5	U005	" "	P	" " "	
6	U006	" "	P	" " "	
7	U007	" "	P	" " "	
8	U008	" "	P	" " "	
9	U009	" "	P	" " "	
10	U010	" "	P	" " "	
11	U011	" "	P	" " "	
12	U012	" "	P	" " "	
13	U014	" "	P	" " "	
14	U015	" "	P	" " "	
15	U016	" "	P	" " "	
16	U017	" "	P	" " "	
17	U018	" "	P	" " "	
18	U019	" "	P	" " "	
19	U020	" "	P	" " "	
20	U021	" "	P	" " "	
21	U022	" "	P	" " "	
22	U023	" "	P	" " "	
23	U024	" "	P	" " "	
24	U025	" "	P	" " "	
25	U026	" "	P	" " "	
26	U027	" "	P	" " "	
27	U028	" "	P	" " "	
28	U029	" "	P	" " "	
29	U030	" "	P	" " "	
30	U031	" "	P	" " "	
31	U032	" "	P	" " "	
32	U033	" "	P	" " "	
33	U034	1.0×10^8	P	S01 S02 T04	

EPA Form 8700-23 (01-90) 00000097

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 2 3

Please print or type in the ELITE type (12 characters per inch) in the unshaded areas only.

Form Number (Check one if this is a revised form)

Check one if this is a

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U035	1.0×10^8	P	S01 S02 T04	
2	U036	" "	P	" " "	
3	U037	" "	P	" " "	
4	U038	" "	P	" " "	
5	U039	" "	P	" " "	
6	U041	" "	P	" " "	
7	U042	" "	P	" " "	
8	U043	" "	P	" " "	
9	U044	" "	P	" " "	
10	U045	" "	P	" " "	
11	U046	" "	P	" " "	
12	U047	" "	P	" " "	
13	U048	" "	P	" " "	
14	U049	" "	P	" " "	
15	U050	" "	P	" " "	
16	U051	" "	P	" " "	
17	U052	" "	P	" " "	
18	U053	" "	P	" " "	
19	U055	" "	P	" " "	
20	U056	" "	P	" " "	
21	U057	" "	P	" " "	
22	U058	" "	P	" " "	
23	U059	" "	P	" " "	
24	U060	" "	P	" " "	
25	U061	" "	P	" " "	
26	U062	" "	P	" " "	
27	U063	" "	P	" " "	
28	U064	" "	P	" " "	
29	U065	" "	P	" " "	
30	U066	" "	P	" " "	
31	U067	" "	P	" " "	
32	U068	" "	P	" " "	
33	U069	1.0×10^8	P	S01 S02 T04	

EPA Form 8700-23 (01-90)

00000098

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0924

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	D. Processes (2) Process Description (If a code is not entered in D(1))
1	U 0 7 0	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 0 7 1	" "	P	" " " "	
3	U 0 7 2	" "	P	" " " "	
4	U 0 7 3	" "	P	" " " "	
5	U 0 7 4	" "	P	" " " "	
6	U 0 7 5	" "	P	" " " "	
7	U 0 7 6	" "	P	" " " "	
8	U 0 7 7	" "	P	" " " "	
9	U 0 7 8	" "	P	" " " "	
10	U 0 7 9	" "	P	" " " "	
11	U 0 8 0	" "	P	" " " "	
12	U 0 8 1	" "	P	" " " "	
13	U 0 8 2	" "	P	" " " "	
14	U 0 8 3	" "	P	" " " "	
15	U 0 8 4	" "	P	" " " "	
16	U 0 8 5	" "	P	" " " "	
17	U 0 8 6	" "	P	" " " "	
18	U 0 8 7	" "	P	" " " "	
19	U 0 8 8	" "	P	" " " "	
20	U 0 8 9	" "	P	" " " "	
21	U 0 9 0	" "	P	" " " "	
22	U 0 9 1	" "	P	" " " "	
23	U 0 9 2	" "	P	" " " "	
24	U 0 9 3	" "	P	" " " "	
25	U 0 9 4	" "	P	" " " "	
26	U 0 9 5	" "	P	" " " "	
27	U 0 9 6	" "	P	" " " "	
28	U 0 9 7	" "	P	" " " "	
29	U 0 9 8	" "	P	" " " "	
30	U 0 9 9	" "	P	" " " "	
31	U 1 0 1	" "	P	" " " "	
32	U 1 0 2	" "	P	" " " "	
33	U 1 0 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 2 5

Please print or type in the ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	D. Processes (2) Process Description (If a code is not entered in D(1))
1	U 1 0 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 0 6	" "	P	" " "	
3	U 1 0 7	" "	P	" " "	
4	U 1 0 8	" "	P	" " "	
5	U 1 0 9	" "	P	" " "	
6	U 1 1 0	" "	P	" " "	
7	U 1 1 1	" "	P	" " "	
8	U 1 1 2	" "	P	" " "	
9	U 1 1 3	" "	P	" " "	
10	U 1 1 4	" "	P	" " "	
11	U 1 1 5	" "	P	" " "	
12	U 1 1 6	" "	P	" " "	
13	U 1 1 7	" "	P	" " "	
14	U 1 1 8	" "	P	" " "	
15	U 1 1 9	" "	P	" " "	
16	U 1 2 0	" "	P	" " "	
17	U 1 2 1	" "	P	" " "	
18	U 1 2 2	" "	P	" " "	
19	U 1 2 3	" "	P	" " "	
20	U 1 2 4	" "	P	" " "	
21	U 1 2 5	" "	P	" " "	
22	U 1 2 6	" "	P	" " "	
23	U 1 2 7	" "	P	" " "	
24	U 1 2 8	" "	P	" " "	
25	U 1 2 9	" "	P	" " "	
26	U 1 3 0	" "	P	" " "	
27	U 1 3 1	" "	P	" " "	
28	U 1 3 2	" "	P	" " "	
29	U 1 3 3	" "	P	" " "	
30	U 1 3 4	" "	P	" " "	
31	U 1 3 5	" "	P	" " "	
32	U 1 3 6	" "	P	" " "	
33	U 1 3 7	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

EPA Form 8700-23 (01-90)

00000100

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0926

Please print or type in the ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 1 3 8	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 4 0	" "	P	" " " "	
3	U 1 4 1	" "	P	" " " "	
4	U 1 4 2	" "	P	" " " "	
5	U 1 4 3	" "	P	" " " "	
6	U 1 4 4	" "	P	" " " "	
7	U 1 4 5	" "	P	" " " "	
8	U 1 4 6	" "	P	" " " "	
9	U 1 4 7	" "	P	" " " "	
10	U 1 4 8	" "	P	" " " "	
11	U 1 4 9	" "	P	" " " "	
12	U 1 5 0	" "	P	" " " "	
13	U 1 5 1	" "	P	" " " "	
14	U 1 5 2	" "	P	" " " "	
15	U 1 5 3	" "	P	" " " "	
16	U 1 5 4	" "	P	" " " "	
17	U 1 5 5	" "	P	" " " "	
18	U 1 5 6	" "	P	" " " "	
19	U 1 5 7	" "	P	" " " "	
20	U 1 5 8	" "	P	" " " "	
21	U 1 5 9	" "	P	" " " "	
22	U 1 6 0	" "	P	" " " "	
23	U 1 6 1	" "	P	" " " "	
24	U 1 6 2	" "	P	" " " "	
25	U 1 6 3	" "	P	" " " "	
26	U 1 6 4	" "	P	" " " "	
27	U 1 6 5	" "	P	" " " "	
28	U 1 6 6	" "	P	" " " "	
29	U 1 6 7	" "	P	" " " "	
30	U 1 6 8	" "	P	" " " "	
31	U 1 6 9	" "	P	" " " "	
32	U 1 7 0	" "	P	" " " "	
33	U 1 7 1	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 2 7

Please print or type in the unshaded areas only (elite type 12 characters per inch)

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 1 7 2	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 7 3	" "	P	" " "	
3	U 1 7 4	" "	P	" " "	
4	U 1 7 6	" "	P	" " "	
5	U 1 7 7	" "	P	" " "	
6	U 1 7 8	" "	P	" " "	
7	U 1 7 9	" "	P	" " "	
8	U 1 8 0	" "	P	" " "	
9	U 1 8 1	" "	P	" " "	
10	U 1 8 2	" "	P	" " "	
11	U 1 8 3	" "	P	" " "	
12	U 1 8 4	" "	P	" " "	
13	U 1 8 5	" "	P	" " "	
14	U 1 8 6	" "	P	" " "	
15	U 1 8 7	" "	P	" " "	
16	U 1 8 8	" "	P	" " "	
17	U 1 8 9	" "	P	" " "	
18	U 1 9 0	" "	P	" " "	
19	U 1 9 1	" "	P	" " "	
20	U 1 9 2	" "	P	" " "	
21	U 1 9 3	" "	P	" " "	
22	U 1 9 4	" "	P	" " "	
23	U 1 9 6	" "	P	" " "	
24	U 1 9 7	" "	P	" " "	
25	U 2 0 0	" "	P	" " "	
26	U 2 0 1	" "	P	" " "	
27	U 2 0 2	" "	P	" " "	
28	U 2 0 3	" "	P	" " "	
29	U 2 0 4	" "	P	" " "	
30	U 2 0 5	" "	P	" " "	
31	U 2 0 6	" "	P	" " "	
32	U 2 0 7	" "	P	" " "	
33	U 2 0 8	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000102

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0928

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0039
Expires 10-31-93

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 2 0 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 2 1 0	" "	P	" " " "	
3	U 2 1 1	" "	P	" " " "	
4	U 2 1 3	" "	P	" " " "	
5	U 2 1 4	" "	P	" " " "	
6	U 2 1 5	" "	P	" " " "	
7	U 2 1 6	" "	P	" " " "	
8	U 2 1 7	" "	P	" " " "	
9	U 2 1 8	" "	P	" " " "	
10	U 2 1 9	" "	P	" " " "	
11	U 2 2 0	" "	P	" " " "	
12	U 2 2 1	" "	P	" " " "	
13	U 2 2 2	" "	P	" " " "	
14	U 2 2 3	" "	P	" " " "	
15	U 2 2 5	" "	P	" " " "	
16	U 2 2 6	" "	P	" " " "	
17	U 2 2 7	" "	P	" " " "	
18	U 2 2 8	" "	P	" " " "	
19	U 2 3 4	" "	P	" " " "	
20	U 2 3 5	" "	P	" " " "	
21	U 2 3 6	" "	P	" " " "	
22	U 2 3 7	" "	P	" " " "	
23	U 2 3 8	" "	P	" " " "	
24	U 2 3 9	" "	P	" " " "	
25	U 2 4 0	" "	P	" " " "	
26	U 2 4 3	" "	P	" " " "	
27	U 2 4 4	" "	P	" " " "	
28	U 2 4 6	" "	P	" " " "	
29	U 2 4 7	" "	P	" " " "	
30	U 2 4 8	" "	P	" " " "	
31	U 2 4 9	" "	P	" " " "	
32	U 3 2 8	" "	P	" " " "	
33	U 3 5 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0929

Please print or type in the unshaded areas only (12 characters per inch)

EPA I.D. Number (enter from page 1): A R D 9 8 1 5 1 2 2 7 0

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 3 5 9	1.0×10^3	P	S 0 1 S 0 2 T 0 4	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

00000101

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0930

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0034

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page
A R D 9 8 1 5 1 2 2 7 0	

XIV. Description of Hazardous Waste (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 6.

Line Number	Additional Process Codes (enter)

XV. Map

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storag treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in and all attached documents, and that based on my inquiry of those individuals immediately responsible obtaining the information, I believe that the submitted information is true, accurate, and complete. I am av that there are significant penalties for submitting false information, including the possibility of fine imprisonment.

Owner Signature	Date Signed
Name and Official Title (type or print)	
Operator Signature	Date Signed
Name and Official Title (type or print)	

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (refer to instructions for more information)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 3 1

A. **Facility Information**

1. Respondent Name and Title:
ERIC HANSEN VICE PRESIDENT AND TECHNICAL DIRECTOR

Company:
ASH GROVE CEMENT CO

Phone number:
913 451 8900

2. Name and address of company that owns the cement kilns at this facility:
Ash Grove Cement Company
8900 Indian Creek Parkway Overland Park, KS 66225

Facility name, location, and address:
Ash Grove Louisville Cement Plant
Highways 50 and 66 Louisville, NE

EPA ID of burner: NED007266672

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Same as above

EPA ID of on-site processor: N/A

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 2
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 2

00000106

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 2 2

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): 100
Processor 1 Avganic Industries Inc. 708-705-0125
Processor 2 Pollution Control Industries of America 219-347-3951
Processor 3 Petro-Chem Processing 313-824-5429
Processor 4 Gibraltar Chemical Resources Inc. 903-877-3227

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): 100
Processor 1 Petro-Chem Processing 313-824-5429
Processor 2 Pollution Control Industries of America 219-397-2151
Processor 3 Avganic Industries Inc. 708-705-0125
Processor 4 Murphy Oil 504-271-4141

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

00000207

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 3 3

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

- ___ Roll-Off Bin
- X Steel Drum, specify sizes: 5 - 6.5 gal.
- X Poly Drum, specify sizes: 5 - 7.5 gal.
- ___ Fiber Drum, specify sizes: ___
- X Bag or other flexible container, specify sizes: 2 - 15 gal.
- ___ Rigid Tote
- X Tanker Trucks (transferred to tank)
- ___ Tanker Trucks (direct feed to kiln)
- X Rail car
- ___ Carboy
- X Pallet
- ___ Other, specify: ___

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	60,500 gal.	113,500 gal.	1992
Liquid Tanks	76,000 gal.	76,000 gal	1992
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0934

00000108 X

6b. What processing operations do you perform on-site for liquid wastes?[1]

NONE

6c. What processing operations do you perform on-site for solid wastes?

None

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000109

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0935

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	4606	None	70,000	T
Pumpable Sludges				
Nonpumpable Sludges				
Containerized Solids	1,768	None	27,840	P
Bulk Solids				
Dry Solids				
Total	6374		97,840	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0936

00000110

Kiln Number: 1 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Allis Chalmers rotary preheater cement kiln

Clinker capacity (tons/hr): 58 TPH

Thermal input (Btu/ton clinker): 4.3 X10^6 BTU/TON 250 mm BTU/Hr.

Type of cement product(s) produced in this kiln: Portland Cement

Total hours operating per year on average: 7500

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: X
Sludge Pump: ___
Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 3 7

Kiln Number: 1 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	2,303	35,000	P
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids	824	13,920	P
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of above solids originally generated as solids: N/RA (%)

NRA = [illegible]

00000112

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0938

Kiln Number: 1 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	10,000	24	290	11,000	42 %
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	4,000	24	290	8,000	10 %
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

[illegible] available for burning waste. 290 days [illegible]

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0939

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Dec, January, February or March

How long? 3-4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000114

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 6 4 0

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

SUPPLEMENTAL QUESTION SET FOR ADDITIONAL KILNS

0 9 4 1

00000115

Kiln Number: 2 of 2

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: Humboldt Wedag rotary preheater cement kiln

Clinker capacity (tons/hr): 75 TPH

Thermal input (Btu/ton clinker): 3.5X10⁶ Btu/ton 260 MM BTU/Hr

Type of cement product(s) produced in this kiln: Portland Cement

Total hours operating per year on average: 7500

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: X
- Sludge Pump: ___
- Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0942

00000116

Kiln Number: 2 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	2,363	35,000	P
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids	884	13,920	P
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 30 (%)
Percent of solids originally generated as solids: N/A (%)

N/A - Not applicable to this

00000117

S-2

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 6 4 3

Kiln Number: 2 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	10,000	24	290	11,000	44%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids	4,000	24	290	6,000	10%
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 4 4

00000118

Kiln Number: 2 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Nov, Dec, January, February or March

How long? 3-4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter): N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F002

0945

00000119

Liquid Waste Acceptance Limits As Received (Refer to attachment)

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion BTU/#	8000 average		P
Water Content			
Total Solids Content		30%	T
Total Inorganics Content			
Particle/Object Size		1/8"	T
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content		6.66%	P
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0946

00000120

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		10 ppm	P
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify PCB		10 ppm	P
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content		5130 ppm	P
Beryllium Content			
Cadmium Content		100 ppm	P
Chromium Content			
Copper Content			
Lead Content		2000 ppm	P
Mercury Content		10 ppm	P
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F.002

0 0 4 7

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) Yes

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000122

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0948

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion BTU/#	6000		P
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content		[illegible] %	P
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000123

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 4 9

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		10 ppm	P
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify PCB		10 ppm	P
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content		6640 ppm	P
Beryllium Content			
Cadmium Content		200 ppm	P
Chromium Content		2,250 ppm	P
Copper Content			
Lead Content		8,250 ppm	P
Mercury Content		10 ppm	P
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0950

00000124

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: Yes

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 5 1

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)	Y			
Personal Protection Equipment (e.g., Tyvex suits)	Y			
Paper or Cardboard Materials	Y			
Filter Cartridges	Y			
Wood Materials	Y			
Rubber Objects (e.g., tires, hoses)	Y			
PVC Pipe	Y			
Other Plastic Debris	Y			
Glass Debris	Y			
Ceramic Debris (e.g., semiconductors)	N			
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)	N			
Asbestos Materials (e.g., shingles, insulation)	N			
Non-Soil Geologic Material (e.g., rocks)	N			
Concrete Debris	N			
Refractory Brick	N			
Other Bricks	N			
Slag	N			
Intact Batteries	N			
Battery Cases	N	Y		
Electronic Components (e.g., printed circuit boards)				
Electrical Wires, Switches, etc.	N			

00000126

X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0952

20. Please explain any debris acceptance conditions noted on the previous page:

N/A

20a. Do you accept soils? If so, under what conditions or limitations?

Yes, if containerized w-8 it BTUs
[illegible] soils BTU/lb.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 5 3

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

Refer to the attached RCRA Part A Application

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

N/A

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

N/A

CD2F 002

0954

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	US EPA Region 7	IS	
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission	Nebraska Dept. of Environmental Control	FP	
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0955

00000129

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

June 1992

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 5 6

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

X Yes
___ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

June 1992

b) Effect on hazardous waste capacity:

Compliance testing to broaden fuel specification and increase firing rate. Testing is planned at 1.5 to 2 times the current permit rate.

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0957

00000131

00030139

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

For EPA Regional Use Only		For State Use Only
Date Received Month Day Year		

EPA

United States Environmental Protection Agency
Washington, DC 20460

Hazardous Waste Permit Application Part A

(Read the Instructions before starting)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0958

I. ID Number(s)

A. EPA ID Number	B. Secondary ID Number *(if applicable)*
NED007260672	

II. Name of Facility

ASH GROVE CEMENT PLANT

III. Facility Location *(Physical address not P.O. Box or Route Number)*

A. Street			
HIGHWAYS 50 AND 66 INTERCHANGE			
Street *(continued)*			
City or Town	State	ZIP Code	
LOUISVILLE	NE	68037-	
County Code *(if known)*	County Name		
	CASS		

B. Land Type *(enter code)*	C. Geographic Location LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*	D. Facility Existence Date Month Day Year
P	410027	0960919 6	04301987

IV. Facility Mailing Address

Street or P.O. Box			
PO BOX 609			
City or Town	State	ZIP Code	
LOUISVILLE	NE	68037-	

V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

Name *(last)*	*(first)*
WALKER	WILLIAM
Job Title	**Phone Number** *(area code and number)*
PLANT MANAGER	402-234-2415

VI. Facility Contact Address *(See instructions)*

A. Contact Address Location	Mailing	B. Street or P.O. Box
	X	
City or Town	State	ZIP Code
		-

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): NED007260672

Secondary ID Number (enter from page 1):

VII. Operator Information (see instructions)

Name of Operator: ASH GROVE CEMENT CO

Street or P.O. Box: PO BOX 609

City or Town: LOUISVILLE

State: NE

ZIP Code: 68037-

Phone Number (area code and number): 402-234-2415

B. Operator Type: P

C. Change of Operator Indicator: Yes [ ] No [X]

Date Changed: Month Day Ye

VIII. Facility Owner (see instructions)

A. Name of Facility's Legal Owner: ASH GROVE CEMENT COMPANY

Street or P.O. Box: PO BOX 25900

City or Town: OVERLAND PARK

State: KS

ZIP Code: 66225-

Phone Number (area code and number): 913-451-8900

B. Owner Type: P

C. Change of Owner Indicator: Yes [ ] No [X]

Date Changed: Month Day Ye

IX. SIC Codes (4-digit, in order of significance)

Primary		Secondary	
3241	(description) Portland Cement		(description)
Secondary		**Secondary**	
	(description)		(description)

X. Other Environmental Permits (see instructions)

A. Permit Type (enter code)	B. Permit Number	C. Description
N	NE0000787	NPDES Permit
P	280-400-0002	PSD Permit

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0959

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved OMB No. 2050-0039; Expires 12-31-92

EPA I.D. Number (enter from page 1)												Secondary ID Number (enter from page 1)
N	E	D	0	0	7	2	6	0	6	7	2	

XI. Nature of Business (provide a brief description)

Manufacturing of Portland Cement - involves:

1) Quarrying and crushing of limestone and acquisition of other raw materials;

2) Grinding of raw materials;

3) Pyroprocessing of the raw materials in a rotary cement kiln to form Portland Cement clinker; and

4) Grinding of clinker with gypsum to form Portland Cement.

XII. Process - Codes and Design Capacities

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided in Item XIII.*

B. PROCESS DESIGN CAPACITY - *For each code entered in column A, enter the capacity of the process.*

1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process unit.*
2. UNIT OF MEASURE - *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	DISPOSAL:	
D79	INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY
D80	LANDFILL	ACRE-FEET OR HECTARE-METER
D81	LAND APPLICATION	ACRES OR HECTARES
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	STORAGE:	
S01	CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS
S02	TANK	GALLONS OR LITERS
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	TREATMENT:	
T01	TANK	GALLONS PER DAY OR LITERS PER DAY
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR
T04	OTHER TREATMENT (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided in Item XIII.)	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
GALLONS PER HOUR	E
GALLONS PER DAY	U
LITERS	L
LITERS PER HOUR	H
LITERS PER DAY	V
SHORT TONS PER HOUR	D
METRIC TONS PER HOUR	W
SHORT TONS PER DAY	N
METRIC TONS PER DAY	S
POUNDS PER HOUR	J
KILOGRAMS PER HOUR	R
CUBIC YARDS	Y
CUBIC METERS	C
ACRES	B
ACRE-FEET	A
HECTARES	O
HECTARE-METER	F
BTU's PER HOUR	K

00000134

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0960

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
N E D 0 0 7 2 6 0 6 7 2	

XII. Process - Codes and Design Capacities (continued)

EXAMPLE FOR COMPLETING ITEM XII (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line Number	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	FOR OFFICIAL USE ONLY
X 1	S 0 2	600	G	0 0 2	
X 2	T 0 3	20	E	0 0 1	
1	S 0 1	152,000	G	0 0 1	
2	S 0 2	180,000	G	0 0 2	
3	T 0 1	35,000	U	0 0 2	
4					
5					
6					
7					
8					
9					
10					
11					
12					

NOTE: If you need to list more than 12 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for additional treatment processes in Item XIII.

XIII. Additional Treatment Processes (follow instructions from Item XII)

Line Number (enter numbers in sequence with Item XII)	A. PROCESS CODE	B. TREATMENT PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	D. DESCRIPTION OF PROCESS
0 4	T 0 4	50.42	D	0 0 2	Recycling of hazardous waste as a fuel substitute in cement kilns in order to manufacture Portland Cement.
0 5	T 0 4	35,000	U	0 0 2	Physical treatment: Blending and packaging
	T 0 4				
	T 0 4				

00000135

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 6 1

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
N E D 0 0 7 2 6 0 6 7 2	

XIV. Description of Hazardous Wastes

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A, on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A, on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item XIV-D(1).*
3. *Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS (1) PROCESS CODES (enter)	D. PROCESS (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3 D 8 0	
X 2	D 0 0 2	400	P	T 0 3 D 8 0	
X 3	D 0 0 1	100	P	T 0 3 D 8 0	
X 4	D 0 0 2				Included With Above

00000136

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0962

Please print or type in the ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	(2) Process Description (If a code is not entered in D.)
1	D001	5.0×10^8	P	S01 S02 T04	
2	D004	2.0×10^8	P	" " "	
3	D005	" "	P	" " "	
4	D006	" "	P	" " "	
5	D007	" "	P	" " "	
6	D008	" "	P	" " "	
7	D009	" "	P	" " "	
8	D010	" "	P	" " "	
9	D011	" "	P	" " "	
10	D012	" "	P	" " "	
11	D013	" "	P	" " "	
12	D014	" "	P	" " "	
13	D015	" "	P	" " "	
14	D016	" "	P	" " "	
15	D017	" "	P	" " "	
16	D018	" "	P	" " "	T01
17	D019	" "	P	" " "	"
18	D020	" "	P	" " "	"
19	D021	" "	P	" " "	"
20	D022	" "	P	" " "	"
21	D023	" "	P	" " "	"
22	D024	" "	P	" " "	"
23	D025	" "	P	" " "	"
24	D026	" "	P	" " "	"
25	D027	" "	P	" " "	"
26	D028	" "	P	" " "	"
27	D029	" "	P	" " "	"
28	D030	" "	P	" " "	"
29	D031	" "	P	" " "	"
30	D032	" "	P	" " "	"
31	D033	" "	P	" " "	"
32	D034	" "	P	" " "	"
33	D035	2.0×10^8	P	S01 S02 T04	T01

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0963

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	D. Processes (2) Process Description (If a code is not entered in D(1))
1	D 0 3 6	2.0×10^6	P	S 0 1 S 0 2 T 0 4	T 0 1
2	D 0 3 7	" "	P	" " "	"
3	D 0 3 8	" "	P	" " "	"
4	D 0 3 9	" "	P	" " "	"
5	D 0 4 0	" "	P	" " "	"
6	D 0 4 1	" "	P	" " "	"
7	D 0 4 2	" "	P	" " "	"
8	D 0 4 3	" "	P	" " "	T 0 1
9	F 0 0 1	5.0×10^8	P	" " "	
10	F 0 0 2	" "	P	" " "	
11	F 0 0 3	" "	P	" " "	
12	F 0 0 4	" "	P	" " "	
13	F 0 0 5	" "	P	" " "	
14	F 0 0 6	1.0×10^8	P	" " "	
15	F 0 0 7	" "	P	" " "	
16	F 0 0 8	" "	P	" " "	
17	F 0 0 9	" "	P	" " "	
18	F 0 1 0	" "	P	" " "	
19	F 0 1 1	" "	P	" " "	
20	F 0 1 2	" "	P	" " "	
21	F 0 1 9	" "	P	" " "	
22	F 0 2 4	" "	P	" " "	
23	F 0 2 5	" "	P	" " "	
24	F 0 2 8	" "	P	" " "	
25	F 0 3 4	" "	P	" " "	
26	F 0 3 5	" "	P	" " "	
27	F 0 3 7	" "	P	" " "	
28	F 0 3 8	" "	P	" " "	
29	F 0 3 9	" "	P	" " "	
30	K 0 0 1	" "	P	" " "	
31	K 0 0 2	" "	P	" " "	
32	K 0 0 3	" "	P	" " "	
33	K 0 0 4	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 8 4

Please print or type in ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page

XIV Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTIO (If a code is not entered in D
1	K005	1.0×10^8	P	S01 S02 T04	
2	K006	" "	P	" " "	
3	K007	" "	P	" " "	
4	K008	" "	P	" " "	
5	K009	" "	P	" " "	
6	K010	" "	P	" " "	
7	K011	" "	P	" " "	
8	K013	" "	P	" " "	
9	K014	" "	P	" " "	
10	K015	" "	P	" " "	
11	K016	" "	P	" " "	
12	K017	" "	P	" " "	
13	K018	" "	P	" " "	
14	K019	" "	P	" " "	
15	K020	" "	P	" " "	
16	K021	" "	P	" " "	
17	K022	" "	P	" " "	
18	K023	" "	P	" " "	
19	K024	" "	P	" " "	
20	K025	" "	P	" " "	
21	K026	" "	P	" " "	
22	K027	" "	P	" " "	
23	K028	" "	P	" " "	
24	K029	" "	P	" " "	
25	K030	" "	P	" " "	
26	K031	" "	P	" " "	
27	K032	" "	P	" " "	
28	K033	" "	P	" " "	
29	K034	" "	P	" " "	
30	K035	" "	P	" " "	
31	K036	" "	P	" " "	
32	K037	" "	P	" " "	
33	K038	1.0×10^8	P	S01 S02 T04	

00000135

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F.002

0965

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	K 0 3 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	K 0 4 0	" "	P	" " "	
3	K 0 4 1	" "	P	" " "	
4	K 0 4 2	" "	P	" " "	
5	K 0 4 3	" "	P	" " "	
6	K 0 4 4	" "	P	" " "	
7	K 0 4 5	" "	P	" " "	
8	K 0 4 6	" "	P	" " "	
9	K 0 4 7	" "	P	" " "	
10	K 0 4 8	2.0×10^8	P	" " "	
11	K 0 4 9	" "	P	" " "	
12	K 0 5 0	" "	P	" " "	
13	K 0 5 1	" "	P	" " "	
14	K 0 5 2	" "	P	" " "	
15	K 0 6 0	1.0×10^8	P	" " "	
16	K 0 6 1	" "	P	" " "	
17	K 0 6 2	" "	P	" " "	
18	K 0 6 4	" "	P	" " "	
19	K 0 6 5	" "	P	" " "	
20	K 0 6 6	" "	P	" " "	
21	K 0 7 1	" "	P	" " "	
22	K 0 7 3	" "	P	" " "	
23	K 0 8 3	" "	P	" " "	
24	K 0 8 4	" "	P	" " "	
25	K 0 8 5	" "	P	" " "	
26	K 0 8 6	" "	P	" " "	
27	K 0 8 7	" "	P	" " "	
28	K 0 8 8	" "	P	" " "	
29	K 0 9 0	" "	P	" " "	
30	K 0 9 1	" "	P	" " "	
31	K 0 9 3	" "	P	" " "	
32	K 0 9 4	" "	P	" " "	
33	K 0 9 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000110

