

SECTION F
PROCEDURES TO PREVENT HAZARDS

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SECTION F - PROCEDURES TO PREVENT HAZARDS

1.0 SECURITY

The information presented in this section is submitted in accordance with the requirements of 40 CFR 264.14, 264.15, 264.30 through 264.37, 266.102, 270.14, and O.A.C.252:205-3-2(f).

In accordance with 40 CFR 264.14 and 270.14(b)(4), and OAC 252:205-3-2(f), the CPCC plant has developed a security plan to prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility. Maintaining a secure facility minimizes the risk of unauthorized persons or livestock from encountering the hazardous waste operations.

Section F-1 of this application includes a copy of the Security Plan that describes how Systech meets the requirements of these regulations.

2.0 INSPECTION PLAN

A written inspection plan has been developed for the timely detection of equipment malfunctions or deterioration, operator errors and waste discharges at the CPCC plant to meet the requirements of 40 CFR 264.15 and 270.14(b)(5).

Section F-2, Inspection Plan, of the application discusses the equipment and inspection requirements for the waste management units, security, and safety and emergency equipment at the facility.

3.0 PREPAREDNESS AND PREVENTION

This facility is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. Should an unavoidable incident occur, personnel are trained to respond to emergencies and to minimize associated risks.

To comply with 40 CFR Part 264, Subpart C, the plant has:

- Designed and equipped the plant for maximum safety;
- Prepared emergency response plans; and
- Made arrangements with local authorities for emergency response.

3.1 Emergency Equipment

To be able to respond effectively to emergencies, the following types of equipment are provided:

- Internal alarms and communications devices to provide immediate emergency instruction to facility personnel;
- External communications equipment to summon outside assistance;
- Fire-fighting equipment;
- Spill control and decontamination equipment; and
- Adequate spill clean-up equipment.

3.1.1 Internal Communications

Plant personnel can alert others to the existence of a possible emergency by voice contact, by telephone, by two-way radio, or by activating the plant-wide alarm system. Telephones are located throughout the plant and can be used as necessary for emergency communications. Two telephones, that are available at all times, are located in the Control Room. The Control Room is located near the hot ends of the kilns where fuels are introduced and is manned at all times when the kiln is in operation. Closed circuit television between the Control Room and the kilns allows visible access to the hot ends of the kilns. Both kilns are controlled and monitored from the Control Room. The Control Room Operator can communicate with CPCC or Systech via these two telephones.

All on-site Emergency Coordinators (Shift Supervisor/Leadman) carry portable radios at all times when on duty. Radios are also available in the front office and various managers' offices that are available during normal working hours. A radio with two frequencies (CPCC and Systech) is also available at all times in the Control Room.

The internal telephone system includes a plant-wide paging capability, intercoms, and an emergency alarm system. Personnel can use the telephone system to activate the alarm system if necessary. The alarm signal is a continuous blast on a warning siren that is clearly audible throughout the plant.

3.1.2 External Communications

The internal telephone system also provides access to external telephone networks needed to summon emergency response teams. The telephones located in the Control Room have a separate plant line and both access an outside line. Because the Control Room is manned at all times and both kilns are controlled and monitored from the Control Room, the Control Room telephones will serve as main conduits for external communication. Emergency contact telephone numbers are posted at the Control Room telephones.

3.1.3 Emergency Equipment

The emergency equipment has been selected to provide an adequate amount of equipment for those employees directly involved in responding to an emergency; all other employees would evacuate the immediate response area and report to the rally point.

Fire Control Equipment

Several systems are in place to prevent fires from occurring and to minimize them if they do occur. First, operating personnel monitor the areas to eliminate combustible material that could contribute to a fire. Therefore, there is virtually nothing present on the kiln floors that is combustible except the fuel, which is contained within a pipe. Second, at least one (1) 120-pound dry chemical fire extinguisher is available in the plant's kiln area to control any fires. Personnel would use this equipment to immediately extinguish any fire that did start. Third, CPCC controls the pump that supplies FQW to the kiln. In the unlikely event that an accident did occur, or a fire did start, CPCC would stop the pump to prevent additional waste fuel from being transferred to the kiln area. The operator located in the Control Room has total control over the FQW feed pumps located at Systech. The operator not only controls the FQW flow rate, he also can enable and disable the operation of the pumps. Systech cannot start a pump unless it has been enabled by CPCC. Systech also has no control over the pumping rate of the pumps. In addition, all of the automatic waste feed cutoffs (AWFCOs) are interconnected with not only the AWFCO valve, but also with the FQW pumps. If an AWFCO occurs, the pump is also automatically shut off, and cannot be restarted until CPCC enables the pump, and Systech manually re-

starts the pump. Automatic pump shut offs are triggered by various safety parameters within the requirements of the HWC MACT compliance. For example, a high fuel line pressure or a high pump pressure will turn off the FQW feed pumps.

