

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	07/22/2019 to 07/24/2019		
Media:	Resource Conservation and Recovery Act		
Regulatory Program(s)	LQG/TSDF		
Company Name:	Systech Environmental		
Facility Name:	Systech Environmental Tulsa Facility		
Facility Physical Location:	2701 N 145 th East Avenue		
(city, state, zip code)	Tulsa, OK 74116		
Mailing address:	2701 N 145 th East Avenue		
(city, state, zip code)	Tulsa, OK 74116		
County/Parish:	Rogers County		
Facility Contact:	Joe Sommer	Operations Supervisor	
	Joseph.sommer@sysenv.com		
FRS Number:	110039076077		
Identification/Permit Number:	RCRA Permit No. 000025452	Air Quality Permit No. 2018-0805-TVRR	
Media Number:	OKR000025452		
NAICS:	562211		
SIC:	4953		
Personnel participating in inspection:			
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Troy Speaks	Systech Environmental	Operations	
Randy Sparks	Geocycle LLC	Regulatory Manager	803-496-1472
EPA Lead Inspector Signature/Date			
	Angela Hays		Date
Supervisor Signature/Date			
	Jeff Yurk		Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

During the week of 07/22/2019, I, Angela Hays, conducted an unannounced inspection of the Systech Environmental Corporation (Systech) fuel quality hazardous waste disposal facility located in Tulsa, Oklahoma, for compliance with the Resource Conservation and Recovery Act (RCRA). I was assisted on this inspection by Environmental Protection Agency (EPA) inspector John Penland and on 07/23/2019, joined by Oklahoma Department of Environmental Quality (ODEQ) inspector Alicia Chen. Beginning 07/22/2019, we met with Mr. Joe Sommer, the Operations Manager for Systech Tulsa, and conducted an opening inspection briefing. During this briefing we presented our credentials to the Mr. Sommer and explained that the inspection was being conducted under the authority of Section 3007 of RCRA. The inspection included walkthroughs of the facility's hazardous waste storage and treatment units, a review of the facility records related to hazardous waste management, and a specific evaluation of the facility's compliance with the RCRA air pollution control requirements. We concluded the inspection of Systech on 07/24/2019 and moved onto inspect Tulsa Cement located on the surrounding property. On 07/26/2019 we conducted a closing conference attended by Mr. Sommer and representatives of the associated Tulsa Cement facility and presented our provisional areas of concern.

This report serves as documentation of all onsite activities and observations during the inspection of Systech. Photographs taken during the inspection documenting onsite observations are included as Attachment 1. A summary of areas of concern identified during the inspection are provided in Section III.

FACILITY DESCRIPTION

The Systech Tulsa facility is registered as a large quantity generator (LQG) and a treatment, storage, and disposal facility (TSDF) (SIC 4953). Systech's primary operation is to receive fuel quality hazardous waste (FQW) for combustion in the Tulsa Cement kilns. The Systech facility consists of a tank farm with secondary containment and two storage tanks, a covered truck off-loading area that can hold two tanker trailers, and an office building. The Systech tank farm and truck off-loading area are situated within the Tulsa Cement plant on property owned by Systech at 2701 N 145th East Avenue Tulsa, Oklahoma 74116¹. The demarcation between Systech and Tulsa Cement ownership is the piping running from the tank farm to the kilns, which is at least 50 feet from the edge of the tank farm and truck off-loading area. Hours of operation for Systech are Monday thru Friday from 7:00 am to 5:00 pm. The facility is operated by three employees.

The facility operates under the requirements of RCRA hazardous waste permit OKR000025452, issued by the ODEQ on 08/08/2011, last amended on 04/01/2019, and Air permit 2018-0805-TVR, issued by the ODEQ on 06/18/2018, last amended on 04/22/2019. These permits lay out general facility requirements as well as requirements specific to the individual categories of hazardous waste management units and

¹ Appendix 2 – RCRA Permit - Site Map page 27

air emission units. The RCRA permit specifically authorizes and regulates the operation of two 180,000-gallon storage tanks that are also considered treatment units due to the agitation system installed in each tank. In addition to the permitted units, the facility applies the LQG standards for the satellite accumulation areas (SAAs) and less-than 90-day container storage located in the truck off-loading bay.

Section II – OBSERVATIONS

Unless otherwise stated, facts laid out in this section are observations by the EPA inspectors or statements made by Mr. Joseph Sommer during the inspection.

We conducted the onsite inspection during normal business hours from 07/22-24/2019. During the inspection, the facility was conducting normal operations and all areas of the facility were in use. Our primary points of contact at the facility during the inspection were Mr. Joe Sommer and Mr. Troy Speaks. On 07/22/2019, following the opening briefing, we visited each of the hazardous waste management units to review them for compliance with general facility and unit specific standards. On 07/23/2019, we conducted a review of the facility's compliance with the air emission standards of 40 CFR 60.110 to 60.116 and 40 CFR 264, subsections AA, BB, and CC. As part of the review, Mr. Penland conducted air monitoring in accordance with EPA Method 21 using a Thermo TVA-2020 (S/N 202016081525) calibrated using Zero Air, Methane at 500ppm, and Methane at 9,500ppm as specified in 40 CFR 264.1063 and 265.1085 (d). On 07/23-24/2019, we reviewed the facility's operating records pertaining to the hazardous waste regulations and permit requirements. This section provides a detailed description of EPA observations of the individual units assessed throughout the inspection.

Truck Unloading Bay / Shipping and Receiving Area

The truck off-loading bay is a covered, concrete-lined area located on the Systech owned property within the Tulsa Cement property boundary². Per the RCRA permit, the bay can store up to 13,100 gallons of hazardous waste in containers. The bay is equipped with two loading racks for the transfer of FQW from transportation containers to the permitted hazardous waste storage tanks. Each loading rack is equipped with a pump and inline grinder to facilitate the transfer of the waste. According to Mr. Sommer a 55-gallon drum is placed next to each loading rack as a satellite accumulation container for waste personal protective equipment (PPE) and debris from the operation of the individual loading rack. Hazardous waste containers are unloaded immediately upon arrival at the facility without interim storage. During the week of this inspection, Mr. Sommer indicated a total of fifty-eight containers of FQW were scheduled to arrive at the facility, each with a load of approximately 45,000-50,000 pounds of hazardous waste.

We inspected this area on 07/22/2019 and observed 11 containers of hazardous waste stored in this area. In addition, two satellite accumulation containers were observed. The following describes our observations.

² Appendix 1 – Photo 508 and 509

- Six 55-gallon containers labeled “Waste Solids, NOS” – Per Mr. Sommer, these containers consist of contaminated PPE and debris generated during the handling and transfer of FQW. Mr. Sommer stated that this waste will be shipped to the Systech facility located in Fredonia, Kansas for fuel-blending. All containers were in good condition, appropriately closed, labeled with the words “Hazardous Waste”, and marked with their accumulation start date.
- Two 55-gallon drums labeled “Waste Flammable Liquids, NOS”³ - According to Mr. Sommer, these drums contain FQW and other liquids collected during the repair of one of the inline grinders on 07/11/2019. This waste will be shipped to the Systech facility located in Fredonia, Kansas for fuel-blending. Both containers were in good condition, appropriately closed, labeled with the words “Hazardous Waste”, and marked with their accumulation start date.
- Three 5-gallon buckets⁴ - Per Mr. Sommer the buckets contain rocks and other debris contaminated with FQW that was removed from one of the inline grinders on 07/11/2019. This waste will be shipped to the Systech facility located in Fredonia, Kansas. When we inspected these containers on 07/22/2019, only one of these buckets was labeled with the words hazardous waste and the waste accumulation start date; all three buckets were open and two unlabeled. The facility personnel corrected this immediately when we identified this issue.
- Two 55-gallon satellite accumulation areas⁵ – Systech dedicates a satellite accumulation area for each of the loading racks. Both containers were marked with the words “Hazardous waste” and were appropriately closed at the time of this inspection.

Tank Area

The Systech facility has two 180,000 - gallon vertical, fixed roof tanks used to blend and store FQW prior to burning⁶. Each tank is constructed of mild carbon steel and is equipped with an agitator, an inline pressure/vacuum relief device, high level indicators/alarms and an emergency pressure relief vent. The tanks and pressure/vacuum relief in-line conservation vents are designed for 2 pounds per square inch (psi) before venting to the control system. After releasing the pressure on the tank, the conservation vent will close⁷, and the tank is sealed until it builds pressure again. To protect the tanks there is a detonation arrestor⁸ at each tank to protect the tank from any potential flashback, there is also a detonation arrestor at the kiln hood area to stop a flame front from moving through the line. The emergency relief vent is a backup only employed if pressure in the tanks exceeded the design criteria. The emergency relief vents exhaust to the atmosphere. The tanks are equipped with a closed-vent system that routes exhaust from the tank vents to either the cement kilns for combustion control or to a carbon adsorption system when both kilns are not operating. The 4-inch vapor vent lines from the tanks to the kilns flow into a 6-inch vapor line that routes vapors to the kilns. The 6-inch transfer line splits into two 4-inch vapor lines – one for each kiln. These lines to the kiln are equipped with automatically actuated valves. The valves are automatically opened and closed based on kiln operating parameters.

³ Appendix 1 – Photos 510, 511, 515

⁴ Appendix 1 – Photos 520 and 521

⁵ Appendix 1 – Photos 513 and 514

⁶ Appendix 1 – Photos 516 and 517

⁷ Appendix 1 – Photos 523, 524, 527, 528, and 529

⁸ Appendix 1 – Photo 525

The vapors enter the kiln hood and the flame zone where organics are combusted with at least a 99.99% destruction efficiency. Systech uses 40 CFR 63.685(b)(i) and 681(d) and NSPS subpart DD in lieu of 40 CFR 264 subpart CC for controlling volatile organic emissions from its tanks.

The secondary containment system for the tanks is an above-ground concrete impoundment separated with an 18-inch high divider wall⁹. The total gross containment capacity reported in the permit application is 283,859 gallons. Allowing for the displacement caused by a 25-year, 24-hour storm event and the presence of the equipment within the dike wall, the net available secondary containment capacity, as reported in the permit application, is 181,489 gallons¹⁰. The calculations attached to the revised March 2012 permit application to support this capacity show a net secondary containment capacity of 181,500 gallons but fail to account for the displacement caused by ancillary equipment (piping, valves, etc.) within the dike wall.

We inspected the waste tanks and ancillary equipment in this area on 07/22-23/2019. During the inspection only tank number two was in use. The tanks are utilized one at a time and switched every three months. Per Mr. Sommer, tank number two was approximately 60% percent full and tank number one was approximately 27% full. Tank number one was still agitating. The agitators turn off when the volume of waste in the tank falls below 22%.

The facility also maintains three stormwater tanks¹¹ located in a conjoined containment dike. These tanks accumulate and store contact stormwater from the Systech facility which is used as cooling water for the kilns at the Tulsa Cement Plant.

Both permitted hazardous waste storage tanks were marked with the words hazardous waste. The tanks visually appeared to be in good condition and without visual indication of releases or spills. Our visual inspection of the secondary containment dike showed evidence that some repairs to historic structural cracks were beginning to deteriorate but there was no indication that they posed a risk of release to the environment in the case of a spill.

On 07/23/2019, we conducted a leak detection inspection of the tanks and their ancillary equipment in accordance with EPA Method 21. None of the components subject to the leak detection and repair requirements were visibly labeled or otherwise made easily identifiable. Systech does maintain a component log with an associated piping and instrumentation diagram (P&ID), but facility representatives were unable to consistently identify the components being monitored.

Valves and connectors used for transport of the FQW are required to be repaired within 15 days if a leak is discovered using EPA Method 21. A leak in this case is defined as a monitoring result of greater than

⁹ Appendix 1 – Photos 518 and 519

¹⁰ Appendix 2 – RCRA Permit – Part D Process Description

¹¹ Appendix 1 – Photo 508

10,000 ppm above the background for these components. No leaks were identified for these components during this inspection.

The primary barrier for the hazardous waste tanks, the closed vent system for the hazardous waste tanks, and the pressure relief devices for the tanks and closed vent system are required to be operated with no detectable emissions. No detectable emissions were defined as a monitoring result of less than 500 ppm above the background for these components. EPA monitoring results of greater than 500 ppm above the background were identified at the following locations: the detonation arrestor for tank 1; the hatch for tank 2, and the pressure relief vent for the closed vent system on tank 2.