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0966

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	C. PROCESSES (1) PROCESS CODES (enter)	C. PROCESSES (2) PROCESS DESCRIPT. (If a code is not entered in
1	K 0 9 6	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	K 0 9 7	" "	P	" " " "	
3	K 0 9 8	" "	P	" " " "	
4	K 0 9 9	" "	P	" " " "	
5	K 1 0 0	" "	P	" " " "	
6	K 1 0 1	" "	P	" " " "	
7	K 1 0 2	" "	P	" " " "	
8	K 1 0 3	" "	P	" " " "	
9	K 1 0 4	" "	P	" " " "	
10	K 1 0 5	" "	P	" " " "	
11	K 1 0 6	" "	P	" " " "	
12	K 1 1 1	" "	P	" " " "	
13	K 1 1 2	" "	P	" " " "	
14	K 1 1 3	" "	P	" " " "	
15	K 1 1 4	" "	P	" " " "	
16	K 1 1 5	" "	P	" " " "	
17	K 1 1 6	" "	P	" " " "	
18	K 1 1 7	" "	P	" " " "	
19	K 1 1 8	" "	P	" " " "	
20	K 1 2 3	" "	P	" " " "	
21	K 1 2 4	" "	P	" " " "	
22	K 1 2 5	" "	P	" " " "	
23	K 1 2 6	" "	P	" " " "	
24	K 1 3 1	" "	P	" " " "	
25	K 1 3 2	" "	P	" " " "	
26	K 1 3 6	" "	P	" " " "	
27	P 0 0 1	" "	P	" " " "	
28	P 0 0 2	" "	P	" " " "	
29	P 0 0 3	" "	P	" " " "	
30	P 0 0 4	" "	P	" " " "	
31	P 0 0 5	" "	P	" " " "	
32	P 0 0 6	" "	P	" " " "	
33	P 0 0 7	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 5 7

Please print or type in the ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)									(2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	P 0 0 8	1.0×10^8	P	S 0 1	S 0 2	T 0 4							
2	P 0 0 9	" "	P	"	"	"							
3	P 0 1 0	" "	P	"	"	"							
4	P 0 1 1	" "	P	"	"	"							
5	P 0 1 2	" "	P	"	"	"							
6	P 0 1 3	" "	P	"	"	"							
7	P 0 1 4	" "	P	"	"	"							
8	P 0 1 5	" "	P	"	"	"							
9	P 0 1 6	" "	P	"	"	"							
10	P 0 1 7	" "	P	"	"	"							
11	P 0 1 8	" "	P	"	"	"							
12	P 0 2 0	" "	P	"	"	"							
13	P 0 2 1	" "	P	"	"	"							
14	P 0 2 2	" "	P	"	"	"							
15	P 0 2 3	" "	P	"	"	"							
16	P 0 2 4	" "	P	"	"	"							
17	P 0 2 6	" "	P	"	"	"							
18	P 0 2 7	" "	P	"	"	"							
19	P 0 2 8	" "	P	"	"	"							
20	P 0 2 9	" "	P	"	"	"							
21	P 0 3 0	" "	P	"	"	"							
22	P 0 3 1	" "	P	"	"	"							
23	P 0 3 3	" "	P	"	"	"							
24	P 0 3 4	" "	P	"	"	"							
25	P 0 3 6	" "	P	"	"	"							
26	P 0 3 7	" "	P	"	"	"							
27	P 0 3 8	" "	P	"	"	"							
28	P 0 3 9	" "	P	"	"	"							
29	P 0 4 0	" "	P	"	"	"							
30	P 0 4 1	" "	P	"	"	"							
31	P 0 4 2	" "	P	"	"	"							
32	P 0 4 3	" "	P	"	"	"							
33	P 0 4 4	1.0×10^8	P	S 0 1	S 0 2	T 0 4							

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0968

Please [illegible] ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)									(2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	P045	1.0×10^8	P	S01	S02	T04							
2	P046	" "	P	"	"	"							
3	P047	" "	P	"	"	"							
4	P048	" "	P	"	"	"							
5	P049	" "	P	"	"	"							
6	P050	" "	P	"	"	"							
7	P051	" "	P	"	"	"							
8	P054	" "	P	"	"	"							
9	P057	" "	P	"	"	"							
10	P058	" "	P	"	"	"							
11	P059	" "	P	"	"	"							
12	P060	" "	P	"	"	"							
13	P062	" "	P	"	"	"							
14	P063	" "	P	"	"	"							
15	P064	" "	P	"	"	"							
16	P065	" "	P	"	"	"							
17	P066	" "	P	"	"	"							
18	P067	" "	P	"	"	"							
19	P068	" "	P	"	"	"							
20	P069	" "	P	"	"	"							
21	P070	" "	P	"	"	"							
22	P071	" "	P	"	"	"							
23	P072	" "	P	"	"	"							
24	P073	" "	P	"	"	"							
25	P074	" "	P	"	"	"							
26	P075	" "	P	"	"	"							
27	P076	" "	P	"	"	"							
28	P077	" "	P	"	"	"							
29	P078	" "	P	"	"	"							
30	P081	" "	P	"	"	"							
31	P082	" "	P	"	"	"							
32	P084	" "	P	"	"	"							
33	P085	1.0×10^8	P	S01	S02	T04							

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0969

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	(2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	P 0 8 7	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	P 0 8 8	" "	P	" " "	
3	P 0 8 9	" "	P	" " "	
4	P 0 9 2	" "	P	" " "	
5	P 0 9 3	" "	P	" " "	
6	P 0 9 4	" "	P	" " "	
7	P 0 9 5	" "	P	" " "	
8	P 0 9 6	" "	P	" " "	
9	P 0 9 7	" "	P	" " "	
10	P 0 9 8	" "	P	" " "	
11	P 0 9 9	" "	P	" " "	
12	P 1 0 1	" "	P	" " "	
13	P 1 0 2	" "	P	" " "	
14	P 1 0 3	" "	P	" " "	
15	P 1 0 4	" "	P	" " "	
16	P 1 0 5	" "	P	" " "	
17	P 1 0 6	" "	P	" " "	
18	P 1 0 7	" "	P	" " "	
19	P 1 0 8	" "	P	" " "	
20	P 1 0 9	" "	P	" " "	
21	P 1 1 0	" "	P	" " "	
22	P 1 1 1	" "	P	" " "	
23	P 1 1 2	" "	P	" " "	
24	P 1 1 3	" "	P	" " "	
25	P 1 1 4	" "	P	" " "	
26	P 1 1 5	" "	P	" " "	
27	P 1 1 6	" "	P	" " "	
28	P 1 1 8	" "	P	" " "	
29	P 1 1 9	" "	P	" " "	
30	P 1 2 0	" "	P	" " "	
31	P 1 2 1	" "	P	" " "	
32	P 1 2 2	" "	P	" " "	
33	P 1 2 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 7 0

Please print or type in the unshaded areas only.

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTI (If a code is not entered in
1	U 0 0 1	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 0 0 2	" "	P	" " "	
3	U 0 0 3	" "	P	" " "	
4	U 0 0 4	" "	P	" " "	
5	U 0 0 5	" "	P	" " "	
6	U 0 0 6	" "	P	" " "	
7	U 0 0 7	" "	P	" " "	
8	U 0 0 8	" "	P	" " "	
9	U 0 0 9	" "	P	" " "	
10	U 0 1 0	" "	P	" " "	
11	U 0 1 1	" "	P	" " "	
12	U 0 1 2	" "	P	" " "	
13	U 0 1 4	" "	P	" " "	
14	U 0 1 5	" "	P	" " "	
15	U 0 1 6	" "	P	" " "	
16	U 0 1 7	" "	P	" " "	
17	U 0 1 8	" "	P	" " "	
18	U 0 1 9	" "	P	" " "	
19	U 0 2 0	" "	P	" " "	
20	U 0 2 1	" "	P	" " "	
21	U 0 2 2	" "	P	" " "	
22	U 0 2 3	" "	P	" " "	
23	U 0 2 4	" "	P	" " "	
24	U 0 2 5	" "	P	" " "	
25	U 0 2 6	" "	P	" " "	
26	U 0 2 7	" "	P	" " "	
27	U 0 2 8	" "	P	" " "	
28	U 0 2 9	" "	P	" " "	
29	U 0 3 0	" "	P	" " "	
30	U 0 3 1	" "	P	" " "	
31	U 0 3 2	" "	P	" " "	
32	U 0 3 3	" "	P	" " "	
33	U 0 3 4	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000145

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 7 1 1

Please print or type in the unshaded areas only (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 0 3 5	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 0 3 6	" "	P	" " "	
3	U 0 3 7	" "	P	" " "	
4	U 0 3 8	" "	P	" " "	
5	U 0 3 9	" "	P	" " "	
6	U 0 4 1	" "	P	" " "	
7	U 0 4 2	" "	P	" " "	
8	U 0 4 3	" "	P	" " "	
9	U 0 4 4	" "	P	" " "	
10	U 0 4 5	" "	P	" " "	
11	U 0 4 6	" "	P	" " "	
12	U 0 4 7	" "	P	" " "	
13	U 0 4 8	" "	P	" " "	
14	U 0 4 9	" "	P	" " "	
15	U 0 5 0	" "	P	" " "	
16	U 0 5 1	" "	P	" " "	
17	U 0 5 2	" "	P	" " "	
18	U 0 5 3	" "	P	" " "	
19	U 0 5 5	" "	P	" " "	
20	U 0 5 6	" "	P	" " "	
21	U 0 5 7	" "	P	" " "	
22	U 0 5 8	" "	P	" " "	
23	U 0 5 9	" "	P	" " "	
24	U 0 6 0	" "	P	" " "	
25	U 0 6 1	" "	P	" " "	
26	U 0 6 2	" "	P	" " "	
27	U 0 6 3	" "	P	" " "	
28	U 0 6 4	" "	P	" " "	
29	U 0 6 5	" "	P	" " "	
30	U 0 6 6	" "	P	" " "	
31	U 0 6 7	" "	P	" " "	
32	U 0 6 8	" "	P	" " "	
33	U 0 6 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000116

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 7 2

Please print or type in the unshaded areas only (elite type is 12 characters per inch, or pica type is 10 characters per inch).

EPA I.D. Number (enter from page 1): N F D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 0 7 0	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 0 7 1	" "	P	" " "	
3	U 0 7 2	" "	P	" " "	
4	U 0 7 3	" "	P	" " "	
5	U 0 7 4	" "	P	" " "	
6	U 0 7 5	" "	P	" " "	
7	U 0 7 6	" "	P	" " "	
8	U 0 7 7	" "	P	" " "	
9	U 0 7 8	" "	P	" " "	
10	U 0 7 9	" "	P	" " "	
11	U 0 8 0	" "	P	" " "	
12	U 0 8 1	" "	P	" " "	
13	U 0 8 2	" "	P	" " "	
14	U 0 8 3	" "	P	" " "	
15	U 0 8 4	" "	P	" " "	
16	U 0 8 5	" "	P	" " "	
17	U 0 8 6	" "	P	" " "	
18	U 0 8 7	" "	P	" " "	
19	U 0 8 8	" "	P	" " "	
20	U 0 8 9	" "	P	" " "	
21	U 0 9 0	" "	P	" " "	
22	U 0 9 1	" "	P	" " "	
23	U 0 9 2	" "	P	" " "	
24	U 0 9 3	" "	P	" " "	
25	U 0 9 4	" "	P	" " "	
26	U 0 9 5	" "	P	" " "	
27	U 0 9 6	" "	P	" " "	
28	U 0 9 7	" "	P	" " "	
29	U 0 9 8	" "	P	" " "	
30	U 0 9 9	" "	P	" " "	
31	U 1 0 1	" "	P	" " "	
32	U 1 0 2	" "	P	" " "	
33	U 1 0 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0973

Please print or type in the unshaded areas only

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 1 0 5	1.0×10^{6}	P	S 0 1 S 0 2 T 0 4	
2	U 1 0 6	" "	P	" " "	
3	U 1 0 7	" "	P	" " "	
4	U 1 0 8	" "	P	" " "	
5	U 1 0 9	" "	P	" " "	
6	U 1 1 0	" "	P	" " "	
7	U 1 1 1	" "	P	" " "	
8	U 1 1 2	" "	P	" " "	
9	U 1 1 3	" "	P	" " "	
10	U 1 1 4	" "	P	" " "	
11	U 1 1 5	" "	P	" " "	
12	U 1 1 6	" "	P	" " "	
13	U 1 1 7	" "	P	" " "	
14	U 1 1 8	" "	P	" " "	
15	U 1 1 9	" "	P	" " "	
16	U 1 2 0	" "	P	" " "	
17	U 1 2 1	" "	P	" " "	
18	U 1 2 2	" "	P	" " "	
19	U 1 2 3	" "	P	" " "	
20	U 1 2 4	" "	P	" " "	
21	U 1 2 5	" "	P	" " "	
22	U 1 2 6	" "	P	" " "	
23	U 1 2 7	" "	P	" " "	
24	U 1 2 8	" "	P	" " "	
25	U 1 2 9	" "	P	" " "	
26	U 1 3 0	" "	P	" " "	
27	U 1 3 1	" "	P	" " "	
28	U 1 3 2	" "	P	" " "	
29	U 1 3 3	" "	P	" " "	
30	U 1 3 4	" "	P	" " "	
31	U 1 3 5	" "	P	" " "	
32	U 1 3 6	" "	P	" " "	
33	U 1 3 7	1.0×10^{8}	P	S 0 1 S 0 2 T 0 4	

00000118

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 7 4

Please print or type in the unshaded areas only (elite type 12 characters per inch)

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA Hazardous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	D. Processes (2) Process Description (If a code is not entered in D.1)
1	U 1 3 8	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 4 0	" "	P	" " "	
3	U 1 4 1	" "	P	" " "	
4	U 1 4 2	" "	P	" " "	
5	U 1 4 3	" "	P	" " "	
6	U 1 4 4	" "	P	" " "	
7	U 1 4 5	" "	P	" " "	
8	U 1 4 6	" "	P	" " "	
9	U 1 4 7	" "	P	" " "	
10	U 1 4 8	" "	P	" " "	
11	U 1 4 9	" "	P	" " "	
12	U 1 5 0	" "	P	" " "	
13	U 1 5 1	" "	P	" " "	
14	U 1 5 2	" "	P	" " "	
15	U 1 5 3	" "	P	" " "	
16	U 1 5 4	" "	P	" " "	
17	U 1 5 5	" "	P	" " "	
18	U 1 5 6	" "	P	" " "	
19	U 1 5 7	" "	P	" " "	
20	U 1 5 8	" "	P	" " "	
21	U 1 5 9	" "	P	" " "	
22	U 1 6 0	" "	P	" " "	
23	U 1 6 1	" "	P	" " "	
24	U 1 6 2	" "	P	" " "	
25	U 1 6 3	" "	P	" " "	
26	U 1 6 4	" "	P	" " "	
27	U 1 6 5	" "	P	" " "	
28	U 1 6 6	" "	P	" " "	
29	U 1 6 7	" "	P	" " "	
30	U 1 6 8	" "	P	" " "	
31	U 1 6 9	" "	P	" " "	
32	U 1 7 0	" "	P	" " "	
33	U 1 7 1	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

00000149

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0975

Please print or type in the unit type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
N E D 0 0 7 2 6 0 6 7 2	

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 1 7 2	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 1 7 3	" "	P	" " " "	
3	U 1 7 4	" "	P	" " " "	
4	U 1 7 6	" "	P	" " " "	
5	U 1 7 7	" "	P	" " " "	
6	U 1 7 8	" "	P	" " " "	
7	U 1 7 9	" "	P	" " " "	
8	U 1 8 0	" "	P	" " " "	
9	U 1 8 1	" "	P	" " " "	
10	U 1 8 2	" "	P	" " " "	
11	U 1 8 3	" "	P	" " " "	
12	U 1 8 4	" "	P	" " " "	
13	U 1 8 5	" "	P	" " " "	
14	U 1 8 6	" "	P	" " " "	
15	U 1 8 7	" "	P	" " " "	
16	U 1 8 8	" "	P	" " " "	
17	U 1 8 9	" "	P	" " " "	
18	U 1 9 0	" "	P	" " " "	
19	U 1 9 1	" "	P	" " " "	
20	U 1 9 2	" "	P	" " " "	
21	U 1 9 3	" "	P	" " " "	
22	U 1 9 4	" "	P	" " " "	
23	U 1 9 6	" "	P	" " " "	
24	U 1 9 7	" "	P	" " " "	
25	U 2 0 0	" "	P	" " " "	
26	U 2 0 1	" "	P	" " " "	
27	U 2 0 2	" "	P	" " " "	
28	U 2 0 3	" "	P	" " " "	
29	U 2 0 4	" "	P	" " " "	
30	U 2 0 5	" "	P	" " " "	
31	U 2 0 6	" "	P	" " " "	
32	U 2 0 7	" "	P	" " " "	
33	U 2 0 8	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 7 6

Please print or type in the unshaded areas only (elite type is 12 characters per inch)

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in C
1	U 2 0 9	1.0×10^8	P	S 0 1 S 0 2 T 0 4	
2	U 2 1 0	" "	P	" " "	
3	U 2 1 1	" "	P	" " "	
4	U 2 1 3	" "	P	" " "	
5	U 2 1 4	" "	P	" " "	
6	U 2 1 5	" "	P	" " "	
7	U 2 1 6	" "	P	" " "	
8	U 2 1 7	" "	P	" " "	
9	U 2 1 8	" "	P	" " "	
10	U 2 1 9	" "	P	" " "	
11	U 2 2 0	" "	P	" " "	
12	U 2 2 1	" "	P	" " "	
13	U 2 2 2	" "	P	" " "	
14	U 2 2 3	" "	P	" " "	
15	U 2 2 5	" "	P	" " "	
16	U 2 2 6	" "	P	" " "	
17	U 2 2 7	" "	P	" " "	
18	U 2 2 8	" "	P	" " "	
19	U 2 3 4	" "	P	" " "	
20	U 2 3 5	" "	P	" " "	
21	U 2 3 6	" "	P	" " "	
22	U 2 3 7	" "	P	" " "	
23	U 2 3 8	" "	P	" " "	
24	U 2 3 9	" "	P	" " "	
25	U 2 4 0	" "	P	" " "	
26	U 2 4 3	" "	P	" " "	
27	U 2 4 4	" "	P	" " "	
28	U 2 4 6	" "	P	" " "	
29	U 2 4 7	" "	P	" " "	
30	U 2 4 8	" "	P	" " "	
31	U 2 4 9	" "	P	" " "	
32	U 3 2 8	" "	P	" " "	
33	U 3 5 3	1.0×10^8	P	S 0 1 S 0 2 T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 6 7 1

Please print or type in the unshaded areas only (Elite type is shown below in the unshaded areas)

EPA I.D. Number (enter from page 1): N E D 0 0 7 2 6 0 6 7 2

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 3 5 9	1.0 x 10	P	S 0 1 S 0 2 T 0 4	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

00000152

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 7 8

Please print or type in the unshaded areas only.

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
N E D 0 0 7 2 6 0 6 7 2	

XIV. Description of Hazardous Waste (continued)

USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 6

Line Number	Additional Process Codes (enter)

XV. Map

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner Signature	Date Signed
Name and Official Title (type or print)	
Operator Signature	Date Signed
Name and Official Title (type or print)	

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office (refer to instructions for more information)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 0 1 9

A. Facility Information

1. Respondent Name and Title: Hans E. Steuch

Company: Ash Grove Cement West, Inc.

Phone number: (503) 293-2333

2. Name and address of company that owns the cement kilns at this facility:
Ash Grove Cement West, Inc., 6720 S.W. Macadam Ave., Suite 300, Portland, OR 97219-2312

Facility name, location, and address:
Ash Grove Cement West, Inc., Montana City Plant, 100 MT Hwy. 518, Clancy, MT 59634-9701

EPA ID of burner: MTD986067825

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company): Will be cement company.

EPA ID of on-site processor: N/A

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 0
Additional kilns expected to burn hazardous wastes by July 1994: 1
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 1

00000154

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0980

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

03000155

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0981

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
_x_ Steel Drum, specify sizes: 5-10 gallon
_x_ Poly Drum, specify sizes: 5-10 gallon
___ Fiber Drum, specify sizes: ____
_x_ Bag or other flexible container, specify sizes: 5-10 gallon
___ Rigid Tote
___ Tanker Trucks (transferred to tank)
___ Tanker Trucks (direct feed to kiln)
___ Rail car
___ Carboy
___ Pallet
___ Other, specify: ____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	0	100,000 gal.	12/92
Liquid Tanks	0		
Other (specify)	0		

00000156

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0982

6b. What processing operations do you perform on-site for liquid wastes?[1]

None

6c. What processing operations do you perform on-site for solid wastes?

None

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000157

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 8 3

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	0	0	0	N/A
Pumpable Sludges	0	0	0	N/A
Nonpumpable Sludges	0	0	0	N/A
Containerized Solids	0	0	0	N/A
Bulk Solids	0	0	0	N/A
Dry Solids	0	0	0	N/A
Total	0	0	0	N/A

00000158

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 8 4

Kiln Number: 1 of 1

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Long wet

Clinker capacity (tons/hr): 40

Thermal input (Btu/ton clinker): 5.5 MM

Type of cement product(s) produced in this kiln: I, II, V

Total hours operating per year on average: 7800

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: N/A
Dry solids injected at "hot" end: N/A
Containerized solids charged to calcining zone: N/A
Sludge Pump: N/A
Other: (specify) N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0985

Kiln Number: 1 of 1

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current/ Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	0	N/A
Pumpable Sludges	0	0	N/A
Nonpumpable Sludges	0	0	N/A
Containerized Solids	0	0	N/A
Bulk Solids	0	0	N/A
Dry Solids	0	0	N/A
Total	0	0	N/A

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): N/A (%)
Percent of above solids originally generated as solids: N/A (%)

00000100

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0986

Kiln Number: 1 of 1

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids					
Pumpable Sludges					
Nonpumpable Sludges			N/A		
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 8 7

Kiln Number: 1 of 1

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? March

How long? 3 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

1/92

b) Physical changes (include planned schedule):

None

c) Regulatory modifications (include planned schedule):

State permit - 11/91

Interim status - 8/91

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0988

00000162

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0989

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		N/A	
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0990

00000164

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ____

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000165

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 9 1

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		N/A	
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0992

00000166

Pumpable Sludges Waste Acceptance Limits As Received

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	N/A	N/A	N/A
Water Content	↓	↓	↓
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify	↓	↓	↓

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 8 8 3

"As Received" Pumpable Sludges Waste Limitations						
Property	Minimum Allowable (specify units)		Maximum Allowable (specify units)		Limiting Factor	
Pesticides	N/A		N/A		N/A	
Fungicides	↓		↓		↓	
Herbicides						
Insecticides						
Rodenticides						
Other: Specify						
Total Specified Metals Content						
Antimony Content						
Arsenic Content						
Barium Content						
Beryllium Content						
Cadmium Content						
Chromium Content						
Copper Content						
Lead Content						
Mercury Content						
Nickel Content						
Selenium Content						
Silver Content						
Thallium Content						
Vanadium Content						
Zinc Content						
Other: Specify						
Other: Specify	↓		↓		↓	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0994

00000168

Pumpable Sludges Waste Acceptance Limits As Burned

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Pumpable Sludges Waste Limitations						
Property	Minimum Allowable (specify units)		Maximum Allowable (specify units)		Limiting Factor	
Heat of Combustion	N/A		N/A		N/A	
Water Content	↓		↓		↓	
Total Solids Content						
Total Inorganics Content						
Particle/Object Size						
Cyanide Content						
Sulfur Content						
Sodium Content						
Potassium Content						
Other: Specify						
Other: Specify						
Total Halogen Content						
Chlorine Content						
Fluorine Content						
Bromine Content						
Other: Specify						
Other: Specify	↓		↓		↓	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F.002

0 9 9 5

"As Burned" Pumpable Sludges Waste Limitations						
Property	Minimum Allowable (specify units)		Maximum Allowable (specify units)		Limiting Factor	
Pesticides	N/A		N/A		N/A	
Fungicides						
Herbicides						
Insecticides						
Rodenticides						
Other: Specify						
Total Specified Metals Content						
Antimony Content						
Arsenic Content						
Barium Content						
Beryllium Content						
Cadmium Content						
Chromium Content						
Copper Content						
Lead Content						
Mercury Content						
Nickel Content						
Selenium Content						
Silver Content						
Thallium Content						
Vanadium Content						
Zinc Content						
Other: Specify						
Other: Specify						

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0996

00000170

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0997

Nonpumpable Sludges Waste Acceptance Limits As Received

15a. Are your nonpumpable sludge waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15b:

_____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	N/A	N/A	N/A
Water Content	↓	↓	↓
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify	↓	↓	↓

00030171

"As Received" Nonpumpable Sludges Waste Limitations.						
Property	Minimum Allowable (specify units)		Maximum Allowable (specify units)		Limiting Factor	
Pesticides	N/A		N/A		N/A	
Fungicides	↓		↓		↓	
Herbicides						
Insecticides						
Rodenticides						
Other: Specify						
Total Specified Metals Content						
Antimony Content						
Arsenic Content						
Barium Content						
Beryllium Content						
Cadmium Content						
Chromium Content						
Copper Content						
Lead Content						
Mercury Content						
Nickel Content						
Selenium Content						
Silver Content						
Thallium Content						
Vanadium Content						
Zinc Content						
Other: Specify						
Other: Specify	↓		↓		↓	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0998

00000172

Nonpumpable Sludges Waste Acceptance Limits As Burned

15b. Are your nonpumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	N/A	N/A	N/A
Water Content	↓	↓	↓
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify	↓	↓	↓

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 9 9 9

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides	N/A	N/A	N/A
Fungicides	↓	↓	↓
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify	↓	↓	↓

NOTICE
If the filmed image is less clear than this Notice, it is due to the quality of the document being filmed.

CD2F 002

1000

00000174 X

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5000 BTU/LB.		T
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		50,000 ppm	T
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 0 1

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		50 ppm	T
Fungicides		50 ppm	T
Herbicides		50 ppm	T
Insecticides		50 ppm	T
Rodenticides		50 ppm	T
Other: Specify			
Total Specified Metals Content			
Antimony Content		5,000 ppm	T
Arsenic Content		250 ppm	T
Barium Content		100,000 ppm	T
Beryllium Content		35 ppm	T
Cadmium Content		70 ppm	T
Chromium Content		7,500 ppm	T
Copper Content			
Lead Content		5,000 ppm	T
Mercury Content		600 ppm	T
Nickel Content			
Selenium Content			
Silver Content		5,000 ppm	T
Thallium Content		5,000 ppm	T
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1002

00000176

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: 16a.

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002
1003

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 0 0 4

00000178

Bulk Solids Waste Acceptance Limits As Received

17a. Are your bulk solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00006179

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 0 5

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		N/A	
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1006

00000186

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Bulk Solids Waste Acceptance Limits As Burned

17b. Are your bulk solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1 0 0 7

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1008

00000182

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions?. If so, specify which table applies (e.g., 13a) and skip to 18b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1009

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10110

00000184

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000135

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		N/A	
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10 12

00000186

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)		Y		
Personal Protection Equipment (e.g., Tyvex suits)		↓		
Paper or Cardboard Materials				
Filter Cartridges				
Wood Materials				
Rubber Objects (e.g., tires, hoses)				
PVC Pipe				
Other Plastic Debris				
Glass Debris				
Ceramic Debris (e.g., semiconductors)				
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)				
Asbestos Materials (e.g., shingles, insulation)				
Non-Soil Geologic Material (e.g., rocks)				
Concrete Debris				
Refractory Brick				
Other Bricks				
Slag				
Intact Batteries				
Battery Cases				
Electronic Components (e.g., printed circuit boards)				
Electrical Wires, Switches, etc.		↓		

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 1 3

20. Please explain any debris acceptance conditions noted on the previous page:

To the extent that the debris can be containerized in 5-10 gallon drums or bags and satisfy our limitations, they will be accepted.

20a. Do you accept soils? If so, under what conditions or limitations?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 1 1 4

00000188

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

o

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See attachment 1.

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

N/A

00000189

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1015

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	EPA Region VIII (303) 293-1603	SA	9/91
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission	Utah Bureau of Air Pollution Control (801) 538-6108		12/91
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)	*		

*There currently is a state of Utah moratorium on the burning of waste in cement kilns expected to expire in May, 1992.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 1 6

00000190

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

8/91

00000191

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

__x__ Yes
____ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year): (A)

b) Effect on hazardous waste capacity: N/A

c) Modifications: N/A

(A) We are ready to burn containers in kiln #1 as soon as our state permit application is approved and the state moratorium is lifted, and we expect to burn 2500 tons of solid containerized waste in 1992, increasing gradually to 12,000 tons per year in 1994.

00000192

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 1 8

Appendix 1

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0034 (Expires 12-31-91) GSA No. 0246-EPA-01

For EPA Regional Use Only		For State Use Only
Date Received: Month Day Year	**EPA** United States Environmental Protection Agency Washington, DC 20460 **Hazardous Waste Permit Application Part A** *(Read the Instructions before starting)*	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10 19

I. ID Number(s)

A. EPA ID Number: MTD986067825

B. Secondary ID Number *(if applicable)*:

II. Name of Facility

ASH GROVE CEMENT WEST INC

III. Facility Location *(Physical address not P.O. Box or Route Number)*

A. Street: MT HWY 518 1 MILE EAST OF I15

Street *(continued)*:

City or Town: CLANCY | State: MT | ZIP Code: 59634-9701

County Code *(if known)*: | County Name: JEFFERSON

B. Land Type *(enter code)*: P

C. Geographic Location — LATITUDE *(degrees, minutes, & seconds)*: 46 32 27 N | LONGITUDE *(degrees, minutes, & seconds)*: 111 55 35 W

D. Facility Existence Date — Month Day Year: 07 24 1991

IV. Facility Mailing Address

Street or P.O. Box: 100 MT HWY 518

City or Town: CLANCY | State: MT | ZIP Code: 59634-9701

V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

Name *(last)*: PETERSON | *(first)*: CHARLES

Job Title: PLANT MANAGER | Phone Number *(area code and number)*: 406-442-8855

VI. Facility Contact Address *(See instructions)*

A. Contact Address — Location: | Mailing: X

B. Street or P.O. Box:

City or Town: | State: | ZIP Code:

00000193

00000194

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0034 Expires 12-
GSA No. 0246-EPA

EPA I.D. Number (enter from page 1): MTD986067825

Secondary ID Number (enter from page 1):

VII. Operator Information (see instructions)

Name of Operator: ASH GROVE CEMENT WEST INC

Street or P.O. Box: 100 MT HWY 518

City or Town: CLANCY

State: MT

ZIP Code: 59634-9700

Phone Number (area code and number): 406-442-8855

B. Operator Type: P

C. Change of Operator Indicator: Yes [ ] No [X]

Date Changed: Month Day Year

VIII. Facility Owner (see instructions)

A. Name of Facility's Legal Owner: ASH GROVE CEMENT WEST INC

Street or P.O. Box: 6720 SW MACADAM AVE SUITE 300

City or Town: PORTLAND

State: OR

ZIP Code: 97219-2312

Phone Number (area code and number): 503-293-2333

B. Owner Type: P

C. Change of Owner Indicator: Yes [ ] No [X]

Date Changed: Month Day Year

IX. SIC Codes (4-digit, in order of significance)

Primary	Secondary
3241 (description) Hydraulic (Portland) Cement	(description)
Secondary	Secondary
(description)	(description)

X. Other Environmental Permits (see instructions)

A. Permit Type (enter code)	B. Permit Number	C. Description
E	MT-000045 1	MPDES WATER DISCHARGE PERMIT
E	2005	MONTANA AIR PERMIT

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1020

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
M T D 9 8 6 0 6 7 8 2 5	

XI. Nature of Business (provide a brief description)

Manufacturing of Portland Cement by the wet process - involves:

1) Quarrying and crushing of limestone and acquisition of other raw materials

2) Grinding of raw materials with water to form a slurry

3) Pyroprocessing of the slurry in a rotary cement kiln to form Portland Cement clinker

4) Grinding of clinker with gypsum to form Portland Cement.

