SECTION B

FACILITY DESCRIPTION

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SECTION B – FACILITY DESCRIPTION

TABLE OF CONTENTS

1.0 GENERAL DESCRIPTION [40 CFR 270.14(b)(1)]................................. 1
   1.1 Facility .................................................................................................. 1
   1.2 Waste Management Activities ............................................................. 1
       1.2.1 Fuel Quality Wastes ................................................................. 1
2.0 TOPOGRAPHIC MAP [40 CFR 270.14(b)(19)]................................. 1
3.0 SURFACE WATERS [40 CFR 270.14(b)(19)(iii)]............................... 2
4.0 FLOODPLAIN STANDARD [40 CFR 264.18(b), 270.14((b)(11)(iii), 270.14(b)(19)(ii)]................................. 2
   5.0 SURROUNDING LAND USE [40 CFR 270.14(b)(19)(iv)]...................... 2
   6.0 WIND ROSE [40 CFR 270.14(b)(19)(v)]........................................... 2
   7.0 LEGAL BOUNDARIES [40 CFR 270.14(b)(19)(vi)]............................. 2
   8.0 ACCESS CONTROL [40 CFR 270.14(b)(19)(vii)].............................. 2
   9.0 INJECTION AND WITHDRAWAL WELLS [40 CFR 270.14(b)(19)(ix)].... 3
  10.0 LOCATION OF SOLID WASTE MANAGEMENT UNITS (SWMUs) (SWMUs)[40 CFR 270.14(d)(1)(i)]................................. 3
  11.0 SEISMIC STANDARD [40 CFR 270.14(d)(1)(i)]................................. 3
  12.0 TRAFFIC INFORMATION [40 CFR 270.14(b)(10)]............................. 3
      12.1 Site Access ..................................................................................... 3
      12.2 On-Site Traffic Patterns ................................................................. 4
      12.3 Estimated Traffic Volume ............................................................... 4
      12.4 Traffic Control Signs ..................................................................... 4
      12.5 Road Surfaces and Load-Bearing Capacity ..................................... 4
  13.0 BUILDINGS AND OTHER STRUCTURES [40 CFR 270.14(b)(19)(x)]..... 4
  14.0 FIRE CONTROL FACILITIES ............................................................... 4
  15.0 PRESUMPTION OF UNAPPROVABLE SITE ........................................ 4
  16.0 AIR POLLUTION .................................................................................. 5
  17.0 LATITUDE / LONGITUDE ..................................................................... 5

LIST OF FIGURES:

FIGURE B-1 TOPOGRAPHIC MAP ................................................................. 6
FIGURE B-2 TOPOGRAPHIC MAP 200 FT CONTOUR ..................................... 7
FIGURE B-3 STORMWATER SURFACE FLOW ............................................. 8
FIGURE B-4 100-YR FLOOD PLAIN AND WATER WELL LOCATIONS ............ 9
FIGURE B-5 SURROUNDING LAND USE ..................................................... 10
FIGURE B-6 WIND ROSE ........................................................................... 11

ATTACHMENTS:

ATTACHMENT B-1 CPCC PROPERTY DESCRIPTION
ATTACHMENT B-2 CPCC DEED RECORDED PROPERTY
SECTION B – FACILITY DESCRIPTION

1.0 GENERAL DESCRIPTION [40 CFR 270.14(B)(1)]

Central Plains Cement Company (CPCC), which is located at 2609 N. 145TH East Avenue, Tulsa, Rogers County, Oklahoma, currently operates two dry process rotary kilns to produce Portland cement from raw limestone, sand, and shale, as well as various raw material substitutes. The primary fuel fed to both kilns is fuel quality waste (FQW), which provides up to 35% of the energy required by the kilns each year. Coal, natural gas, and non-hazardous wastes may also be used in the kilns as supplemental fuels. Air emissions from the kilns are regulated under a Title V air permit which includes the emission limits of 40 CFR 63, Subpart EEE (HWC MACT).

All FQW burned in the kilns is supplied by the Systech fuel blending facility co-located on the CPCC property. The fuels are blended in the Systech tanks to meet the specifications required for the CPCC plant, and then pumped to the rotary kilns for combustion (treatment). The CPCC operations at this facility do not store the FQW received from off-site.

1.1 Facility

The permitted facilities include two rotary cement kilns with their fuel controls and nozzles for burning fuel quality waste (FQW).