For a full record of the monitoring results consult Appendix 4.

Hazardous Waste Manifests

On 07/24/2019, we reviewed 425 hazardous waste manifests for wastes received by Systech for fuel burning in the Tulsa Cement kilns. Our review covered waste received between May 1, 2019 and July 22, 2019. The review identified eight manifests for shipments of hazardous waste fully rejected by the designated receiving facility, Ash Grove Cement Company in Chanute, Kansas¹². The rejecting facility's signature was not on manifests 018095192 JJK, 018095193 JJK, and 018095194 JJK. While on manifests 018095180 JJK, 018095181 JJK, 018095182 JJK, 018095183 JJK and 018095180 JJK, the facility address where the waste was received was incorrect. These manifests state that the waste was received at the Systech Fredonia, Kansas plant when the waste was received at the Systech Tulsa, Oklahoma plant. Copies of these manifests can be found in Appendix 3.

During our review of manifests for shipments of hazardous waste originated by Systech we noted that the weights of wastes listed on the manifests lacked the normal variance expected for the two types of waste streams listed: spent carbon and contaminated PPE. When we asked for an explanation, Mr. Sommer stated that Systech does not own a scale to weigh containers of its waste and therefore, uses an estimated weight for each container: 450 pounds (lbs) for carbon drums and 250 lbs for PPE drums. However, since these manifests are for shipments of containerized wastes and not bulk wastes, the facility can list the number of containers shipped for each waste stream in lieu of the weight. At the time of this inspection, we did not identify evidence that the facility is under-reporting its waste generation and, therefore this practice did not raise any immediate concern.

Hazardous Waste Container Inspection Records

On 07/24/2019, we reviewed the facility's records of inspection for their permitted hazardous waste container storage area. The records we reviewed were all present and completed by facility personnel. However, the records did not document inspection of waste compatibility, aisle spacing, container closure, or appropriate labeling.

¹² Appendix 3 - Manifests

Training Records

On 07/24/2019, we reviewed the facility's employee training records pertaining to the RCRA requirements. Mr. Troy Speaks, Mr. Joe Sommer, and Mr. Cory Brewer had completed the following training programs: Department of Transportation (DOT) Hazardous Materials Shipping; Mining Safety and Health Administration (MSHA) Mine Worker training; and Systech RCRA training. Notably missing was the Occupational Safety and Health Administration's (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) training. This training is required for all employees whose duties may require them to respond to a release or spill of a hazardous waste or operate a hazardous waste treatment, storage, or disposal unit.

Contingency Plan

On 07/24/2019, we reviewed the facility's hazardous waste contingency plan. The plan was revised on 03/27/2019, document number 56-2019-03-4¹³, in order to update the primary contact. However, the contingency plan lacks information on the fire, police, and hazmat addresses and phone numbers. The facility said they will be able to provide documentation in the form of certified mail receipts for Hillcrest Healthcare Services, Rogers County Emergency Management, Catoosa Fire Department, Catoosa Police Department and Tulsa Fire Department dated March 27, 2019.

The contingency plan also lists Mr. Troy Speaks, Mr. Joe Sommer, and Mr. Cody Brewer as potential responders to releases of hazardous waste. As stated above, none of these employees have received the appropriate hazardous materials response training.

Section III – AREAS OF CONCERN

This section summarizes the Areas of Concern discussed with Systech during the closing meeting.

- Training: Systech employees handling hazardous waste do not have HAZWOPER training. Systech is also noted in the Tulsa Cement plant's contingency plan for maintenance of spill containment and clean up. Systech employees are not equipped with proper training to handle hazardous waste response. Refer to 40 CFR 264.16.
- Labeling of valves, gaskets, and flanges subject to 40 CFR Part 264 subpart BB: No labeling on equipment was present at the time of the EPA inspection. Systech provided a diagram of the facility equipment and documentation that the components were monitored twice a week, yet had difficulty identifying components during the inspection. Refer to 40 CFR 264.1050(d), labels in BB and heavy 40 CFR 262.1058 or light 40 CFR 262.1057 monitoring responsibilities.
- Leaks subject to 40 CFR 264 subpart BB: The leaks detected during the EPA Method 21 inspection are required to be repaired within the time frames laid out in the regulations. Refer to 40 CFR 262.1058 (heavy) or 40 CFR 262.1057 (light) and 40 CFR 264.1033(k)(1) for monitoring responsibilities. Including but not limited to notification and certification of leak and repair per Title V Renewal terms (Appendix 5).

¹³ Appendix 6 – Contingency Plan

- Closed vent system design and operation: Systech operates the closed vent system for the hazardous waste storage tanks at atmospheric pressure. The RCRA regulations require these systems to be operated under negative pressure. How this would interplay with the system's requirements under the Clean Air Act is a matter for additional review. Refer to 40 CFR 264.1033(k)(2) vent.
- Hazardous waste tank secondary containment: Total capacity for the secondary containment only calculates for the volume of the tanks located in containment. The calculations do not compensate for the volume of the ancillary equipment within the containment area per 40 CFR 264.175.
- Facility inspection documentation: Systech inspections are completed weekly with notation of "ok". No unit description or details are recorded per CFR 40 265.195. While these records may be sufficient to document that an inspection generally occurred, they do not address all of the relevant unit standards.

Section IV – FOLLOW UP

The following information was received by EPA after the inspection. Dates received are indicated below.

- Part 70 permit No 2018 – 0805-TVR (received September 10, 2019)
- Documentation of vent repair (received July 10, 2019)
- Certified mailing receipts from Systech to local first responders of facility's contingency plan (received July 31, 2019)

Section V – LIST OF APPENDICES

Appendix 1 – Photograph Log – 21 photos taken on 07/22/2019 and 07/23/2019

Appendix 2 – RCRA Permit Part D Process Description

Appendix 3 – Rejected Manifests

Appendix 4 – Method 21 Monitoring Results – July

Appendix 5 – Air Emissions Standards Title V Renewal Permit No. 2018-0805-TVR

Appendix 6 – Contingency Plan

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 508

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Overview from left to right: Waste water tank, hazardous waste storage tank number one and truck bay.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 509

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Interior of truck bay with tanker unloading.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 510

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Satellite accumulation drum near East wall in truck bay.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 511

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Overview of satellite accumulation drum near East wall in truck bay.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 512

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Three open containers of hazardous waste in truck bay, two with no labels.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 513

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Satellite accumulation drum of hazardous waste in truck bay. This drum was deemed not full and was still being utilized according to facility.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 514

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Close up of drum label from picture 513



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 515

Date: 7/22/2019

Photographer: John Penland, EPA

Description: SAA drum in truck unload area



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 516

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Hazardous waste storage tank number one



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 517

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Hazardous waste storage tank number two



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 518

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Overview of piping in secondary containment area for hazardous waste storage tank number one



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 519

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Overview of piping in secondary containment area for hazardous waste storage tank number two



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 520

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Hazardous waste buckets from picture 512 received lids and labels



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 521

Date: 7/22/2019

Photographer: John Penland, EPA

Description: Close up of hazardous waste buckets from picture 512 received lids and labels



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 523

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Closed vent system on tank one



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 524

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Underneath view of closed vent system on tank one



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 525

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Flame arrestor



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 526

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Manway on tank two



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 527

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Closed vent system on tank two



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 528

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Close up of closed vent system on tank two



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: Systech Environmental Corporation		
City: Tulsa	County/Parish: Tulsa	State: Oklahoma



Photograph Number: 529

Date: 7/23/2019

Photographer: John Penland, EPA

Description: Underneath view of closed vent system on tank two

Appendix 2

RCRA Permit Part D Process Description

Section D

PROCESS DESCRIPTION

Revision 2: April 2010

Revision 3: March 2012

SECTION D - PROCESS INFORMATION

Table of Contents

D.1	Introduction.....	1
D.2	Process Flow	2
D.3	Waste Management Units.....	3
D.3.1	Tank Systems	3
D.3.1.1	Tank Management Practices	4
D.3.1.2	Description.....	4
D.3.1.3	Description of Off-loading Systems to the Tanks.....	4
D.3.1.4	Level Indicators and Controls	5
D.3.1.5	Safety Cutoff	5
D.3.1.6	Pressure Controls	5
D.3.1.7	Secondary Containment and Detection of Releases	5
D.3.1.7	Leak Detection System	6
D.3.2	Response to Leaks or Spills and Disposition of Leaking or Unfit-for-use Tank Systems	7
D.3.2.1	Spill Response.....	7
D.3.2.2	Tank and Secondary Containment System Repair or Closure.....	8
D.3.2.3	Certification of Major Repairs	9
D.3.3	Containers	9
B.3.3.1	Description of Containers	10
B.3.3.2	Condition of Containers.....	10
B.3.3.2	Container/Waste Compatibility	10
D.3.3.3	Container Management Practices	11
D.3.3.4	Inspections	12
D.3.3.5	Containment.....	12

List of Figures

Figure D-1	Process Flow Schematic
Figure D-2	Tank Containment and Truck Off-Load Plan
Figure D-3	Tank Containment and Truck Off-Load Sections
Figure D-4	Piping and Instrumentation Drawing

List of Attachments

Att. D-1	Engineering Drawings and Figures
Att. D-2	Tank Design Assessment
Att. D-3	Tank Dike Secondary Containment Calculations
Att. D-4	Truck Off-load Area Containment Calculations

SECTION D - PROCESS INFORMATION

D.1 Introduction

The Systech Tulsa facility receives hazardous waste for the preparation of fuel quality waste (FQW) to be combusted in the Lafarge Tulsa cement kilns. The Systech facility consists of a tank farm with secondary containment and two storage tanks, a covered truck off-loading area that can hold two tanker trailers, and a laboratory/office building. The Systech tank farm and truck off-loading area are situated within the Lafarge Tulsa cement plant on property owned by Systech.

The Systech Tulsa facility has two waste storage/treatment systems that are regulated under the RCRA regulations at 40 CFR 264.

- Two 180,000-gallon storage tanks (S02) that are also considered as Treatment Units (T04) due to the agitation system installed with each tank;
- One Truck Off-loading Area that will store containers (S01) totaling up to 13,100 gallons.

The demarcation between Systech and Lafarge ownership of the piping running from the tank farm to the kilns is the property line separating the Systech and Lafarge properties, which is at least 50 feet from the edge of the tank farm and truck off-loading area.

D.2 Process Flow

The Systech Tulsa operations receive bulk tanker trucks of liquid hazardous waste, which are sampled, tested, and off-loaded into one of two storage tanks where the various received volumes are mixed by top-mounted agitators. After the tanks are mixed and tested to demonstrate they meet the requirements to be burned, the blended FQW is pumped to either or both of the two Lafarge cement kilns to be combusted as fuel in the manufacture of portland cement. Piping is also provided to allow the FQW to be recirculated back to the tank being fed from in the event of an automatic waste flow cut-off to the kiln. Tanker trailers may also be stored within the truck off-loading area, in addition to drums of site-generated hazardous wastes. Figure D-1 below represents the flow of materials through the facility.

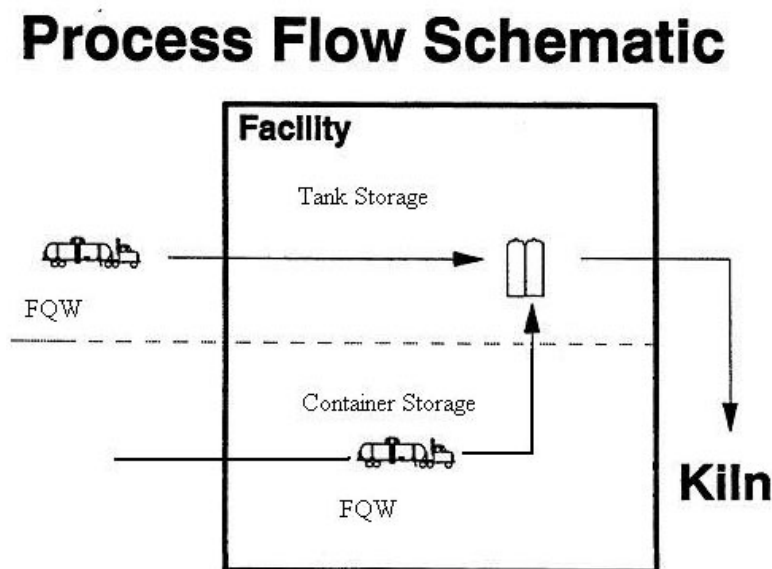


Figure D-1 Process Flow Schematic

D.3 Waste Management Units

This section describes the tank system and container storage area. Attachment D-1, Engineering Drawings and Figures, contains drawings that illustrate the features of each system. Figure A-1, Plot Plan, in Section A shows the general layout of the buildings and the off-loading and storage areas within the Lafarge and Systech facilities.