XII. Process - Codes and Design Capacities

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided in Item XIII.*

B. PROCESS DESIGN CAPACITY - *For each code entered in column A, enter the capacity of the process.*

1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process unit.*
2. UNIT OF MEASURE - *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	DISPOSAL:	
D79	INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY
D80	LANDFILL	ACRE-FEET OR HECTARE-METER
D81	LAND APPLICATION	ACRES OR HECTARES
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	STORAGE:	
S01	CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS
S02	TANK	GALLONS OR LITERS
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	TREATMENT:	
T01	TANK	GALLONS PER DAY OR LITERS PER DAY
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR
T04	OTHER TREATMENT (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundment or incinerators. Describe the processes in the space provided in Item XIII.)	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
GALLONS PER HOUR	E
GALLONS PER DAY	U
LITERS	L
LITERS PER HOUR	H
LITERS PER DAY	V
SHORT TONS PER HOUR	D
METRIC TONS PER HOUR	W
SHORT TONS PER DAY	N
METRIC TONS PER DAY	S
POUNDS PER HOUR	J
KILOGRAMS PER HOUR	R
CUBIC YARDS	Y
CUBIC METERS	C
ACRES	B
ACRE-FEET	A
HECTARES	Q
HECTARE-METER	F
BTU's PER HOUR	K

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 2 1

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
M T D 9 8 6 0 6 7 8 2 5	

XII. Process - Codes and Design Capacities (continued)

EXAMPLE FOR COMPLETING ITEM XII (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line Number	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	FOR OFFICIAL USE ONLY
X 1	S 0 2	600	G	0 0 2	
X 2	T 0 3	20	E	0 0 1	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

NOTE: If you need to list more than 12 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for additional treatment processes in Item XIII.

XIII. Additional Treatment Processes (follow instructions from Item XII)

Line Number (enter numbers in sequence with Item XII)	A. PROCESS CODE	B. TREATMENT PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. TREATMENT PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	D. DESCRIPTION OF PROCESS
0 1	T 0 4	23.33	D	0 0 1	Recycling of hazardous waste as a fuel substitute in cement kilns in order to manufacture Portland Cement.
	T 0 4				
	T 0 4				
	T 0 4				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 2 2

Please print or type with Elite type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
M T D 9 8 6 0 6 7 8 2 5	

XIV. Description of Hazardous Wastes

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that processes that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item XIV-D(1).*
3. *Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS (1) PROCESS CODES (enter)	D. PROCESS (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3 D 8 0	
X 2	D 0 0 2	400	P	T 0 3 D 8 0	
X 3	D 0 0 1	100	P	T 0 3 D 8 0	
X 4	D 0 0 2				Included With Above

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1023

00000197

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
M T D 9 8 6 0 6 7 8 2 5	

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	D001	2.0×10^8	P	T04	
2	D004	" "	P	"	
3	D005	" "	P	"	
4	D006	" "	P	"	
5	D007	" "	P	"	
6	D008	" "	P	"	
7	D009	" "	P	"	
8	D010	" "	P	"	
9	D011	" "	P	"	
10	D012	" "	P	"	
11	D013	" "	P	"	
12	D014	" "	P	"	
13	D015	" "	P	"	
14	D016	" "	P	"	
15	D017	" "	P	"	
16	D018	" "	P	"	
17	D019	" "	P	"	
18	D020	" "	P	"	
19	D021	" "	P	"	
20	D022	" "	P	"	
21	D023	" "	P	"	
22	D024	" "	P	"	
23	D025	" "	P	"	
24	D026	" "	P	"	
25	D027	" "	P	"	
26	D028	" "	P	"	
27	D029	" "	P	"	
28	D030	" "	P	"	
29	D031	" "	P	"	
30	D032	" "	P	"	
31	D033	" "	P	"	
32	D034	" "	P	"	
33	D035	2.0×10^8	P	T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1024

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 5 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
01	D036	2.0×10^8	P	T04	
02	D037	" "	P	"	
03	D038	" "	P	"	
04	D039	" "	P	"	
05	D040	" "	P	"	
06	D041	" "	P	"	
07	D042	" "	P	"	
08	D043	" "	P	"	
09	F001	" "	P	"	
10	F002	" "	P	"	
11	F003	" "	P	"	
12	F004	" "	P	"	
13	F005	" "	P	"	
14	F006	" "	P	"	
15	F007	" "	P	"	
16	F008	" "	P	"	
17	F009	" "	P	"	
18	F010	" "	P	"	
19	F011	" "	P	"	
20	F012	" "	P	"	
21	F019	" "	P	"	
22	F024	" "	P	"	
23	F025	" "	P	"	
24	F028	" "	P	"	
25	F034	" "	P	"	
26	F035	" "	P	"	
27	F037	" "	P	"	
28	F038	" "	P	"	
29	F039	" "	P	"	
30	K001	" "	P	"	
31	K002	" "	P	"	
32	K003	" "	P	"	
33	K004	2.0×10^8	P	T04	

00000199

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1025

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0039
Expires 6-30-92

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K005	2.0×10^8	P	T04	
2	K006	" "	P	"	
3	K007	" "	P	"	
4	K008	" "	P	"	
5	K009	" "	P	"	
6	K010	" "	P	"	
7	K011	" "	P	"	
8	K013	" "	P	"	
9	K014	" "	P	"	
10	K015	" "	P	"	
11	K016	" "	P	"	
12	K017	" "	P	"	
13	K018	" "	P	"	
14	K019	" "	P	"	
15	K020	" "	P	"	
16	K021	" "	P	"	
17	K022	" "	P	"	
18	K023	" "	P	"	
19	K024	" "	P	"	
20	K025	" "	P	"	
21	K026	" "	P	"	
22	K027	" "	P	"	
23	K028	" "	P	"	
24	K029	" "	P	"	
25	K030	" "	P	"	
26	K031	" "	P	"	
27	K032	" "	P	"	
28	K033	" "	P	"	
29	K034	" "	P	"	
30	K035	" "	P	"	
31	K036	" "	P	"	
32	K037	" "	P	"	
33	K038	2.0×10^8	P	T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1026

Please print or type with ELITE type (12 characters per inch) in the shaded areas only.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K 0 3 9	2.0×10^8	P	T 0 4	
2	K 0 4 0	" "	P	"	
3	K 0 4 1	" "	P	"	
4	K 0 4 2	" "	P	"	
5	K 0 4 3	" "	P	"	
6	K 0 4 4	" "	P	"	
7	K 0 4 5	" "	P	"	
8	K 0 4 6	" "	P	"	
9	K 0 4 7	" "	P	"	
10	K 0 4 8	" "	P	"	
11	K 0 4 9	" "	P	"	
12	K 0 5 0	" "	P	"	
13	K 0 5 1	" "	P	"	
14	K 0 5 2	" "	P	"	
15	K 0 6 0	" "	P	"	
16	K 0 6 1	" "	P	"	
17	K 0 6 2	" "	P	"	
18	K 0 6 4	" "	P	"	
19	K 0 6 5	" "	P	"	
20	K 0 6 6	" "	P	"	
21	K 0 7 1	" "	P	"	
22	K 0 7 3	" "	P	"	
23	K 0 8 3	" "	P	"	
24	K 0 8 4	" "	P	"	
25	K 0 8 5	" "	P	"	
26	K 0 8 6	" "	P	"	
27	K 0 8 7	" "	P	"	
28	K 0 8 8	" "	P	"	
29	K 0 9 0	" "	P	"	
30	K 0 9 1	" "	P	"	
31	K 0 9 3	" "	P	"	
32	K 0 9 4	" "	P	"	
33	K 0 9 5	2.0×10^8	P	T 0 4	

00000801

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1027

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K096	2.0×10^8	P	T04	
2	K097	" "	P	"	
3	K098	" "	P	"	
4	K099	" "	P	"	
5	K100	" "	P	"	
6	K101	" "	P	"	
7	K102	" "	P	"	
8	K103	" "	P	"	
9	K104	" "	P	"	
10	K105	" "	P	"	
11	K106	" "	P	"	
12	K111	" "	P	"	
13	K112	" "	P	"	
14	K113	" "	P	"	
15	K114	" "	P	"	
16	K115	" "	P	"	
17	K116	" "	P	"	
18	K117	" "	P	"	
19	K118	" "	P	"	
20	K123	" "	P	"	
21	K124	" "	P	"	
22	K125	" "	P	"	
23	K126	" "	P	"	
24	K131	" "	P	"	
25	K132	" "	P	"	
26	K136	" "	P	"	
27	P001	" "	P	"	
28	P002	" "	P	"	
29	P003	" "	P	"	
30	P004	" "	P	"	
31	P005	" "	P	"	
32	P006	" "	P	"	
33	P007	2.0×10^8	P	T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1028

Please print or type with ELITE type (12 characters per inch) [illegible]

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P008	2.0×10^8	P	T04	
2	P009	" "	P	"	
3	P010	" "	P	"	
4	P011	" "	P	"	
5	P012	" "	P	"	
6	P013	" "	P	"	
7	P014	" "	P	"	
8	P015	" "	P	"	
9	P016	" "	P	"	
10	P017	" "	P	"	
11	P018	" "	P	"	
12	P020	" "	P	"	
13	P021	" "	P	"	
14	P022	" "	P	"	
15	P023	" "	P	"	
16	P024	" "	P	"	
17	P026	" "	P	"	
18	P027	" "	P	"	
19	P028	" "	P	"	
20	P029	" "	P	"	
21	P030	" "	P	"	
22	P031	" "	P	"	
23	P033	" "	P	"	
24	P034	" "	P	"	
25	P036	" "	P	"	
26	P037	" "	P	"	
27	P038	" "	P	"	
28	P039	" "	P	"	
29	P040	" "	P	"	
30	P041	" "	P	"	
31	P042	" "	P	"	
32	P043	" "	P	"	
33	P044	2.0×10^8	P	T04	

00000203

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1029

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	P 0 4 5	2.0×10^8	P	T 0 4	
2	P 0 4 6	" "	P	"	
3	P 0 4 7	" "	P	"	
4	P 0 4 8	" "	P	"	
5	P 0 4 9	" "	P	"	
6	P 0 5 0	" "	P	"	
7	P 0 5 1	" "	P	"	
8	P 0 5 4	" "	P	"	
9	P 0 5 7	" "	P	"	
10	P 0 5 8	" "	P	"	
11	P 0 5 9	" "	P	"	
12	P 0 6 0	" "	P	"	
13	P 0 6 2	" "	P	"	
14	P 0 6 3	" "	P	"	
15	P 0 6 4	" "	P	"	
16	P 0 6 5	" "	P	"	
17	P 0 6 6	" "	P	"	
18	P 0 6 7	" "	P	"	
19	P 0 6 8	" "	P	"	
20	P 0 6 9	" "	P	"	
21	P 0 7 0	" "	P	"	
22	P 0 7 1	" "	P	"	
23	P 0 7 2	" "	P	"	
24	P 0 7 3	" "	P	"	
25	P 0 7 4	" "	P	"	
26	P 0 7 5	" "	P	"	
27	P 0 7 6	" "	P	"	
28	P 0 7 7	" "	P	"	
29	P 0 7 8	" "	P	"	
30	P 0 8 1	" "	P	"	
31	P 0 8 2	" "	P	"	
32	P 0 8 4	" "	P	"	
33	P 0 8 5	2.0×10^8	P	T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 3 0

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P087	2.0×10^8	P	T04	
2	P088	" "	P	"	
3	P089	" "	P	"	
4	P092	" "	P	"	
5	P093	" "	P	"	
6	P094	" "	P	"	
7	P095	" "	P	"	
8	P096	" "	P	"	
9	P097	" "	P	"	
10	P098	" "	P	"	
11	P099	" "	P	"	
12	P101	" "	P	"	
13	P102	" "	P	"	
14	P103	" "	P	"	
15	P104	" "	P	"	
16	P105	" "	P	"	
17	P106	" "	P	"	
18	P107	" "	P	"	
19	P108	" "	P	"	
20	P109	" "	P	"	
21	P110	" "	P	"	
22	P111	" "	P	"	
23	P112	" "	P	"	
24	P113	" "	P	"	
25	P114	" "	P	"	
26	P115	" "	P	"	
27	P116	" "	P	"	
28	P117	" "	P	"	
29	P118	" "	P	"	
30	P120	" "	P	"	
31	P121	" "	P	"	
32	P122	" "	P	"	
33	P123	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

00000205

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1031

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U001	2.0×10^8	P	T04	
2	U002	" "	P	"	
3	U003	" "	P	"	
4	U004	" "	P	"	
5	U005	" "	P	"	
6	U006	" "	P	"	
7	U007	" "	P	"	
8	U008	" "	P	"	
9	U009	" "	P	"	
10	U010	" "	P	"	
11	U011	" "	P	"	
12	U012	" "	P	"	
13	U014	" "	P	"	
14	U015	" "	P	"	
15	U016	" "	P	"	
16	U017	" "	P	"	
17	U018	" "	P	"	
18	U019	" "	P	"	
19	U020	" "	P	"	
20	U021	" "	P	"	
21	U022	" "	P	"	
22	U023	" "	P	"	
23	U024	" "	P	"	
24	U025	" "	P	"	
25	U026	" "	P	"	
26	U027	" "	P	"	
27	U028	" "	P	"	
28	U029	" "	P	"	
29	U030	" "	P	"	
30	U031	" "	P	"	
31	U032	" "	P	"	
32	U033	" "	P	"	
33	U034	2.0×10^8	P	T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10372

Please print or type with elite type in the shaded areas only. Refer to the instructions before completing this form.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 0 3 5	2.0×10^6	P	T 0 4	
2	U 0 3 6	" "	P	"	
3	U 0 3 7	" "	P	"	
4	U 0 3 8	" "	P	"	
5	U 0 3 9	" "	P	"	
6	U 0 4 1	" "	P	"	
7	U 0 4 2	" "	P	"	
8	U 0 4 3	" "	P	"	
9	U 0 4 4	" "	P	"	
10	U 0 4 5	" "	P	"	
11	U 0 4 6	" "	P	"	
12	U 0 4 7	" "	P	"	
13	U 0 4 8	" "	P	"	
14	U 0 4 9	" "	P	"	
15	U 0 5 0	" "	P	"	
16	U 0 5 1	" "	P	"	
17	U 0 5 2	" "	P	"	
18	U 0 5 3	" "	P	"	
19	U 0 5 5	" "	P	"	
20	U 0 5 6	" "	P	"	
21	U 0 5 7	" "	P	"	
22	U 0 5 8	" "	P	"	
23	U 0 5 9	" "	P	"	
24	U 0 6 0	" "	P	"	
25	U 0 6 1	" "	P	"	
26	U 0 6 2	" "	P	"	
27	U 0 6 3	" "	P	"	
28	U 0 6 4	" "	P	"	
29	U 0 6 5	" "	P	"	
30	U 0 6 6	" "	P	"	
31	U 0 6 7	" "	P	"	
32	U 0 6 8	" "	P	"	
33	U 0 6 9	2.0×10^8	P	T 0 4	

00000297

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 3 3

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 0 7 0	2.0×10^8	P	T 0 4	
2	U 0 7 1	" "	P	"	
3	U 0 7 2	" "	P	"	
4	U 0 7 3	" "	P	"	
5	U 0 7 4	" "	P	"	
6	U 0 7 5	" "	P	"	
7	U 0 7 6	" "	P	"	
8	U 0 7 7	" "	P	"	
9	U 0 7 8	" "	P	"	
10	U 0 7 9	" "	P	"	
11	U 0 8 0	" "	P	"	
12	U 0 8 1	" "	P	"	
13	U 0 8 2	" "	P	"	
14	U 0 8 3	" "	P	"	
15	U 0 8 4	" "	P	"	
16	U 0 8 5	" "	P	"	
17	U 0 8 6	" "	P	"	
18	U 0 8 7	" "	P	"	
19	U 0 8 8	" "	P	"	
20	U 0 8 9	" "	P	"	
21	U 0 9 0	" "	P	"	
22	U 0 9 1	" "	P	"	
23	U 0 9 2	" "	P	"	
24	U 0 9 3	" "	P	"	
25	U 0 9 4	" "	P	"	
26	U 0 9 5	" "	P	"	
27	U 0 9 6	" "	P	"	
28	U 0 9 7	" "	P	"	
29	U 0 9 8	" "	P	"	
30	U 0 9 9	" "	P	"	
31	U 1 0 1	" "	P	"	
32	U 1 0 2	" "	P	"	
33	U 1 0 3	2.0×10^8	P	T 0 4	

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1034

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U105	2.0×10^8	P	T04	
2	U106	" "	P	"	
3	U107	" "	P	"	
4	U108	" "	P	"	
5	U109	" "	P	"	
6	U110	" "	P	"	
7	U111	" "	P	"	
8	U112	" "	P	"	
9	U113	" "	P	"	
10	U114	" "	P	"	
11	U115	" "	P	"	
12	U116	" "	P	"	
13	U117	" "	P	"	
14	U118	" "	P	"	
15	U119	" "	P	"	
16	U120	" "	P	"	
17	U121	" "	P	"	
18	U122	" "	P	"	
19	U123	" "	P	"	
20	U124	" "	P	"	
21	U125	" "	P	"	
22	U126	" "	P	"	
23	U127	" "	P	"	
24	U128	" "	P	"	
25	U129	" "	P	"	
26	U130	" "	P	"	
27	U131	" "	P	"	
28	U132	" "	P	"	
29	U133	" "	P	"	
30	U134	" "	P	"	
31	U135	" "	P	"	
32	U136	" "	P	"	
33	U137	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

00000209

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 3 5

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 1 3 8	2.0×10^8	P	T 0 4	
2	U 1 4 0	" "	P	"	
3	U 1 4 1	" "	P	"	
4	U 1 4 2	" "	P	"	
5	U 1 4 3	" "	P	"	
6	U 1 4 4	" "	P	"	
7	U 1 4 5	" "	P	"	
8	U 1 4 6	" "	P	"	
9	U 1 4 7	" "	P	"	
10	U 1 4 8	" "	P	"	
11	U 1 4 9	" "	P	"	
12	U 1 5 0	" "	P	"	
13	U 1 5 1	" "	P	"	
14	U 1 5 2	" "	P	"	
15	U 1 5 3	" "	P	"	
16	U 1 5 4	" "	P	"	
17	U 1 5 5	" "	P	"	
18	U 1 5 6	" "	P	"	
19	U 1 5 7	" "	P	"	
20	U 1 5 8	" "	P	"	
21	U 1 5 9	" "	P	"	
22	U 1 6 0	" "	P	"	
23	U 1 6 1	" "	P	"	
24	U 1 6 2	" "	P	"	
25	U 1 6 3	" "	P	"	
26	U 1 6 4	" "	P	"	
27	U 1 6 5	" "	P	"	
28	U 1 6 6	" "	P	"	
29	U 1 6 7	" "	P	"	
30	U 1 6 8	" "	P	"	
31	U 1 6 9	" "	P	"	
32	U 1 7 0	" "	P	"	
33	U 1 7 1	2.0×10^8	P	T 0 4	

EPA Form 8700-23 (01-90)

00000810

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1036

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U172	2.0×10^8	P	T04	
2	U173	" "	P	"	
3	U174	" "	P	"	
4	U176	" "	P	"	
5	U177	" "	P	"	
6	U178	" "	P	"	
7	U179	" "	P	"	
8	U180	" "	P	"	
9	U181	" "	P	"	
10	U182	" "	P	"	
11	U183	" "	P	"	
12	U184	" "	P	"	
13	U185	" "	P	"	
14	U186	" "	P	"	
15	U187	" "	P	"	
16	U188	" "	P	"	
17	U189	" "	P	"	
18	U190	" "	P	"	
19	U191	" "	P	"	
20	U192	" "	P	"	
21	U193	" "	P	"	
22	U194	" "	P	"	
23	U196	" "	P	"	
24	U197	" "	P	"	
25	U200	" "	P	"	
26	U201	" "	P	"	
27	U202	" "	P	"	
28	U203	" "	P	"	
29	U204	" "	P	"	
30	U205	" "	P	"	
31	U206	" "	P	"	
32	U207	" "	P	"	
33	U208	2.0×10^8	P	T04	

00000211

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1037

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): M T D 9 8 6 0 6 7 8 2 5

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)
1	U 2 0 9	2.0×10^8	P	T 0 4	
2	U 2 1 0	" "	P	"	
3	U 2 1 1	" "	P	"	
4	U 2 1 3	" "	P	"	
5	U 2 1 4	" "	P	"	
6	U 2 1 5	" "	P	"	
7	U 2 1 6	" "	P	"	
8	U 2 1 7	" "	P	"	
9	U 2 1 8	" "	P	"	
10	U 2 1 9	" "	P	"	
11	U 2 2 0	" "	P	"	
12	U 2 2 1	" "	P	"	
13	U 2 2 2	" "	P	"	
14	U 2 2 3	" "	P	"	
15	U 2 2 5	" "	P	"	
16	U 2 2 6	" "	P	"	
17	U 2 2 7	" "	P	"	
18	U 2 2 8	" "	P	"	
19	U 2 3 4	" "	P	"	
20	U 2 3 5	" "	P	"	
21	U 2 3 6	" "	P	"	
22	U 2 3 7	" "	P	"	
23	U 2 3 8	" "	P	"	
24	U 2 3 9	" "	P	"	
25	U 2 4 0	" "	P	"	
26	U 2 4 3	" "	P	"	
27	U 2 4 4	" "	P	"	
28	U 2 4 6	" "	P	"	
29	U 2 4 7	" "	P	"	
30	U 2 4 8	" "	P	"	
31	U 2 4 9	" "	P	"	
32	U 3 2 8	" "	P	"	
33	U 3 5 3	2.0×10^8	P	T 0 4	

00000312

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1098

Please enter type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
M T D 9 8 6 0 6 7 8 2 5	

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 3 5 9	2.0×10^8	P	T 0 4	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1039

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
M T D 9 8 6 0 6 7 8 2 5	

XIV. Description of Hazardous Waste (continued)

USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 6.

Line Number	Additional Process Codes (enter)

XV. Map

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner Signature	Date Signed
Richard E. Cooke	August 19, 1991
Name and Official Title (type or print): Richard E. Cooke, Vice President - Operations	
Operator Signature: Richard E. Cooke	Date Signed: August 19, 1991
Name and Official Title (type or print): Richard E. Cooke, Vice President - Operations	

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (refer to instructions for more information)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1040

00000215 Attachment 1

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0034 Expires 12-31-
GSA No. 0246-EPA-

For EPA Regional Use Only	EPA United States Environmental Protection Agency Washington, DC 20460 # Hazardous Waste Permit Application # Part A *(Read the Instructions before starting)*	For State Use Only
Date Received Month Day Year		

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1041

I. ID Number(s)

A. EPA ID Number	B. Secondary ID Number *(if applicable)*
UTD982590358	

II. Name of Facility

ASH GROVE CEMENT WEST INC

III. Facility Location *(Physical address not P.O. Box or Route Number)*

A. Street			
6 MILES EAST OF LEAMINGTON			
Street *(continued)*			
HIGHWAY 132			
City or Town	State	ZIP Code	
LEAMINGTON	UT	84638-	
County Code *(if known)*	County Name		
	JUAB		

B. Land Type	C. Geographic Location		D. Facility Existence Date
(enter code)	*LATITUDE (degrees, minutes, & seconds)*	*LONGITUDE (degrees, minutes, & seconds)*	Month Day Year
O	39 33 045	112 11 050	07 24 1991

IV. Facility Mailing Address

Street or P.O. Box		
PO BOX 51		
City or Town	State	ZIP Code
NEPHI	UT	84648-

V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

Name *(last)*	*(first)*
CRUTCHFIELD	DUANE
Job Title	**Phone Number** *(area code and number)*
PLANT MANAGER	801-857-2380

VI. Facility Contact Address *(See instructions)*

A. Contact Address Location	Mailing	B. Street or P.O. Box
	X	

City or Town	State	ZIP Code
		-

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number *(enter from page 1)*: UTD982590358

Secondary ID Number *(enter from page 1)*:

VII. Operator Information *(see instructions)*

Name of Operator: ASH GROVE CEMENT WEST INC

Street or P.O. Box: PO BOX 51

City or Town: NEPHI

State: UT

ZIP Code: 84648-

Phone Number *(area code and number)*: 801-857-2380

B. Operator Type: P

C. Change of Operator Indicator: Yes [ ] No [X]

Date Changed: Month Day Year

VIII. Facility Owner *(see instructions)*

A. Name of Facility's Legal Owner: ASH GROVE CEMENT WEST INC

Street or P.O. Box: 6720 SW MACADAM AVE SUITE 300

City or Town: PORTLAND

State: OR

ZIP Code: 97219-231

Phone Number *(area code and number)*: 503-293-2333

B. Owner Type: P

C. Change of Owner Indicator: Yes [ ] No [X]

Date Changed: Month Day Year

IX. SIC Codes *(4-digit, in order of significance)*

Primary	Secondary
3241 (description) Hydraulic (Portland) Cement	(description)
Secondary	**Secondary**
(description)	(description)

X. Other Environmental Permits *(see instructions)*

A. Permit Type (enter code)	B. Permit Number	C. Description
E	BAQE-240-89	State of Utah, Department of Health Division of Environmental Health Bureau of Air Quality Air Permit
E	M102310 12	State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining Mining Permit

00000216

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1042

00000817

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
U T D 9 8 2 5 9 0 3 5 8	

XI. Nature of Business (provide a brief description)

Manufacturing of Portland Cement - involves:

1) Quarrying and crushing of limestone and acquisition of other raw materials

2) Grinding of raw materials

3) Pyroprocessing of raw materials in a rotary cement kiln to form Portland Cement clinker

4) Grinding of clinker with gypsum to form Portland Cement

XII. Process - Codes and Design Capacities

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Twelve lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided in Item XIII.*

B. PROCESS DESIGN CAPACITY - *For each code entered in column A, enter the capacity of the process.*

1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process unit.*
2. UNIT OF MEASURE - *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	DISPOSAL:	
D79	INJECTION WELL	GALLONS; LITERS; GALLONS PER DAY; OR LITERS PER DAY
D80	LANDFILL	ACRE-FEET OR HECTARE-METER
D81	LAND APPLICATION	ACRES OR HECTARES
D82	OCEAN DISPOSAL	GALLONS PER DAY OR LITERS PER DAY
D83	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	STORAGE:	
S01	CONTAINER (barrel, drum, etc.)	GALLONS OR LITERS
S02	TANK	GALLONS OR LITERS
S03	WASTE PILE	CUBIC YARDS OR CUBIC METERS
S04	SURFACE IMPOUNDMENT	GALLONS OR LITERS
	TREATMENT:	
T01	TANK	GALLONS PER DAY OR LITERS PER DAY
T02	SURFACE IMPOUNDMENT	GALLONS PER DAY OR LITERS PER DAY
T03	INCINERATOR	SHORT TONS PER HOUR; METRIC TONS PER HOUR; GALLONS PER HOUR; LITERS PER HOUR; OR BTU'S PER HOUR
T04	OTHER TREATMENT (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundment or incinerators. Describe the processes in the space provided in Item XIII.)	GALLONS PER DAY; LITERS PER DAY; POUNDS PER HOUR; SHORT TONS PER HOUR; KILOGRAMS PER HOUR; METRIC TONS PER DAY; METRIC TONS PER HOUR; OR SHORT TONS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
GALLONS PER HOUR	E
GALLONS PER DAY	U
LITERS	L
LITERS PER HOUR	H
LITERS PER DAY	V
SHORT TONS PER HOUR	D
METRIC TONS PER HOUR	W
SHORT TONS PER DAY	N
METRIC TONS PER DAY	S
POUNDS PER HOUR	J
KILOGRAMS PER HOUR	R
CUBIC YARDS	Y
CUBIC METERS	C
ACRES	B
ACRE-FEET	A
HECTARES	O
HECTARE-METER	F
BTU's PER HOUR	K

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1043

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XII. Process - Codes and Design Capacities (continued)

EXAMPLE FOR COMPLETING ITEM XII (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line Number	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	FOR OFFICIAL USE ONLY
X 1	S 0 2	600	G	0 0 2	
X 2	T 0 3	20	E	0 0 1	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

NOTE: If you need to list more than 12 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for additional treatment processes in Item XIII.