1.2 Waste Management Activities

The only hazardous waste management activity at the CPCC plant is the burning of FQW in the process of manufacturing cement. The receiving and preparation activities associated with the FQW prior to being fed to the cement kilns is conducted by a fuel blending operation located within the CPCC property boundary on property owned and operated by Systech Environmental Corporation. The activity regulated by RCRA at the CPCC plant is treatment of wastes in the cement kilns (T81).

1.2.1 Fuel Quality Wastes

Spent organic solvents and used oil from off-site industries and fuel blenders are most frequently received at the facility. Paint manufacturing, printing, lubrication, parts cleaning, and manufacturing represent the major activities producing the wastes. Select flammable and combustible wastes generated by other industries are used when available.

All liquid waste fuel is received in bulk trucks which are unloaded directly into the storage tanks. The liquid waste fuels are pumped from the FQW tanks to the plant and are combusted in the cement kilns at the plant.

2.0 TOPOGRAPHIC MAP [40 CFR 270.14(B)(19)]

CPCC is located in Rogers County, Oklahoma. Figure B-1 is a topographic map of the CPCC plant that displays features within 1,000 feet of the waste management units, including buildings, structures, and internal roads. Surface waters and streams in the vicinity of the plant are also shown on Figure B-1. Figure B-2 is a topographic map with a scale of 1-inch equals 200 feet. On the 2-foot contour interval on Figure B-2, it is possible to see the surface water flow pattern at the facility.

The date of each map and the map orientation are included in the title block of each map.
3.0 SURFACE WATERS [40 CFR 270.14(B)(19)(III)]

The surface waters near the facility include Bird Creek about 1.5 miles north of the plant, and Mingo Creek about 2 miles west of the facility. Mingo Creek runs north into Bird Creek, which drains to the east into the Verdigris River about 4 miles to the east. These surface waters are shown on Figure B-1 and on Figure A-1 of Section A of this application.

Drainage around the processing portions of the CPCC plant runs as sheet flow to the on-site drainage system, which is collected in a surface water pond in the southwest corner of the CPCC plant. Figure B-3 illustrates the surface drainage flow across the site. The CPCC facility is not located within one mile of the conservation pool elevation of any reservoir which supplies water for a public water supply or within one mile of any scenic river per OAC 252:205-11-2(d).

4.0 FLOODPLAIN STANDARD [40 CFR 264.18(B), 270.14((B)(11)(III), 270.14(B)(19)(II)]

The waste management portions of the CPCC plant are not located within a 100-year flood zone. Figure B-4 incorporates the Flood Insurance Rate Maps with an aerial photograph and includes the location of the CPCC plant in relation to the floodplain. The plant's kilns are located at a ground elevation of greater than 708 feet above sea level. The 100-year floodplain elevation is about 684 feet above sea level. The plant's kilns are not located in the 100-year floodplain; and no flood control structures, or drainage barriers are required.

5.0 SURROUNDING LAND USE [40 CFR 270.14(B)(19)(IV)]

Figure B-1 is a topographic map illustrating the CPCC plant location. Land use within one quarter mile surrounding the CPCC plant is illustrated on Figure B-5 and includes agricultural, industrial, recreational, and residential uses. The land west of the CPCC plant property is agricultural (grazing) and industrial. Land to south of the plant is industrial. The east side of the property adjoins agricultural land. The north side includes industrial, undeveloped woodlands, and a small recreational nature preserve northeast of the property. All property within 1,000-feet of the permitted waste management units is within the property owned by Central Plains Cement Company.

6.0 WIND ROSE [40 CFR 270.14(B)(19)(V)]

A wind rose for Tulsa, Oklahoma is provided as Figure B-6.

7.0 LEGAL BOUNDARIES [40 CFR 270.14(B)(19)(VII)]

The legal boundaries of the CPCC plant are outlined on the Figure B-1 map. This outline includes the entire cement plant and contiguous quarry. Attachment B-1 includes the metes and bounds for the regulated facility.

8.0 ACCESS CONTROL [40 CFR 270.14(B)(19)(VIII)]

The CPCC plant is enclosed by a fence with lockable gates. Plant personnel are on site 24 hours per day in the cement plant. Remote areas of the plant have perimeter fencing to prevent unauthorized access. Gates from the public road (2609 N. 145th East Ave.) are either under access control or closed and locked during evening and weekend hours. See Section F-1, Security, for a detailed description of facility security.
9.0 INJECTION AND WITHDRAWAL WELLS [40 CFR 270.14(B)(19)(IX)]

There are no known injection or withdrawal wells on-site or within one-quarter mile of the CPCC plant property per the Oklahoma Water Resources Board. Figure B-4 illustrates the locations of wells in the area surrounding the plant.