D.3.1 Tank Systems

Tank systems provide storage capacity for wastes delivered in trucks before they are used as FQW in the manufacture of cement. Truck off-loading usually occurs during the day shift five days a week, while the cement kilns operate twenty-four hours a day, seven days a week. The tanks are sized to be able to supply sufficient fuel over the weekend when the kiln continues to operate. The tanks are also used to blend the wastes to prepare a consistent fuel for the kilns.

The facility has one tank farm, shown on Figure A-2, Plot Plan, which includes the two storage tanks. Each tank has a design capacity of 180,000 gallons (32-foot diameter, 30-foot high), for a total permitted tank storage capacity of 360,000 gallons. Most of the wastes stored in the tanks are generated off-site, but some of the wastewaters are collected on-site from containment areas. The off-site wastes include liquid and sludge waste fuels.

Attachment D-2 contains a copy of the design assessment for the tank systems.

Systech will ensure that proper handling procedures are adhered to in order to prevent damage to the new tank system during installation. Prior to placing a new tank system or component in use, an independent, qualified, installation inspector or a qualified Professional Engineer, either of whom is trained and experienced in the proper installation of tanks systems or components, must inspect the system for the presence of weld breaks, punctures, scrapes of protective coatings, cracks, corrosion, or other structural damage or inadequate construction/installation. All discrepancies will be remedied before the tank system is placed in use.

All new tanks and ancillary equipment are tested for tightness prior to being placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank system being covered, enclosed, or placed into use.

D.3.1.1 Tank Management Practices

The tanks are used to receive off-site shipments of liquid waste fuels from bulk trucks, and are used to blend the various liquid waste fuels to prepare a consistent fuel for the kiln. The fuel in the tanks can be transferred to the other tank for blending or pumped directly to the kiln for use as fuel. Operations are both manual with manual valves and manual start/stop of pumps, and automatic valves and start/stop for pumps.

Hazardous wastes or treatment reagents are not placed in the tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

D.3.1.2 Description

Each tank is an aboveground, vertical, cylindrical tank with a flat bottom and a top deck. All of the tanks are constructed of mild steel and meet or exceed the minimum requirements of API 620. Ancillary equipment is supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

D.3.1.3 Description of Off-loading Systems to the Tanks

The off-loading system for the tanks includes two truck off-loading stations and two transfer pumps to unload the trucks. The system is operated manually with all manual valves and manual start for the pumps.

The bulk truck off-loading stations are located at the truck pad. These stations operate independently allowing two trucks to be off-loaded at a time.

D.3.1.4 Level Indicators and Controls

Each tank uses a mechanical or electrical device for level measurements. Each tank has a high-level alarm that works off the level indicators to alert the employees to prevent overflowing of the tank. An audible alarm horn is located in the bulk truck off-loading areas.

D.3.1.5 Safety Cutoff

Emergency stop buttons that stop all transfer pumps are located at the facility. In addition, the tanks have a high-level sensor that will shut off all transfer pumps. This system is designed to prevent overfilling the tanks.

D.3.1.6 Pressure Controls

Each tank is equipped with an in-line pressure/vacuum relief valve that vents to either of the cement kilns where working and breathing losses are controlled in the kilns' combustion chambers. Each tank is also equipped with an emergency pressure/vacuum release vent set per API 620 standards to prevent damage to the tanks. The emergency vent releases to the atmosphere.

D.3.1.7 Secondary Containment and Detection of Releases

Figure D-2, Tank Containment and Truck Off-load Plan, and Figure D-3, Tank Containment and Truck Off-load Sections, show that the secondary containment for the tanks is designed to contain liquids. The area is constructed of reinforced concrete with any cracks or gaps sealed. The concrete is compatible with the waste stored. The concrete secondary containment system acts as a liner external to the tank in compliance with 40 CFR 264.193(d).

The containment area is generally sloped at a 1% incline toward a sump within the tank dike. According to the Department of Commerce Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," the 25-year, 24-hour storm is 7.2 inches of precipitation for the Tulsa area.

Per the dimensions shown on the Plan and Section drawings in Attachment D-1, the total gross available containment within the tank farm is 283,859 gallons. Allowing for displacement by the 25-year, 24-hour storm event and the presence of the equipment within the dike wall, the net available secondary containment capacity is 181,498 gallons, which is more than the largest tank volume. Details of these calculations are shown in Attachment D-3:

The top of the dike wall is at least 2.0 feet above grade to prevent run-on into the tank dike area.

Precipitation collected in the containment area drains to a sump and is pumped by a sump pump to one of three stormwater tanks located in the adjacent containment area. The sump pump is operated manually.

Small leaks of waste fuels are cleaned up within 24 hours or in as timely a manner as possible after detection. The collected materials are placed back into the fuel. If a major release of waste fuels occurs, the majority of material would be pumped into a storage tank, and the remainder would be cleaned up as a small spill.

The Attachment D-1, Engineering Drawings and Figures, shows that all off-loading and tank transfer equipment and piping are located within secondary containment areas. The only hazardous waste equipment not within the secondary containment area are the burn lines and return line to and from the kilns, and above-ground welded flanges, welded joints, and welded connections that are inspected daily for leaks.

D.3.1.7 Leak Detection System

The FQW storage tanks are provided with a leak detection system that is designed and operated so that it will detect failure of the primary containment structure in compliance with 40 C FR 264.193(c)(3). The tank walls are visible to inspection. The tank floors consist of a double bottom with the lower plate made of pebble or checker plate. The interstitial space between the plates created by the pebble or

checker pattern allows any leakage to run to one of the inspection ports at the side of the tank. Both bottoms are sloped from the center of the tank down to the side walls to assure any leakage will run to the inspection ports.

D.3.2 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-use Tank Systems

D.3.2.1 Spill Response

The facility removes from service any tank system or secondary containment system that has a leak or spill or that becomes unfit for use. In any of these cases, the facility ensures that the following actions take place:

- The flow of hazardous waste into the tank system or secondary containment system is stopped. The system is then inspected to determine the cause of the release.
- If the release was from the tank system, the facility removes as much of the waste as necessary to prevent any further releases and to allow inspection and repair of the tank system.
- If the release is to the secondary containment system, all released materials are removed to prevent any harm to human health and the environment.
- The Site Manager or designee conducts a visual inspection of the release and, based on that, would prevent any further migration of the leak or spill to soils or surface water. An inspection is also conducted to ensure that any visible contamination of the soil or surface water has been removed and properly disposed of.
- Any release to the environment above the Reportable Quantity (RQ) will be reported to ODEQ within 24 hours of its detection. Exceptions to this

requirement are if the hazardous waste leak or spill is less than or equal to a quantity of one pound and if it is immediately contained and cleaned up.

- Within 30 days of detecting a release to the environment above the RQ, a written report containing the following information will be submitted to ODEQ, unless the agency instructs otherwise. The written report will include:
 - o The likely route of migration of the release;
 - o Characteristics of the surrounding soil;
 - o Results of any monitoring or sampling conducted in connection with the release, if this information is available. If this information is not available at this time, it will be submitted when it becomes available;
 - o Proximity of down-gradient drinking water, surface water, and populated areas; and
 - o A description of the response actions taken or planned.

D.3.2.2 Tank and Secondary Containment System Repair or Closure

Following a spill or release, the tanks and secondary containment systems are repaired in accordance with 40 CFR §264.196(e). Unless these requirements can be satisfied, the leaking tank system will be closed in accordance with 40 CFR §264.197. The requirements of 40 CFR §264.196(e) are the following:

- If the cause of the release was a spill that did not damage the integrity of the system, the system may be returned to service as soon as the released waste is removed and repairs, if necessary, are made.
- If the cause of the release was a leak from the primary tank system into the secondary containment system, the primary system must be repaired prior to returning the tank system to service.

- If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the facility must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of 40 CFR §264.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the appropriate certifications by an independent, qualified, professional engineer are obtained. If a component is replaced to comply with these requirements, that component must satisfy the requirements for new tank systems or components in 40 CFR §264.193. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank) the entire component must be provided with secondary containment in accordance with 40 CFR §264.193 prior to being returned to use.

D.3.2.3 Certification of Major Repairs

If the facility has repaired a tank system in accordance with the above requirements and the repair has been extensive (e.g., installation of an internal liner or the repair of a ruptured primary containment or secondary containment vessel), the tank system will not be returned to service unless the certification has been obtained by an independent professional engineer in accordance with 40 CFR §270.11(d)(1) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification will be submitted to ODEQ within seven days after returning the tank system to use.

D.3.3 Containers

A maximum of 13,100 gallons of containerized waste may be stored within the truck off-loading area. This value is based on being able to store two (2) 6,000-gallon tank trailers

in addition to non-bulk containers of site-generated wastes that must be shipped off-site for final treatment or disposal.

B.3.3.1 Description of Containers

Containerized off-site wastes are only stored in the bulk container in which they were received. No non-bulk containers of hazardous waste will be received for storage. Site-generated wastes may be stored in new, used, or reconditioned non-bulk containers meeting Department of Transportation (DOT) specifications. These containers meet the requirements of 49 CFR, Part 178, Subpart L - Non-bulk Performance-oriented Packaging Standards. These standards incorporate specifications for container dimensions and materials of construction.

B.3.3.2 Condition of Containers

Containers in storage are periodically inspected to ensure that they are in good condition and not leaking. If the container is observed to not be in good condition or if it begins to leak, the contained waste is transferred to a container that is in good condition, or the liquid hazardous waste may be off-loaded into the storage tanks.

B.3.3.2 Container/Waste Compatibility

Wastes received from off-site require that the shipping containers comply with DOT regulations, which include the requirement that the materials of construction of the containers be compatible with the contents so that the ability of the container to contain the waste is not impaired.

On-site generated wastes that are placed in storage for off-site shipment are placed in DOT-specified containers that are compatible with the contents.

D.3.3.3 Container Management Practices

All containers of hazardous waste in the truck off-loading area remain closed during storage, except when it is necessary to add or remove waste from that container.

All containers of hazardous waste in the truck off-loading area are opened, handled, and stored in manner that will not cause the container to rupture or leak.

D.3.3.3.1 Aisle Spacing

Aisle spacing in the container storage area conforms to National Fire Protection Association (NFPA), federal, and state requirements. Tankers and the non-bulk containers are stored with at least 2-foot aisle spacing on each side to allow access to the bulk containers. Non-bulk containers of site-generated wastes are stored on pallets with container labels facing the aisles. Adequate space is provided to prevent the tank trucks from damaging the non-bulk containers that may be stored within the area.

D.3.3.3.2 Marking and Labeling

All non-bulk site-generated waste containers are marked and labeled in accordance with all applicable ODEQ and DOT regulations. The labels attached to the non-bulk site-generated waste containers have the words "Hazardous Waste" and the date accumulation began in that container. Before shipping the site-generated waste containers, a label meeting the 49 CFR 172.304 labeling requirements is affixed. The bulk containers (tankers) are not required to be labeled while in storage, but the container must be properly placarded and the shipping papers (i.e., hazardous waste manifest) are readily available to identify the contents of the bulk container.

D.3.3.4 Inspections

All containers are visually inspected upon receipt to verify that they are in good condition and leak-free. The containers are inspected at least weekly. The contents of a damaged or leaking container are processed, immediately transferred to a container in good condition, or placed in an overpack. In addition, the condition of the container storage area is also inspected for deterioration of the containment system caused by corrosion or other factors.

D.3.3.5 Containment

Figure A-2, Plot Plan, shows the location of the truck off-loading area adjacent to and on the west side of the tank storage area. Figure D-2, Tank Containment and Truck Off-Load, Plan, and Figure D-3, Truck Containment and Truck Off-load Sections, shows that the truck off-load area is a curbed, concrete containment area. The area is under roof to minimize the amount of precipitation collected within this area.