XIII. Additional Treatment Processes (follow instructions from Item XII)

Line Number (enter numbers in sequence with Item XII)	A. PROCESS CODE	B. TREATMENT PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. TREATMENT PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	C. PROCESS TOTAL NUMBER OF UNITS	D. DESCRIPTION OF PROCESS
0 1	T 0 4	25.97	D	0 0 1	Recycling of hazardous waste as a fuel substitute in cement kilns in order to manufacture Portland Cement.
	T 0 4				
	T 0 4				
	T 0 4				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1044

CCCCCR18

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1)												Secondary ID Number (enter from page 1)
U	T	D	9	8	2	5	9	0	3	5	8	

XIV. Description of Hazardous Wastes

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that processes that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item XIV-D(1).*
3. *Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESS (1) PROCESS CODES (enter)	D. PROCESS (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3 D 8 0	
X 2	D 0 0 2	400	P	T 0 3 D 8 0	
X 3	D 0 0 1	100	P	T 0 3 D 8 0	
X 4	D 0 0 2				Included With Above

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1045

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	D001	2.0×10^8	P	T04	
2	D004	" "	P	"	
3	D005	" "	P	"	
4	D006	" "	P	"	
5	D007	" "	P	"	
6	D008	" "	P	"	
7	D009	" "	P	"	
8	D010	" "	P	"	
9	D011	" "	P	"	
10	D012	" "	P	"	
11	D013	" "	P	"	
12	D014	" "	P	"	
13	D015	" "	P	"	
14	D016	" "	P	"	
15	D017	" "	P	"	
16	D018	" "	P	"	
17	D019	" "	P	"	
18	D020	" "	P	"	
19	D021	" "	P	"	
20	D022	" "	P	"	
21	D023	" "	P	"	
22	D024	" "	P	"	
23	D025	" "	P	"	
24	D026	" "	P	"	
25	D027	" "	P	"	
26	D028	" "	P	"	
27	D029	" "	P	"	
28	D030	" "	P	"	
29	D031	" "	P	"	
30	D032	" "	P	"	
31	D033	" "	P	"	
32	D034	" "	P	"	
33	D035	2.0×10^8	P	T04	

00000220

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1046

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D036	2.0×10^8	P	T04	
2	D037	" "	P	"	
3	D038	" "	P	"	
4	D039	" "	P	"	
5	D040	" "	P	"	
6	D041	" "	P	"	
7	D042	" "	P	"	
8	D043	" "	P	"	
9	F001	" "	P	"	
10	F002	" "	P	"	
11	F003	" "	P	"	
12	F004	" "	P	"	
13	F005	" "	P	"	
14	F006	" "	P	"	
15	F007	" "	P	"	
16	F008	" "	P	"	
17	F009	" "	P	"	
18	F010	" "	P	"	
19	F011	" "	P	"	
20	F012	" "	P	"	
21	F019	" "	P	"	
22	F024	" "	P	"	
23	F025	" "	P	"	
24	F028	" "	P	"	
25	F034	" "	P	"	
26	F035	" "	P	"	
27	F037	" "	P	"	
28	F038	" "	P	"	
29	F039	" "	P	"	
30	K001	" "	P	"	
31	K002	" "	P	"	
32	K003	" "	P	"	
33	K004	2.0×10^8	P	T04	

00000321

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1047

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0039. Expires 12-31-93
GSA No. 0246-EPA

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K005	2.0×10^8	P	T04	
2	K006	" "	P	"	
3	K007	" "	P	"	
4	K008	" "	P	"	
5	K009	" "	P	"	
6	K010	" "	P	"	
7	K011	" "	P	"	
8	K013	" "	P	"	
9	K014	" "	P	"	
10	K015	" "	P	"	
11	K016	" "	P	"	
12	K017	" "	P	"	
13	K018	" "	P	"	
14	K019	" "	P	"	
15	K020	" "	P	"	
16	K021	" "	P	"	
17	K022	" "	P	"	
18	K023	" "	P	"	
19	K024	" "	P	"	
20	K025	" "	P	"	
21	K026	" "	P	"	
22	K027	" "	P	"	
23	K028	" "	P	"	
24	K029	" "	P	"	
25	K030	" "	P	"	
26	K031	" "	P	"	
27	K032	" "	P	"	
28	K033	" "	P	"	
29	K034	" "	P	"	
30	K035	" "	P	"	
31	K036	" "	P	"	
32	K037	" "	P	"	
33	K038	2.0×10^8	P	T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1048

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K039	2.0×10^8	P	T04	
2	K040	" "	P	"	
3	K041	" "	P	"	
4	K042	" "	P	"	
5	K043	" "	P	"	
6	K044	" "	P	"	
7	K045	" "	P	"	
8	K046	" "	P	"	
9	K047	" "	P	"	
10	K048	" "	P	"	
11	K049	" "	P	"	
12	K050	" "	P	"	
13	K051	" "	P	"	
14	K052	" "	P	"	
15	K060	" "	P	"	
16	K061	" "	P	"	
17	K062	" "	P	"	
18	K064	" "	P	"	
19	K065	" "	P	"	
20	K066	" "	P	"	
21	K071	" "	P	"	
22	K073	" "	P	"	
23	K083	" "	P	"	
24	K084	" "	P	"	
25	K085	" "	P	"	
26	K086	" "	P	"	
27	K087	" "	P	"	
28	K088	" "	P	"	
29	K090	" "	P	"	
30	K091	" "	P	"	
31	K093	" "	P	"	
32	K094	" "	P	"	
33	K095	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1049

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	K 0 9 6	2.0×10^8	P	T 0 4	
2	K 0 9 7	" "	P	"	
3	K 0 9 8	" "	P	"	
4	K 0 9 9	" "	P	"	
5	K 1 0 0	" "	P	"	
6	K 1 0 1	" "	P	"	
7	K 1 0 2	" "	P	"	
8	K 1 0 3	" "	P	"	
9	K 1 0 4	" "	P	"	
10	K 1 0 5	" "	P	"	
11	K 1 0 6	" "	P	"	
12	K 1 1 1	" "	P	"	
13	K 1 1 2	" "	P	"	
14	K 1 1 3	" "	P	"	
15	K 1 1 4	" "	P	"	
16	K 1 1 5	" "	P	"	
17	K 1 1 6	" "	P	"	
18	K 1 1 7	" "	P	"	
19	K 1 1 8	" "	P	"	
20	K 1 2 3	" "	P	"	
21	K 1 2 4	" "	P	"	
22	K 1 2 5	" "	P	"	
23	K 1 2 6	" "	P	"	
24	K 1 3 1	" "	P	"	
25	K 1 3 2	" "	P	"	
26	K 1 3 6	" "	P	"	
27	P 0 0 1	" "	P	"	
28	P 0 0 2	" "	P	"	
29	P 0 0 3	" "	P	"	
30	P 0 0 4	" "	P	"	
31	P 0 0 5	" "	P	"	
32	P 0 0 6	" "	P	"	
33	P 0 0 7	2.0×10^8	P	T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1050

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (if a code is not entered in D(1))
01	P008	2.0×10^8	P	T04	
02	P009	" "	P	"	
03	P010	" "	P	"	
04	P011	" "	P	"	
05	P012	" "	P	"	
06	P013	" "	P	"	
07	P014	" "	P	"	
08	P015	" "	P	"	
09	P016	" "	P	"	
10	P017	" "	P	"	
11	P018	" "	P	"	
12	P020	" "	P	"	
13	P021	" "	P	"	
14	P022	" "	P	"	
15	P023	" "	P	"	
16	P024	" "	P	"	
17	P026	" "	P	"	
18	P027	" "	P	"	
19	P028	" "	P	"	
20	P029	" "	P	"	
21	P030	" "	P	"	
22	P031	" "	P	"	
23	P033	" "	P	"	
24	P034	" "	P	"	
25	P036	" "	P	"	
26	P037	" "	P	"	
27	P038	" "	P	"	
28	P039	" "	P	"	
29	P040	" "	P	"	
30	P041	" "	P	"	
31	P042	" "	P	"	
32	P043	" "	P	"	
33	P044	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

00000225

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F.002

1051

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P 0 4 5	2.0×10^8	P	T 0 4	
2	P 0 4 6	" "	P	"	
3	P 0 4 7	" "	P	"	
4	P 0 4 8	" "	P	"	
5	P 0 4 9	" "	P	"	
6	P 0 5 0	" "	P	"	
7	P 0 5 1	" "	P	"	
8	P 0 5 4	" "	P	"	
9	P 0 5 7	" "	P	"	
10	P 0 5 8	" "	P	"	
11	P 0 5 9	" "	P	"	
12	P 0 6 0	" "	P	"	
13	P 0 6 2	" "	P	"	
14	P 0 6 3	" "	P	"	
15	P 0 6 4	" "	P	"	
16	P 0 6 5	" "	P	"	
17	P 0 6 6	" "	P	"	
18	P 0 6 7	" "	P	"	
19	P 0 6 8	" "	P	"	
20	P 0 6 9	" "	P	"	
21	P 0 7 0	" "	P	"	
22	P 0 7 1	" "	P	"	
23	P 0 7 2	" "	P	"	
24	P 0 7 3	" "	P	"	
25	P 0 7 4	" "	P	"	
26	P 0 7 5	" "	P	"	
27	P 0 7 6	" "	P	"	
28	P 0 7 7	" "	P	"	
29	P 0 7 8	" "	P	"	
30	P 0 8 1	" "	P	"	
31	P 0 8 2	" "	P	"	
32	P 0 8 4	" "	P	"	
33	P 0 8 5	2.0×10^8	P	T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1052

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P 0 8 7	2.0×10^8	P	T 0 4	
2	P 0 8 8	" "	P	"	
3	P 0 8 9	" "	P	"	
4	P 0 9 2	" "	P	"	
5	P 0 9 3	" "	P	"	
6	P 0 9 4	" "	P	"	
7	P 0 9 5	" "	P	"	
8	P 0 9 6	" "	P	"	
9	P 0 9 7	" "	P	"	
10	P 0 9 8	" "	P	"	
11	P 0 9 9	" "	P	"	
12	P 1 0 1	" "	P	"	
13	P 1 0 2	" "	P	"	
14	P 1 0 3	" "	P	"	
15	P 1 0 4	" "	P	"	
16	P 1 0 5	" "	P	"	
17	P 1 0 6	" "	P	"	
18	P 1 0 7	" "	P	"	
19	P 1 0 8	" "	P	"	
20	P 1 0 9	" "	P	"	
21	P 1 1 0	" "	P	"	
22	P 1 1 1	" "	P	"	
23	P 1 1 2	" "	P	"	
24	P 1 1 3	" "	P	"	
25	P 1 1 4	" "	P	"	
26	P 1 1 5	" "	P	"	
27	P 1 1 6	" "	P	"	
28	P 1 1 8	" "	P	"	
29	P 1 1 9	" "	P	"	
30	P 1 2 0	" "	P	"	
31	P 1 2 1	" "	P	"	
32	P 1 2 2	" "	P	"	
33	P 1 2 3	2.0×10^8	P	T 0 4	

EPA Form 8700-23 (01-90)

00000227

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1053

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U001	2.0×10^8	P	T04	
2	U002	" "	P	"	
3	U003	" "	P	"	
4	U004	" "	P	"	
5	U005	" "	P	"	
6	U006	" "	P	"	
7	U007	" "	P	"	
8	U008	" "	P	"	
9	U009	" "	P	"	
10	U010	" "	P	"	
11	U011	" "	P	"	
12	U012	" "	P	"	
13	U014	" "	P	"	
14	U015	" "	P	"	
15	U016	" "	P	"	
16	U017	" "	P	"	
17	U018	" "	P	"	
18	U019	" "	P	"	
19	U020	" "	P	"	
20	U021	" "	P	"	
21	U022	" "	P	"	
22	U023	" "	P	"	
23	U024	" "	P	"	
24	U025	" "	P	"	
25	U026	" "	P	"	
26	U027	" "	P	"	
27	U028	" "	P	"	
28	U029	" "	P	"	
29	U030	" "	P	"	
30	U031	" "	P	"	
31	U032	" "	P	"	
32	U033	" "	P	"	
33	U034	2.0×10^8	P	T04	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1054

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U035	2.0×10^8	P	T04	
2	U036	" "	P	"	
3	U037	" "	P	"	
4	U038	" "	P	"	
5	U039	" "	P	"	
6	U041	" "	P	"	
7	U042	" "	P	"	
8	U043	" "	P	"	
9	U044	" "	P	"	
10	U045	" "	P	"	
11	U046	" "	P	"	
12	U047	" "	P	"	
13	U048	" "	P	"	
14	U049	" "	P	"	
15	U050	" "	P	"	
16	U051	" "	P	"	
17	U052	" "	P	"	
18	U053	" "	P	"	
19	U055	" "	P	"	
20	U056	" "	P	"	
21	U057	" "	P	"	
22	U058	" "	P	"	
23	U059	" "	P	"	
24	U060	" "	P	"	
25	U061	" "	P	"	
26	U062	" "	P	"	
27	U063	" "	P	"	
28	U064	" "	P	"	
29	U065	" "	P	"	
30	U066	" "	P	"	
31	U067	" "	P	"	
32	U068	" "	P	"	
33	U069	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

00000229

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1055

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only.

EPA I.D. Number (enter from page 1): UTD982590358

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U070	2.0×10^8	P	T04	
2	U071	" "	P	"	
3	U072	" "	P	"	
4	U073	" "	P	"	
5	U074	" "	P	"	
6	U075	" "	P	"	
7	U076	" "	P	"	
8	U077	" "	P	"	
9	U078	" "	P	"	
10	U079	" "	P	"	
11	U080	" "	P	"	
12	U081	" "	P	"	
13	U082	" "	P	"	
14	U083	" "	P	"	
15	U084	" "	P	"	
16	U085	" "	P	"	
17	U086	" "	P	"	
18	U087	" "	P	"	
19	U088	" "	P	"	
20	U089	" "	P	"	
21	U090	" "	P	"	
22	U091	" "	P	"	
23	U092	" "	P	"	
24	U093	" "	P	"	
25	U094	" "	P	"	
26	U095	" "	P	"	
27	U096	" "	P	"	
28	U097	" "	P	"	
29	U098	" "	P	"	
30	U099	" "	P	"	
31	U101	" "	P	"	
32	U102	" "	P	"	
33	U103	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1056

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U105	2.0×10^8	P	T04	
2	U106	" "	P	"	
3	U107	" "	P	"	
4	U108	" "	P	"	
5	U109	" "	P	"	
6	U110	" "	P	"	
7	U111	" "	P	"	
8	U112	" "	P	"	
9	U113	" "	P	"	
10	U114	" "	P	"	
11	U115	" "	P	"	
12	U116	" "	P	"	
13	U117	" "	P	"	
14	U118	" "	P	"	
15	U119	" "	P	"	
16	U120	" "	P	"	
17	U121	" "	P	"	
18	U122	" "	P	"	
19	U123	" "	P	"	
20	U124	" "	P	"	
21	U125	" "	P	"	
22	U126	" "	P	"	
23	U127	" "	P	"	
24	U128	" "	P	"	
25	U129	" "	P	"	
26	U130	" "	P	"	
27	U131	" "	P	"	
28	U132	" "	P	"	
29	U133	" "	P	"	
30	U134	" "	P	"	
31	U135	" "	P	"	
32	U136	" "	P	"	
33	U137	2.0×10^8	P	T04	

EPA Form 8700-23 (01-90)

00000231

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 5 7

Please print or type with ELITE type (12 characters per inch) in the unshaded areas.

EPA I.D. Number (enter from page 1)	Secondary ID Number (enter from page 1)
U T D 9 8 2 5 9 0 3 5 8	

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 1 3 8	2.0×10^8	P	T 0 4	
2	U 1 4 0	" "	P	"	
3	U 1 4 1	" "	P	"	
4	U 1 4 2	" "	P	"	
5	U 1 4 3	" "	P	"	
6	U 1 4 4	" "	P	"	
7	U 1 4 5	" "	P	"	
8	U 1 4 6	" "	P	"	
9	U 1 4 7	" "	P	"	
10	U 1 4 8	" "	P	"	
11	U 1 4 9	" "	P	"	
12	U 1 5 0	" "	P	"	
13	U 1 5 1	" "	P	"	
14	U 1 5 2	" "	P	"	
15	U 1 5 3	" "	P	"	
16	U 1 5 4	" "	P	"	
17	U 1 5 5	" "	P	"	
18	U 1 5 6	" "	P	"	
19	U 1 5 7	" "	P	"	
20	U 1 5 8	" "	P	"	
21	U 1 5 9	" "	P	"	
22	U 1 6 0	" "	P	"	
23	U 1 6 1	" "	P	"	
24	U 1 6 2	" "	P	"	
25	U 1 6 3	" "	P	"	
26	U 1 6 4	" "	P	"	
27	U 1 6 5	" "	P	"	
28	U 1 6 6	" "	P	"	
29	U 1 6 7	" "	P	"	
30	U 1 6 8	" "	P	"	
31	U 1 6 9	" "	P	"	
32	U 1 7 0	" "	P	"	
33	U 1 7 1	2.0×10^8	P	T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1058

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0039; Expires 9-30-93

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 1 7 2	2.0×10^8	P	T 0 4	
2	U 1 7 3	" "	P	"	
3	U 1 7 4	" "	P	"	
4	U 1 7 6	" "	P	"	
5	U 1 7 7	" "	P	"	
6	U 1 7 8	" "	P	"	
7	U 1 7 9	" "	P	"	
8	U 1 8 0	" "	P	"	
9	U 1 8 1	" "	P	"	
10	U 1 8 2	" "	P	"	
11	U 1 8 3	" "	P	"	
12	U 1 8 4	" "	P	"	
13	U 1 8 5	" "	P	"	
14	U 1 8 6	" "	P	"	
15	U 1 8 7	" "	P	"	
16	U 1 8 8	" "	P	"	
17	U 1 8 9	" "	P	"	
18	U 1 9 0	" "	P	"	
19	U 1 9 1	" "	P	"	
20	U 1 9 2	" "	P	"	
21	U 1 9 3	" "	P	"	
22	U 1 9 4	" "	P	"	
23	U 1 9 6	" "	P	"	
24	U 1 9 7	" "	P	"	
25	U 2 0 0	" "	P	"	
26	U 2 0 1	" "	P	"	
27	U 2 0 2	" "	P	"	
28	U 2 0 3	" "	P	"	
29	U 2 0 4	" "	P	"	
30	U 2 0 5	" "	P	"	
31	U 2 0 6	" "	P	"	
32	U 2 0 7	" "	P	"	
33	U 2 0 8	2.0×10^8	P	T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1059

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 2 0 9	2.0×10^8	P	T 0 4	
2	U 2 1 0	" "	P	"	
3	U 2 1 1	" "	P	"	
4	U 2 1 3	" "	P	"	
5	U 2 1 4	" "	P	"	
6	U 2 1 5	" "	P	"	
7	U 2 1 6	" "	P	"	
8	U 2 1 7	" "	P	"	
9	U 2 1 8	" "	P	"	
10	U 2 1 9	" "	P	"	
11	U 2 2 0	" "	P	"	
12	U 2 2 1	" "	P	"	
13	U 2 2 2	" "	P	"	
14	U 2 2 3	" "	P	"	
15	U 2 2 5	" "	P	"	
16	U 2 2 6	" "	P	"	
17	U 2 2 7	" "	P	"	
18	U 2 2 8	" "	P	"	
19	U 2 3 4	" "	P	"	
20	U 2 3 5	" "	P	"	
21	U 2 3 6	" "	P	"	
22	U 2 3 7	" "	P	"	
23	U 2 3 8	" "	P	"	
24	U 2 3 9	" "	P	"	
25	U 2 4 0	" "	P	"	
26	U 2 4 3	" "	P	"	
27	U 2 4 4	" "	P	"	
28	U 2 4 6	" "	P	"	
29	U 2 4 7	" "	P	"	
30	U 2 4 8	" "	P	"	
31	U 2 4 9	" "	P	"	
32	U 3 2 8	" "	P	"	
33	U 3 5 3	2.0×10^8	P	T 0 4	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1060

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1):

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES (1) PROCESS CODES (enter)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 3 5 9	2.0×10^8	P	T 0 4	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

EPA Form 8700-23 (01-90)

00000835

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1061

EPA I.D. Number (enter from page 1): U T D 9 8 2 5 9 0 3 5 8

Secondary ID Number (enter from page 1)

XIV. Description of Hazardous Waste (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 6.

Line Number	Additional Process Codes (enter)

XV. Map

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner Signature: Richard E. Cooke — Date Signed: August 19, 1991

Name and Official Title (type or print): Richard E. Cooke, Vice President - Operations

Operator Signature: Richard E. Cooke — Date Signed: August 19, 1991

Name and Official Title (type or print): Richard E. Cooke, Vice President - Operations

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (refer to instructions for more information)

NOTICE: If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 6 2

A. **Facility Information**

1. Respondent Name and Title:
Hans E. Steuch

Company:
Ash Grove Cement West, Inc.

Phone number:
(503) 293-2333

2. Name and address of company that owns the cement kilns at this facility:
Ash Grove Cement West, Inc., 6720 S.W. Macadam Ave., Suite 300, Portland, OR 97219-2312

Facility name, location, and address:
Ash Grove Cement West, Inc., Leamington Plant, P. O. Box 51, Nephi, UT 84648

EPA ID of burner: UTD982590358

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Will be cement company.

EPA ID of on-site processor: N/A

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 0
Additional kilns expected to burn hazardous wastes by July 1994: 1
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 1

00000237

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1063

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): 0
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

00000238

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1064

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
x Steel Drum, specify sizes: 5-10 gallon
x Poly Drum, specify sizes: 5-10 gallon
___ Fiber Drum, specify sizes: ___
x Bag or other flexible container, specify sizes: 5-10 gallon
___ Rigid Tote
___ Tanker Trucks (transferred to tank)
___ Tanker Trucks (direct feed to kiln)
___ Rail car
___ Carboy
___ Pallet
___ Other, specify: ___

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	0	100,000 gallon	12/93
Liquid Tanks	0		
Other (specify)	0		

00000239

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1065

6b. What processing operations do you perform on-site for liquid wastes?[1]

None

6c. What processing operations do you perform on-site for solid wastes?

None

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

030000210

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1066

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	0	0	0	N/A
Pumpable Sludges	0	0	0	N/A
Nonpumpable Sludges	0	0	0	N/A
Containerized Solids	0	0	0	N/A
Bulk Solids	0	0	0	N/A
Dry Solids	0	0	0	N/A
Total	0	0	0	N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1067

00000241

Kiln Number: 1 of 1

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. **Kiln Number:** 1

Type of Kiln: Short, dry kiln with 4-stage preheater and precalciner

Clinker capacity (tons/hr): 74

Thermal input (Btu/ton clinker): 3.6

Type of cement product(s) produced in this kiln: I, II, V

Total hours operating per year on average: 7,000

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	N/A
Dry solids injected at "hot" end:	N/A
Containerized solids charged to calcining zone:	N/A
Sludge Pump:	N/A
Other: (specify)	N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1068

Kiln Number: 1 of 1

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	0	N/A
Pumpable Sludges	0	0	N/A
Nonpumpable Sludges	0	0	N/A
Containerized Solids	0	0	N/A
Bulk Solids	0	0	N/A
Dry Solids	0	0	N/A
Total	0	0	N/A

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): N/A (%)
Percent of above solids originally generated as solids: N/A (%)

00000213

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1069

Kiln Number: _____ of _____

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids					
Pumpable Sludges					
Nonpumpable Sludges			N/A		
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10070

Kiln Number: 1 of 1

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? March

How long? 3 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

6/92

b) Physical changes (include planned schedule):

None

c) Regulatory modifications (include planned schedule):

State permit - 11/91

Interim status - 8/91

Lifting of Utah moratorium - 5/92

00000815

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 7 1

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10072

00000246

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		N/A	
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 7 1 3

00090847

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ____

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 7 4

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 7 5

00000819

Pumpable Sludges Waste Acceptance Limits As Received

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10 0 7 6

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content		N/A	
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 7 7

00000251

Pumpable Sludges Waste Acceptance Limits As Burned

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 7 8

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

10719

00000253

Nonpumpable Sludges Waste Acceptance Limits As Received

15a. Are your nonpumpable sludge waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15b:

_____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000254

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 0 0

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000255

Nonpumpable Sludges Waste Acceptance Limits As Burned

15b. Are your nonpumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000256

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 8 2

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1083

00030957

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5,000 BTU/LB.		T
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		94,000 ppm	T
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000258

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1084

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		50 ppm	
Fungicides		50 ppm	
Herbicides		50 ppm	
Insecticides		50 ppm	
Rodenticides		50 ppm	
Other: Specify			
Total Specified Metals Content			
Antimony Content		1000 ppm	T
Arsenic Content		1100 ppm	T
Barium Content		100,000 ppm	T
Beryllium Content		40 ppm	T
Cadmium Content		150 ppm	T
Chromium Content		7000 ppm	T
Copper Content			
Lead Content		5600 ppm	T
Mercury Content		100 ppm	T
Nickel Content			
Selenium Content			
Silver Content		500 ppm	T
Thallium Content		500 ppm	T
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1085

00000859

X

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: 16a.

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1086

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1087

00000831

Bulk Solids Waste Acceptance Limits As Received

17a. Are your bulk solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content		N/A	
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 0 8 8

00000838

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1089

00000363

Bulk Solids Waste Acceptance Limits As Burned

17b. Are your bulk solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000264

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1090

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 9 1

00000285

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1092

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000266

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 9 9 3

00000837

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		N/A	
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000868

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 9 4

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content		N/A	
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1095

00000339

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)		Y		
Personal Protection Equipment (e.g., Tyvex suits)		Y		
Paper or Cardboard Materials				
Filter Cartridges				
Wood Materials				
Rubber Objects (e.g., tires, hoses)				
PVC Pipe				
Other Plastic Debris				
Glass Debris				
Ceramic Debris (e.g., semiconductors)				
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)				
Asbestos Materials (e.g., shingles, insulation)				
Non-Soil Geologic Material (e.g., rocks)				
Concrete Debris				
Refractory Brick				
Other Bricks				
Slag				
Intact Batteries				
Battery Cases				
Electronic Components (e.g., printed circuit boards)				
Electrical Wires, Switches, etc.		Y		

00000270

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1096

20. Please explain any debris acceptance conditions noted on the previous page:

To the extent that the debris can be containerized in 5-10 gallon drums or bags and satisfy our limitations, they will be accepted.

20a. Do you accept soils? If so, under what conditions or limitations?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1097

00000271

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

0

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See Attachment 1

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1098

00000872

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	EPA Region VIII (303) 293-1603	SA	9/91
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission	Montana Dept. of Health & Enviro. Sciences (404) 444-3454	SA	12/91
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1099

00000873

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

8/92

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000874

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

X Yes
___ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year): (A)

b) Effect on hazardous waste capacity:

N/A

c) Modifications: N/A

(A) We are ready to burn containers in kiln #1 as soon as our state permit application is approved and expect to burn 5,000 ton solid containerized waste in 1992, increasing gradually to 12,000 tons per year in 1994.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000275

A. Facility Information

1. Respondent Name and Title:
Ed Morton, Director of Engineering and Operations

Company:
Cemtech LP

Phone number:
(908) 805-9595

2. Name and address of company that owns the cement kilns at this facility:
Blue Circle, Inc., Atlanta Plant, 2520 Paul Avenue, Atlanta, GA 30318

Facility name, location, and address:

EPA ID of burner: GAD984286609

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):

EPA ID of on-site processor: Same as above

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 2
Additional kilns expected to burn hazardous wastes by July 1994:
Kilns at this facility not expected to burn hazardous wastes by July 1994:
Total Number of kilns at this facility (should be total of above): 2

00000276

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1102

* Proposed Facility

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

00000277

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 0 3

* Proposed Facility

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
___ Steel Drum, specify sizes: _____
___ Poly Drum, specify sizes: _____
___ Fiber Drum, specify sizes: _____
___ Bag or other flexible container, specify sizes: _____
___ Rigid Tote
x Tanker Trucks (transferred to tank)
x Tanker Trucks (direct feed to kiln)
x Rail car
___ Carboy
___ Pallet
___ Other, specify: _____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers			
Liquid Tanks		240,000	1) 1992
Other (specify)			

1) Depends on Interim Status

00000278

X

NOTICE: If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1104

* Proposed Facility

6b. What processing operations do you perform on-site for liquid wastes?[1]

Proposed operations include (copy Festus)

6c. What processing operations do you perform on-site for solid wastes?

Proposed operations include (copy Festus)

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000273

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1105

* Proposed Operations

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	0	0	?	P/R
Pumpable Sludges	0	0	?	P/R
Nonpumpable Sludges	0	0	?	P/R
Containerized Solids				
Bulk Solids				
Dry Solids				
Total	0	0	?	P/R

Proposed Capacity 124,400 $\frac{\text{Tons}}{\text{Year}}$

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1106

00000030

Kiln Number: 1 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Dry

Clinker capacity (tons/hr): 41.9

Thermal input (Btu/ton clinker): 4,298,500

Type of cement product(s) produced in this kiln: I, IA, II, III

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	X P
Dry solids injected at "hot" end:	X P
Containerized solids charged to calcining zone:	
Sludge Pump:	X P
Other: (specify)	

P - proposed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 0 7

Kiln Number: 2 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. **Kiln Number:** 2

Type of Kiln: Dry

Clinker capacity (tons/hr): 41.9

Thermal input (Btu/ton clinker): 4,298,500

Type of cement product(s) produced in this kiln: I, IA, II, III

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	X P
Dry solids injected at "hot" end:	X P
Containerized solids charged to calcining zone:	
Sludge Pump:	X P
Other: (specify)	

P - Proposed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1108

00000282

A

* Proposed Facility

Kiln Number: 1 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	?	P/R
Pumpable Sludges	0	?	P/R
Nonpumpable Sludges	0	?	P/R
Containerized Solids			
Bulk Solids			
Dry Solids			
Total	0	?	P/R

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): NA (%)
Percent of above solids originally generated as solids: NA (%)

00000883

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1109

A

Kiln Number: 2 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	?	P/R
Pumpable Sludges	0	?	P/R
Nonpumpable Sludges	0	?	P/R
Containerized Solids			
Bulk Solids			
Dry Solids			
Total	0	?	P/R

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): NA (%)
Percent of above solids originally generated as solids: NA (%)

00000284

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

A

Kiln Number: 1 of 2

*Proposed Facility

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids					
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					
Total	16,700	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

A

Kiln Number: 2 of 2

* Proposed Facility

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids					
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					
Total	16,700	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

00000236

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

A

* Proposed Facility

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
1992 Second Quarter

b) Physical changes (include planned schedule):

Construction of receiving and storage facility during fourth quarter 1991 and first quarter 1992.

c) Regulatory modifications (include planned schedule):

Requires obtaining Interim Status during third quarter 1991.

00030887

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

A

* Proposed Facility

Kiln Number: 2 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
1992 Second Quarter

b) Physical changes (include planned schedule):

Construction of receiving and storage facility during fourth quarter 1991 and first quarter 1992.

c) Regulatory modifications (include planned schedule):

Requires obtaining Interim Status during third quarter 1991.