10.0 LOCATION OF SOLID WASTE MANAGEMENT UNITS (SWMUS) [40 CFR 270.14(D)(1)(I)]

The only SWMUs located on the CPCC property are the two cement kilns that burn FQW. The locations of the waste management units are shown on Figure A-2 of Section A of the application. A RCRA Facility Investigation was performed in accordance with the requirements of the hazardous waste permit issued in 2010. Remediation activities were completed for waste management units identified by the RCRA Facility Assessment prepared for the original permit application. Attachment B-2 includes a copy of the metes and bounds for deed recorded property associated with the remediation of a fuel release.

11.0 SEISMIC STANDARD [40 CFR 270.14(D)(1)(I)]

The CPCC plant is located in Rogers County, which is not listed in Appendix VI of 40 CFR Part 264 as being an area that must demonstrate compliance with the seismic standard. The requirements for demonstrating compliance with the seismic standard are therefore not applicable.

12.0 TRAFFIC INFORMATION [40 CFR 270.14(B)(10)]

All fuel-quality FQW burned at the CPCC plant is received by bulk tank trucks into the on-site Systech facility. The FQW is transferred from Systech to the CPCC cement kilns via piping.

12.1 Site Access

Truck access to the site is via truck routes from US Highway 169 to the west of the facility which is a 4-lane, divided, limited access highway. The routes are as follows from US 169:

- Exit off of US 169 at the 36th Street North exit onto the access ramp to stop sign;
- Turn east on East 36th Street North from the ramp;
- Turn right (south) on North 14th East Avenue to stop sign;
- Turn left on East Apache Street to stop sign;
- Turn left on North 145th East Avenue to plant entrance;
- Turn right into the CPCC plant;
- Proceed through plant entrance and continue traveling straight.
- Follow signs to Systech.
12.2 On-Site Traffic Patterns

Within the CPCC plant, the trucks carrying the FQW will enter the north gate. The trucks will then proceed around the north end of the plant to the Systech truck unloading pad. After unloading, the trucks will return to the north end of the processing area, then will exit the area in the opposite direction to which they entered.

12.3 Estimated Traffic Volume

At peak periods, up to 30 FQW delivery trucks may travel to and from the plant daily. These trucks are tractor/tanker trailer combinations.

12.4 Traffic Control Signs

Traffic routing and control at the CPCC plant, allows for free and safe access of routine and emergency traffic around the plant. Plant access roads are surfaced for the load bearing capacity of routine heavy trucks that access the plant. Signs direct truck traffic to the Systech facility.

12.5 Road Surfaces and Load-Bearing Capacity

The access and on-site roads are surfaced with concrete, asphalt, or crushed stone and are designed with a load-bearing capacity in excess of 100,000 pounds. The trucks transporting waste weigh less than 80,000 pounds and, therefore, do not exceed the load-bearing capacity of these roads.

13.0 BUILDINGS AND OTHER STRUCTURES [40 CFR 270.14(B)(19)(X)]

Figure A-2, Plot Plan, shows the location and arrangement of the buildings and structures of the CPCC plant and the location of the permitted waste management units.

14.0 FIRE CONTROL FACILITIES

The major components of the fire control facilities are described in Section G, Contingency Plan, of this application. The principal fire control methods for the CPCC plant are fire hydrants located throughout the plant supplied by city water. In addition, numerous portable fire extinguishers are located around the facility.

15.0 PRESUMPTION OF UNAPPROVABLE SITE

The CPCC plant is not located in an area that lies wholly or partially within an area designated as an actual or potential unconsolidated alluvial aquifer or terrace deposit aquifer or bedrock aquifer or recharge area, as shown on the maps described as "Sheet 1 - Unconsolidated Alluvium and Terrace Deposits" and "Sheet 2 - Bedrock Aquifers and Recharge Areas" of the "Maps Showing Principal Ground Water Resources and Recharge Areas in Oklahoma," compiled by Kenneth S. Johnson, Oklahoma Geological Survey (1983), or any successor map(s) compiled by the Oklahoma Geological Survey.

The cement kilns are not sited in or over a principal groundwater resource or recharge area.
16.0  **AIR POLLUTION**

The CPCC plant is not located within one mile of any public school, educational institution, nursing home, hospital, or public park per OAC 252:205-11-2(e).