In the highly unlikely event that there is a sustained fire, there is adequate water available to control the fire using water provided by the City to the fire hydrant locations shown on Figure F-1.

Spill Control Equipment

Solvent absorbent booms and absorbents stored in drums or buckets can be used to contain and clean up spills. The boom systems range in length from four to ten feet and can be linked together to form containment dikes or to absorb spills.

Other equipment such as shovels, brooms, and containers are readily available on site. Heavy equipment is available upon request within the cement plant.

Decontamination Equipment

Equipment and clothing that cannot be decontaminated is sealed in containers and subsequently transported to an appropriate facility for disposal. Equipment and clothing that can be cleaned will be placed in containers until the cleaning and decontamination can be accomplished. A pressure washer, cleaner, clean mineral spirits solvent, and soap and water are available.

3.1.4 Water for Fire Control

The primary water supply for fire control is an 8-inch city water main. Figure F-1 shows the locations of the fire hydrants at the facility.

3.2 Equipment Testing and Maintenance

All emergency communications equipment, alarm systems, and fire protection, spill control, and decontamination equipment is inspected according to the inspection schedule included in Section F-2.

3.3 Access to Communication or Alarm System

CPCC operations personnel involved in kiln operations and fuel delivery carry portable radios when working outside the office/laboratory complex providing them immediate access to emergency communications equipment. The internal alarm system can be activated by the control room operator. Telephones throughout the plant and kiln control room are manned 24-hours per day.

3.4 Aisle Space Requirement

In accordance with 40 CFR 264.35, adequate aisle space is maintained in all areas of the facility to provide unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment. Aisle space is maintained in the plant's kiln area to allow unobstructed movement of personnel, fire response equipment, spill control equipment, and decontamination equipment.

3.5 Arrangements with Local Authorities

The CPCC plant has made arrangements with local authorities as described in the Contingency Plan in Section G., including the Sheriff's Department, the Fire Department, the Hospital, and Ambulance Service, to provide emergency services during a fire, explosion, or major release of hazardous waste. The primary or alternate Emergency Coordinator, or his/her designee, can contact the local authorities by telephone to request emergency services. These groups have been briefed on the following information:

- Layout of the plant;
- Properties of hazardous wastes handled at the plant and associated hazards;
- Places where personnel would normally be working;
- Entrances to and roads within the plant area; and
- Evacuation routes.

All local authorities who enter into an agreement with the CPCC plant receive a copy of the plant's Contingency Plan and any updates or modifications to the Plan as they become available. CPCC will maintain copies of the agreements or refusal to enter into an agreement in the facility operating record. Attachment F-1 presents an example agreement used

3.6 Waiver of Preparedness and Prevention Requirements

The CPCC plant does not request a waiver of preparedness and prevention requirements.

4.0 PREVENTIVE PROCEDURES, STRUCTURES, AND EQUIPMENT

The following sections provide information on preventative procedures, structures, and equipment at the CPCC plant.

4.1 Loading/Unloading Operations

Loading/unloading operations from trucks are carried out at the Systech storage facility. The liquid FQW used at the CPCC plant is piped directly from the storage tanks owned and operated by Systech to the plant's kilns. All unloading procedures take place while the hazardous waste is still in Systech's custody and are covered under Systech's permit.

4.2 Run-on/Run-off

No permitted storage of hazardous wastes occurs on-site at the CPCC plant, minimizing the potential for leaks and resulting runoff. Samples of hazardous waste may be stored for short periods of time within buildings where spills may be readily contained.

The kiln hoods are within roofed areas. If a spill occurs at the kiln, rainwater cannot come in contact with the spill.

The FQW transfer piping between storage at Systech and the kilns meets the requirements of 40 CFR 264.193(f)(1) and (2) by being inspected daily for leaks and all flanges, joints, and connections are welded. If leaks are found, repairs are initiated to minimize the amount of spilled material.

Because of these precautions, CPCC does not anticipate any leaks or spills on the CPCC site that could not be immediately controlled through the procedures specified in the Contingency plan (Section G of this document). Following the steps outlined in the Contingency Plan should ensure that no wastes come into contact with plant runoff.

4.3 Water Supplies

As stated above, precautions are in place to prevent the runoff of hazardous waste in the unlikely event a spill occurs. Because potential runoff of hazardous waste is controlled, the possible contamination of surface water from a spill is minimized. There is little chance of rainwater contacting the hazardous waste, and if it does, it will be collected before it can reach the environment.

There are no drinking water wells within ¼ mile from the plant boundary. Groundwater is not generally used for drinking water supplies.