00000238

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5,000 BTU'S/lb	25,000 BTU's/lb	T
Water Content		40%	T
Total Solids Content		100%	T
Total Inorganics Content			
Particle/Object Size		1.000"	T
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify) ASH		40%	T
Other (Specify)			
Total Halogen Content			
Chlorine Content		20%	T
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

* Proposed Limits, require state approval

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

115

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content		500 ppm	T
Arsenic Content		50 ppm	T
Barium Content		5000 ppm	T
Beryllium Content		10 ppm	T
Cadmium Content		500 ppm	T
Chromium Content		2500 ppm	T
Copper Content			
Lead Content		5000 ppm	T
Mercury Content		10 ppm	
Nickel Content			
Selenium Content			
Silver Content		500 ppm	T
Thallium Content		500 ppm	T
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* Proposed Limits require State approval

00000290

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

116

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) N

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	10,000 BTU's/lb	14,000 BTU's/lb	T
Water Content		25%	T
Total Solids Content		70%	
Total Inorganics Content			
Particle/Object Size		.125"	
Cyanide Content			
Sulfur Content			T
Sodium Content			T
Potassium Content			T
Other: Specify ASH		15%	R
Other: Specify			
Total Halogen Content			
Chlorine Content		5%/3%	R/T
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

* Proposed Limits require State approval.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content		100 ppm	R
Arsenic Content		10 ppm	R
Barium Content		1000 ppm	R
Beryllium Content		2 ppm	R
Cadmium Content		100 ppm	R
Chromium Content		500 ppm	R
Copper Content			
Lead Content		1000 ppm	R
Mercury Content		2 ppm	R
Nickel Content			
Selenium Content			
Silver Content		100 ppm	R
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* Proposed Limits, require state approval.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 1 1 1 0

Pumpable Sludges Waste Acceptance Limits As Received

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: 13a * Proposed limits, require state approval

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 1 9

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1120

00000294

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

Pumpable Sludges Waste Acceptance Limits As Burned

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a:
__13b__ * Proposed limits, require state approval

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000895

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000296

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1123

Nonpumpable Sludges Waste Acceptance Limits As Received

15a. Are your nonpumpable sludge waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15b:
13a * Proposed limits, require state approval

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1124

00000298

Nonpumpable Sludges Waste Acceptance Limits As Burned

15b: Are your nonpumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16a: 13b * Proposed limits, require state approval

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1125

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1126

S0000300

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000801

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1128

00000802

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1129

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000303

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1130

00000804

Bulk Solids Waste Acceptance Limits As Received

17a. Are your bulk solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 3 2

00000806

Bulk Solids Waste Acceptance Limits As Burned

17b. Are your bulk solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000307

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1134

00000608

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1175

00000309

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1136

00000310

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00060811

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1138

00000312

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)		Y	1	
Personal Protection Equipment (e.g., Tyvex suits)		Y	1	
Paper or Cardboard Materials		Y	1	
Filter Cartridges		Y	1	
Wood Materials		Y	1	
Rubber Objects (e.g., tires, hoses)		Y	1	
PVC Pipe		Y	1	
Other Plastic Debris		Y	1	
Glass Debris		Y	2	
Ceramic Debris (e.g., semiconductors)		Y	2	
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)		N		
Asbestos Materials (e.g., shingles, insulation)		N		
Non-Soil Geologic Material (e.g., rocks)		N		
Concrete Debris		N		
Refractory Brick		Y	2	
Other Bricks		Y	2	
Slag				
Intact Batteries		N		
Battery Cases		Y	4	
Electronic Components (e.g., printed circuit boards)		N		
Electrical Wires, Switches, etc.		N		

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1139

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

20. Please explain any debris acceptance conditions noted on the previous page:

1) Fuel value into calcining zone
2) Raw material value i.e. high concentrations of calcium, alumina, silica, or iron.
3) Wire insulation as fuel substitute
4) Plastic battery cases as fuel substitute internal lead parts must be removed

CD2F 002

20a. Do you accept soils? If so, under what conditions or limitations?

Yes, soils that have high concentrations of silica or alumina can be used as raw material substitutes.

1140

00006314

C. Permit Conditions

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

* Proposed Facility

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See attached copy of acceptable waste codes.

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000015

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF			
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1142

00000816

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1143

00000817

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

____ Yes
_X_ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1144

00000818

A

ACCEPTABLE WASTE CODES
PRIMARY

WASTE CODE	WASTE CODE
D001 - except compressed gas	K102
D003 - water reaction (if direct burn)	K103
D018	K104
D023	P005
D024	U001
D025	U002
D026	U003
D035	U004
D036	U009
D038	U012
F001	U031
F002	U051
F003	U052
F004	U055
F005	U057
F024	U080
F037	U110
F038	U112
K013	U117
K014	U140
K022	U154
K023	U159
K024	U161
K025	U162
K026	U165
K048	U169
K049	U171
K050	U190
K051	U194
K052	U196
K061 - as raw material	U213
K083	U220
K086	U239
K087	U328
K088	U353
K093	U359
K094	
K101	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1145

00000319

ACCEPTABLE WASTE CODES
SECONDARY

WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE
D004	K018	U041	U122
D005	K019	U042	U123
D006	K020	U043	U124
D007	K027	U044	U125
D008	K028	U045	U127
D009	K029	U046	U128
D010	K030	U047	U133
D011	K035	U053	U141
D019	K036	U056	U147
D021	K060	U065	U152
D022	K061	U069	U172
D027	K084	U070	U173
D028	K085	U071	U174
D029	K095	U072	U176
D030	K096	U074	U177
D031	K105	U076	U178
D032	K107	U077	U180
D033	K108	U078	U188
D034	K109	U079	U201
D039	K110	U081	U202
D040	K111	U082	U203
D043	K112	U083	U207
F032	K113	U084	U208
F034	K114	U088	U209
F035	K115	U092	U210
F039	K116	U098	U211
K001	P022	U099	U221
K002	P069	U102	U222
K003	P112	U105	U223
K004	U008	U106	U226
K005	U019	U107	U227
K006	U023	U108	U228
K007	U024	U109	U234
K008	U025	U111	U238
K009	U027	U113	U243
K010	U028	U115	
K011	U034	U118	
K015	U037	U119	
K016	U039	U121	
K017			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1146

00000820

ACCEPTABLE WASTE CODES
TRACE

WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE
D001 - oxidizer	K062	P021	P068	P116	U064	U148	U218
D002	K064	P023	P070	P118	U066	U149	U219
D003 - water reaction except direct burn	K065	P024	P071	P119	U067	U150	U225
D003 - explosives	K066	P026	P072	P120	U068	U151	U235
D012	K069	P027	P073	P121	U073	U153	U236
D013	K071	P028	P074	P122	U075	U155	U237
D014	K073	P029	P075	P123	U085	U156	U240
D015	K090	P030	P076	U005	U086	U157	U244
D016	K091	P031	P077	U006	U087	U158	U246
D017	K097	P033	P078	U007	U089	U160	U247
D020	K098	P034	P081	U010	U090	U163	U248
D037	K099	P036	P082	U011	U091	U164	U249
D041	K100	P037	P083	U014	U093	U166	
D042	K106	P038	P084	U015	U094	U167	
F006	K117	P039	P085	U016	U095	U168	
F007	K118	P040	P087	U017	U096	U170	
F008	K123	P041	P088	U018	U097	U179	
F009	K124	P042	P089	U020	U101	U181	
F010	K125	P043	P092	U021	U103	U182	
F011	K126	P044	P093	U022	U114	U183	
F012	K136	P045	P094	U026	U116	U184	
F019	P001	P046	P095	U029	U120	U185	
K021	P002	P047	P096	U030	U126	U186	
K031	P003	P048	P097	U032	U129	U187	
K032	P004	P049	P098	U033	U130	U189	
K033	P006	P050	P099	U035	U131	U191	
K034	P007	P051	P101	U036	U132	U192	
K037	P008	P054	P102	U038	U134	U193	
K038	P009	P056	P103	U048	U135	U197	
K039	P010	P057	P104				
K040	P011	P058	P105				
K041	P012	P059	P106	U049	U136	U200	
K042	P013	P060	P107	U050	U137	U204	
K043	P014	P062	P108	U058	U138	U205	
K044	P015	P063	P109	U059	U142	U206	
K045	P016	P064	P110	U060	U143	U214	
K046	P017	P065	P111	U061	U144	U215	
K047	P018	P066	P113	U062	U145	U216	
	P020	P067	P114	U063	U146	U217	
			P115				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1147

A. **Facility Information**

1. Respondent Name and Title:
   Ed Morton, Director of Engineering and Operations

   Company:
   Cemtech LP

   Phone number:
   (908) 805-9595

2. Name and address of company that owns the cement kilns at this facility:
   Blue Circle, Inc., Tulsa Plant, 2609 N. 145th East Avenue,
   Tulsa, OK 74116

   Facility name, location, and address:

   EPA ID of burner: OKD064558703

   Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):

   EPA ID of on-site processor: Same as above

   EPA ID of other on-site hazardous waste transporter: N/A
   marketer: N/A
   storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 2
   Additional kilns expected to burn hazardous wastes by July 1994: 0
   Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
   Total Number of kilns at this facility (should be total of above): 2

00000822

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0148

* Proposed Facility

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

00000023

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1149

*Proposed Facility

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
___ Steel Drum, specify sizes: _____
___ Poly Drum, specify sizes: _____
___ Fiber Drum, specify sizes: _____
___ Bag or other flexible container, specify sizes: _____
___ Rigid Tote
X Tanker Trucks (transferred to tank)
X Tanker Trucks (direct feed to kiln)
X Rail car
___ Carboy
___ Pallet
___ Other, specify: _____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers			
Liquid Tanks		240,000	1) 1992
Other (specify)			

1) Depends on Interim Status

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1150

09000321

* Proposed Facility

6b. What processing operations do you perform on-site for liquid wastes?[1]

Proposed operations include unloading, storage, blending, pumping, burning.

6c. What processing operations do you perform on-site for solid wastes?

Proposed operations include filtering of oversize particles from liquid streams, unloading of settled solids from transport vehicles, grinding, mixing of ground-up material back into liquid stream, pumping, burning.

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

000000825

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1151

* Proposed Facility

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	0	0	?	P/R
Pumpable Sludges	0	0	?	P/R
Nonpumpable Sludges	0	0	?	P/R
Containerized Solids				
Bulk Solids				
Dry Solids				
Total	0	0	?	P/R

Proposed Capacity 191,200 Ton/Year

00000326

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1152

Kiln Number: 1 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Dry

Clinker capacity (tons/hr): 39.6

Thermal input (Btu/ton clinker): 3,789,000

Type of cement product(s) produced in this kiln: I, IA, II, III

Total hours operating per year on average: 7,450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: x P
Dry solids injected at "hot" end: x P
Containerized solids charged to calcining zone: x P
Sludge Pump: ___
Other: (specify) ___

P - Proposed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1153

Kiln Number: 2 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: Dry

Clinker capacity (tons/hr): 39.6

Thermal input (Btu/ton clinker): 3,789,000

Type of cement product(s) produced in this kiln: I, IA, II, III

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	X P
Dry solids injected at "hot" end:	X P
Containerized solids charged to calcining zone:	
Sludge Pump:	X P
Other: (specify)	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1154

00000328

T

* Proposed Facility

Kiln Number: 1 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	?	P/R
Pumpable Sludges	0	?	P/R
Nonpumpable Sludges	0	?	P/R
Containerized Solids			
Bulk Solids			
Dry Solids			
Total	0	Proposed 95,600	P/R

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): NA (%)
Percent of above solids originally generated as solids: NA (%)

00000829

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1155

T

* Proposed Facility

Kiln Number: 2 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	?	P/R
Pumpable Sludges	0	?	P/R
Nonpumpable Sludges	0	?	P/R
Containerized Solids			
Bulk Solids			
Dry Solids			
Total	0	Proposed 95,600	P/R

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): NA (%)
Percent of above solids originally generated as solids: NA (%)

00000830

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1156

T

* Proposed Facility

Kiln Number: 1 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids					
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					
Total	12,830	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1157

Kiln Number: 2 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids					
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					
Total	12,830	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE: If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1158

T

* Proposed Facility

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
1992 Second Quarter

b) Physical changes (include planned schedule):
Construction of receiving and storage facility during fourth quarter 1991 and first quarter 1992.

c) Regulatory modifications (include planned schedule):

Requires obtaining Interim status during third quarter 1991.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1159

T

* Proposed Facility

Kiln Number: 2 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30 - 45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

1992 Second Quarter

b) Physical changes (include planned schedule):

Construction of receiving and storage facility during fourth quarter 1991 and first quarter 1992.

c) Regulatory modifications (include planned schedule):

Requires obtaining Interim Status during third quarter 1991.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1169

00000334

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5,000 BTU's/lb	25,000 BTU's/lb	T
Water Content		40%	T
Total Solids Content		100%	T
Total Inorganics Content			
Particle/Object Size		1.00"	T
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content		20%	
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

* Five times proposed limits as per BIF precompliance certification, require State approval.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content		500 ppm	
Arsenic Content		50 ppm	
Barium Content		5000 ppm	
Beryllium Content		10 ppm	
Cadmium Content		500 ppm	
Chromium Content		2500 ppm	
Copper Content			
Lead Content		5000 ppm	
Mercury Content		10 ppm	
Nickel Content			
Selenium Content			
Silver Content		500 ppm	
Thallium Content		500 ppm	
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* Five times proposed limits, as per BIF precompliance certifications, require State approval.

00000336

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1162

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) N

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	10,000 BTU's/lb	14,000 BTU's/lb	T
Water Content		25%	T
Total Solids Content		70%	T
Total Inorganics Content			
Particle/Object Size		.125	T
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify ASH		15%	R
Other: Specify			
Total Halogen Content			
Chlorine Content		5.0%	R
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

* Proposed limits as per BIF precompliance certifications, require State approval.

00000337

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1163

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content		100 ppm	R
Arsenic Content		10 ppm	R
Barium Content		1000 ppm	R
Beryllium Content		2 ppm	R
Cadmium Content		100 ppm	R
Chromium Content		500 ppm	R
Copper Content			
Lead Content		1000 ppm	R
Mercury Content		2 ppm	R
Nickel Content			
Selenium Content			
Silver Content		100 ppm	R
Thallium Content		100 ppm	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* Proposed limits as per BIF precompliance certification, require State approval.

00000838

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1164

Pumpable Sludges Waste Acceptance Limits As Received

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: 13a

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1165

00000339

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1165

00000340

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1167

Pumpable Sludges Waste Acceptance Limits As Burned

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a: 13b

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1168

00000812

Nonpumpable Sludges Waste Acceptance Limits As Received

15a. Are your nonpumpable sludge waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15b: 13a

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000343

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1169

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000814

Nonpumpable Sludges Waste Acceptance Limits As Burned

15b. Are your nonpumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16a: 13b

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000816

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000047

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000848

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1175

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000849

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1176

00000850

Bulk Solids Waste Acceptance Limits As Received

17a. Are your bulk solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1178

00000852

Bulk Solids Waste Acceptance Limits As Burned

17b. Are your bulk solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000353

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1179

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1180

00030354

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

02000255

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 8 1

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1182

00000356

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 8 9

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1184

00000858

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance

Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)		Y	1	
Personal Protection Equipment (e.g., Tyvex suits)		Y	1	
Paper or Cardboard Materials		Y	1	
Filter Cartridges		Y	1	
Wood Materials		Y	1	
Rubber Objects (e.g., tires, hoses)		Y	1	
PVC Pipe		Y	1	
Other Plastic Debris		Y	1	
Glass Debris		Y	2	
Ceramic Debris (e.g., semiconductors)		Y	2	
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)		N		
Asbestos Materials (e.g., shingles, insulation)		N		
Non-Soil Geologic Material (e.g., rocks)		N		
Concrete Debris		N		
Refractory Brick		Y	2	
Other Bricks		Y	2	
Slag		N		
Intact Batteries		N		
Battery Cases		Y	4	
Electronic Components (e.g., printed circuit boards)		N		
Electrical Wires, Switches, etc.		N		

00000359

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1185

20. Please explain any debris acceptance conditions noted on the previous page:

1) Fuel Value into calcining zone
2) Raw material value, i.e. high concentrations of calcium, silica, alumina or iron.
3) Wire insulation as fuel substitute
4) Plastic battery cases as fuel substitutes internal lead parts must be removed.

20a. Do you accept soils? If so, under what conditions or limitations?

Yes, solids that have high concentrations of silica or alumina can be used as raw material substitutes.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1186

00000860

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

* Proposed Facility

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See attached copy of acceptable waste codes.

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 8 7

00000361

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF			
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1188

00000362

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1189

C0000363

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

____ Yes
_x_ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1190

00000864

ACCEPTABLE WASTE CODES
PRIMARY

WASTE CODE	WASTE CODE
D001 - except compressed gas	K102
D003 - water reaction (if direct burn)	K103
D018	K104
D023	P005
D024	U001
D025	U002
D026	U003
D035	U004
D036	U009
D038	U012
F001	U031
F002	U051
F003	U052
F004	U055
F005	U057
F024	U080
F037	U110
F038	U112
K013	U117
K014	U140
K022	U154
K023	U159
K024	U161
K025	U162
K026	U165
K048	U169
K049	U171
K050	U190
K051	U194
K052	U196
K061 - as raw material	U213
K083	U220
K086	U239
K087	U328
K088	U353
K093	U359
K094	
K101	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1191

00000865

ACCEPTABLE WASTE CODES
SECONDARY

WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE
D004	K018	U041	U122
D005	K019	U042	U123
D006	K020	U043	U124
D007	K027	U044	U125
D008	K028	U045	U127
D009	K029	U046	U128
D010	K030	U047	U133
D011	K035	U053	U141
D019	K036	U056	U147
D021	K060	U065	U152
D022	K061	U069	U172
D027	K084	U070	U173
D028	K085	U071	U174
D029	K095	U072	U176
D030	K096	U074	U177
D031	K105	U076	U178
D032	K107	U077	U180
D033	K108	U078	U188
D034	K109	U079	U201
D039	K110	U081	U202
D040	K111	U082	U203
D043	K112	U083	U207
F032	K113	U084	U208
F034	K114	U088	U209
F035	K115	U092	U210
F039	K116	U098	U211
K001	P022	U099	U221
K002	P069	U102	U222
K003	P112	U105	U223
K004	U008	U106	U226
K005	U019	U107	U227
K006	U023	U108	U228
K007	U024	U109	U234
K008	U025	U111	U238
K009	U027	U113	U243
K010	U028	U115	
K011	U034	U118	
K015	U037	U119	
K016	U039	U121	
K017			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1192

00000866

ACCEPTABLE WASTE CODES
TRACE

WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE
D001 - oxidizer	K062	P021	P068	P116	U064	U148	U218
D002	K064	P023	P070	P118	U066	U149	U219
D003 - water reaction	K065	P024	P071	P119	U067	U150	U225
except direct burn	K066	P026	P072	P120	U068	U151	U235
D003 - explosives	K069	P027	P073	P121	U073	U153	U236
D012	K071	P028	P074	P122	U075	U155	U237
D013	K073	P029	P075	P123	U085	U156	U240
D014	K090	P030	P076	U005	U086	U157	U244
D015	K091	P031	P077	U006	U087	U158	U246
D016	K097	P033	P078	U007	U089	U160	U247
D017	K098	P034	P081	U010	U090	U163	U248
D020	K099	P036	P082	U011	U091	U164	U249
D037	K100	P037	P083	U014	U093	U166	
D041	K106	P038	P084	U015	U094	U167	
D042	K117	P039	P085	U016	U095	U168	
F006	K118	P040	P087	U017	U096	U170	
F007	K123	P041	P088	U018	U097	U179	
F008	K124	P042	P089	U020	U101	U181	
F009	K125	P043	P092	U021	U103	U182	
F010	K126	P044	P093	U022	U114	U183	
F011	K136	P045	P094	U026	U116	U184	
F012	P001	P046	P095	U029	U120	U185	
F019	P002	P047	P096	U030	U126	U186	
K021	P003	P048	P097	U032	U129	U187	
K031	P004	P049	P098	U033	U130	U189	
K032	P006	P050	P099	U035	U131	U191	
K033	P007	P051	P101	U036	U132	U192	
K034	P008	P054	P102	U038	U134	U193	
K037	P009	P056	P103	U048	U135	U197	
K038	P010	P057	P104				
K039	P011	P058	P105				
K040	P012	P059	P106	U049	U136	U200	
K041	P013	P060	P107	U050	U137	U204	
K042	P014	P062	P108	U058	U138	U205	
K043	P015	P063	P109	U059	U142	U206	
K044	P016	P064	P110	U060	U143	U214	
K045	P017	P065	P111	U061	U144	U215	
K046	P018	P066	P113	U062	U145	U216	
K047	P020	P067	P114	U063	U146	U217	
			P115				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1193

9300367

CEMENT GROUP
P. O. BOX 32
NAZARETH, PA 18064

Please deliver the following pages to:

NAME: Gary Light

LOCATION: 703-934-9740

FROM: Mike Cowhray

TOTAL NUMBER OF PAGES 16 INCLUDING THIS COVER LETTER

OPERATOR/DATE/TIME Doris / 9-17 / 4:44PM

TRANSMITTING FROM A 3M-2127 (GROUP 3) TELECOPIER (215-837-9614)

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL AS SOON AS POSSIBLE (215-837-6725) OR (215-837-9614) VOICE CONTACT FOR THE TELECOPIER

ADDITIONAL COMMENTS: Here is what I have been able to assemble to date.

Berseme
Speed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1194

00000868

Kiln Number: 1 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 18

Thermal input (Btu/ton clinker): 6.3 MM BTU/t

Type of cement product(s) produced in this kiln: Portland

Total hours operating per year on average: 5760

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: ✓
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: ___
- Sludge Pump: ___
- Other: (specify) ___

00000369

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1195

Kiln Number: 1 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	12,000	~ 19,000	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total	12,000	19,000	

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): _____ (%)
Percent of above solids originally generated as solids: _____ (%)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1196

02080870

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5,000 BTU/lb	7,000 BTU/lb	P
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content		6% by wt.	T
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000871

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1197

Kiln Number: 2 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: Dry Process, Preheater

Clinker capacity (tons/hr): 92

Thermal input (Btu/ton clinker): 3.2 MM BTU/ton

Type of cement product(s) produced in this kiln: Portland cement

Total hours operating per year on average: 5760

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: ✓
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: ___
- Sludge Pump: ___
- Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1198

00000872

Kiln Number: 2 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	500	35,000	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total	500	35,000	

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): _____ (%)
Percent of above solids originally generated as solids: _____ (%)

00000873

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1199

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5,000 BTU/lb	7,000 BTU/lb	P
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content		6%	
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000874

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1200

Kiln Number: 3 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 3

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 32

Thermal input (Btu/ton clinker): 163 MM BTU/hr

Type of cement product(s) produced in this kiln: Portland TI and T.

Total hours operating per year on average: 7200

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: ✓
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: ___
Sludge Pump: ___
Other: (specify) ___

00000375

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1201

Kiln Number: 3 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids		26,000	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total		26,000	

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): ____ (%)
Percent of above solids originally generated as solids: ____ (%)

00000876

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1202

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000377

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1203

Kiln Number: 4 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 4

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 32

Thermal input (Btu/ton clinker): 6.3 MM

Type of cement product(s) produced in this kiln: Portland T1, T4

Total hours operating per year on average: 7200

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: ✓
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: ___
Sludge Pump: ___
Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1284

00000378

Kiln Number: 4 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids		26,000	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total		26,000	

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): ____ (%)
Percent of above solids originally generated as solids: ____ (%)

00080379

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1205

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1206

00000360

Kiln Number: 5 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 5

Type of Kiln: Dry, Preheater

Clinker capacity (tons/hr): 83.3

Thermal input (Btu/ton clinker): 3.6 MM

Type of cement product(s) produced in this kiln: Portland TI and TII

Total hours operating per year on average: 7200

*Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: ___
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: ___
Sludge Pump: ___
Other: (specify) ___

* Kiln not currently burning hazardous waste fuels. Pl. are to burn containerized solids in the future

00000331

6

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1207

Kiln Number: 5 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.) N/A

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids			
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): ____ (%)
Percent of above solids originally generated as solids: ____ (%)

00000382

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1208

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5,000 BTU/lb	6,000 BTU/lb	T
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00060883

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1209

A. **Facility Information**

1. Respondent Name and Title:
Virginia C. Davis, Environmental Director

Company:
Giant Cement Company

Phone number:
803/496-5033

2. Name and address of company that owns the cement kilns at this facility:
GIANT GROUP, LTD. - Post Office Box 218
Harleyville, SC 29448

Facility name, location, and address:
Giant Cement Company, Highway SC 453 N @ I-26, Harleyville, SC
Mailing address: P. O. Box 218, Harleyville, SC 29448

EPA ID of burner: SCD 003 351 699

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Giant Resource Recovery Company, Inc.

EPA ID of on-site processor: N/A

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 4
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 4

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000334

1210

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids

Percent received from off-site processors (excluding generators): 73%

Processor 1 Southeastern, P.O. Box 1060, Sumter, SC 29150 (803/773-1400)

Processor 2 M & M Chemical Co., 1229 Valley Drive, Attalla, AL 35954 (205/538-

Processor 3 Heritage Env. Servs., 4132 Poupano Road, Charlotte, NC 28216 704/39

Processor 4 Oldover Corp., P. O. Box 68, Arvonia, VA 23004 (804/798-7981)

Pumpable Sludges

Percent received from off-site processors (excluding generators): _____

Processor 1 _____

Processor 2 _____

Processor 3 _____

Processor 4 _____

Nonpumpable Sludges

Percent received from off-site processors (excluding generators): _____

Processor 1 _____

Processor 2 _____

Processor 3 _____

Processor 4 _____

Containerized Solids

Percent received from off-site processors (excluding generators): _____

Processor 1 _____

Processor 2 _____

Processor 3 _____

Processor 4 _____

Bulk Solids

Percent received from off-site processors (excluding generators): _____

Processor 1 _____

Processor 2 _____

Processor 3 _____

Processor 4 _____

Dry Solids

Percent received from off-site processors (excluding generators): _____

Processor 1 Safety-Kleen Corp., 581 Milliken Dr.SE, Hebron, OH 43025 (614/929-3

Processor 2 Tosco Refining Co., Avon Refinery, Martinez, CA 94553 (415/228-12

Processor 3 _____

Processor 4 _____

00000385

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

- X Roll-Off Bin
- X Steel Drum, specify sizes: _____
- ___ Poly Drum, specify sizes: _____
- ___ Fiber Drum, specify sizes: _____
- ___ Bag or other flexible container, specify sizes: _____
- ___ Rigid Tote
- X Tanker Trucks (transferred to tank)
- X Tanker Trucks (direct feed to kiln)
- X Rail car
- ___ Carboy
- ___ Pallet
- ___ Other, specify: _____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers			
Liquid Tanks	140,000 gallons	350,000 gallons	1993
Other (specify)	550 cu. yards	550 cu. yds.	1993

00080861

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1212

6b. What processing operations do you perform on-site for liquid wastes?[1]

Blending

6c. What processing operations do you perform on-site for solid wastes?

None

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000387

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 1 3

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	3,804			
Pumpable Sludges				
Nonpumpable Sludges				
Containerized Solids				
Bulk Solids				
Dry Solids	1,726			
Total				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

12114

00000038

Kiln Number: 1 of 4

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1 (Designated #2 on GCC records)

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 32 TPH

Thermal input (Btu/ton clinker): 5.6 MMBTU/ton

Type of cement product(s) produced in this kiln: Types I and II Clinker

Total hours operating per year on average: 7400

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: X
Containerized solids charged to calcining zone: ____
Sludge Pump: ____
Other: (specify) ____

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 1 5

Kiln Number: 1 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

#2 Kiln (GCC records)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	9216	26,000	T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids	722	7,400	T
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 20 (%)
Percent of above solids originally generated as solids: Unknown (%)

00060390

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1216

Kiln Number: 1 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? December, January or February (varies year to year).