The permitted capacity for this area is 13,100 gallons. Typically, this area may be used to store two 6,000-gallon tankers plus twenty 55-gallon drums. However, if two tankers are not being stored in the area, additional non-bulk containers may be stored that continue to meet the volume limits and storage and aisle spacing requirements.

The containment system has been designed and constructed of concrete that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. The truck off-load area is sloped to drain and remove liquids resulting from spills, leaks, or precipitation and to provide adequate secondary containment for the largest container (6,000 gallons) plus allowance for accumulated precipitation. See Attachment D-4 for calculation of the available secondary containment in this container storage area.

The perimeter curbing and raised approach aprons prevent run-on into this container storage area.

Any waste leakage or spills are cleaned up within 24 hours after detection or in as timely a manner as possible consistent with the procedures identified in the site's Contingency Plan in Section G.

The truck off-load area is located at least 50 feet from the Systech property line since the area manages ignitable wastes.

Attachment D-1
Engineering Drawings and Figures

Figure D-2	Tank Containment and Truck Off-Load Plan	Dwg. No. 42-06G02
Figure D-3	Tank Containment and Truck Off-Load Sections	Dwg. No. 42-06C02
Figure D-4	Piping and Instrumentation Drawing	Dwg. No. 42-06P01

Attachment D-2
Tank System Design Assessment

Attachment D-3

Tank Dike Secondary Containment Calculations

Gross Volume of Tank Dike plus 2 sumps (assumes no sloped floor):

- Two sumps = $4' \times 4' \times 5' \times 3 = 240$ cu. ft = 1,197 gallons
- Dike inside width = 55 feet
- Dike inside length = 149 feet (each FQW tank = 65 feet plus 19 feet for stormwater tanks)
- Dike maximum depth = $(5' - 2.9'') = 5.24$ feet
- Total Volume (without deducting sloped floor) = $(55 \times 149 \times 5.24) + 160$ cu. ft. = 43,182 cu. ft. = **323,001** gallons

Less displacement:

Sloped floor at FQW tanks (floor slopes at .25" per foot from adjacent corners to each sump forming 2 triangular wedges within each half of the dike area).

The volume of the concrete wedges can be estimated using the volume of a pyramid formula (area of base times height divided by 3) as follows:

- Elevation at 3 corners other than sump in each half = 1.24 feet above sump elevation
- The volume of the 4 concrete wedges = $\frac{1}{2}$ of the volume of a slab 110 ft by 130 ft by 1.24 ft less $\frac{1}{2}$ the volume of a pyramid 110 ft by 130 ft by 1.24 ft.

$$[(110 \times 130 \times 1.24) - (110 \times 130 \times 1.24 \div 3)] \div 2 = 5,910.7 \text{ cubic feet} = \mathbf{44,212} \text{ gallons}$$

Sloped floor at stormwater tanks:

- Length = 19 feet
- Width = 55 feet
- Slope elevation = 5.25 feet – 4 feet = 1.25 feet
- Volume of concrete wedge = $19 \times 55 \times 1.25 \times .5 = 653$ cu. ft. = **4,885** gallons

Two FQW tank pads:

- Tank base diameter = 34 feet
- Tank pad height = 1.5 foot above sump elevation (ignores portion of pad within the wedges)

- Tank Base displacement volume = $2 \times 1.5 \times \pi \times 34 \times 34 / 4 = 2,723.8$ cu. ft. = **20,374** gallons

Base of 1 FQW tank (the other is assumed to be the leaking tank):

- Tank diameter = 32.0 feet
- Height of tank within containment zone = $(5.24 - 1.5) = 3.74$ feet
- Volume of bottom of tank = $3.74 \times \pi \times 32 \times 32 / 4 = 3,007.9$ cu. ft. = **22,499** gallons

Base of 3 stormwater tanks (assume flat bottom on the floor):

- Tank diameter = 12 feet
- Average height of tank within containment zone = $(4 + 75\% \text{ of } 1.25) = 4.9$ feet
- Volume of bottom of tanks = $4.9 \times \pi \times 12 \times 12 / 4 \times 3 = 1,662.5$ cu. ft. = **12,436** gallons

Two divider walls (assume top is level):

- Divider walls width = 8 inches = .67 feet
- Divider walls length = 55 feet
- Top of divider walls above sump elevation = 18 inches
- Volume of divider walls = $2 \times .67 \times 55 \times 1.5 = 110$ cu ft = **827** gal.

Rainwater Volume

- 24-hour, 25-year precipitation = 7.1 inches
- Volume = $55 \times 149 \times 7.1 / 12 = 4,8494$ cubic feet = **36,268** gallons

Net secondary containment

- Volume = $323,001 - 44,212 - 4,885 - 20,374 - 22,499 - 12,436 - 827 - 36,268 = 181,500$ gallons

Volume of largest tank

- Tank diam. = 32 feet
- Tank height = 30 feet
- Tank volume = $\pi \times 32 \times 32 / 4 \times 30 = 24,127$ cubic feet = 180,470 gallons

Adequacy Determination

- Since available containment of 181,500 gallons > 180,470 gallons tank volume, dike dimensions provide adequate secondary containment.

Attachment D-4**Container Storage Area Secondary Containment Calculations**

Gross Volume of Truck Off-loading Area and Dike plus 1 sump (assumes no sloped floor):

- One sump = $4 \times 4 \times 5 = 80$ cu. ft = 598 gallons
- Containment inside width = 39 feet
- Containment inside length (from top of roll-over berms at each end) = 80 feet
- Rollover berm height above sump = $10'' = 0.83$ feet
- Total Volume (without allowing for sloped floor) = $[39 \times 80 \times 0.83] + 80$ cu. ft. = 2,670 cu. ft. = **19,971** gallons

Less displacement:

Two sloped floors:

- Elevation change = 0.83 feet
- Volume of 1 wedge = $39 \times 40 \times 0.83 \times 0.5 = 647$ cu. ft. = 4,840 gallons
- Volume of 2 wedges = $2 \times 4,840$ gallons = **9,680** gallons

Bollards:

- Base of each bollard = 6-in. diameter = 0.196 sq. feet
- Volume within containment = $8 \times 0.196 \times .834 = 130$ cu. ft. = 10 gallons

Pump/grinder pads (2):

- Pump stands sit on the floor. Assume minimal displacement.

Precipitation (since the off-loading area is under roof with walls extending down about 30% of the distance from the roof edge on the side walls, some precipitation can enter the containment area. Assume that 10% of the maximum precipitation can still enter the area.):

- 24-hour, 25-year storm = 7.1 inches = 0.59 feet
- Volume of rainwater = $0.59 \times 39 \times 80 \times 0.1 = 184$ cu. ft. = **1,377** gallons

Non-bulk container storage – Base of 20 55-gallon drums. This is conservative since the drums are stored on pallets, but for this calculation, assume they are sitting on the floor:

- Drum diameter = 23 inches = 1.92 feet
- Depth in containment – since drums are spread along the wall, assume they are all at the midpoint of the containment depth = $0.83 / 2 = 0.41$ ft

- $1.92 \times 1.92 \pi / 4 \times 0.41 \times 20 = 23.7$ cu. ft. = **177** gallons

Net secondary containment

- Volume = $19,971 - 9,680 - 10 - 1,377 - 177 = \mathbf{8,727}$ gallons

Volume of largest container or 10% of permitted capacity

- Tanker maximum volume = 6,000 gallons
- 10% of permitted capacity = $10\% \times 13,100$ gallons = 1,310 gallons
- Containment must be able to hold **6,000** gallons

Adequacy Determination

- Since available containment of **8,727** gallons > **6,000** gallons tanker volume, dike dimensions provide adequate secondary containment.

Appendix 3

Rejected Manifests

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Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 018095180 JJK			
5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736				Generator's Site Address (if different than mailing address)				
Generator's Phone 620-378-4451-107								
6. Transporter 1 Company Name Schiber Truck Company				U.S. EPA ID Number ILD006493191				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720				U.S. EPA ID Number KSD031203318				
Facility's Phone 620-433-3517								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
				No.	Type			
	1. UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB			1	TT	46140	P	0001 F001 F002 F003 F004 F005
	2.							
	3.							
4.								
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21669 029284-029285								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Michael L. Umbarger on behalf of				Signature Michael L. Umbarger		Month Day Year 5/14/19		
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Dale McDaniel				Signature Dale McDaniel		Month Day Year 5/14/19		
Transporter 2 Printed/Typed Name				Signature		Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection Incompatible Tanks								
18b. Alternate Facility (or Generator) 620-378-4451 Facility's Phone: Systech Environmental Corp 1420 South Central Road Fredonia, KS 66736				Manifest Reference Number: U.S. EPA ID Number KSD980633259				
18c. Signature of Alternate Facility (or Generator) Joe Hoffman				Month Day Year 05/14/19				
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H050		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name Michelle Huffman				Signature Michelle Huffman		Month Day Year 5/14/19		

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 018095181 JJK			
5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736				Generator's Site Address (if different than mailing address)				
Generator's Phone: 620-378-4451-107								
6. Transporter 1 Company Name Schiber Truck Company				U.S. EPA ID Number ILD006493191				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720				U.S. EPA ID Number KSD031203318				
Facility's Phone: 620-433-3517								
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		1. UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB		1 TT		49140	P	0001 F001 F002 F003 F004 F005
		2.						
		3.						
		4.						
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21669 029282-029283								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offero's Printed/Typed Name Michael L Umbarger on behalf of				Signature Michael L Umbarger		Month Day Year 5/14/19		
TRANSPORTER	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ Transporter signature (for exports only): _____							
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Toby Wren Signature [Signature] Month Day Year 5/14/19 Transporter 2 Printed/Typed Name _____ Signature _____ Month Day Year _____							
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection Incompatible Tank Manifest Reference Number: _____							
	18b. Alternate Facility (or Generator) Systech Environmental Corp 620-378-4451 1420 South Cement Road Fredonia, KS 66736				U.S. EPA ID Number KSD980633259			
	18c. Signature of Alternate Facility (or Generator) Joe Somme				Month Day Year 05/14/19			
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H050 2. 3. 4.							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Michelle Huffman Signature [Signature] Month Day Year 5/14/19								

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Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 018095182 JJK		
5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736		Generator's Site Address (if different than mailing address)					
Generator's Phone 620-378-4451-107							
6. Transporter 1 Company Name Schiber Truck Company		U.S. EPA ID Number ILD006493191					
7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720		U.S. EPA ID Number KSD031203318					
Facility's Phone 620-433-3517							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		1UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB	1	TT	49780	P	F001 F002 F003 F004 F005
		2.					
		3.					
		4.					
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21669 029280-029281							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name Michael L. Umbarger on behalf of		Signature Michael L. Umbarger		Month 5		Day 14	
16. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit: Date leaving U.S.:		Year 19			
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name MARK BATCHELDER		Signature Mark Batfelder		Month 5		Day 14	
Transporter 2 Printed/Typed Name		Signature		Year 19			
18. Discrepancy							
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection		Didn't meet fuel specs - Incompatible material!					
18b. Alternate Facility (or Generator) 660-378-4451		Systech Environmental Corp 1420 South Cement Road Fredonia, KS 66736		Manifest Reference Number: KSD980633259		U.S. EPA ID Number	
18c. Signature of Alternate Facility (or Generator) Joe Sommer				Month 05		Day 14	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)		1. H050		2.		3.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a		Printed/Typed Name Michelle Huffman		Signature Michelle Huffman		Month 5	
				Day 14		Year 19	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259		2. Page 1 of 1		3. Emergency Response Phone 800-424-9300		4. Manifest Tracking Number 018095183 JJK			
		5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736						Generator's Site Address (if different than mailing address)			
6. Transporter 1 Company Name Schiber Truck Company		U.S. EPA ID Number ILD006493191									
7. Transporter 2 Company Name		U.S. EPA ID Number									
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Santa Fe Ave. Chanute, KS 66720		U.S. EPA ID Number KSD031203318									
Facility's Phone: 620-433-3517											
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
						No. Type					
		1. UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB				1 TT		51700	P	F001 F002 F003 F004 F005	
		2.									
		3.									
	4.										
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 CONTRACT # CNN21669 029278-029279 SEE WASTE CODE LIST FOR ADDITIONAL CODES											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name: Michael L. Umbarger on behalf of Signature: Michael L. Umbarger Month: 5 Day: 14 Year: 19											
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____										
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: Cherise A. B. S. D. Signature: [Signature] Month: 5 Day: 14 Year: 19 Transporter 2 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____										
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection Incompatible Tank Manifest Reference Number: _____										
	18b. Alternate Facility (or Generator) U.S. EPA ID Number 620-378-4451 Systech Environmental Corp 1420 South Cement Road Fredonia, KS 66736 KSD 980633259										
	18c. Signature of Alternate Facility (or Generator) Month: 5 Day: 14 Year: 19 [Signature]										
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H050 2. _____ 3. _____ 4. _____										
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name: Michele Huffman Signature: [Signature] Month: 5 Day: 14 Year: 19										