17.0  **LATITUDE/LONGITUDE**

The CPCC plant is located in the southwest corner of Rogers County. The location of the processing operations where hazardous waste is managed is described by the latitude and longitude of:

Latitude – 36° 11' 38" N

Longitude – 95° 48' 42" W
FIGURE B-1
USGS TOPOGRAPHIC MAP

CENTRAL PLAINS
CEMENT COMPANY

Legend

- Tulsa Cement LLC
- Property Boundary
- Systech
- Environmental LLC
- Property Boundary
- 1/4 Mile Radius
- 1 Mile Radius

N

O K L A H O M A

Area of Interest

MINGO (36095-B7) QUADRANGLE
7.5 MINUTE TOPOGRAPHIC MAP 1955
PHOTO-REVISED 1982

Date: 2/3/2021
FIGURE B-2   TOPOGRAPHIC MAP 200 FT CONTOUR
FIGURE B-3   STORMWATER SURFACE FLOW
NO ACTIVITIES EXPOSED TO STORMWATER OCCURS IN THIS AREA

DRAINAGE AREA 1

DRAINAGE AREA 2

DRAINAGE AREA 3

OUTFALL 001

OUTFALL 002

OUTFALL 003

OUTFALL 004

OUTFALL 005

LIMESTONE QUARRY POND

SHALE QUARRY POND

Legend

- Outfall
- Flow Through Surface Impoundment
- Total Retention Surface Impoundment
- Septic Tank System with Lateral Lines
- Central Plains Cement Company Property Boundary
- Systech Environmental Corporation Property Boundary
- Surface Flow Direction
- NHD Stream
- 100-Year Floodplain (Dated 07.23.2020)
- Drainage Area

Central Plains Cement Company

FIGURE B-3
SURFACE DRAINAGE MAP

Date: 12/16/2020
FIGURE B-4  100-YR FLOOD PLAIN AND WATER WELL LOCATIONS
FIGURE B-4
100-YR FLOODPLAIN & WATER WELL LOCATIONS

Legend

- CPCC Property Boundary
- NHD Stream
- 1/4 Mile Radius
- 100-Year Floodplain (Dated 07.23.2020)
- Systech Environmental Corp Property Boundary
- Geotechnical Boring
- Groundwater Test Hole
- Monitoring Well

Area of Interest

CENTRAL PLAINS CEMENT COMPANY

FEMA FIRM ID (40145C, 40143C, 40131C)
04/17/2012

Date: 2/3/2021
FIGURE B-5  SURROUNDING LAND USE
FIGURE B-5
SURROUNDING LAND USE

Legend

- Tulsa Cement LLC Property Boundary
- 1 Mile Radius
- Other
- Residential Multi-Family
- Commercial
- Residential Single-Family
- Agriculture
- Industrial
- Office
- Parking
- Central Business District
- Mining District
- Public Facilities
- Redbud Valley Nature Preserve

Central Plains Cement Company
Parcel Data
(Indian Nations Council of Governments)
7/3/2020

Date: 2/3/2021
FIGURE B-6    WIND ROSE
TULSA INTL AP (OK) Wind Rose

Sub-Interval: Jan. 1 – Dec. 31, 0 – 23

Wind Speed (mph)
- 1.3 – 4
- 4 – 8
- 8 – 13
- 13 – 19
- 19 – 25
- 25 – 32
- 32 – 39
- 39 – 47
- 47 –

SOURCE: MRCC "MIDWESTERN REGIONAL CLIMATE CENTER"
EXHIBIT A TO NOTICE OF REMEDIATION AND EASEMENT

LEGAL DESCRIPTION

A tract or parcel of land located in the East Half (E/2) of the Southeast Quarter (SE/4) of Section Twenty-one (21), Township Twenty (20) North, Range Fourteen (14) East of the Indian Meridian, Tulsa County, Oklahoma, more particularly described as follows:

Commencing at the Southeast Corner (SE/C) of said East Half (E/2) of the Southeast Quarter (SE/4); thence northerly along the east line of said East Half (E/2) of the Southeast Quarter (SE/4) a distance of 310.0 feet; thence westerly and parallel with the south line of said East Half (E/2) of the Southeast Quarter (SE/4) a distance of 80.0 feet to the POINT OF BEGINNING; thence northerly and parallel with the east line of said East Half (E/2) of the Southeast Quarter (SE/4) a distance of 30.0 feet; thence westerly and parallel with the south line of said East Half (E/2) of the Southeast Quarter (SE/4) a distance of 3.0 feet; thence southerly and parallel with the east line of said East Half (E/2) of the Southeast Quarter (SE/4) a distance of 30.0 feet; thence easterly and parallel with the south line of said East Half (E/2) of the Southeast Quarter (SE/4) a distance of 3.0 feet to the POINT OF BEGINNING; said tract or parcel of land containing 90.0 square feet, or 0.00207 acres.