How long? 4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 1 1 1

Kiln Number: 1 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

#2 Kiln - GCC records

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	7200	24	310	12500	70
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids	2000	24	310	7000	10

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE - If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1218

26000892

Kiln Number: 2 of 4

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2 (Designated #3 on GCC records)

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 32 TPH

Thermal input (Btu/ton clinker): 5.6 MMBTU/ton

Type of cement product(s) produced in this kiln: Types I and II Clinker

Total hours operating per year on average: 7400

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	X
Dry solids injected at "hot" end:	X
Containerized solids charged to calcining zone:	
Sludge Pump:	
Other: (specify)	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1219

00000393

Kiln Number: 2 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year; taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

#3 Kiln - GCC records

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	7938		T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids	575		T
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 20 (%)
Percent of solids originally generated as solids: Unknown (%)

00000894

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1220

Kiln Number: 2 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

#3 Kiln - GCC records

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	7200	24	310	12500	70
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids	2000	24	310	7000	10

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1221

Kiln Number: 2 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? December, January or February (varies year to year)

How long? 4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000396

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1222

Kiln Number: 3 of 4

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 3 (Designated #4 on GCC records)

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 32 TPH

Thermal input (Btu/ton clinker): 5.6 MMBTU/ton

Type of cement product(s) produced in this kiln: Types I and II Clinker

Total hours operating per year on average: 7400

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: X
- Containerized solids charged to calcining zone: ____
- Sludge Pump: ____
- Other: (specify) ____

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1223

Kiln Number: 3 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

#4 Kiln - GCC records

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	7410		T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids	327		T
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 20 (%)
Percent of solids originally generated as solids: Unknown (%)

00000398

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1224

Kiln Number: 3 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

#4 Kiln - GCC records

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	7200	24	310	12500	70
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids	2000	24	310	7000	10

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

00000899

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1225

Kiln Number: 3 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? December, January or February (varies year to year)

How long? 4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000400

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1226

Kiln Number: 4 of 4

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 4 (Designated #5 on GCC records)

Type of Kiln: Wet Process

Clinker capacity (tons/hr): 36 TPH

Thermal input (Btu/ton clinker): 5.6 MMBTU/ton

Type of cement product(s) produced in this kiln: Types I and II clinker

Total hours operating per year on average: 7400

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: X
Containerized solids charged to calcining zone: ____
Sludge Pump: ____
Other: (specify) ____

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1227

Kiln Number: 4 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

#5 Kiln - GCC records

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	8468		T
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids	309		T
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 20 (%)
Percent of solids originally generated as solids: Unknown (%)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1228

20000092

Kiln Number: 4 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

#5 Kiln - GCC records

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	9000	24	310	12500	70
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids	2500	24	310	7000	10

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1229

Kiln Number: 4 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? December, January or February (varies year to year)

How long? 4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000404

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1230

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	8000 Btu/lb		Q
Water Content		25%	T
Total Solids Content		Not established	
Total Inorganics Content		Not established	
Particle/Object Size		1/8 inch	T
Cyanide Content		0	T
Sulfur Content		Not established	
Sodium Content		Not established	
Potassium Content		Not established	
Other (Specify)			
Other (Specify)			
Total Halogen Content		8%	T
Chlorine Content		8%	T
Fluorine Content		Not established	
Bromine Content		Not established	
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 3 1

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		0	T
Fungicides		0	T
Herbicides		0	T
Insecticides		0	T
Rodenticides		0	T
Other: Specify			
Total Specified Metals Content			
Antimony Content		Not established	
Arsenic Content		Not established	
Barium Content		Not established	
Beryllium Content		Not establsihed	
Cadmium Content		Not established	
Chromium Content		Not established	
Copper Content		Not established	
Lead Content		Not established	
Mercury Content		Not established	
Nickel Content		Not established	
Selenium Content		Not established	
Silver Content		Not established	
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1232

00000406

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) NO

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	8000 Btu/lb.		P
Water Content		25%	T
Total Solids Content		Not established	
Total Inorganics Content		Not established	
Particle/Object Size		1/8 inch	T
Cyanide Content		0	T
Sulfur Content		3.5%	P
Sodium Content		Not established	
Potassium Content		Not established	
Other: Specify			
Other: Specify			
Total Halogen Content		4%	P
Chlorine Content		4%	P
Fluorine Content		Not established	
Bromine Content		Not established	
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1233

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		0	T
Fungicides		0	T
Herbicides		0	T
Insecticides		0	T
Rodenticides		0	T
Other: Specify			
Total Specified Metals Content		PPM	
Antimony Content		10,000	R
Arsenic Content		748	R
Barium Content		2,000	P
Beryllium Content		10	P
Cadmium Content		2,000	P
Chromium Content		2,000	P
Copper Content		N/A	
Lead Content		2,000	P
Mercury Content		300	R
Nickel Content		5,000	P
Selenium Content		2,000	P
Silver Content		2,000	P
Thallium Content		5,024	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1234

00000408

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5000 Btu/lb		R
Water Content		25%	T
Total Solids Content			
Total Inorganics Content			
Particle/Object Size		1/4 inch	T
Cyanide Content		0	T
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content		8%	T
Chlorine Content		8%	T
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1225

00000409

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		0	T
Fungicides		0	T
Herbicides		0	T
Insecticides		0	T
Rodenticides		0	T
Other: Specify			
Total Specified Metals Content			
Antimony Content		Not established	
Arsenic Content		Not established	
Barium Content		Not established	
Beryllium Content		Not established	
Cadmium Content		Not established	
Chromium Content		Not established	
Copper Content		Not established	
Lead Content		Not established	
Mercury Content		Not established	
Nickel Content		Not established	
Selenium Content		Not established	
Silver Content		Not established	
Thallium Content		Not established	
Vanadium Content		Not established	
Zinc Content		Not established	
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1236

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	8000 Btu/lb		P
Water Content		25%	T
Total Solids Content			
Total Inorganics Content			
Particle/Object Size		1/4 inch	T
Cyanide Content		0	T
Sulfur Content		3.5%	P
Sodium Content		Not established	
Potassium Content		Not established	
Other: Specify			
Other: Specify			
Total Halogen Content		4%	T
Chlorine Content		4%	T
Fluorine Content		Not established	
Bromine Content		Not established	
Other: Specify			
Other: Specify			

00000411

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1237

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		0	T
Fungicides		0	T
Herbicides		0	T
Insecticides		0	T
Rodenticides		0	T
Other: Specify			
Total Specified Metals Content		PPM	
Antimony Content		10,000	R
Arsenic Content		748	R
Barium Content		2,000	P
Beryllium Content		10	P
Cadmium Content		2,000	P
Chromium Content		2,000	P
Copper Content			
Lead Content		2,000	P
Mercury Content		300	R
Nickel Content		5,000	P
Selenium Content		2,000	P
Silver Content		2,000	P
Thallium Content		5,024	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1238

00000412

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)		X		
Personal Protection Equipment (e.g., Tyvex suits)				
Paper or Cardboard Materials		X		
Filter Cartridges	X			
Wood Materials		X		
Rubber Objects (e.g., tires, hoses)		X		
PVC Pipe				
Other Plastic Debris		X		
Glass Debris				
Ceramic Debris (e.g., semiconductors)				
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)				
Asbestos Materials (e.g., shingles, insulation)				
Non-Soil Geologic Material (e.g., rocks)				
Concrete Debris				
Refractory Brick				
Other Bricks				
Slag				
Intact Batteries				
Battery Cases				
Electronic Components (e.g., printed circuit boards)				
Electrical Wires, Switches, etc.				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1239

00000413

20. Please explain any debris acceptance conditions noted on the previous page:

Same requirements as dry solids

20a. Do you accept soils? If so, under what conditions or limitations?

Yes - Non regulated soil only at this time. Soil is pretreated in Interim Status incinerators on-site and then used as raw material in cement kilns.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1240

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

See attached sheet.

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91):

None

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 4 1

338 codes

Following is a list of hazardous waste codes which Giant Cement Company is permitted to accept.

6666	D040	F001	K001	K050	P001	U001	U068	U110	U150	U200	U240
7777	D041	F002	K002	K051	P006	U002	U069	U111	U151	U201	U242
D001	D042	F003	K003	K052	P022	U003	U071	U112	U152	U202	U243
D002	D043	F004	K004	K060	P028	U004	U072	U113	U153	U203	U244
D003		F005	K005	K061	P029	U005	U073	U114	U154	U204	U247
D004		F006	K006	K062	P030	U006	U074	U115	U155	U205	U328
D005		F007	K007	K079	P050	U007	U075	U116	U156	U207	U359
D006		F008	K008	K081	P053	U008	U076	U117	U157	U208	
D007		F009	K009	K083	P055	U009	U077	U118	U158	U209	
D008		F010	K010	K084	P064	U010	U078	U119	U159	U210	
D009		F011	K011	K085	P074	U011	U079	U120	U161	U211	
D010		F012	K013	K086	P098	U012	U080	U121	U162	U212	
D011		F015	K014	K087	P105	U014	U081	U122	U163	U213	
D012		F017	K015	K088	P106	U015	U082	U123	U164	U214	
D013		F018	K016	K093	P120	U016	U083	U124	U165	U215	
D014		F019	K017	K094		U017	U084	U125	U166	U216	
D015		F024	K018	K095		U018	U085	U126	U167	U217	
D016		F030	K019	K096		U019	U086	U127	U168	U218	
D017		F032	K020	K100		U020	U087	U128	U169	U219	
D018		F033	K021	K101		U021	U088	U129	U170	U220	
D019		F034	K022	K102		U022	U089	U130	U171	U221	
D020		F035	K023	K103		U023	U090	U131	U172	U222	
D021		F037	K024	K104		U024	U091	U132	U174	U223	
D022		F038	K025	K105		U025	U092	U133	U179	U225	
D023		F039	K026			U026	U093	U134	U180	U226	
D024			K027			U027	U094	U136	U181	U227	
D025			K028			U031	U095	U137	U182	U228	
D026			K029			U039	U096	U138	U183	U230	
D027			K030			U043	U097	U140	U184	U231	
D028			K035			U044	U098	U141	U185	U232	
D029			K042			U045	U099	U142	U186	U235	
D030			K044			U050	U101	U143	U187	U236	
D031			K046			U051	U102	U144	U188	U237	
D032			K048			U052	U103	U145	U190	U238	
D033			K049			U053	U105	U146	U191	U239	
D034						U055	U106	U147	U192		
D035						U056	U107	U148	U193		
D036						U057	U108	U149	U194		
D037							U109		U196		
D038											
D039											

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1242

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	USEPA - Region IV 404/347-3016	OT*	Unknown
RCRA Storage	SCDHEC 803/734-5200	IS,SA,ND	Spring 1992
RCRA Treatment	404/347-3016 USEPA - Region IV	IS	Unknown
Clean Air Act			
Other (specify)			
State Hazardous Waste	SCDHEC - BS&HWM 803/734-5200	IS SA ND	Spring 1992
Air Emission	SCDHEC - BAQC 803/734-4527	FP	
Land Use/Siting	SCDHEC - BS&HWM 803/734-5200	ND	
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

* Submitted Pre-compliance Certification

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000417

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

August, 1992

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1244

00000418

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

___ Yes
X No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1245

00000419

A. Facility Information

1. Respondent Name and Title:
Ed Morton, Director of Engineering and Operations

Company:
Cemtech LP

Phone number:
(908) 805-9595

2. Name and address of company that owns the cement kilns at this facility:
Heartland Cement Co., Cement Street, P.O. Box 428, Independence KS, 67301

Facility name, location, and address:

EPA ID of burner: KSD-980-739-999

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):

EPA ID of on-site processor: Same as above

EPA ID of other on-site hazardous waste transporter: N/A
marketer: N/A
storer: N/A

3. Number of kilns currently burning hazardous wastes at this facility: 4
Additional kilns expected to burn hazardous wastes by July 1994:
Kilns at this facility not expected to burn hazardous wastes by July 1994:
Total Number of kilns at this facility (should be total of above): 4

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1246

00000420

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): 0
Processor 1
Processor 2
Processor 3
Processor 4

Pumpable Sludges
Percent received from off-site processors (excluding generators): 0
Processor 1
Processor 2
Processor 3
Processor 4

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): 0
Processor 1
Processor 2
Processor 3
Processor 4

Containerized Solids
Percent received from off-site processors (excluding generators): 0
Processor 1
Processor 2
Processor 3
Processor 4

Bulk Solids
Percent received from off-site processors (excluding generators): 0
Processor 1
Processor 2
Processor 3
Processor 4

Dry Solids
Percent received from off-site processors (excluding generators): 100.
Processor 1 Safety Kleen
Processor 2 IFR Scott City Mo.
Processor 3 USPCI
Processor 4

00000421

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 4 4 1

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

- __x Roll-Off Bin
- __ Steel Drum, specify sizes: _____
- __ Poly Drum, specify sizes: _____
- __ Fiber Drum, specify sizes: _____
- __x Bag or other flexible container, specify sizes: _____
- __x Rigid Tote
- __ Tanker Trucks (transferred to tank)
- __ Tanker Trucks (direct feed to kiln)
- __ Rail car
- __ Carboy
- __ Pallet
- __ Other, specify: _____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	120 cubic yards		
Liquid Tanks			
Other (specify)	Solid Storage Tanks	2,000 cubic yards	1992

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1248

00000422

6b. What processing operations do you perform on-site for liquid wastes?[1]

6c. What processing operations do you perform on-site for solid wastes?

Unloading, screening, blending, burning

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

03000423

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1249

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	0	0	0	
Pumpable Sludges	0	0	0	
Nonpumpable Sludges	0	0	0	
Containerized Solids	0	0	0	
Bulk Solids	0	0	0	
Dry Solids	2,400	2,400	30,000	T/Q
Total	2,400	2,400	30,000	T/Q

00000424 X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1250

Kiln Number: 1 of 4

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Dry

Clinker capacity (tons/hr): 11.25

Thermal input (Btu/ton clinker): 5,867,000

Type of cement product(s) produced in this kiln: I, II, III, CTS

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	x-P
Dry solids injected at "hot" end:	x
Containerized solids charged to calcining zone:	
Sludge Pump:	x-P
Other: (specify)	

P - Proposed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1251

00000425

Kiln Number: 2 of 4

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: Dry

Clinker capacity (tons/hr): 11.25

Thermal input (Btu/ton clinker): 5,867,000

Type of cement product(s) produced in this kiln: I, II, III, CTS

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	x-P
Dry solids injected at "hot" end:	x
Containerized solids charged to calcining zone:	
Sludge Pump:	x-P
Other: (specify)	

P - Proposed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1252

00000426 X

Kiln Number: 3 of 4

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. **Kiln Number:** 3

Type of Kiln: Dry

Clinker capacity (tons/hr): 11.25

Thermal input (Btu/ton clinker): 5,867,000

Type of cement product(s) produced in this kiln: I, II, III, CTS

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	x-P
Dry solids injected at "hot" end:	x
Containerized solids charged to calcining zone:	
Sludge Pump:	x-P
Other: (specify)	

P - Proposed

00000427

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1253

Kiln Number: 4 of 4

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 4

Type of Kiln: Dry

Clinker capacity (tons/hr): 11.25

Thermal input (Btu/ton clinker): 5,867,000

Type of cement product(s) produced in this kiln: I, II, III, CTS

Total hours operating per year on average: 7450

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	x-P
Dry solids injected at "hot" end:	x
Containerized solids charged to calcining zone:	
Sludge Pump:	x-P
Other: (specify)	

P - Proposed

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1254

00000428

Kiln Number: 1 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0		
Pumpable Sludges	0		
Nonpumpable Sludges	0		
Containerized Solids	0		
Bulk Solids	0		
Dry Solids	600	7,500	T/Q
Total	600	7,500	T/Q

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 100 (%)
Percent of above solids originally generated as solids: 100 (%)

00000429

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1255

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1256

Kiln Number: 2 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	0	
Pumpable Sludges	0	0	
Nonpumpable Sludges	0	0	
Containerized Solids	0	0	
Bulk Solids	0	0	
Dry Solids	600	600	T/Q
Total	600	600	T/Q

Maximum should be 750 due to limits in permit

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 100 (%)
Percent of above solids originally generated as solids: 100 (%)

00000230

Kiln Number: 3 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	0	
Pumpable Sludges	0	0	
Nonpumpable Sludges	0	0	
Containerized Solids	0	0	
Bulk Solids	0	0	
Dry Solids	600	7,500	T/Q
Total	600	7,500	T/Q

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 100 (%)
Percent of above solids originally generated as solids: 100 (%)

00000431

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1257

Kiln Number: 4 of 4

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	0	0	
Pumpable Sludges	0	0	
Nonpumpable Sludges	0	0	
Containerized Solids	0	0	
Bulk Solids	0	0	
Dry Solids	600	7,500	T/Q
Total	600	7,500	T/Q

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 100 (%)
Percent of above solids originally generated as solids: 100 (%)

00000438

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1258

Kiln Number: 1 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A	N/A	N/A	N/A	N/A
Pumpable Sludges	"	"	"	"	"
Nonpumpable Sludges	"	"	"	"	"
Containerized Solids	"	"	"	"	"
Bulk Solids	"	"	"	"	"
Dry Solids	2000	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1259

Kiln Number: 2 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A	N/A	N/A	N/A	N/A
Pumpable Sludges	"	"	"	"	"
Nonpumpable Sludges	"	"	"	"	"
Containerized	"	"	"	"	"
Bulk Solids	"	"	"	"	"
Dry Solids	2000	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

00000434

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1260

Kiln Number: 3 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A:

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A	N/A	N/A	N/A	N/A
Pumpable Sludges	"	"	"	"	"
Nonpumpable Sludges	"	"	"	"	"
Containerized Solids	"	"	"	"	"
Bulk Solids	"	"	"	"	"
Dry Solids	2000	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 7 6 1

00060435

Kiln Number: 4 of 4

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A	N/A	N/A	N/A	N/A
Pumpable Sludges	"	"	"	"	"
Nonpumpable Sludges	"	"	"	"	"
Containerized Solids	"	"	"	"	"
Bulk Solids	"	"	"	"	"
Dry Solids	2000	24	310	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

00000436

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1262

Kiln Number: 1 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1263

00000437

Kiln Number: 2 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000438

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1264

Kiln Number: 3 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1265

00000439

Kiln Number: 4 of 4

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000440

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1266

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1267

00000441

Kiln Number: 2 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Variable

How long? 30-45 days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

00000448

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1268

Liquid Waste Acceptance Limits As Received Presently not accepting this type of waste.

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1269

00000443

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1210

00000444

Liquid Waste Acceptance Limits As Burned : Presently not accepting this type of waste.

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) N/A

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000445

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 7 1 2

00000416 X

Pumpable Sludges Waste Acceptance Limits As Received Presently not accepting this type of waste.

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

12713

00000447

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

12714

00000448

Pumpable Sludges Waste Acceptance Limits As Burned Presently not accepting this type of waste.

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1215

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 7 6

00000450

Nonpumpable Sludges Waste Acceptance Limits As Received Presently not accepting this type of waste.

15a. Are your nonpumpable sludge waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000451

NOTICE
If the filmed image is less clear than this. Notice it is due to the quality of the document being filmed.

CD2F 002

"As Received" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE:
If the filmed image is less clear than this Notice, it is due to the quality of the document being filmed.

CD2F 002

12718

00000452

Nonpumpable Sludges Waste Acceptance Limits As Burned Presently not accepting this type of waste.

15b. Are your nonpumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1279

"As Burned" Nonpumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1280

00000454

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1281

Containerized Solids Waste Acceptance Limits As Received

16a. Are your containerized solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 16b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

33030455

"As Received" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F-002

1282

00000456 X

Containerized Solids Waste Acceptance Limits As Burned

16b. Are your containerized solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1283

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

"As Burned" Containerized Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

CD2F 002

12 8 4

00000458

Bulk Solids Waste Acceptance Limits As Received Presently not accepting this type of waste.

17a. Are your bulk solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 17b: N/A

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1285

"As Received" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content.			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1286

00000460

Bulk Solids Waste Acceptance Limits As Burned Presently not accepting this type of waste.

17b. Are your bulk solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18a: N/A

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1287

00000461

"As Burned" Bulk Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

12888

00000468

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1289

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	8,000 $\frac{BTV'S}{lb}$	16,000 $\frac{BTV'S}{lb}$	T
Water Content		10%	T
Total Solids Content	90%	100%	T
Total Inorganics Content			
Particle/Object Size		.125"	T
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify ASH		24%	
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	R
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

03000463

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content		200ppm	
Arsenic Content		20ppm	
Barium Content		2000ppm	
Beryllium Content		4ppm	
Cadmium Content		200ppm	
Chromium Content		1000ppm	
Copper Content			
Lead Content		2000ppm	
Mercury Content		4ppm	
Nickel Content			
Selenium Content			
Silver Content		200ppm	
Thallium Content		200ppm	
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* Two times proposed limits of BIF precompliance certification levels due to limited blending capacity.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1290

00000464 X

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	8,000 BTV'S/lb	14,000 BTV'S/lb	T
Water Content		5%	T
Total Solids Content	95%	100%	T
Total Inorganics Content			
Particle/Object Size		.125"	T
Cyanide Content			
Sulfur Content		6%	T
Sodium Content		1%	T
Potassium Content		2%	T
Other: Specify ASH		24%	R
Other: Specify			
Total Halogen Content		5%	
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

129

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content		100ppm	R
Arsenic Content		10ppm	R
Barium Content		1000ppm	R
Beryllium Content		2ppm	R
Cadmium Content		100ppm	R
Chromium Content		500ppm	R
Copper Content			
Lead Content		1000ppm	R
Mercury Content		2ppm	R
Nickel Content			
Selenium Content			
Silver Content		100ppm	R
Thallium Content		100ppm	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1292

00000496

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance				
Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)		Y	1	
Personal Protection Equipment (e.g., Tyvex suits)		Y	1	
Paper or Cardboard Materials		Y	1	
Filter Cartridges		Y	1	
Wood Materials		Y	1	
Rubber Objects (e.g., tires, hoses)		Y	1	
PVC Pipe		Y	1	
Other Plastic Debris		Y	1	
Glass Debris		Y	2	
Ceramic Debris (e.g., semiconductors)		Y	2	
Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)		N		✓
Asbestos Materials (e.g., shingles, insulation)		N		
Non-Soil Geologic Material (e.g., rocks)		N		
Concrete Debris		N		
Refractory Brick		Y	2	
Other Bricks		Y	2	
Slag		N		
Intact Batteries		N		
Battery Cases		Y	4	
Electronic Components (e.g., printed circuit boards)		N		
Electrical Wires, Switches, etc.		N		

02000467

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1293

20. Please explain any debris acceptance conditions noted on the previous page:

1) Fuel value into calcining zone.
2) Raw material value, i.e. high concentraions of calcium, silica, alumina or iron.
3) Wire insulation as fuel substitution.
4) Plastic battery cases as fuel substitutes, internal lead parts must be moved.

20a. Do you accept soils? If so, under what conditions or limitations?

Yes, solids that have high concentrations of silica or alumina can be used as raw material substitutes.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1294

00000468

C. Permit Conditions

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

* Proposed Facility.

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See attached copy of acceptable waste codes.

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1295

00000469

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF			
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1296

00000470

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 2 9 7

03000471

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

____ Yes
_X_ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

c) Modifications:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1298

00000472

H

ACCEPTABLE WASTE CODES
PRIMARY

WASTE CODE	WASTE CODE
D001 - except compressed gas	K102
D003 - water reaction (if direct burn)	K103
D018	K104
D023	P005
D024	U001
D025	U002
D026	U003
D035	U004
D036	U009
D038	U012
F001	U031
F002	U051
F003	U052
F004	U055
F005	U057
F024	U080
F037	U110
F038	U112
K013	U117
K014	U140
K022	U154
K023	U159
K024	U161
K025	U162
K026	U165
K048	U169
K049	U171
K050	U190
K051	U194
K052	U196
K061 - as raw material	U213
K083	U220
K086	U239
K087	U328
K088	U353
K093	U359
K094	
K101	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1259

00080473

ACCEPTABLE WASTE CODES
SECONDARY

WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE
D004	K018	U041	U122
D005	K019	U042	U123
D006	K020	U043	U124
D007	K027	U044	U125
D008	K028	U045	U127
D009	K029	U046	U128
D010	K030	U047	U133
D011	K035	U053	U141
D019	K036	U056	U147
D021	K060	U065	U152
D022	K061	U069	U172
D027	K084	U070	U173
D028	K085	U071	U174
D029	K095	U072	U176
D030	K096	U074	U177
D031	K105	U076	U178
D032	K107	U077	U180
D033	K108	U078	U188
D034	K109	U079	U201
D039	K110	U081	U202
D040	K111	U082	U203
D043	K112	U083	U207
F032	K113	U084	U208
F034	K114	U088	U209
F035	K115	U092	U210
F039	K116	U098	U211
K001	P022	U099	U221
K002	P069	U102	U222
K003	P112	U105	U223
K004	U008	U106	U226
K005	U019	U107	U227
K006	U023	U108	U228
K007	U024	U109	U234
K008	U025	U111	U238
K009	U027	U113	U243
K010	U028	U115	
K011	U034	U118	
K015	U037	U119	
K016	U039	U121	
K017			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1300

ACCEPTABLE WASTE CODES
IRACE

WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE	WASTE CODE
D001 - oxidizer	K062	P021	P068	P116	U064	U148	U218
D002	K064	P023	P070	P118	U066	U149	U219
D003 - water reaction	K065	P024	P071	P119	U067	U150	U225
except direct burn	K066	P026	P072	P120	U068	U151	U235
D003 - explosives	K069	P027	P073	P121	U073	U153	U236
D012	K071	P028	P074	P122	U075	U155	U237
D013	K073	P029	P075	P123	U085	U156	U240
D014	K090	P030	P076	U005	U086	U157	U244
D015	K091	P031	P077	U006	U087	U158	U246
D016	K097	P033	P078	U007	U089	U160	U247
D017	K098	P034	P081	U010	U090	U163	U248
D020	K099	P036	P082	U011	U091	U164	U249
D037	K100	P037	P083	U014	U093	U166	
D041	K106	P038	P084	U015	U094	U167	
D042	K117	P039	P085	U016	U095	U168	
F006	K118	P040	P087	U017	U096	U170	
F007	K123	P041	P088	U018	U097	U179	
F008	K124	P042	P089	U020	U101	U181	
F009	K125	P043	P092	U021	U103	U182	
F010	K126	P044	P093	U022	U114	U183	
F011	K136	P045	P094	U026	U116	U184	
F012	P001	P046	P095	U029	U120	U185	
F019	P002	P047	P096	U030	U126	U186	
K021	P003	P048	P097	U032	U129	U187	
K031	P004	P049	P098	U033	U130	U189	
K032	P006	P050	P099	U035	U131	U191	
K033	P007	P051	P101	U036	U132	U192	
K034	P008	P054	P102	U038	U134	U193	
K037	P009	P056	P103	U048	U135	U197	
K038	P010	P057	P104				
K039	P011	P058	P105				
K040	P012	P059	P106	U049	U136	U200	
K041	P013	P060	P107	U050	U137	U204	
K042	P014	P062	P108	U058	U138	U205	
K043	P015	P063	P109	U059	U142	U206	
K044	P016	P064	P110	U060	U143	U214	
K045	P017	P065	P111	U061	U144	U215	
K046	P018	P066	P113	U062	U145	U216	
K047	P020	P067	P114	U063	U146	U217	
			P115				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 0 E 1

00030475

A. **Facility Information**

1. Respondent Name and Title:
Jeff Kaboly, Environmental Specialist

Company:
Keystone Cement Company

Phone number:
(215) 837-1881

2. Name and address of company that owns the cement kilns at this facility:
GIANT GROUP, LTD.
Harleyville, SC 29448

Facility name, location, and address:
Keystone Cement Company - Route 329
P. O. Box A, Bath, PA 18014-0058

EPA ID of burner: PAD 002389559

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Same

EPA ID of on-site processor: Same

EPA ID of other on-site hazardous waste transporter: --
marketer: --
storer: --

3. Number of kilns currently burning hazardous wastes at this facility: 2
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 2

00000476

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1302

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): _____
Processor 1) _____
Processor 2) _____
Processor 3) --100% EPA regulated TSDF solvent recyclers/fuel blenders
Processor 4) _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

00000477

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 0 0 3

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
___ Steel Drum, specify sizes: _____
___ Poly Drum, specify sizes: _____
___ Fiber Drum, specify sizes: _____
___ Bag or other flexible container, specify sizes: _____
___ Rigid Tote
_x_ Tanker Trucks (transferred to tank)
___ Tanker Trucks (direct feed to kiln)
___ Rail car
___ Carboy
___ Pallet
___ Other, specify: _____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers			
Liquid Tanks	90,000 gallons	180,000 gallons	1993
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1304

03000478

6b. What processing operations do you perform on-site for liquid wastes?[1]

Storage only.

6c. What processing operations do you perform on-site for solid wastes?

None.

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000479

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1305

Kiln Number: 1 of 2

This supplemental question set should be completed for each additional kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: F. L. Smidth Rotary Kiln - wet process

Clinker capacity (tons/hr): 15 tons/hr.

Thermal input (Btu/ton clinker): 5.2 million

Type of cement product(s) produced in this kiln: Type I

Total hours operating per year on average: 7,850 hr.

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: ___
Sludge Pump: ___
Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1306

00000480

Kiln Number: 1 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	1,275 tons (estimated)	20,000 tons/yr	R
Pumpable Sludges	N/A	N/A	N/A
Nonpumpable Sludges	N/A	N/A	N/A
Containerized Solids	N/A	N/A	N/A
Bulk Solids	N/A	N/A	N/A
Dry Solids	N/A	N/A	N/A
Total	1,275 tons	20,000 tons/yr	

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): less than 15 (%)
Percent of solids originally generated as solids: ? (%)

00000431

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

Kiln Number: 1 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	76.1	24	327	greater than 8,000	50%
Pumpable Sludges	N/A	N/A	N/A	N/A	N/A
Nonpumpable Sludges	N/A	N/A	N/A	N/A	N/A
Containerized Solids	N/A	N/A	N/A	N/A	N/A
Bulk Solids	N/A	N/A	N/A	N/A	N/A
Dry Solids	N/A	N/A	N/A	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1308

00000432

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? First Quarter

How long? 110 Days - inventory control

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

NOTICE
If the filmed image is less clear than this Notice, it is due to the quality of the document being filmed.

CD2F 002

1309

Kiln Number: 2 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 2

Type of Kiln: Traylor Rotary Kiln - wet process

Clinker capacity (tons/hr): 60.4 tons/hr.

Thermal input (Btu/ton clinker): 5.2 million

Type of cement product(s) produced in this kiln: Type I

Total hours operating per year on average: 7,850 hr.

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: ___
Sludge Pump: ___
Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

0 3 1 0

00000434

Kiln Number: 2 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	24,238	60,000	R
Pumpable Sludges	N/A	N/A	N/A
Nonpumpable Sludges	N/A	N/A	N/A
Containerized Solids	N/A	N/A	N/A
Bulk Solids	N/A	N/A	N/A
Dry Solids	N/A	N/A	N/A
Total	24,238	60,000	

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): less than 15 (%)
Percent of above solids originally generated as solids: ? (%)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

03000435

Kiln Number: 2 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	13,698	24	327	greater than 8,000	50%
Pumpable Sludges	N/A	N/A	N/A	N/A	N/A
Nonpumpable Sludges	N/A	N/A	N/A	N/A	N/A
Containerized Solids	N/A	N/A	N/A	N/A	N/A
Bulk Solids	N/A	N/A	N/A	N/A	N/A
Dry Solids	N/A	N/A	N/A	N/A	N/A

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

00000436

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 1 2

Kiln Number: 1 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? First Quarter

How long? 20 Days

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

N/A

c) Regulatory modifications (include planned schedule):

N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 3

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	greater than 8,000 Btu/lb.	No Limit	P
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content		None	R
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify) PCBs		less than 40 ppm	P
Other (Specify)			
Total Halogen Content			
Chlorine Content	0%	3%	P
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000438

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 4

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		None	R
Fungicides		None	R
Herbicides		None	R
Insecticides		None	R
Rodenticides		None	R
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content		.167 lb/mmBtu	P
Barium Content			
Beryllium Content			
Cadmium Content		.383 lb/mmBtu	P
Chromium Content V		.112 lb/mmBtu	P
Copper Content			
Lead Content		10.449 lb/mmBTU	P
Mercury Content		.473 lb/mmBtu	P
Nickel Content		3.341 lb/mmBtu	P
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 5

~~00000409~~
00000500

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) _ N

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	greater than 8,000 Btu/lb	No Limit	
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content		None	R
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify PCBs		40 ppm	P
Other: Specify			
Total Halogen Content			
Chlorine Content	0%	3%	R
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000501

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 6

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides		None	R
Fungicides		None	R
Herbicides		None	R
Insecticides		None	R
Rodenticides		None	R
Other: Specify			
Total Specified Metals Content		less than 1%	
Antimony Content			
Arsenic Content		.043 lb/mmBtu	P
Barium Content			
Beryllium Content			
Cadmium Content		.108 lb/mmBtu	P
Chromium Content V		.032 lb/mmBtu	P
Copper Content			
Lead Content		1.838 lb/mmBtu	P
Mercury Content		.019 lb/mmBtu	P
Nickel Content		.240 lb/mmBtu	P
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 1 1

19. EPA has identified several types of debris that may be contaminated with hazardous wastes. Please indicate the whether you accept or plan to accept any of the following types of hazardous waste contaminated debris at this facility, and any physical or chemical conditions (e.g., restrictions or limitations) in addition to those specified above which would be required for you to do so. Note any important acceptance conditions in the table and explain them on the page following the table. If one of the types of debris may be included in wastes you receive, but you are uncertain, please check off the "Don't Know" column.