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259		2. Page 1 of 1	3. Emergency Response Phone 800-424-9300		4. Manifest Tracking Number 018095184 JJK				
		5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736						Generator's Site Address (if different than mailing address)			
Generator's Phone 620-378-4451-107		6. Transporter 1 Company Name Schiber Truck Company						U.S. EPA ID Number ILD006493191			
7. Transporter 2 Company Name								U.S. EPA ID Number			
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720								U.S. EPA ID Number KSD031203318			
Facility's Phone 620-433-3517											
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		1. UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB			1 TT		46320	P	0001 F001 F002 F003 F004 F005		
		2.									
		3.									
		4.									
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21689 029039-029040											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name Michael L. Vinkberger on behalf of					Signature <i>Michael Vinkberger</i>			Month Day Year 5/14/19			
INT'L	16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____										
	17. Transporter Acknowledgment of Receipt of Materials										
TRANSPORTER	Transporter 1 Printed/Typed Name Jeffrey Weller					Signature <i>Jeffrey Weller</i>			Month Day Year 5/14/19		
	Transporter 2 Printed/Typed Name					Signature			Month Day Year		
DESIGNATED FACILITY	18. Discrepancy										
	18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection Incompatible Tanks										
	18b. Alternate Facility (or Generator) 620-378-4451 Systech Environmental Corp 1420 South Cement Road Fredonia, KS 66736					Manifest Reference Number: 1 KSD 980633259					
	Facility's Phone:					U.S. EPA ID Number					
	18c. Signature of Alternate Facility (or Generator) <i>Joe Somme</i>					Month Day Year 5/14/19					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)											
1. H050			2.			3.			4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a											
Printed/Typed Name Nichelle Huffman					Signature <i>Nichelle Huffman</i>			Month Day Year 5/14/19			

MO00 353 454

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 018095192 JJK			
5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736					Generator's Site Address (if different than mailing address)			
Generator's Phone: 620-378-4451-107								
6. Transporter 1 Company Name Schiber Truck Company					U.S. EPA ID Number ILD006493191			
7. Transporter 2 Company Name					U.S. EPA ID Number			
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720					U.S. EPA ID Number KSD031203318			
Facility's Phone: 620-433-3517								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
1.	UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB	1	TT	48980	P	D001	F001	F002
2.						F003	F004	F005
3.								
4.								
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21669 029083 029084								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offor's Printed/Typed Name Michael L. Vmberger on behalf of					Signature Michael L. Vmberger		Month Day Year 5/17/19	
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Chester S. B. J. J.					Signature [Signature]		Month Day Year 5/17/19	
Transporter 2 Printed/Typed Name					Signature		Month Day Year	
18. Discrepancy								
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection								
Sent to Alternate Facility Manifest Reference Number:								
18b. Alternate Facility (or Generator) Systech Envi. Corp, 2701 N. 145th East Ave					U.S. EPA ID Number			
Facility's Phone: 918-437-3902 ext-294 Tulsa, OK 74116					OKR 0000 25452			
18c. Signature of Alternate Facility (or Generator)							Month Day Year	
Joe Sommer							05/17/19	
19. Hazardous Waste Report Management Method Codes (I.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name					Signature		Month Day Year	

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Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

M000353592

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 018095193 JJK			
5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736					Generator's Site Address (if different than mailing address)			
Generator's Phone: 620-378-4451-107								
6. Transporter 1 Company Name Schiber Truck Company					U.S. EPA ID Number ILD006493191			
7. Transporter 2 Company Name					U.S. EPA ID Number			
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720					U.S. EPA ID Number KSD031203318			
Facility's Phone: 620-433-3517								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
1	UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB	1	TT	46020	P	F001	F001	F002
2						F003	F004	F005
3								
4								
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21669 029096-029097								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Michael L. Umberger on behalf of					Signature Michael Umberger		Month Day Year 5/20/19	
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Dale McDonald					Signature Dale McDonald		Month Day Year 5/20/19	
Transporter 2 Printed/Typed Name					Signature		Month Day Year	
18. Discrepancy								
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection								
Sent to Alternate Facility Manifest Reference Number: _____								
18b. Alternate Facility (or Generator) Systech Env Corp 2701N. 145th East Ave Tulsa, OK 74116					U.S. EPA ID Number OKR 000025452			
18c. Signature of Alternate Facility (or Generator) Joe Sommers							Month Day Year 05/20/19	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name					Signature		Month Day Year	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number KSD980633259	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 018095194 JJK			
5. Generator's Name and Mailing Address Systech Environmental Corp. 1420 South Cement Road Fredonia, KS 66736				Generator's Site Address (if different than mailing address)				
Generator's Phone: 620-378-4451-107								
6. Transporter 1 Company Name Schiber Truck Company				U.S. EPA ID Number ILD006493191				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Ash Grove Cement Co. 1801 N. Sante Fe Ave. Chanute, KS 66720				U.S. EPA ID Number KSD031203318				
Facility's Phone: 620-433-3517								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	1UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., 3, PGII, (XYLENE, TOLUENE), RQ=1 LB	1	TT	49300	P	F001	F002	F003
	2.					F004	F005	
	3.							
	4.							
14. Special Handling Instructions and Additional Information PROFILE NUMBER: AG1500 ERG# 128 SEE WASTE CODE LIST FOR ADDITIONAL CODES CONTRACT # CNN21669 029095-029098								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Michael L. Umberger on behalf of				Signature <i>Michael Umberger</i>		Month Day Year 5 20 19		
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Toby Wren				Signature <i>Toby Wren</i>		Month Day Year 5 20 19		
Transporter 2 Printed/Typed Name				Signature		Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☒ Full Rejection Sent to Alternate Facility								
18b. Alternate Facility (or Generator) Systech Env Corp 2701 N. 145th East Ave Tulsa, OK 74116				Manifest Reference Number: _____ U.S. EPA ID Number OKR 000 025452				
18c. Signature of Alternate Facility (or Generator) <i>Joe Sommer</i>						Month Day Year 05 20 19		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name				Signature		Month Day Year		

Appendix 4

Method 21 Monitoring Results – July

Appendix 5

Air Emissions Standards Title V Renewal Permit No. 2018-0805-TV



SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

APR 26 2019

KEVIN STITT
Governor

Systech Environmental Corporation
Attn. Randy Sparks, Regulatory Manager
2175 Gardner Blvd.
Holly Hill, South Carolina 29059

Permit Number: **2018-0805-TVR**
Permit Writer: Morgan McGrath, E.I.

SUBJECT: Title V Renewal; **Permit No. 2018-0805-TVR**
Systech Environmental Corporation
AQD Facility ID: 6924
Latitude 36.19676°, Longitude -95.81248°
Section 22, Township 20N, Range 14E
Physical Address: 2609 North 145th East Avenue, Tulsa, Rogers County

Dear Mr. Sparks:

Enclosed is the Part 70 Renewal authorizing operation of the referenced facility. Please note that this permit is issued subject to certain standard and specific conditions that are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed on approved AQD forms and submitted by April 1st of every year. Any questions concerning the form or submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact me at morgan.mcgrath@deq.ok.gov or (918) 293-1600.

Sincerely,

Morgan McGrath, E.I.
Engineering Section
AIR QUALITY DIVISION

Enclosure: Title V Renewal Permit





PART 70 PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON STREET, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit Number: 2018-0805-TVR

Systech Environmental Corporation,
having complied with the requirements of the law, is hereby granted permission to
operate the Systech Environmental Facility located in Section 22, T20N, R14E,
Rogers County, Oklahoma, subject to standard conditions dated June 21, 2016, and
specific conditions, both attached.

This permit shall expire five (5) years from the date below, except as authorized under Section VIII of the Standard Conditions.



Division Director
Air Quality

4-25-17

Issuance Date

**PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS**

**Systech Environmental Corporation
Systech Environmental**

Permit No. 2018-0805-TV

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on June 18, 2018. The Evaluation Memorandum dated April 22, 2019, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Points of emissions and limitations for each point: [OAC 252:100-8-6(a)(1)]

EUG 1 Tanks		
ID#	Contents	Throughput (gal/yr)
Tank #1	Fuel Quality Waste	48,880,800
Tank #2	Fuel Quality Waste	

EUG 2 Fugitive Emission Sources	
ID#	Contents
Fugitives	Fuel Quality Waste

EUG 3 Unloading Rack		
ID#	Contents	Throughput (gal/yr)
Unloading Rack	Fuel Quality Waste	48,880,800

2. Tank #1 and Tank #2 are subject to federal New Source Performance Standards, 40 CFR Part 60 Subpart Kb, and shall comply with all applicable standards including but not limited to: [40 CFR 60.110 to 60.116]

- a. § 60.110b Applicability and designation of affected facility.
- b. § 60.111b Definitions.
- c. § 60.112b Standard for VOC.
- d. § 60.113b Testing and procedures.
- e. § 60.114b Alternative means of emission limitation.
- f. § 60.115b Reporting and recordkeeping requirements.
- g. § 60.116b Monitoring of Operations.

3. The facility is subject to NESHAP, 40 CFR Part 61, Subpart FF and shall comply with all applicable provisions including but not limited to: [40 CFR Part 61, Subpart FF]

- a. § 61.342 Standards: General;
 - b. § 61.348 Standards: Treatment processes;
 - c. § 61.349 Standards: Closed-vent systems and control devices;
 - d. § 61.354 Monitoring of operations;
 - e. § 61.355 Test methods, procedures, and compliance provisions;
 - f. § 61.356 Recordkeeping requirements; and
 - g. § 61.357 Reporting requirements.
4. The facility is subject to NESHAP, 40 CFR Part 63, Subpart DD and shall comply with all applicable provisions including but not limited to: [40 CFR Part 63, Subpart DD]
- a. §63.680 Applicability and designation of affected sources.
 - b. §63.681 Definitions.
 - c. §63.683 Standards: General.
 - d. §63.684 Standards: Off-site material treatment.
 - e. §63.685 Standards: Tanks.
 - f. §63.686 Standards: Oil-water and organic-water separators.
 - g. §63.687 Standards: Surface impoundments.
 - h. §63.688 Standards: Containers.
 - i. §63.689 Standards: Transfer systems.
 - j. §63.690 Standards: Process vents.
 - k. §63.691 Standards: Equipment leaks.
 - l. §63.693 Standards: Closed-vent systems and control devices.
 - m. §63.694 Testing methods and procedures.
 - n. §63.695 Inspection and monitoring requirements.
 - o. §63.696 Recordkeeping requirements.
 - p. §63.697 Reporting requirements.
 - q. §63.698 Implementation and enforcement.
5. The permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
6. The permittee shall maintain records of operation as listed below. These records shall be retained on-site for at least five years from the date of recording, inspection, testing, or repair, and shall be made available to regulatory personnel upon request. [OAC 252:100-8-6(a)(3)(B)]
- a. Throughput for Tank #1, Tank #2, and the unloading rack to demonstrate compliance with the limits in Specific Condition #1 (monthly and 12-month rolling totals).
 - b. Records required by NSPS, 40 CFR Part 60, Subpart Kb.
 - c. Records required by NESHAP, 40 CFR Part 61, Subpart FF.
 - d. Records required by NESHAP, 40 CFR Part 63, Subpart DD.
7. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit (September 30, 1998), the permittee shall submit to the Air Quality

Division of the DEQ, with a copy to the USEPA Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6 (c)(5)(A) & (D)]

8. This permit supersedes all previous Air Quality operating permits for this facility which are now canceled.

**MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(June 21, 2016)**

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:

- (1) the date, place and time of sampling or measurement;
- (2) the date or dates analyses were performed;
- (3) the company or entity which performed the analyses;
- (4) the analytical techniques or methods used;
- (5) the results of such analyses; and
- (6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report.

[OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions.

[OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

[OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards (“NSPS”) under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants (“NESHAPs”) under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer’s instructions and in accordance with a protocol meeting the requirements of the “AQD Portable Analyzer Guidance” document or an equivalent method approved by Air Quality.

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM₁₀). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification.

[OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit.

[OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit.

[OAC 252:100-8-6(d)(2)]

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.

[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance.

[OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration.

[OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced.

[OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation.

[OAC 252:100-8-4(b)(5)]

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.

[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued.

[OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing,

terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances:

[OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

- (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
- (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d).

[OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

- (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

- (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;

- (2) the permitted facility was at the time being properly operated;
- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

- (1) 5 tons per year of any one criteria pollutant.
- (2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.

[OAC 252:100-8-2 and OAC 252:100, Appendix J]

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

- (1) result in no net emissions increases,
- (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
- (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]
 - (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
 - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
 - (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
 - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of

adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]

- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]

- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]

- (7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

- (1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
- (2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
- (3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be

- certified by an approved technician certification program pursuant to § 82.161;
- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
 - (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R. § 70.8(a) and (c).
- (5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 C.F.R. § 70.8(d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).

- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

SECTION XXII. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[OAC 252:100-43-6]

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

MEMORANDUM

April 22, 2019

TO:  Phillip Fielder, P.E., Chief Engineer

THROUGH:  Phil Martin, P.E., Existing Source Permits Section Manager

THROUGH:  Ryan Buntyn, P.E., Existing Source Permits Section

FROM: Morgan McGrath, E.I., Eng. Section, Regional Office at Tulsa (ROAT)

SUBJECT: Evaluation of Permit Application No. **2018-0805-TV**
Systech Environmental Corporation
Systech Environmental (SIC 4953/NAICS 562211)
AQD Facility ID: 6924
Latitude 36.19676°, Longitude -95.81248°
Section 22, Township 20N, Range 14E
Directions: I-44 to 129th East Avenue, North 2 miles to Apache, East 1
mile to 145th East Avenue, North to entrance.
Physical Address: 2609 North 145th East Avenue, Tulsa, Rogers County

SECTION I. INTRODUCTION

Systech Environmental Corporation (Systech) has submitted an application for a Part 70 Renewal for their facility in Rogers County. The facility currently operates under 2009-205-TV issued on December 18, 2013. Systech is considered a collocated facility with Tulsa Cement LLC dba Central Plains Cement Company (Tulsa Cement). Tulsa Cement operates under a separate Part 70 Operating Permit No. 98-174-TV (M-24).

The facility has made the following requested change in this renewal:

- Change Specific Condition 3 to use an alternative compliance program under NESHAP 40 CFR Part 63, Subpart DD that utilizes LDAR Monitoring requirements contained in NESHAP 40 CFR Part 63, Subpart H .

Systech was issued a construction permit on January 3, 2011. Construction of the site was completed in January of 2012 and operation of the fuel quality waste (FQW) storage and handling units began on February 6, 2012. Systech began supplying Tulsa Cement with FQW to use in their kilns on February 7, 2012. Under NESHAP 40 CFR Part 63, Subpart DD, Systech is considered a new affected source that commenced construction after October 13, 1994, but before July 2, 2014.

After the effective date of the final amendment to the Off-Site Waste and Recovery Operations (OSWRO) rule published on March 18, 2015, the facility became subject to the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendment. §63.691(b)(2) requires the facility to comply with the LDAR requirements of 40 CFR Part 63, Subpart H for equipment leaks. Before the 2015 OSWRO final rule was promulgated, sources could comply with the LDAR requirements of 40 CFR Part 61, Subpart V, or 40 CFR Part 63, Subpart H for equipment leaks. Subpart V requires sensory-based monitoring while Subpart H requires Method 21 instrument-based monitoring. This facility is now subject to the requirement in Subpart DD that references Subpart H LDAR Monitoring requirements which requires Method 21 instrument-based monitoring.

In this renewal, the high level citation for NESHAP 40 CFR Part 61, Subpart V (formally specific condition 3) has been removed from the specific conditions. Instead only the high level citation for NESHAP 40 CFR Part 63, Subpart DD will be retained. Any reference to comply with requirements from other regulations is assumed by virtue of compliance with NESHAP 40 CFR Part 63, Subpart DD. Therefore, other regulatory citations to NESHAP 40 CFR Part 61, Subpart V and NESHAP 40 CFR Part 63, Subpart H are not necessary.

There are no other requested changes in the application for renewal.

SECTION II. FACILITY DESCRIPTION

Systech operates a fuel quality waste (FQW) facility which supplies FQW to Tulsa Cement LLC dba Central Plains Cement Company (Tulsa Cement). Tulsa Cement owns and operates a cement manufacturing facility located at 2609 North 145 East Avenue, Tulsa, Oklahoma. The plant is a major source of air emissions operating in accordance with Part 70 Operating Permit No. 98-174-TV (M-24). Operation of the FQW storage and handling units began on February 6, 2012. Systech began supplying Tulsa Cement with FQW to use in their kilns on February 7, 2012. Tulsa Cement burns FQW in each of their two kilns in place of the coal/coke fuel currently being used. The FQW is managed by Systech. Systech constructed and operates a fully permitted hazardous waste management facility within the Tulsa Cement facility site. Systech owns the property on which the FQW facility is constructed. Systech's primary responsibility is to receive, process, and store liquid FQW prior to introduction into the Tulsa Cement kilns. This permit addresses the sources and operations required for the Systech facility to supply the FQW to the Tulsa Cement kilns. The boundary between the Tulsa Cement and Systech properties forms the basis for determining whether a particular piece of equipment and source of emissions is considered to belong to Tulsa Cement or Systech and in which permit it should be addressed. The construction and operation of the Tulsa Cement FQW burning system is addressed in a separate Part 70 air permit.

SECTION III. PROCESS INFORMATION

Systech's FQW receiving and storage facility is located northwest of the Tulsa Cement kilns. The Systech waste management units consist of a tanker truck receiving bay (that can hold two (2) tanker trailers) and two (2) 180,000 gallon tanks. The FQW is received in bulk trucks which are

unloaded directly into the storage tanks. The truck offloading area may also be used for storage of a limited number of non-bulk hazardous waste containers. Piping, ancillary equipment, and associated controls are utilized to transfer FQW from the storage tanks at Systech to the kilns at Tulsa Cement.

3.1 Storage Tanks

Two (2) 180,000 gallon vertical, fixed roof tanks are used to blend and store FQW prior to burning. Each tank is constructed of mild steel and is equipped with an agitator, an inline pressure/vacuum relief device, high level indicators/alarms and an emergency pressure relief vent. The tank vents are routed to the cement kiln where vapor displacement and evaporative emissions are burned. The tanks and pressure/vacuum relief in-line device is designed for a maximum of 2 pounds per square inch (psi) before venting to the control system. The facility may operate the tanks at a lower pressure. This design minimizes the evaporative losses during storage. The emergency relief vent is a backup that would only be employed if pressure in the tanks exceeded the design criteria. The emergency relief vents exhaust to the atmosphere. The tanks were installed with the option to vent to a carbon adsorption system for the times when both cement kilns are not available. The carbon adsorption units are managed in accordance with Systech's Operation & Maintenance Plan. The spent carbon may be sent off-site for disposal or regeneration.

3.2 Truck Unloading

Systech receives bulk tanker trucks of FQW which are sampled, tested and off-loaded into one of two storage tanks. The FQW delivered to Systech is pumpable. There are two truck off-loading stations, and two transfer pumps with in-line grinders to unload the FQW from the trucks. The system is operated manually with all manual valves and manual start switches for the pumps.

3.3 Air Pollution Control Systems

The tanks are equipped with a closed-vent system that routes exhaust to either the cement kilns for combustion control or to a carbon adsorption system when both kilns are not operating. The kilns combust volatile organic compounds and organic hazardous air pollutants with an efficiency of at least 99.99% which is the minimum destruction and removal efficiency required by the Hazardous Waste Combustors (HWC) MACT (40 CFR Part 63, Subpart EEE). Two carbon canisters in series containing activated carbon are used as a back-up control device if both kilns are not operating. The carbon adsorption system controls emissions with an efficiency of at least 95% which is the minimum required by the regulations for hazardous waste operations in 40 CFR 63 Subpart DD.

SECTION IV. EMISSIONS

The operation of Systech's FQW management facility results in the addition of sources of volatile organic compound (VOC) emissions. In addition, there are hazardous air pollutant (HAP)

components in the generated emissions. VOC and HAP pollutants are the only potential air emissions associated with the Systech facility.

4.1 Volatile Organic Compounds

VOC emissions are generated when FQW is loaded into the tanks (working losses) and from evaporation during storage (breathing losses). The working and breathing losses escaping the tank are VOC and HAP emissions. These emissions can be estimated based on FQW composition, the maximum FQW throughput and by using the TANKS 4.09d emission estimation program which assumes no control. A representative average composition of FQW was estimated based on constituent information from Systech's facility in Fredonia, Kansas. The average weight percent of the constituents in the FQW was used to speciate emissions in the TANKS program. The average composition is provided in the table below.

Table 4-1. Average FQW Composition

Compound	CAS No.	Average %
Acetone	67-64-1	0.63
Acetonitrile	75-05-8	0.02
Aliphatics/Aromatics	--	34.67
Benzene	71-43-2	0.03
Butyl Acetate	123-86-4	0.62
Chlorobenzene	108-90-7	1.14
Cyclohexane	110-87-7	0.03
Ethanol	64-17-5	0.32
Ethyl Acetate	141-78-6	0.54
Ethylbenzene	100-41-4	0.17
Diethylene Glycol Monobutyl Ether as Ethylene Glycol	107-21-1	1.03
Ethyl Ether	60-29-7	0.09
Heptanes	142-82-5	2.98
Hexanes as Hexane(-n)	110-54-3	2.70
Isobutanol	78-83-1	0.06
Isopropanol	67-63-0	0.52
Isopropyl Acetate	108-21-4	0.37
Methanol as Methyl Alcohol	67-56-1	0.03

Compound	CAS No.	Average %
Methyl Amyl Ketone	110-43-0	0.08
Methylcyclohexane	108-87-2	0.57
Methyl Ethyl Ketone	78-93-3	0.23
Methyl Isoamyl Ketone	110-12-3	0.52
Methyl Isobutyl Ketone	108-10-1	0.10
Methylene Chloride	75-09-2	0.42
n-Methyl-2-Pyrrolidone	872-50-4	1.01
Octanes	111-65-9	0.95
Pentane	109-66-0	0.13
n-Butanol	78-92-2	0.34
Styrene	100-42-5	0.24
Tetrachloroethylene	127-18-4	0.12
Tetrahydrofuran	109-99-9	0.03
Toluene	108-88-3	3.01
Trichloroethylene	79-01-6	0.09
Xylenes	1330-20-7	8.29
Solids	--	34.07
Water	--	20.17

These concentrations and the total annual FQW throughput of 48,880,800 gallons are used in the TANKS program to estimate working and breathing losses of the named constituents. The two FQW tanks are identical; therefore, the throughput is apportioned equally to both tanks at 24,440,400 gallons per year per tank. The pressure and vacuum settings in TANKS may be set at the maximum allowable, 2 psi (design) or lower.

A summary of the emissions estimates is provided below.

Table 4-2. Uncontrolled VOC Emission Rates

Source	Pollutant	Working Loss (tpy)	Breathing Loss (tpy)	Emission Rate (tpy)
Tank #1	VOC	1.25	0.00	1.25
Tank #2	VOC	1.25	0.00	1.25
Total				2.50

As described in Sections 3.1 and 3.3, VOC emissions from the tanks pass through the inline conservation vents and are routed to one of the cement kilns or to a carbon adsorption system for control. VOC and organic HAPS are controlled by the kilns with an efficiency of at least 99.99% which is the minimum destruction and removal efficiency (DRE) required by the HWC MACT. The carbon adsorption system controls emissions with a removal efficiency of at least 95% which is the minimum required by the regulations for hazardous waste operations in 40 CFR Part 63, Subpart DD. When control is taken into consideration, estimated actual VOC emissions to the atmosphere are much less than the uncontrolled emissions as indicated below.