4.4 Equipment Failure and Power Outages

The kilns at the CPCC plant have auxiliary power supplied by a diesel-powered generator to maintain rotation of the kilns at all times. The AWFCO system engages in the event of a power failure or emergency shutdown of the induced draft fans or baghouse.

4.5 Personnel Protection Equipment

FQW managed at the CPCC plant kilns is hard piped directly into the kilns, thus limiting exposure of plant personnel to this waste. Personnel receive training according to RCRA/MSHA guidelines that includes information on how to minimize exposure to hazardous waste. CPCC personnel do not handle hazardous FQW. All sampling, testing, blending, and storage is performed by trained personnel at Systech. If a hazardous waste spill occurs, CPCC personnel immediately notify Systech and Systech provides trained personnel to clean up the spill, as specified in the written agreement between CPCC and Systech. CPCC has personal protective equipment available (see list in Section F-2) for short-term exposures in emergency situations, but CPCC personnel do not routinely undertake activities that would allow exposure.

4.5.1 Releases to the Atmosphere

Baghouses are used to control particulate emissions to the atmosphere from the kilns to within the emission standards specified by the HWC MACT Rule. Operating parameter limits for hazardous waste burning modes of operation as established during the comprehensive performance testing required by HWC MACT are included in CPCC's Title V Operating Permit.

The kilns operate under negative pressure, thereby preventing fugitive emissions. Hazardous waste is transferred by sealed piping under a leak detection and repair program to minimize releases. No open containers of hazardous waste are used. All liquid storage tanks maintained by Systech are sealed and vented to the kiln to destroy any vapors.

5.0 PREVENTION OF REACTION OR IGNITION

All FQW is hard-piped to the kiln areas and are physically separated and protected from sources of ignition or reaction, including but not limited to: open flames, smoking, cutting, welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition, and radiant heat. There is not a possibility of ignition under normal circumstances.

"NO SMOKING" signs are posted on the kiln floors in the area where the ignitable waste valves, meters, and connections are located. "NO UNAUTHORIZED PERSONNEL" signs (or signs conveying a similar message) are also posted in the kiln area.

5.1 Precautions for Handling Ignitable Wastes

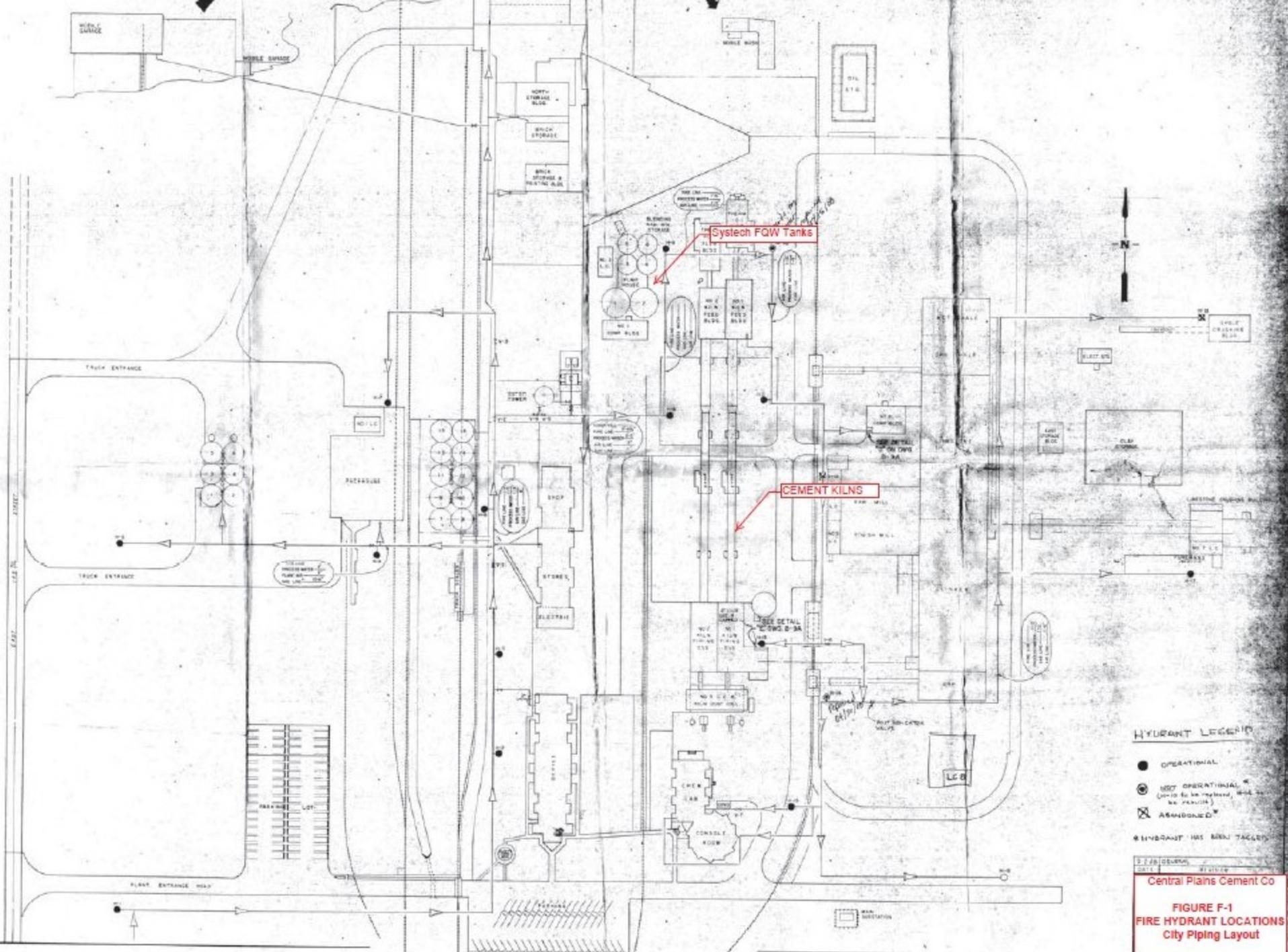
The CPCC plant neither handles nor mixes any hazardous waste-derived fuels. The co-located Systech storage facility premixes the liquid FQW and delivers it directly to the CPCC plant kilns through hard pipes.