Hazardous Waste Contaminated Debris Acceptance

Type of Debris	Accept Now (Y/N)	Plan to Accept By June 94 (Y/N)	Acceptance Conditions (In addition to above)	Don't Know (✓)
Common Cloth Materials (e.g., rags, mop heads, blankets, or clothing)	N	Y	grtr than 8,000 Btu/lb less than 3% Cl less than metals max.	
Personal Protection Equipment (e.g., Tyvex suits)	N	Y	grtr than 8,000 Btu/lb less than 3% Cl less than metals max.	
Paper or Cardboard Materials	N	Y	" " "	
Filter Cartridges	N	Y	" " "	
Wood Materials	N	Y	" " "	
Rubber Objects (e.g., tires, hoses)	N	Y	" " "	
* PVC Pipe	N	N		
Other Plastic Debris	N	Y	" " "	
Glass Debris	N	Y	less than 5 ppm TOC less than metals max.	
* Ceramic Debris (e.g., semiconductors)	N	N		
* Metal Objects (e.g., pipes, valves, pumps, nuts and bolts)	N	N		
* Asbestos Materials (e.g., shingles, insulation)	N	N		
* Non-Soil Geologic Material (e.g., rocks)	N	N		
* Concrete Debris	N	N		
* Refractory Brick	N	N		
* Other Bricks	N	N		
Slag	N	Y	less than 5 ppm TOC less than metals max.	
* Intact Batteries	N	N		
Battery Cases	N	N		
* Electronic Components (e.g., printed circuit boards)	N	N		
* Electrical Wires, Switches, etc.	N	N		

00000506

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 8

20. Please explain any debris acceptance conditions noted on the previous page:

Must meet beneficial use standards established for raw materials and fuels.

20a. Do you accept soils? If so, under what conditions or limitations?

Not presently.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 9

00000504

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

F003 - F005

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

D001	K010	K019	K036	K086	U031	U057	U140	U194
D018	K011	K020	K045	K087	U037	U074	U153	U229
D035	K013	K022	K048	U001	U039	U078	U154	U239
F001	K014	K023	K049	U002	U044	U079	U159	
F002	K015	K025	K050	U004	U051	U112	U161	
F003	K016	K026	K051	U009	U052	U113	U169	
F004	K017	K028	K052	U012	U055	U115	U171	
F005	K018	K035	K083	U019	U056	U117	U188	

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

00000505

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	EPA Region III	IS	
RCRA Storage	EPA Region III	IS	
RCRA Treatment	EPA Region III	NA	
Clean Air Act	EPA Region III	NR	
Other (specify)			
State Hazardous Waste	PA DER	IS	
Air Emission	PA DER	MA/FP	
Land Use/Siting	PA DER	FP	
Other (specify)			
Local Hazardous Waste		NR	
Air Emission		NR	
Land Use/Siting		FP	
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1321

00000506

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

- Final approval of Part B Permit
- Air Quality Plan Approvals
- Awaiting PA DER decisions, expected this year.

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

August 21, 1992

00000507

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1322

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

__X__ Yes
____ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

Start date estimated 1993

b) Effect on hazardous waste capacity:

Increasing the storage capacity from 90,000 gallons to 270,000 gallons.

c) Modifications:

- Increase burning rate by 30%
- Storage capacity increasing by 180,000 gallons
- New laboratory equipment

  X-ray machine
  Atomic absorption

00000598

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 2 3

A. **Facility Information**

1. Respondent Name and Title:
Robert F. Babik - Regulatory Compliance Coordinator

Company:
Systech Environmental Corporation

Phone number:
(513) 372-8077

2. Name and address of company that owns the cement kilns at this facility:
Lafarge Corporation
11130 Sunrise Valley Drive, Suite 300, Reston, VA 22091

Facility name, location, and address:
Lafarge Corporation, Alpena Facility
Ford Avenue, Alpena, Michigan 49701

EPA ID of burner: _____

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Systech Environmental Corporation

EPA ID of on-site processor: MID 981200835

EPA ID of other on-site hazardous waste transporter: _____
marketer: _____
storer: _____

3. Number of kilns currently burning hazardous wastes at this facility: 2
Additional kilns expected to burn hazardous wastes by July 1994: 3
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 5

00000509

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 2 4

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

NOTICE: If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 2 5

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
___ Steel Drum, specify sizes: _____
___ Poly Drum, specify sizes: _____
___ Fiber Drum, specify sizes: _____
___ Bag or other flexible container, specify sizes: _____
___ Rigid Tote
X Tanker Trucks (transferred to tank)
___ Tanker Trucks (direct feed to kiln)
X Rail car
___ Carboy
___ Pallet
___ Other, specify: _____

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	N/A		
Liquid Tanks	300,000 gallons		
Other (specify)			

00000511

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 3 6

6b. What processing operations do you perform on-site for liquid wastes?[1]

Liquid wastes are transferred from bulk trucks, and railcars to storage tanks. The material is then blended and used as waste derived fuel.

6c. What processing operations do you perform on-site for solid wastes?

N/A

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000512

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1327

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	As of July 1 25870 tons	25870 tons	70090 tons/yr	R
Pumpable Sludges				
Nonpumpable Sludges				
Containerized Solids				
Bulk Solids				
Dry Solids				
Total				

00000513 X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 2 8

Kiln Number: 1 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 19

Type of Kiln: Rotary Cement Kiln (Allis Chalmers)

Clinker capacity (tons/hr): 40 ton/hr

Thermal input (Btu/ton clinker): 5.3 million BTU/ton clinker

Type of cement product(s) produced in this kiln: Type 1, Type 3

Total hours operating per year on average: 7896 hr/yr

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: N/A
Dry solids injected at "hot" end: ____
Containerized solids charged to calcining zone: ____
Sludge Pump: ____
Other: (specify) ____

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1329

00000514

Kiln Number: 1 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	N/A	N/A	
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): N/A (%)
Percent of solids originally generated as solids: _____ (%)

00000515

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1330

Kiln Number: 1 of 5

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A				
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000516

Kiln Number: ____ of ____

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? _____

How long? _____

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
92-93

b) Physical changes (include planned schedule):

Need to install burner, valve rack, piping.

c) Regulatory modifications (include planned schedule):

BIF pre-compliance certification - August 21, 1991
BIF compliance certification

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 3 2

00000517

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 2 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 20

Type of Kiln: Rotary Cement Kiln (Allis Chalmers)

Clinker capacity (tons/hr): 40 ton/hr

Thermal input (Btu/ton clinker): 5.3 million BTU/ton clinker

Type of cement product(s) produced in this kiln: Type 1 Masonry, Type 3

Total hours operating per year on average: 7896 hr/yr

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: N/A
Dry solids injected at "hot" end: ____
Containerized solids charged to calcining zone: ____
Sludge Pump: ____
Other: (specify) ____

CD2F 002

1333

Kiln Number: 2 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	N/A	N/A	N/A
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): N/A (%)
Percent of solids originally generated as solids: _____ (%)

00000519

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1334

Kiln Number: 2 of 5

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A				
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1335

Kiln Number: 2 of 5

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? _____

How long? _____

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
92-93

b) Physical changes (include planned schedule):

Need to install burner, valve rack and piping.

c) Regulatory modifications (include planned schedule):

BIF pre-compliance certification - August 21, 1991
BIF compliance certification

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 7 3 6

00000521

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 3 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 21

Type of Kiln: Rotary Cement Kiln (Allis Chalmers)

Clinker capacity (tons/hr): 40 ton/hr

Thermal input (Btu/ton clinker): 5.3 million BTU/ton clinker

Type of cement product(s) produced in this kiln: Type 1 Masonry
Type 3

Total hours operating per year on average: 7896 hr/hr

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: N/A
Dry solids injected at "hot" end: ____
Containerized solids charged to calcining zone: ____
Sludge Pump: ____
Other: (specify) ____

CD2F 002

00000522

Kiln Number: 3 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	N/A	N/A	N/A
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): N/A (%)
Percent of solids originally generated as solids: _____ (%)

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1138

000503

Kiln Number: 3 of 5

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	N/A	N/A	N/A	N/A	N/A
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 5 6

Kiln Number: 3 of 5

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? _____

How long? _____

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
92-93

b) Physical changes (include planned schedule):

Need to install burner, valve rack and piping.

c) Regulatory modifications (include planned schedule):

BIF pre-compliance certification
BIF compliance certification

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1340

00000525

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 4 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 22

Type of Kiln: Rotary Cement Kiln (Fuller)

Clinker capacity (tons/hr): 70 tons/hr

Thermal input (Btu/ton clinker): 5.3 million BTU/ton clinker

Type of cement product(s) produced in this kiln: Type 1 Masonry
Type 3

Total hours operating per year on average: 7896 hr/yr

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end: X
Dry solids injected at "hot" end: ___
Containerized solids charged to calcining zone: ___
Sludge Pump: ___
Other: (specify) ___

CD2F 002

1144

00000526

Kiln Number: 4 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	As of July 1, 1991 12935 tons	34000 T/yr	R
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 10 (%)
Percent of solids originally generated as solids: _____ (%)

00000527

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1342

Kiln Number: 4 of 5

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	7440 lb/yr	24 hr/day	329	11800	30%
Pumpable Sludges	N/A				
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 4 3

00000528

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 4 of 5

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? November - January

How long? 3-4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

CD2F 002

1344

00000529

Kiln Number: 5 of 5

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 23

Type of Kiln: Rotary Cement Kiln (Fuller)

Clinker capacity (tons/hr): 70 tons/hr.

Thermal input (Btu/ton clinker): 5.3 million BTU/ton clinker

Type of cement product(s) produced in this kiln: Type 1 Masonry, Type 3

Total hours operating per year on average: 7896 hr/yr

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: ___
- Sludge Pump: ___
- Other: (specify) ___

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1145

02000530

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 5 of 5

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	As of July 1, 1991 12935	34000 T/yr	R
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 10 (%)
Percent of solids originally generated as solids: _____ (%)

CD2F 002

1346

00000531

Kiln Number: 5 of 5

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	7440 lb/yr	24 hr/day	329 day/yr	11800	30%
Pumpable Sludges	N/A				
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 4 7

00000532

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 5 of 5

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? November - January

How long? 3 - 4 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

c) Regulatory modifications (include planned schedule):

CD2F 002

1148

00000533

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	52,000 BTU/lb		R
Water Content		<1% Sep. Phase	R
Total Solids Content		30%	R
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify) PCB		N.D.	R
Other (Specify) Ash		15%	R
Total Halogen Content			
Chlorine Content		10%	R
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1349

000534

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content		7500 ppm	
Beryllium Content			
Cadmium Content		500 ppm	
Chromium Content		5000 ppm	
Copper Content			
Lead Content		7500 ppm	
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1350

00000535

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 5 1

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ____

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kilns 19, 20, 21

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	10,000 BUT/lb		
Water Content		20%	Q
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		5%	Q
Sodium Content			
Potassium Content			
Other: Specify PCB		Non-Detect	R
Other: Specify Ash		15%	Q
Total Halogen Content			
Chlorine Content		3%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000536

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1352

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify		Kilns 19,20,21	
Total Specified Metals Content		Each Kiln *	
Antimony Content		2.7 lb/hr	
Arsenic Content		2.7 lb/hr	
Barium Content		27 lb/hr	
Beryllium Content		.54 lb/hr	
Cadmium Content		1.08 lb/hr	
Chromium Content		8.10 lb/hr	
Copper Content			
Lead Content		1.62 lb/hr	
Mercury Content		.54 lb/hr	
Nickel Content			
Selenium Content			
Silver Content		2.7 lb/hr	
Thallium Content		2.7 lb/hr	
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* These approximate limits are based upon feed rate and concentration.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ____

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kilns 23, 23

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	10,000 BTU/lb		Q
Water Content		20%	Q
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		5%	Q
Sodium Content			
Potassium Content			
Other: Specify PCB		N.D.	R
Other: Specify Ash		15%	Q
Total Halogen Content			
Chlorine Content		3%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1 3 5 3

00000533

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify		Kilns 23, 23	
Total Specified Metals Content		Each Kiln *	
Antimony Content		8 lb/hr	
Arsenic Content		8 lb/hr	
Barium Content		80 lb/yr	
Beryllium Content		1.6 lb/hr	
Cadmium Content		3.2 lb/hr	
Chromium Content		24 lb/hr	
Copper Content			
Lead Content		48 lb/hr	
Mercury Content		1.6 lb/hr	
Nickel Content			
Selenium Content			
Silver Content		8 lb/hr	
Thallium Content		8 lb/hr	
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* These approximate limits are based upon feed rate and concentration.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1354

00000539

20. Please explain any debris acceptance conditions noted on the previous page:

N/A

20a. Do you accept soils? If so, under what conditions or limitations?

N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 5 5

00000540

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

See Attachment 1

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See Attachment 2

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

Submit a request for a change under interim status requesting the additional waste codes.

CD2F 002

1356

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	U.S. EPA, Region V (312) 353-4789		
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste	Michigan Dept. of Natural Resources (MDNR) (517) 732-3541		
Air Emission	MDNR		
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

CD2F 002

1357

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

Add burners, value racks piping pumps

For kilns 19, 20, 21, it is necessary to install burners, valve racks, piping and pumps.

CD2F 002

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

1358

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

X Yes
___ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

Will increase capacity and add sludge handling procedures.

c) Modifications:

Add container storage
Increase tank storage
Sludge handling system

CD2F 002

1759

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Characteristic Hazardous Waste

	OH	AL	KS	[redacted]
D001	X	X	X	X
D004	—	X	—	X
D005	X	X	X	X
D006	X	X	X	X
D007	X	X	X	X
D008	X	X	X	X
D009	X	X	X	X
D010	—	X	—	—
D011	—	X	—	—
D018	X	X	X	X
D019	X	X	X	X
D021	X	X	X	X
D022	X	X	X	X
D023	X	X	X	X
D024	X	X	X	X
D025	X	X	X	X
D026	X	X	X	X
D027	X	X	X	X
D028	X	X	X	X
D029	X	X	X	X
D030	X	X	X	X
D032	X	X	X	X
D033	X	X	X	X
D034	X	X	X	X
D035	X	X	X	X
D036	X	X	X	X
D037	X	X	X	X
D038	X	X	X	X
D039	X	X	X	X
D040	X	X	X	X
D041	X	X	X	X
D042	X	X	X	X

CD2F 002

1360

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Hazardous Waste from Nonspecific Sources

	OH	AL	KS	[redacted]
F001	X	X	X	X
F002	X	X	X	X
F003	X	X	X	X
F004	X	X	X	X
F005	X	X	X	X

Hazardous Waste from Specific Sources

	OH	AL	KS	[redacted]
K015	—	—	X	—
K022	X	X	X	X
K023	—	—	X	—
K024	—	—	X	—
K027	—	—	X	—
K046	—	—	X	—
K048	X	X	X	X
K049	X	X	X	X
K050	—	—	X	—
K051	—	—	X	—
K052	X	X	X	X
K083	—	X	X	—
K085	—	X	X	X
K086	X	X	X	X
K087	—	X	X	—
K093	—	—	X	—
K094	—	—	X	—
K095	—	X	X	X
K096	—	X	X	X

CD2F 002

1 3 6 1

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1362

Discarded Commercial Chemical Products

	OH	AL	KS	[redacted]
U001	X	X	X	X
U002	X	X	X	X
U003	X	X	X	X
U019	X	X	X	X
U031	X	X	X	X
U037	—	X	X	X
U051	X	X	X	X
U052	X	X	X	X
U055	X	X	X	X
U056	X	X	X	X
U057	X	X	X	X
U069	X	X	X	X
U080	—	X	X	X
U102	—	X	—	—
U112	X	X	X	X
U113	X	X	X	X
U117	X	X	X	X
U118	X	X	X	X
U121	—	X	X	—
U124	X	X	X	X
U125	X	X	X	X
U140	X	X	X	X
U154	X	X	X	X
U159	X	X	X	X
U161	X	X	X	X
U162	X	X	X	X
U165	X	X	X	X
U188	X	X	X	X
U210	—	X	X	X
U213	X	X	X	X
U220	X	X	X	X
U226	—	X	X	X
U228	—	X	X	X
U239	X	X	X	X

EPA I.D. Number (enter from page 1): M I D 0 0 5 3 7 9 6 0 7

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)								
1	D	0	0	1	11,092	T	T	0	4						
2	D	0	0	4	269	T	T	0	4						
3	D	0	0	5	269	T	T	0	4						
4	D	0	0	6	328	T	T	0	4						
5	D	0	0	7	63	T	T	0	4						
6	D	0	0	8	1,544	T	T	0	4						
7	D	0	0	9	265	T	T	0	4						
8	D	0	1	0	100	T	T	0	4						
9	D	0	1	1	100	T	T	0	4						
10	D	0	1	8	100	T	T	0	4						
11	D	0	1	9	100	T	T	0	4						
12	D	0	2	1	100	T	T	0	4						
13	D	0	2	2	100	T	T	0	4						
14	D	0	2	3	100	T	T	0	4						
15	D	0	2	4	100	T	T	0	4						
16	D	0	2	5	100	T	T	0	4						
17	D	0	2	6	100	T	T	0	4						
18	D	0	2	7	100	T	T	0	4						
19	D	0	2	8	100	T	T	0	4						
20	D	0	2	9	100	T	T	0	4						
21	D	0	3	0	100	T	T	0	4						
22	D	0	3	2	100	T	T	0	4						
23	D	0	3	3	100	T	T	0	4						
24	D	0	3	4	100	T	T	0	4						
25	D	0	3	5	100	T	T	0	4						
26	D	0	3	6	100	T	T	0	4						
27	D	0	3	7	100	T	T	0	4						
28	D	0	3	8	100	T	T	0	4						
29	D	0	3	9	100	T	T	0	4						
30	D	0	4	0	100	T	T	0	4						
31	D	0	4	1	100	T	T	0	4						
32	D	0	4	2	100	T	T	0	4						
33	F	0	0	1	5,360	T	T	0	4						

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1393

00000518

EPA I.D. Number (enter from page 1)

M	I	D	0	0	5	3	7	9	6	0	7

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)					B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)								
3 4	F	0	0	2		4,258	T	T	0	4						
3 5	F	0	0	3		16,235	T	T	0	4						
3 6	F	0	0	4		1,608	T	T	0	4						
3 7	F	0	0	5		10,246	T	T	0	4						
3 8	F	0	3	7		2,000	T	T	0	4						
3 9	F	0	3	8		2,000	T	T	0	4						
4 0	F	0	3	9		2,000	T	T	0	4						
4 1	K	0	2	2		269	T	T	0	4						
4 2	K	0	2	4		100	T	T	0	4						
4 3	K	0	4	8		2,000	T	T	0	4						
4 4	K	0	4	9		2,000	T	T	0	4						
4 5	K	0	5	0		2,000	T	T	0	4						
4 6	K	0	5	1		2,000	T	T	0	4						
4 7	K	0	5	2		2,000	T	T	0	4						
4 8	K	0	8	5		269	T	T	0	4						
4 9	K	0	8	6		269	T	T	0	4						
5 0	K	0	9	4		100	T	T	0	4						
5 1	K	0	9	5		269	T	T	0	4						
5 2	K	0	9	6		269	T	T	0	4						
5 3	U	0	0	1		269	T	T	0	4						
5 4	U	0	0	2		269	T	T	0	4						
5 5	U	0	0	3		269	T	T	0	4						
5 6	U	0	1	9		269	T	T	0	4						
5 7	U	0	3	1		269	T	T	0	4						
5 8	U	0	3	7		269	T	T	0	4						
5 9	U	0	5	1		269	T	T	0	4						
6 0	U	0	5	2		269	T	T	0	4						
6 1	U	0	5	5		269	T	T	0	4						
6 2	U	0	5	6		269	T	T	0	4						
6 3	U	0	5	7		269	T	T	0	4						
6 4	U	0	6	9		269	T	T	0	4						
6 5	U	0	8	0		269	T	T	0	4						
6 6	U	1	1	2		269	T	T	0	4						

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1364

00000549

EPA I.D. Number (enter from page 1)

M	I	D	0	0	5	3	7	9	6	0	7

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)								
6	7	U	1	1	3	269	T	T	0	4					
6	8	U	1	1	7	269	T	T	0	4					
6	9	U	1	1	8	269	T	T	0	4					
7	0	U	1	2	4	269	T	T	0	4					
7	1	U	1	2	5	269	T	T	0	4					
7	2	U	1	4	0	269	T	T	0	4					
7	3	U	1	5	4	269	T	T	0	4					
7	4	U	1	5	9	269	T	T	0	4					
7	5	U	1	6	1	269	T	T	0	4					
7	6	U	1	6	2	269	T	T	0	4					
7	7	U	1	6	5	269	T	T	0	4					
7	8	U	1	8	8	269	T	T	0	4					
7	9	U	2	1	0	269	T	T	0	4					
8	0	U	2	1	3	269	T	T	0	4					
8	1	U	2	2	0	269	T	T	0	4					
8	2	U	2	2	1	269	T	T	0	4					
8	3	U	2	2	6	269	T	T	0	4					
8	4	U	2	2	8	269	T	T	0	4					
8	5	U	2	3	9	269	T	T	0	4					

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1365

03000550

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

A. **Facility Information**

1. Respondent Name and Title:
Robert Babik/Regulatory Compliance Coordinator

Company:
Systech Envrionmental Corporation

Phone number:
(513) 372-8077

2. Name and address of company that owns the cement kilns at this facility:
Lafarge Corporation
11130 Sunrise Valley Drive, Suite 300, Reston, VA 22091

Facility name, location, and address:
Lafarge Corporation, Demopolis Facility
Arcola Road, Demopolis, Alababa 36732

EPA ID of burner: _____

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Systech Environmental Corporation

EPA ID of on-site processor: ALD981019045

EPA ID of other on-site hazardous waste transporter: _____
marketer: _____
storer: _____

3. Number of kilns currently burning hazardous wastes at this facility: 1
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 1

CD2F 002

1 3 6 6

00000551

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

CD2F 002

1 3 6 1

00001553

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
X Steel Drum, specify sizes: 35,55,85 gallons, 330 gallons
X Poly Drum, specify sizes: 35,55,85 gallons
___ Fiber Drum, specify sizes: ___
___ Bag or other flexible container, specify sizes: ___
___ Rigid Tote
X Tanker Trucks (transferred to tank)
___ Tanker Trucks (direct feed to kiln)
X Rail car
___ Carboy
___ Pallet
___ Other, specify: ___

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	96,000 gallons		
Liquid Tanks	260,000 gallons	150,000	Jan 1, 1992
Other (specify)			

CD2F 002

1398

00000553

6b. What processing operations do you perform on-site for liquid wastes?[1]

Liquid wastte and solid waste are blended and transferred from containers, bulk trucks, and railcars to storage tanks. The material is then blended further, and used as waste derived fuels.

6c. What processing operations do you perform on-site for solid wastes?

N/A

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1369

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	As of July 13 17144 tons		32,000 tons/yr	R
Pumpable Sludges				
Nonpumpable Sludges				
Containerized Solids				
Bulk Solids				
Dry Solids				
Total				

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1370

00000555

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 1 of 1

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: 1

Type of Kiln: Allis-Chalmers

Clinker capacity (tons/hr): 800,000 ton/yr

Thermal input (Btu/ton clinker): 3.1 million/ton

Type of cement product(s) produced in this kiln: Type 1, Type 2

Total hours operating per year on average: 7608

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: ___
- Containerized solids charged to calcining zone: ___
- Sludge Pump: ___
- Other: (specify) ___

CD2F 002

00000556

Kiln Number: 1 of 1

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	As of July 13, 1991 17144 tons/hr	32,000 ton/yr	R
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 8 (%)
Percent of solids originally generated as solids: ____ (%)

00000557

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 7 1 2

Kiln Number: 1 of 1

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	4 ton/yr	24	318 days/hr	12400 BTU/lb	30%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 1 1 3

Kiln Number: 1 of 1

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Early Spring and Fall

How long? 3 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

N/A

b) Physical changes (include planned schedule):

N/A

c) Regulatory modifications (include planned schedule):

N/A

03000059 1

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 7 1 4

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify) PCB	Non-Detect		R
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 1 1 5

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1376

00000561

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ____

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	10,000 BTU/lb		Q
Water Content		15%	Q
Total Solids Content		30%	Q
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		1%	Q
Sodium Content		< 200 ppm	Q
Potassium Content		< 200 ppm	Q
Other: Specify Nitrogen		< 3 %	Q
Other: Specify PCB		Non-detect	R
Total Halogen Content		5	R
Chlorine Content		3.5	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 7 1 1

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 7 1 8

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content		*	
Antimony Content		4580 g/hr	
Arsenic Content		366 g/hr	
Barium Content		45800 g/hr	
Beryllium Content		91.6 g/hr	
Cadmium Content		91.6 g/hr	
Chromium Content		6870 g/hr	
Copper Content			
Lead Content		22900 g/hr	
Mercury Content		687 g/hr	
Nickel Content			
Selenium Content			
Silver Content		4580 g/hr	
Thallium Content		4580 g/hr	
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

*These approximate limits are based upon feed rate and concentration.

00000563

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

20. Please explain any debris acceptance conditions noted on the previous page:

N/A

CD2F 002

20a. Do you accept soils? If so, under what conditions or limitations?

N/A

1 3 7 9

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

C. Permit Conditions

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

See Attachment 1

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

See Attachment 2

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

A request to modify or revise the existing permit would need to be submitted requesting additional waste codes.

CD2F 002

1380

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF	U.S. EPA, Region IV (404) 347-3433		
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste	Alabama Dept. of Env. Mgmt. (ADEM)		
Air Emission	ADEM		
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1381

00000566

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

N/A

CD2F 002

26. When do you plan to submit a BIF Certification of Compliance (month and year)?

1 3 8 2

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

X Yes
___ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

January - March 1992

b) Effect on hazardous waste capacity:

Will increase both capacity and blending capabilities.

c) Modifications:

Add 150,000 burn tank

CD2F 002

1383

00000568

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1384

Characteristic Hazardous Waste

	OH	[redacted]	KS	MI
D001	X	X	X	X
D004	—	X	—	X
D005	X	X	X	X
D006	X	X	X	X
D007	X	X	X	X
D008	X	X	X	X
D009	X	X	X	X
D010	—	X	—	—
D011	—	X	—	—
D018	X	X	X	X
D019	X	X	X	X
D021	X	X	X	X
D022	X	X	X	X
D023	X	X	X	X
D024	X	X	X	X
D025	X	X	X	X
D026	X	X	X	X
D027	X	X	X	X
D028	X	X	X	X
D029	X	X	X	X
D030	X	X	X	X
D032	X	X	X	X
D033	X	X	X	X
D034	X	X	X	X
D035	X	X	X	X
D036	X	X	X	X
D037	X	X	X	X
D038	X	X	X	X
D039	X	X	X	X
D040	X	X	X	X
D041	X	X	X	X
D042	X	X	X	X

00000569

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Hazardous Waste from Nonspecific Sources

	OH	[redacted]	KS	MI
F001	X	X	X	X
F002	X	X	X	X
F003	X	X	X	X
F004	X	X	X	X
F005	X	X	X	X

Hazardous Waste from Specific Sources

	OH	[redacted]	KS	MI
K015	—	—	X	—
K022	X	X	X	X
K023	—	—	X	—
K024	—	—	X	—
K027	—	—	X	—
K046	—	—	X	—
K048	X	X	X	X
K049	X	X	X	X
K050	—	—	X	—
K051	—	—	X	—
K052	X	X	X	X
K083	—	X	X	—
K085	—	X	X	X
K086	X	X	X	X
K087	—	X	X	—
K093	—	—	X	—
K094	—	—	X	—
K095	—	X	X	X
K096	—	X	X	X

CD2F 002

1385

93000576

Discarded Commercial Chemical Products

	OH	[redacted]	KS	MI
U001	X	X	X	X
U002	X	X	X	X
U003	X	X	X	X
U019	X	X	X	X
U031	X	X	X	X
U037	—	X	X	X
U051	X	X	X	X
U052	X	X	X	X
U055	X	X	X	X
U056	X	X	X	X
U057	X	X	X	X
U069	X	X	X	X
U090	—	X	X	X
U102	—	X	—	—
U112	X	X	X	X
U113	X	X	X	X
U117	X	X	X	X
U118	X	X	X	X
U121	—	X	X	—
U124	X	X	X	X
U125	X	X	X	X
U140	X	X	X	X
U154	X	X	X	X
U159	X	X	X	X
U161	X	X	X	X
U162	X	X	X	X
U165	X	X	X	X
U188	X	X	X	X
U210	—	X	X	X
U213	X	X	X	X
U220	X	X	X	X
U226	—	X	X	X
U228	—	X	X	X
U239	X	X	X	X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1386

00000571

Attachment 2

Attachment - EPA Form 8700-23 (01-90)

EPA I.D. Number (enter from page 1): A L D 0 6 7 1 1 9 9 6 6

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)
1	D001	40,000	T	T04
2	D004	80	T	T04
3	D005	80	T	T04
4	D006	80	T	T04
5	D007	80	T	T04
6	D008	80	T	T04
7	D009	80	T	T04
8	D010	80	T	T04
9	D011	80	T	T04
10	D018	80	T	T04
11	D019	80	T	T04
12	D021	80	T	T04
13	D022	80	T	T04
14	D023	80	T	T04
15	D024	80	T	T04
16	D025	80	T	T04
17	D026	80	T	T04
18	D027	80	T	T04
19	D028	80	T	T04
20	D029	80	T	T04
21	D030	80	T	T04
22	D032	80	T	T04
23	D033	80	T	T04
24	D034	80	T	T04
25	D035	80	T	T04
26	D036	80	T	T04
27	D037	80	T	T04
28	D038	80	T	T04
29	D039	80	T	T04
30	D040	80	T	T04
31	D041	80	T	T04
32	D042	80	T	T04
33	F001	80	T	T04

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 8 7

00000578

EPA I.D. Number (enter from page 1): A L D 0 6 7 1 1 9 9 6 6

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)
3 4	F 0 0 2	80	T	T 0 4
3 5	F 0 0 3	40,000	T	T 0 4
3 6	F 0 0 4	80	T	T 0 4
3 7	F 0 0 5	40,000	T	T 0 4
3 8	K 0 0 1	2,000	T	T 0 4
3 9	K 0 0 9	80	T	T 0 4
4 0	K 0 1 1	80	T	T 0 4
4 1	K 0 1 3	80	T	T 0 4
4 2	K 0 1 4	80	T	T 0 4
4 3	K 0 1 9	80	T	T 0 4
4 4	K 0 2 2	2,000	T	T 0 4
4 5	K 0 2 3	80	T	T 0 4
4 6	K 0 2 4	80	T	T 0 4
4 7	K 0 2 7	80	T	T 0 4
4 8	K 0 2 8	80	T	T 0 4
4 9	K 0 2 9	80	T	T 0 4
5 0	K 0 3 0	80	T	T 0 4
5 1	K 0 4 8	2,000	T	T 0 4
5 2	K 0 4 9	2,000	T	T 0 4
5 3	K 0 5 0	2,000	T	T 0 4
5 4	K 0 5 1	2,000	T	T 0 4
5 5	K 0 5 2	2,000	T	T 0 4
5 6	K 0 8 3	80	T	T 0 4
5 7	K 0 8 5	80	T	T 0 4
5 8	K 0 8 6	36,000	T	T 0 4
5 9	K 0 8 7	2,000	T	T 0 4
6 0	K 0 9 3	80	T	T 0 4
6 1	K 0 9 4	80	T	T 0 4
6 2	K 0 9 5	80	T	T 0 4
6 3	K 0 9 6	80	T	T 0 4
6 4	U 0 0 1	80	T	T 0 4
6 5	U 0 0 2	80	T	T 0 4
6 6	U 0 0 3	80	T	T 0 4