Table 4-3. Controlled VOC Emission Rates

Source	Pollutant	Uncontrolled VOC (tpy)	Kiln Combustion Control (%)	Kiln Controlled VOC (tpy)	Carbon Control (%)	Carbon Controlled VOC (tpy)
Tank #1	VOC	1.25	99.99	0.00013	95.00	0.0627
Tank #2	VOC	1.25	99.99	0.00013	95.00	0.0627
Total		2.50	--	0.00026	--	0.1254

Fugitive VOC and HAP emissions result from piping component and equipment leaks. These are estimated using the average emission factors from the USEPA guidance document "Protocol for Equipment Leak Emission Estimates", Table 2-1. SOCM I AVERAGE EMISSION FACTORS ¹.

The numbers of pumps, valves, flanges, open-ended lines and vents in the design of Systech's facility were summed and multiplied by the appropriate emission factor and 8,760 hours per year. Fugitive VOC emission calculations are summarized in the table below. The number of system components is an estimate, the actual numbers are maintained at the facility and are used to determine emissions with reporting requirements.

Table 4-4. Fugitive VOC Emission Rates

Equipment Type	Service	Number of Component Sources	Emission Rate (kg/yr)	Emission Rate (tons/yr)
Valves	Gas	0	0.00	0.00
	Light Liquid	141	4,977.72	5.49
Pump seals	Light Liquid	10	1,743.24	1.92
	Heavy Liquid	0	0.00	0.00
Pressure relief valves	Gas	2	1,822.08	2.01
Connectors	All	496	7,951.38	8.76
Open-ended lines (capped)	All	47	700	0.77
Sampling connections	All	0	0.00	0.00
TOTALS			17,194.42	18.95

¹ EPA-453/R-95-017, November 1995.

Fugitive VOC emissions from equipment and piping components will be monitored and minimized in accordance with Systech's leak detection and repair program.

4.2 Hazardous Air Pollutants

The emission of HAPs consist of those VOC that are on the list of hazardous air pollutants. HAPS in the FQW are represented by the constituents listed below. The list is comprised of the main organic components found in the FQW and the average percent composition is taken from 2008 data at Systech's Fredonia facility.

Table 4-5. Representative HAP Constituents in FQW

Compound	CAS No.	Average %
Acetonitrile	75-05-8	0.10
Benzene	71-43-2	0.01
Chlorobenzene	108-90-7	1.14
Ethylbenzene	100-41-4	1.87
Hexanes as Hexane(-n)	110-54-3	2.70
Methanol as Methyl Alcohol	67-56-1	1.05
Methyl Isobutyl Ketone	108-10-1	0.48
Methylene Chloride	75-09-2	0.42
Styrene	100-42-5	0.57
Tetrachloroethylene	127-18-4	0.45
Toluene	108-88-3	2.41
Trichloroethylene	79-01-6	0.09
Xylenes	1330-20-7	3.75

Individual HAP emission rates as estimated by TANKS range from 0.1 to 0.5 tons per year. Combined HAP emission calculations are summarized below in Table 4-6.

Table 4-6. Uncontrolled Total HAP Emission Rates

Source	Pollutant	Working Loss (tpy)	Breathing Loss (tpy)	Emission Rate (tpy)
Tank #1	Total HAP	0.622	0.00	0.622
Tank #2	Total HAP	0.622	0.00	0.622
Total				1.24

Organic HAP emissions from the tanks, as with VOC emissions, pass through the inline conservation vents and are routed to one of the cement kilns or to a carbon adsorption system for control. Organic HAPS are controlled by the kilns with an efficiency of at least 99.99% which is the minimum DRE required by the HWC MACT. The carbon adsorption system controls emissions with a removal efficiency of at least 95% which is

the minimum required by the regulations for hazardous waste operations in 40 CFR 63 Subpart DD. Actual emissions to the atmosphere, therefore, are much less than the uncontrolled emissions as indicated below.

Table 4-7. Controlled Total HAP Emission Rates

Source	Pollutant	Uncontrolled HAP (tpy)	Kiln Combustion Control (%)	Kiln Controlled HAP (tpy)	Carbon Control (%)	Carbon Controlled HAP (tpy)
Tank #1	Total HAP	0.6220	99.99	0.00006	95.00	0.0311
Tank #2	Total HAP	0.6220	99.99	0.00006	95.00	0.0311
Total		1.24	--	0.00012	--	0.0622

In addition, fugitive HAP emissions result from piping component and equipment leaks. Fugitive VOC emissions were estimated in Section 4.1. Fugitive HAP emissions are calculated assuming that the fugitive VOC emission stream contains HAP in the same proportion as the tank VOC emission stream. The calculation is described below.

Total Uncontrolled VOC Tank Emissions	= 2.50 tons per year
Total Uncontrolled Combined HAP Tank Emissions	= 1.24 tons per year
Total Fugitive VOC emissions	= 18.95 tons per year

Total Fugitive HAP emissions
 = 18.95 tpy x [1.24 tpy / 2.50 tpy]
 = 9.40 tons per year.

As with fugitive VOC emissions, fugitive HAP emissions from equipment and piping components will be monitored and minimized in accordance with Systech's leak detection and repair program.

SECTION V. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]
 Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]
 This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations listed in OAC 252:100, Appendix Q. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
 Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in "attainment" of these standards.

OAC 252:100-5 (Registration, Emission Inventory, and Annual Fees) [Applicable]
 Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories were submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
 This facility meets the definition of a major source since it has the potential to emit regulated pollutants in excess of 100 TPY. As such, a Title V (Part 70) operating permit is required. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant
- 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are incorporated from previous permits, or are developed from the applicable regulations.

OAC 252:100-9 (Excess Emissions Reporting Requirements) [Applicable]
 Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-13 (Open Burning) [Applicable]
 Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter. No open burning is conducted at the Facility.

OAC 252:100-19 (Particulate Matter (PM)) [Not Applicable]
 Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. There is no fuel burning or PM producing activities at the Facility.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
 No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. Since there are no fuel-burning or PM-producing activities that are associated with Systech, compliance is assured.

OAC 252: 100-29 (Fugitive Dust) [Applicable]
 This subchapter states that no person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Under normal operating conditions, the Systech facility will not cause a problem in this area, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 2 limits ambient air impacts of hydrogen sulfide and sulfur oxides. The Systech facility does not have any H₂S or SO₂ emissions sources therefore compliance with the above standards is assured.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
 The new equipment standard for emissions of oxides of nitrogen measured as nitrogen dioxide from gas-fired/liquid-fired fuel-burning equipment with a rated heat input of 50 MMBTUH. There is no fuel-burning equipment on the Systech location.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
 This subchapter affects gray iron cupolas, blast furnaces, basic oxygen furnaces, petroleum catalytic cracking units, and petroleum catalytic reforming units. There are no affected sources.

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity between 400 and 40,000 gallons and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. There are no tanks on site with a capacity between 400 and 40,000 gallons.
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity greater than 40,000 gallons to be equipped with a floating roof or a vapor-recovery system capable of collecting 85% or more of the uncontrolled VOCs. The tanks are subject to NSPS Subpart Kb and are equipped with a vapor-recovery system; therefore, the tanks are exempt from this section.
Part 5 limits the VOC content of coatings. Any painting operation will involve maintenance coatings of buildings and equipment and emit less than 100 pounds per day of VOCs and is exempt.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
 This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a

modification is approved by the Director. Since no AOC has been designated there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping)

[Applicable]

This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:

OAC 252:100-11	Alternative Reduction	not eligible
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-39	Nonattainment Areas	exempt (VOC stored < 1.5 psia)
OAC 252:100-47	Landfills	not type of source category

SECTION VI. FEDERAL REGULATIONS

PSD, 40 CFR Part 52

[Not Applicable At This Time]

The Systech facility is surrounded by the Tulsa Cement plant but is owned and operated by Systech. The Systech facility is not a major source in accordance with 40 CFR 52.21(b)(1) with emission rates greater than 100 tons per year for at least one regulated pollutant. Previous determinations by the Air Quality Division of the Oklahoma Department of Environmental Quality (ODEQ) concluded that Systech and the Tulsa Cement are considered collocated. Since Systech is considered collocated with Tulsa Cement, air emissions from both facilities must be evaluated together to determine whether an air permit is required under the Federal Prevention of Significant Deterioration (PSD) provisions. PSD analysis is required when an existing major source increases emissions by significant amounts (after netting, etc.). The significant emissions quantity (TPY) of each pollutant in question is shown following.

SO ₂	NO _x	CO	VOC	PM/PM ₁₀	Sulfuric Acid Mist	Total Reduced Sulfur	H ₂ S	Fluorides	Lead
40	40	100	40	25/15	7	10	10	3	0.6

Any future emissions increases must be evaluated for PSD if they exceed a significance level.

NSPS, 40 CFR Part 60

[Subpart Kb Applicable]

Subpart Kb (Volatile Organic Liquids Storage Vessels) applies to volatile organic liquids storage vessels for which construction, reconstruction, or modification commenced after July 23, 1984, and which have a capacity of 19,812 gallons (40 cubic meters) or greater. Paragraph 60.112b(a) specifies that vessels with a design capacity greater than or equal to 39,980 gallons containing a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 0.75 psia but less than 11 psia shall have one of the following vapor control devices: an external fixed roof in combination with an internal floating roof; an external floating roof; a closed vent system to a control device (flare, condenser, or absorber); or an equivalent system. Tanks #1 and #2 are 180,000 gallon tanks and are subject to the VOC emission standards of §60.112b. The tanks are equipped with a closed-vent system and control device in accordance with §60.112b(b)(1). The permit requires compliance with all applicable requirements of this subpart.

NESHAP, 40 CFR Part 61

[Subparts FF Applicable]

Subpart J (Equipment Leaks of Benzene) concerns only process streams which contain more than 10% benzene by weight. The benzene content of the FQW is not expected to equal or exceed 10 percent, therefore, this regulation is not applicable to Systech's facility.

Subpart V (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)) is applicable to piping components and other fugitive sources when referenced from other regulations. Before the 2015 amendment to 40 CFR Part 63, Subpart DD was promulgated, sources had the option of complying with the LDAR requirements of 40 CFR Part 61, Subpart V or 40 CFR Part 63, Subpart H for equipment leaks. Systech has previously chosen to comply with the requirements of 40 CFR Part 61, Subpart V to satisfy 40 CFR 63 Subpart DD. As of March 18, 2016 (1 year after the publication of the final amendment to 40 CFR 63 Subpart DD), the facility is now required to comply with the LDAR requirements of 40 CFR Part 63, Subpart H for equipment leaks. Therefore, the sensory based requirements of 40 CFR Part 61, Subpart V no longer apply to the facility.

Subpart BB (Benzene Transfer Operations) affects transfer and loading operations with 70% or more by weight benzene. The benzene content of the FQW is not expected to equal or exceed 10 percent, therefore, this regulation is not applicable to Systech's facility.

Subpart FF (National Emission Standard for Benzene Waste Operations) applies to the FQW tanks at Systech's facility. FQW is a liquid hazardous waste stream from Systech's hazardous waste treatment, storage and disposal facility that may include benzene-containing waste from chemical manufacturing facilities, coke by-product recovery plants and petroleum refineries. The tanks must meet the standards of §61.343 and §61.349. In addition, benzene-containing waste streams are required to be treated to remove or destroy the benzene in accordance with §61.342(c) of Subpart FF which is incorporated by reference in OAC 252:100-2-3. The FQW from Systech is sent to the kilns at the Tulsa Cement plant to treat the FQW as required by the standards in §61.342(c). The permit requires compliance with all applicable requirements of this subpart.

NESHAP, 40 CFR Part 63

[Subpart DD Applicable]

Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks). The provisions of this subpart apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR part 63 that references this subpart. After the effective date of the final amendment to 40 CFR Part 63, Subpart DD published on March 18, 2015, the facility became subject to the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendment. §63.691(b)(2) requires the facility to comply with the LDAR requirements of 40 CFR Part 63, Subpart H for equipment leaks. The requirements to control the HAP emitted from equipment leaks in accordance with §63.161 through §63.182 is referenced from 40 CFR 63 Subpart DD.