Compatibility testing, achieved by mixing delivery vehicle samples with storage tank samples, is performed by Systech to ensure that wastes can be mixed in the tank systems without undesirable results.

5.2 Identification of Waste Characteristics

All hazardous wastes are assumed to be ignitable. Waste handling processes are designed accordingly. No incompatible, corrosive, or reactive hazardous wastes are accepted at the Systech Tulsa facility or piped to the CPCC plant. While CPCC is responsible for the compliance with the state and federal regulations regarding the burning of hazardous waste, Systech conducts the identification and approval of all wastes used at the plant in accordance with a written agreement. CPCC will not burn wastes that exhibit the RCRA characteristic of reactivity or corrosivity. Nor will CPCC burn waste that contains insufficient energy to make a positive contribution to the manufacturing process.

FIGURE F-1 FIRE HYDRANT LOCATIONS



System FQW Tanks

CEMENT KILNS

HYDRANT LEGEND

- OPERATIONAL
- ⊙ NOT OPERATIONAL
(to be replaced, with no
in place)
- ⊗ ABANDONED
- * HYDRANT HAS BEEN TAGGED

DATE: _____
BY: _____

Central Plains Cement Co

FIGURE F-1
FIRE HYDRANT LOCATIONS
City Piping Layout

**ATTACHMENT F-1 EXAMPLE OF FORM FOR EMERGENCY
SERVICES AGREEMENTS WITH LOCAL
AUTHORITIES**

AGREEMENT FOR EMERGENCY ASSISTANCE BY AND BETWEEN CPCC FACILITY AND _____

This agreement has been prepared to make arrangements for emergency services to be provided by the _____ in the event of emergencies that may result from fires, explosions, or a major release at:

Central Plains Cement Company (CPCC)
2609 N. 145TH East Avenue
Tulsa, Oklahoma 74116
918-388-1471

Any request for emergency assistance will be issued by telephone by the primary emergency coordinator, the on-site coordinators, or their designee. CPCC will have someone at the plants entrance to give specific directions to the incident. One of the emergency coordinators will be at the scene to brief you on the assistance required.

The materials primarily being handled at the Tulsa facility are organic compounds which have been used as industrial solvents, coats, etc., that have been blended into Fuel Quality Waste (FQW). Heavy metals will be present within the FQW. A Material Safety Data Sheet for typical waste fuel is enclosed for your use. If an emergency arises, the specific compounds involved will be immediately identified by consulting material inventory and analytical records at the CPCC facility. A copy of the CPCC Contingency Plan, which describes emergency response procedures, identifies the type and location of emergency equipment and sets forth emergency assistance requirements, is enclosed with this agreement.

(Name of Responder Company) _____ agrees to provide emergency assistance to the CPCC facility, at their request, if an incident occurs which requires facilities, equipment or expertise not available at the facility.

On behalf of CPCC:	On behalf of (enter name of authority)
Print Name :	Print Name:
Title:	Title:
Date:	Date:
Signature:	Signature:

Please sign in the space indicated above to indicate your agreement to provide emergency response services to the CPCC facility, a hazardous waste permitted FQW processing facility. Please return your original signed copy via mail or overnight delivery to the address provided above for CPCC.