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1388

EPA I.D. Number (enter from page 1)

A	L	D	0	6	7	1	1	9	9	6	6

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)					B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)								
6	7	U	0	0	4	80	T	T	0	4						
6	8	U	0	1	7	80	T	T	0	4						
6	9	U	0	1	9	80	T	T	0	4						
7	0	U	0	3	1	80	T	T	0	4						
7	1	U	0	3	4	80	T	T	0	4						
7	2	U	0	3	7	80	T	T	0	4						
7	3	U	0	3	9	80	T	T	0	4						
7	4	U	0	4	4	80	T	T	0	4						
7	5	U	0	4	5	80	T	T	0	4						
7	6	U	0	4	6	80	T	T	0	4						
7	7	U	0	4	8	80	T	T	0	4						
7	8	U	0	5	1	80	T	T	0	4						
7	9	U	0	5	2	80	T	T	0	4						
8	0	U	0	5	3	80	T	T	0	4						
8	1	U	0	5	5	80	T	T	0	4						
8	2	U	0	5	6	80	T	T	0	4						
8	3	U	0	5	7	80	T	T	0	4						
8	4	U	0	6	9	80	T	T	0	4						
8	5	U	0	7	0	80	T	T	0	4						
8	6	U	0	7	1	80	T	T	0	4						
8	7	U	0	7	2	80	T	T	0	4						
8	8	U	0	7	4	80	T	T	0	4						
8	9	U	0	7	5	80	T	T	0	4						
9	0	U	0	7	6	80	T	T	0	4						
9	1	U	0	7	7	80	T	T	0	4						
9	2	U	0	8	0	80	T	T	0	4						
9	3	U	0	8	1	80	T	T	0	4						
9	4	U	0	8	2	80	T	T	0	4						
9	5	U	0	8	3	80	T	T	0	4						
9	6	U	0	8	9	80	T	T	0	4						
9	7	U	1	0	1	80	T	T	0	4						
9	8	U	1	0	2	80	T	T	0	4						
9	9	U	1	1	2	80	T	T	0	4						

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1389

EPA I.D. Number (enter from page 1): A L D 0 6 7 1 1 9 9 6 6

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)
10 0	U 1 1 3	80	T	T 0 4
10 1	U 1 1 7	80	T	T 0 4
10 2	U 1 1 8	80	T	T 0 4
10 3	U 1 2 1	80	T	T 0 4
10 4	U 1 2 2	80	T	T 0 4
10 5	U 1 2 4	80	T	T 0 4
10 6	U 1 2 5	80	T	T 0 4
10 7	U 1 3 0	80	T	T 0 4
10 8	U 1 3 2	80	T	T 0 4
10 9	U 1 4 0	80	T	T 0 4
11 0	U 1 5 4	80	T	T 0 4
11 1	U 1 5 9	80	T	T 0 4
11 2	U 1 6 1	80	T	T 0 4
11 3	U 1 6 2	80	T	T 0 4
11 4	U 1 6 5	80	T	T 0 4
11 5	U 1 7 0	80	T	T 0 4
11 6	U 1 8 3	80	T	T 0 4
11 7	U 1 8 4	80	T	T 0 4
11 8	U 1 8 6	80	T	T 0 4
11 9	U 1 8 7	80	T	T 0 4
12 0	U 1 8 8	80	T	T 0 4
12 1	U 1 9 0	80	T	T 0 4
12 2	U 1 9 1	80	T	T 0 4
12 3	U 1 9 6	80	T	T 0 4
12 4	U 1 9 7	80	T	T 0 4
12 5	U 2 0 8	80	T	T 0 4
12 6	U 2 0 9	80	T	T 0 4
12 7	U 2 1 0	80	T	T 0 4
12 8	U 2 1 1	80	T	T 0 4
12 9	U 2 1 3	80	T	T 0 4
13 0	U 2 2 0	80	T	T 0 4
13 1	U 2 2 1	80	T	T 0 4
13 2	U 2 2 6	80	T	T 0 4

00000575

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1390

EPA I.D. Number (enter from page 1): A L D 0 6 7 1 1 9 9 6 6

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)
13 3	U 2 2 7	80	T	T 0 4
13 4	U 2 2 8	80	T	T 0 4
13 5	U 2 3 9	80	T	T 0 4

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 3 9 1

00000576

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

A. **Facility Information**

1. Respondent Name and Title:
Robert Babik Regulatory Compliance Coordinator

Company:
Systech Environmental Corporation

Phone number:
(513) 372-8077

2. Name and address of company that owns the cement kilns at this facility:
Lafarge Corporation
11130 Sunrise Valley Dr., Suite 300, Reston, VA 22091

Facility name, location, and address:
Lafarge Corporation, Fredonia Facility
South Cement Road, Fredonia, KS 66736

EPA ID of burner: _____

Name of the company who manages the hazardous waste fuel program at this facility (if not the cement company):
Systech Environmental Corporation

EPA ID of on-site processor: KSD980633259

EPA ID of other on-site hazardous waste transporter: _____
marketer: _____
storer: _____

3. Number of kilns currently burning hazardous wastes at this facility: 2
Additional kilns expected to burn hazardous wastes by July 1994: 0
Kilns at this facility not expected to burn hazardous wastes by July 1994: 0
Total Number of kilns at this facility (should be total of above): 2

00000577

CD2F 002

1192

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

4. For each hazardous waste type, please provide the percent of waste that you receive from off-site intermediate processors and the name, location, and phone number of the 4 off-site processors who provide the largest amount of wastes, by weight, of each waste type you receive.

Liquids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Pumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Nonpumpable Sludges
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Containerized Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Bulk Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

Dry Solids
Percent received from off-site processors (excluding generators): _____
Processor 1 _____
Processor 2 _____
Processor 3 _____
Processor 4 _____

CD2F 002

00000578

B. Potential Capacity and Waste Acceptance Limitations

5. Please indicate the form(s) in which you receive hazardous wastes by checking all that apply:

___ Roll-Off Bin
X Steel Drum, specify sizes: 35,55, 85 gallon 330 gallon
X Poly Drum, specify sizes: 35,55,85 gallon
___ Fiber Drum, specify sizes: ___
___ Bag or other flexible container, specify sizes: ___
___ Rigid Tote
X Tanker Trucks (transferred to tank)
___ Tanker Trucks (direct feed to kiln)
X Rail car
___ Carboy
___ Pallet
___ Other, specify: ___

6a. Please indicate your current and planned on-site storage capacity for hazardous wastes. Indicate any requested specifications below the table.

Maximum RCRA Hazardous Waste Storage Capacity			
Storage Type	Current Capacity (Specify Units)	Planned Capacity Additions (Specify Units)	Expected Date for Planned Additions
Containers	26,000 gallon	303650	1992-1993
Liquid Tanks	440,000 gallon	843000	1992-1993
Other (specify)			

00000579

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1194

6b. What processing operations do you perform on-site for liquid wastes?[1]

Liquid waste are transferred from containers, bulk trucks, and railcars to storage tranks. The material is then blended and used as waste derived fuel.

6c. What processing operations do you perform on-site for solid wastes?

Two types of solids are processed, both pumpable sludges and dry solids. The sludges are pumped and injected into the kiln. The dry solid material is pneumatically fed into the kiln.

[1] For purposes of this form, "processing" includes all blending, repackaging, or other physical processing required to prepare the waste to be fed to the kiln.

00000580

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1395

7. Please complete the following table indicating this facility's capacity to receive and process wastes on-site prior to burning. Maximum practical processing capacity estimates should be based on the most limiting technical or permitting constraint on receiving, storage, and processing operations that occur in sequence. Please estimate maximum practical processing in terms of waste quantities as received. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If regulatory limits contain overall facility capacity below the sum of individual kiln capacity limits, please distribute the facility capacity limit such that individual kiln limits do not exceed total facility limits.

On-site Hazardous Waste Receiving and Processing Capacity				
Waste Type	Tons Received During First 6 Months of 1991	Tons Processed During First 6 Months of 1991	Current Maximum Practical Processing Capacity (tons/yr as received)	Capacity Limiting Factor
Liquids	as of July 15, 1991 36000 tons	36000 tons	(84,000 ton/yr	T
Pumpable Sludges				
Nonpumpable Sludges				
Containerized Solids				
Bulk Solids				
Dry Solids	15200 tons		35,000 ton/yr	T
Total				

00000531

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1396

Kiln Number: 1 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: Kiln 1

Type of Kiln: Rotary Cement Kiln (Vulcan)

Clinker capacity (tons/hr): 19 tons/hr

Thermal input (Btu/ton clinker): 6.2 million BTU/ton

Type of cement product(s) produced in this kiln: Type 1 Masonry, Type 2, Type 3

Total hours operating per year on average: 7796 lb/yr

Type(s) of hazardous waste feed system(s) currently used with this kiln:

Pumpable liquids injected at "hot" end:	X
Dry solids injected at "hot" end:	X
Containerized solids charged to calcining zone:	
Sludge Pump:	
Other: (specify) Pyrolyzer	

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000532

Kiln Number: 1 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	14182	28760	
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 15 (%)
Percent of solids originally generated as solids: ____ (%)

0000583

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1398

Kiln Number: 1 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	22 gal/min 5.2 l/hr 42 ton	24	89%	11,200	100%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids					

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F-002

1 3 9 9

00000584

Kiln Number: ____ of ____

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Winter (Feb)

How long? 2 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):
N/A

b) Physical changes (include planned schedule):

N/A

c) Regulatory modifications (include planned schedule):

N/A

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1400

Kiln Number: 2 of 2

Questions 8, 9, 10, 11 and 12 should be completed for each kiln currently burning hazardous waste or that you expect to burn hazardous waste by July, 1994. A supplemental question set is included for additional kilns. (Question 11 focuses on kilns that are not burning as of August 21, 1991).

8. Kiln Number: Kiln 2

Type of Kiln: Rotary Cement Kiln (F.L. Schmidt)

Clinker capacity (tons/hr): 29 ton/hr

Thermal input (Btu/ton clinker): 5.9 million BTU/ton clinker

Type of cement product(s) produced in this kiln: Type 1 Masonry, Type 2, Type 3

Total hours operating per year on average: 90%

Type(s) of hazardous waste feed system(s) currently used with this kiln:

- Pumpable liquids injected at "hot" end: X
- Dry solids injected at "hot" end: X
- Containerized solids charged to calcining zone: ____
- Sludge Pump: X
- Other: (specify) ____

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 0 1

00000586

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Kiln Number: 2 of 2

9. Please indicate the amount of hazardous wastes you actually burned in this kiln during 1991 to date (as of August 21, 1991), and the maximum practical amount you could burn in one year, taking into account operational down time, residual management capacity limits, Interim Status precompliance limits, and permit limits. In the "Capacity Limiting Factor" column, indicate whether it is a permit limit (P), another type of regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If permits limit overall facility capacity and not individual kiln capacity, please make sure that the sum of individual kiln capacities does not exceed overall facility limits. Explain any exceptions on a separate page as necessary. (Total capacity may not equal the sum of the waste specific capacities if there is a permit limit on total capacity, or if one form of waste capacity may be traded off for another.)

Kiln Number:	Tons of Hazardous Waste Burned During 1991 to Date (August 21, 1991)	Maximum Current Practical Burning Capacity (Tons/Year)	Capacity Limiting Factor
Liquids	As of July 15, 1991 21818 tons	51240	
Pumpable Sludges			
Nonpumpable Sludges			
Containerized Solids			
Bulk Solids			
Dry Solids			
Total			

9a. EPA is aware that hazardous wastes that are generated as solids are often blended into liquids for injection to the kiln. What is the average solid content in the liquids fed to this kiln (on a tonnage basis), and what fraction of the solids entrained in these liquids were originally generated as solids.

Average total solid content in liquids (as burned): 15 (%)
Percent of solids originally generated as solids: _____ (%)

00000587

CD2F 002

1402

Kiln Number: 2 of 2

10. Please indicate the values you assumed for each of the following factors in estimating the hazardous waste burning capacity of each kiln. Fill in those that do not apply with N/A.

Waste Type	Average Haz. Waste Feed Rate (lb/hr)	Daily Hours of Operation Feeding Haz. Waste (hr/day)	Days Feeding Haz. Waste per Year (days/yr)	Average Heating Value of Haz. Waste (Btu/lb)	Percent of Fuel Value provided by Haz. Wastes (Btu basis)
Liquids	8 ton/yr 7 ton/yr	24	90%	11,200	100%
Pumpable Sludges					
Nonpumpable Sludges					
Containerized Solids					
Bulk Solids					
Dry Solids	1 ton/yr				

Please list any other critical parameters on which capacity estimates are based and include additional operating assumptions that further clarify your capacity estimate for this kiln:

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1403

00000588

Kiln Number: 2 of 2

11. When (e.g., calendar month) and for how long is this kiln usually shut down for scheduled maintenance?

When? Winter (February - March)

How long? 2 weeks

12. If this kiln is not currently burning hazardous wastes (as of August 21, 1991), please indicate when you expect it to begin burning hazardous waste, and any physical changes or regulatory (e.g., permit or Interim Status) modification that must occur and or be authorized before this kiln will begin burning hazardous wastes.

a) When (year and month or quarter):

N/A

b) Physical changes (include planned schedule):

N/A

c) Regulatory modifications (include planned schedule):

N/A

00000588

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1404

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 1

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	5000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1 4 0 5

33000590

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1406

00000581 X

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ____

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 1

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	Q
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

NOTICE: If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1407

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content		Kiln #1 *	
Antimony Content		2.7 lb/hr	R
Arsenic Content		2.7 lb/hr	R
Barium Content		27 lb/hr	R
Beryllium Content		.54 lb/hr	R
Cadmium Content		4.05 lb/hr	R
Chromium Content			
Copper Content		16.2 lb/hr	R
Lead Content		.54 lb/hr	R
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content		2.7 lb/hr	R
Thallium Content		2.7 lb/hr	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

*These approximate limits are based upon feed rate and concentration.

00000593

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1408

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Pumpable Sludges Waste Acceptance Limits As Received

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: 13 a

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln I

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barrium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 1 0

00000595

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Pumpable Sludges Waste Acceptance Limits As Burned

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 1

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 lb/hr		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	Q
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000596

GD2F 002

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content		Kiln 1 *	
Antimony Content		2.9 lb/hr	R
Arsenic Content		2.9 lb/hr	R
Barium Content		29 lb/hr	R
Beryllium Content		.58 lb/hr	R
Cadmium Content		17.4 lb/hr	R
Chromium Content			
Copper Content		17.4 lb/hr	R
Lead Content		.58 lb/hr	R
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content		2.9 lb/hr	R
Thallium Content		2.9 lb/hr	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* These approximate limits are based upon feed rate and concentration.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

00000597

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Dry Solids Waste Acceptance Limits As Received

18a. Are your dry solids waste limitations "as received" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 18b: _____

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 1

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000598

CD2F 002

1 4 1 1 3

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 1 4

00000599

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 1

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	Q
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1 4 1 5

00000606

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Podenticides			
Other: Specify			
Total Specified Metals Content		Kiln 1 *	
Antimony Content		1.2 lb/hr	R
Arsenic Content		1.2 lb/hr	R
Barium Content		12 lb/hr	R
Beryllium Content		.24 lb/hr	R
Cadmium Content		.36 lb/hr	R
Chromium Content		7.2 lb/hr	R
Copper Content			
Lead Content		7.2 lb/hr	R
Mercury Content		.24 lb/hr	R
Nickel Content			
Selenium Content			
Silver Content		1.2 lb/hr	R
Thallium Content		1.2 lb/hr	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* These approximate limits are based upon feed and concentration.

1416

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

Liquid Waste Acceptance Limits As Received

13a. Please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 2

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	>5000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other (Specify)			
Other (Specify)			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000609

"As Received" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 1 8

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Liquid Waste Acceptance Limits As Burned

13b. Are your liquid waste limitations "as burned" the same as waste limitations "as received"? (Y/N) ___

If yes, skip to 14a. If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	Q
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1 4 1 6

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

"As Burned" Liquid Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content		Kiln 2*	
Antimony Content		3.2 lb/hr	R
Arsenic Content		3.2 lb/hr	R
Barium Content		32 lb/hr	R
Beryllium Content		.64 lb/hr	R
Cadmium Content		.64 lb/hr	R
Chromium Content		4.8 lb/hr	R
Copper Content			
Lead Content		19.2 lb/hr	R
Mercury Content		.64 lb/hr	R
Nickel Content			
Selenium Content		3.2 lb/hr	R
Silver Content		3.2 lb/hr	R
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

*These approximate limits are based upon feed rate and concentration.

CD2F 002

1420

00000605 X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Pumpable Sludges Waste Acceptance Limits As Received

14a. Are your pumpable sludge waste limitations "as received" the same as waste limitations specified in questions 13a or b? If so, specify which table applies (e.g., 13a or 13b) and skip to 14b: 13 a

If no, please indicate the acceptable ranges of all physical and chemical waste properties that you consider before agreeing to receive a waste. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 2

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion			
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content			
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content			
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

"As Received" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

CD2F 002

1422

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1423

Pumpable Sludges Waste Acceptance Limits As Burned

14b. Are your pumpable sludge waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 15a: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 2

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	Q
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

00000006

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 2 4

"As Burned" Pumpable Sludges Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content		Kiln 2*	
Antimony Content		3.5 lb/hr	R
Arsenic Content		3.5 lb/hr	R
Barium Content		35 lb/hr	R
Beryllium Content		.7 lb/hr	R
Cadmium Content		1.05 lb/hr	R
Chromium Content		21 lb/hr	R
Copper Content			
Lead Content		21 lb/hr	R
Mercury Content		.7 lb/hr	R
Nickel Content			
Selenium Content			
Silver Content		3.5 lb/hr	R
Thallium Content		3.5 lb/hr	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* These approximate limits are based upon feed rate and concentration.

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

"As Received" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content			
Antimony Content			
Arsenic Content			
Barium Content			
Beryllium Content			
Cadmium Content			
Chromium Content			
Copper Content			
Lead Content			
Mercury Content			
Nickel Content			
Selenium Content			
Silver Content			
Thallium Content			
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

CD2F 002

1425

00000010

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Dry Solids Waste Acceptance Limits As Burned

18b. Are your dry solids waste limitations "as burned" the same as waste limitations specified in earlier questions? If so, specify which table applies (e.g., 13a) and skip to 19: _____

If no, please indicate the limitations on all physical and chemical waste properties as burned. Fill in only those that apply, and add properties as necessary. In the "Limiting Factor" column, indicate whether the limit is a permit limit (P), another regulatory limit (R), a product quality limit (Q), or some other technical limit (T). If you have a total specified metals limit and not individual metal limits, indicate the total specified metals limit and check off which metals are included in this limit. Explain any exceptions on a separate sheet as necessary.

Kiln 2

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Heat of Combustion	6000 BTU/lb		R
Water Content			
Total Solids Content			
Total Inorganics Content			
Particle/Object Size			
Cyanide Content			
Sulfur Content		3%	Q
Sodium Content			
Potassium Content			
Other: Specify			
Other: Specify			
Total Halogen Content			
Chlorine Content		5%	Q
Fluorine Content			
Bromine Content			
Other: Specify			
Other: Specify			

CD2F 002

1426

00000611

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1427

"As Burned" Dry Solids Waste Limitations			
Property	Minimum Allowable (specify units)	Maximum Allowable (specify units)	Limiting Factor
Pesticides			
Fungicides			
Herbicides			
Insecticides			
Rodenticides			
Other: Specify			
Total Specified Metals Content		Kiln 2 *	
Antimony Content		1.5 lb/hr	R
Arsenic Content		1.5 lb/hr	R
Barium Content		15 lb/hr	R
Beryllium Content		.3 lb/hr	R
Cadmium Content		.45 lb/hr	R
Chromium Content		9 lb/hr	R
Copper Content			
Lead Content		9 lb/hr	R
Mercury Content		.3 lb/hr	R
Nickel Content			
Selenium Content			
Silver Content		1.5 lb/hr	R
Thallium Content		1.5 lb/hr	R
Vanadium Content			
Zinc Content			
Other: Specify			
Other: Specify			

* These approximate limits are based upon feed rate and concentration.

00000612

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

20. Please explain any debris acceptance conditions noted on the previous page:

N/A

CD2F 002

20a. Do you accept soils? If so, under what conditions or limitations?

N/A

1428

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

C. **Permit Conditions**

21. Please list all RCRA waste codes you are currently authorized to receive and burn as of 8/21/91 (i.e., you have received full permit or interim status approval). Attach a separate sheet as necessary.

22. Please list all additional RCRA waste codes you are seeking permit or interim status modifications to receive and burn by 8/21/91 (i.e., Part A will have been submitted by 8/21/91).

23. If you are not authorized to receive and burn "newly identified" wastes F037, F038, or D018-D043, what would you have to do to be authorized for those codes?

CD2F 002

14229

00000014

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

24. Please fill in the following table for all authorizations you require in order to burn RCRA hazardous wastes. Consider all permits that limit your ability to burn hazardous wastes. Also indicate when you expect final authorizations. Please use the following permit status codes in the current status column:

NR - Permit Not Required (explain in note)
FP - Fully Permitted to receive RCRA hazardous wastes
PM - Preparing Permit Modification for Additional Wastes
SA - Submitted Complete Application and Awaiting Response from Issuing Agency
MA - Modifying Permit Application for Additional RCRA Wastes
IS - Interim Status
ND - Currently Responding to Notices of Deficiency in Application
PH - Awaiting Public Hearing on Permit
OT - Other (please specify):

Authorization Required	Authorizing Agency Name and Phone Number	Current Status	Expected Date of Authorization
Federal BIF			
RCRA Storage			
RCRA Treatment			
Clean Air Act			
Other (specify)			
State Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			
Local Hazardous Waste			
Air Emission			
Land Use/Siting			
Other (specify)			

CD2F 002

1 4 3 0

00000015 X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

25. Please describe any permit changes other than BIF requirements that will be required for you to continue to burn hazardous waste as at present or to begin burning hazardous waste in any of the kilns included in this form. Also indicate when you expect the changes to be made, and when and how you would have to change your current practices if these changes are not approved.

CD2F 002

1 4 3 1

25. When do you plan to submit a BIF Certification of Compliance (month and year)?

27. Do you plan to make any changes to the hazardous waste burning practices at this facility before July 1994?

__x__ Yes
____ No

28. If you do plan to make changes to this facility, please describe the nature of each modification (including kiln number for specific changes), when you expect it to be completed and fully operational, and the effect it will have on this facility's hazardous waste capacity. Include modifications to waste receiving facilities, fuel processing systems, waste feed systems, analytical equipment and facilities, and air pollution control devices. You may attach appropriate sections of your precompliance certification that describe these changes if convenient.

a) When (month or quarter, and year):

b) Effect on hazardous waste capacity:

c) Modifications:

Dry solid and sludge storage

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 3 3 2

00000617 X

Systech Environmental Corporation

Attachment 1

Acceptable Waste Codes

As of 08/29/91

Characteristic Hazardous Waste

	OH	AL	[redacted]	MI
D001	X	X	X	X
D004	—	X	—	X
D005	X	X	X	X
D006	X	X	X	X
D007	X	X	X	X
D008	X	X	X	X
D009	X	X	X	X
D010	—	X	—	—
D011	—	X	—	—
D018	X	X	X	X
D019	X	X	X	X
D021	X	X	X	X
D022	X	X	X	X
D023	X	X	X	X
D024	X	X	X	X
D025	X	X	X	X
D026	X	X	X	X
D027	X	X	X	X
D028	X	X	X	X
D029	X	X	X	X
D030	X	X	X	X
D032	X	X	X	X
D033	X	X	X	X
D034	X	X	X	X
D035	X	X	X	X
D036	X	X	X	X
D037	X	X	X	X
D038	X	X	X	X
D039	X	X	X	X
D040	X	X	X	X
D041	X	X	X	X
D042	X	X	X	X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 3 3

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

Hazardous Waste from Nonspecific Sources

	OH	AL	[redacted]	MI
F001	X	X	X	X
F002	X	X	X	X
F003	X	X	X	X
F004	X	X	X	X
F005	X	X	X	X

Hazardous Waste from Specific Sources

	OH	AL	[redacted]	MI
K015	—	—	X	—
K022	X	X	X	X
K023	—	—	X	—
K024	—	—	X	—
K027	—	—	X	—
K046	—	—	X	—
K048	X	X	X	X
K049	X	X	X	X
K050	—	—	X	—
K051	—	—	X	—
K052	X	X	X	X
K083	—	X	X	—
K085	—	X	X	X
K086	X	X	X	X
K087	—	X	X	—
K093	—	—	X	—
K094	—	—	X	—
K095	—	X	X	X
K096	—	X	X	X

CD2F 002

1 4 4 4

00000010

Discarded Commercial Chemical Products

	OH	AL	[redacted]	MI
U001	X	X	X	X
U002	X	X	X	X
U003	X	X	X	X
U019	X	X	X	X
U031	X	X	X	X
U037	—	X	X	X
U051	X	X	X	X
U052	X	X	X	X
U055	X	X	X	X
U056	X	X	X	X
U057	X	X	X	X
U069	X	X	X	X
U080	—	X	X	X
U102	—	X	—	—
U112	X	X	X	X
U113	X	X	X	X
U117	X	X	X	X
U118	X	X	X	X
U121	—	X	X	—
U124	X	X	X	X
U125	X	X	X	X
U140	X	X	X	X
U154	X	X	X	X
U159	X	X	X	X
U161	X	X	X	X
U162	X	X	X	X
U165	X	X	X	X
U188	X	X	X	X
U210	—	X	X	X
U213	X	X	X	X
U220	X	X	X	X
U226	—	X	X	X
U228	—	X	X	X
U239	X	X	X	X

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 3 5

Attachment

Attachment - EPA Form 8700-23 (01-90)

EPA I.D. Number (enter from page 1)

K	S	D	0	0	7	1	4	8	0	3	4

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)
1	D001	11,092	T	T04
2	D004	269	T	T04
3	D005	269	T	T04
4	D006	328	T	T04
5	D007	63	T	T04
6	D008	1,544	T	T04
7	D009	265	T	T04
8	D010	100	T	T04
9	D011	100	T	T04
10	D018	100	T	T04
11	D019	100	T	T04
12	D021	100	T	T04
13	D022	100	T	T04
14	D023	100	T	T04
15	D024	100	T	T04
16	D025	100	T	T04
17	D026	100	T	T04
18	D027	100	T	T04
19	D028	100	T	T04
20	D029	100	T	T04
21	D030	100	T	T04
22	D032	100	T	T04
23	D033	100	T	T04
24	D034	100	T	T04
25	D035	100	T	T04
26	D036	100	T	T04
27	D037	100	T	T04
28	D038	100	T	T04
29	D039	100	T	T04
30	D040	100	T	T04
31	D041	100	T	T04
32	D042	100	T	T04
33	F001	5,360	T	T04

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1436

EPA I.D. Number (enter from page 1): K S D 0 0 7 1 4 8 0 3 4

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)											
3 4	F 0 0 2	4,258	T	T	0	4									
3 5	F 0 0 3	16,235	T	T	0	4									
3 6	F 0 0 4	1,608	T	T	0	4									
3 7	F 0 0 5	10,246	T	T	0	4									
3 8	F 0 3 7	2,000	T	T	0	4									
3 9	F 0 3 8	2,000	T	T	0	4									
4 0	F 0 3 9	2,000	T	T	0	4									
4 1	K 0 1 5	100	T	T	0	4									
4 2	K 0 2 2	269	T	T	0	4									
4 3	K 0 2 3	100	T	T	0	4									
4 4	K 0 2 4	100	T	T	0	4									
4 5	K 0 2 7	100	T	T	0	4									
4 6	K 0 4 5	100	T	T	0	4									
4 7	K 0 4 6	383	T	T	0	4									
4 8	K 0 4 8	269	T	T	0	4									
4 9	K 0 4 9	269	T	T	0	4									
5 0	K 0 5 0	100	T	T	0	4									
5 1	K 0 5 1	100	T	T	0	4									
5 2	K 0 5 2	269	T	T	0	4									
5 3	K 0 8 3	100	T	T	0	4									
5 4	K 0 8 5	269	T	T	0	4									
5 5	K 0 8 6	269	T	T	0	4									
5 6	K 0 8 7	100	T	T	0	4									
5 7	K 0 9 3	100	T	T	0	4									
5 8	K 0 9 4	100	T	T	0	4									
5 9	K 0 9 5	269	T	T	0	4									
6 0	K 0 9 6	269	T	T	0	4									
6 1	U 0 0 1	269	T	T	0	4									
6 2	U 0 0 2	269	T	T	0	4									
6 3	U 0 0 3	269	T	T	0	4									
6 4	U 0 1 9	269	T	T	0	4									
6 5	U 0 3 1	269	T	T	0	4									
6 6	U 0 3 7	269	T	T	0	4									

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1 4 3 1

EPA I.D. Number (enter from page 1)

K	S	D	0	0	7	1	4	8	0	3	4

XIV. Description of Hazardous Wastes (continued)

Line Number	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)
67	U051	269	T	T04
68	U052	269	T	T04
69	U055	269	T	T04
70	U056	269	T	T04
71	U057	269	T	T04
72	U069	269	T	T04
73	U080	269	T	T04
74	U112	269	T	T04
75	U113	269	T	T04
76	U117	269	T	T04
77	U118	269	T	T04
78	U121	269	T	T04
79	U124	269	T	T04
80	U125	269	T	T04
81	U140	269	T	T04
82	U154	269	T	T04
83	U159	269	T	T04
84	U161	269	T	T04
85	U162	269	T	T04
86	U165	269	T	T04
87	U188	269	T	T04
88	U210	269	T	T04
89	U213	269	T	T04
90	U220	269	T	T04
91	U226	269	T	T04
92	U228	269	T	T04
93	U239	269	T	T04

NOTICE
If the filmed image is less clear than this Notice it is due to the quality of the document being filmed.

CD2F 002

1438

00000623