Subpart DD (National Emission Standard for Hazardous Air Pollutants from Off-Site Waste And Recovery Operations) applies to the FQW Tanks and the ancillary equipment consisting of pumps and piping components. The owner or operator of an affected source that commenced construction on or after October 13, 1994, must achieve compliance with the provisions of this subpart (except §63.685(b)(2), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) on or before July 1, 1996, or upon initial startup of operations, whichever date is later as provided in 40 CFR 63.6(b). New affected sources that commenced construction or reconstruction after October 13, 1994, but on or before July 2, 2014, shall be in compliance with the tank requirements of §63.685(b)(2) 2 years after the publication date of the final amendments, the equipment leak requirements of §63.691(b)(2) 1 year after the publication date of the final amendments, and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii) 3 years after the effective date of the final amendments. Systech was issued a construction permit on January 3, 2011. Construction of the site was completed in January of 2012 and operation of the FQW storage and handling units began on February 6, 2012. Systech began supplying Tulsa Cement with FQW to use in their kilns on February 7, 2012. Systech is considered a new affected source that commenced construction after October 13, 1994, but before July 2, 2014. The tanks are subject to control requirements in §63.685(b)(2). The pumps and piping that convey the FQW in the tank systems generate fugitive organic emissions that are covered by this regulation. The requirement to control fugitive HAP emissions from equipment leaks from the pumps and pipes conveying the FQW are applicable. The fugitive emissions are controlled through the implementation of a Leak Detection and Repair (LDAR) Program contained in §63.691(b)(2) and the pressure relief device monitoring requirements of §63.691(c)(3)(i) and (ii).

Subpart EEE, Hazardous Waste Combustors. This regulation applies to the hazardous waste cement kilns which are located at the collocated facility (Tulsa Cement LLC) and are authorized under a separate permit. Emissions from both facilities are combined because they are considered collocated. The kilns combust volatile organic compounds and organic hazardous air pollutants with an efficiency of at least 99.99%, which is the minimum destruction and removal efficiency required by this subpart.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
This facility does not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: www.epa.gov/rmp.

Stratospheric Ozone Protection, 40 CFR Part 82 [Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

This facility does not utilize any Class I & II substances.

SECTION VII. COMPLIANCE

Inspection

On April 12, 2017 an unannounced air quality Full Compliance Evaluation ("FCE") was conducted at the above-referenced facility. Michael Provence, Environmental Programs Specialist with the Oklahoma Department of Environmental Quality (Department), Air Quality Division, conducted the evaluation. Mr. Troy Speaks, Process Operator, represented the facility throughout the evaluation. The facility was evaluated to document the compliance status of the facility with federal and state air quality regulations as well as Air Quality Permit No. 2009-205-TV. All issues of noncompliance and areas of concern have been resolved.

Tier Classification and Landowner Affidavit

This application has been classified as Tier II based on the request for a major source Part 70 Operating permit renewal.

The applicant has submitted an affidavit certifying that notice to the landowner(s) is not required because the application involves only land owned by the applicant or applicant business. Information

on all permit actions is available for public review in the Air Quality section of the DEQ web page: www.deq.state.ok.us.

Public Review

The applicant published the "Notice of Filing a Tier II Application" in the *Claremore Progress*, a daily newspaper in Rogers County, on July 10, 2018. The notice stated that the application was available for public review at the Systech Environmental Corporation, 2701 N 145th E. Ave, or at the AQD main office in Oklahoma City, Oklahoma. The status of the permit can be reviewed at DEQ's web page: <http://www.deq.state.ok.us/>.

The applicant published the "Notice of Draft Permit" in the *Claremore Progress*, a daily newspaper in Rogers County, on March 15, 2019. The notice stated that the application was available for public review at the Claremore Public Library or at the AQD main office in Oklahoma City, Oklahoma. The public comment period ended 30 days after the publication of the notice. No public comments were received.

EPA Review

The proposed permit was forwarded to EPA Region VI for a 45-day review period. There were no comments received from EPA Region VI. Information on all permit actions is available for review by the public in the Air Quality Section of the DEQ Web Page: <http://www.deq.state.ok.us>.

State Review

This facility is not located within 50 miles of the Oklahoma border.

Fee Paid

Applicant paid a fee of \$7,500 for a Part 70 Renewal on June 18, 2018.

SECTION VII. SUMMARY

The applicant has demonstrated compliance with all applicable air quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the permit is recommended.

Appendix 6

Contingency Plan

Section G

CONTINGENCY PLAN

Revision 4: March 2012

Revision 5: August 2012

Revision 6: November 2013

Revision 7: May 2014, page G-8 only

Revision 8: December 2014, page G-3 only

Revision 9: December 2017, page G-3 only

Revision 10: March 2019, page G-3 only

Contingency Plan

Table of Contents

G.1	RESPONSE LEVEL	4
G.2	INITIAL ACTIONS.....	5
G.2.1	Spill	5
G.2.2	Fire	5
G.2.3	Tornado	5
G.2.4	Medical Emergency	6
G.3	NOTIFICATION	7
G.3.1	Internal	7
G.3.2	External	7
G.3.2.1	Notification of National Response Center (NRC)	8
G.3.2.2	Written Notification to ODEQ Director	8
G.3.2.3	Notification of the Local Emergency Planning Committee.....	9
G.3.3	Identification	10
G.3.4	Assessment.....	10
G.4	FOLLOW-UP	12
G.4.1	Control and Containment.....	12
G.4.2	Remediation	12
G.4.3	Termination and Follow-Up Actions	13

FIGURES

Fig. G-1	Response Process
Fig. G-2	Typical Spill Response

TABLES

Table G-1	Emergency Coordinator (EC) Notification List
Table G-2	Spill Quantity and Appropriate Response
Table G-3	Emergency Contacts

ATTACHMENTS

Att. G-1	Emergency Response Operations
Att. G-2	Emergency Response Resources
Att. G-3	Plot Plan
Att. G-4	Example of Agreement for Emergency Assistance

SECTION G

CONTINGENCY PLAN

As required by 40 CFR 264.51, 270.14(b)(7), and O.A.C. 252:205-3-2(f), Systech Environmental Corporation (Systech) has developed a Contingency Plan designed to minimize hazards to human health and the environment from fires, explosions, and any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. The Contingency Plan meets the requirements of 40 CFR 264 Subpart D and serves as a mechanism to ensure that the response management teams at Systech are adequately prepared to address a worst-case situation. As such, the Systech Contingency Plan details procedures for mobilizing personnel and mitigation assets. The resulting response is designed to minimize life threatening situations and damage to natural resources.

This Contingency Plan will be implemented in conjunction with the co-located cement kiln operations on which the Systech facility is located. As such, activities identified in the Plan may be implemented by either Systech or cement plant personnel.

This chapter outlines the initial response actions necessary to protect the safety of Systech personnel, the environment, and facilities during a hazardous waste discharge or other situation. The objective of the Contingency Plan is to provide field operators and responders with procedures for initial response to hazardous waste spills and other emergencies, to make initial notification of key personnel, and to activate the facility's Contingency Plan.

This Contingency Plan is divided into sections that correspond to each stage of the initial response process for emergencies. Each section identifies the key personnel responsible for executing specific tasks. Figure G-1 summarizes the response process and serves as a map for this Contingency Plan.

The Systech facility receives prequalified waste materials from regulated hazardous waste generators or marketers. Non-hazardous wastes may also be received. The materials are temporarily stored until they can be blended, processed, or used directly in the cement manufacturing process. All waste materials are blended, processed, and controlled to the extent

that their physical and chemical characteristics have been made compatible with the material and process requirements of cement manufacturing.

The facility was designed and is operated to prevent spills, fires, or explosions. Personnel are thoroughly trained to act immediately should it ever become necessary to implement the Contingency Plan. The Contingency Plan is designed to minimize hazards to human health and the environment from fires, explosions, or release of hazardous wastes or hazardous waste constituents to the air, soil, or surface water. This plan would be implemented if any of these occurs.

Attachment G-3 is a Plot Plan of the cement plant and Systech facility.

Figure G-1: Response Process

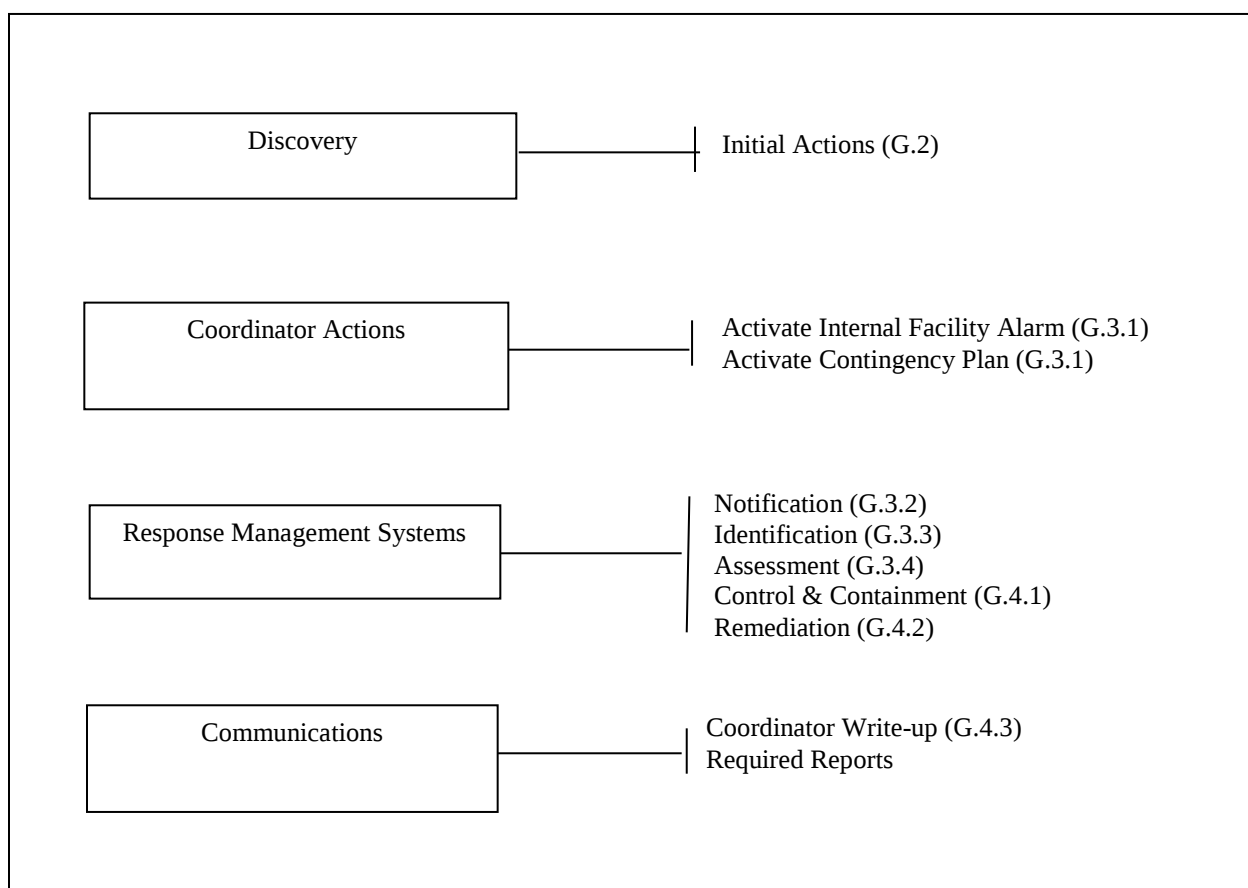


Table G-1 Emergency Coordinator (EC) Notification List		
On-Site EC	Position/Title, Work Phone	Cement Plant Shift Supervisor/Leadman 918-437-3902 or ext. 250 918-388-1150 (direct dial)
	Address	One Shift Foreman will be on-site at all times. The Shift Foremen who are not on-site have no EC responsibilities.
	24 Hour Emergency Phone	918-388-1150
Primary EC	Name	Joseph "Joe" Sommer
	Position/Title	Operations Supervisor
	Address	14547 North 68 th East Ave Collinsville, OK 74021
	Cell Phone	(620) 870-1016
Alternate EC	Name	Wilma Davis
	Position/Title	Fredonia, Interim Plant Manager/Operations Manager
	Address	100 N 1 st Street Independence, KS 67301
	Cell Number	(620) 288-9438

G.1 RESPONSE LEVEL

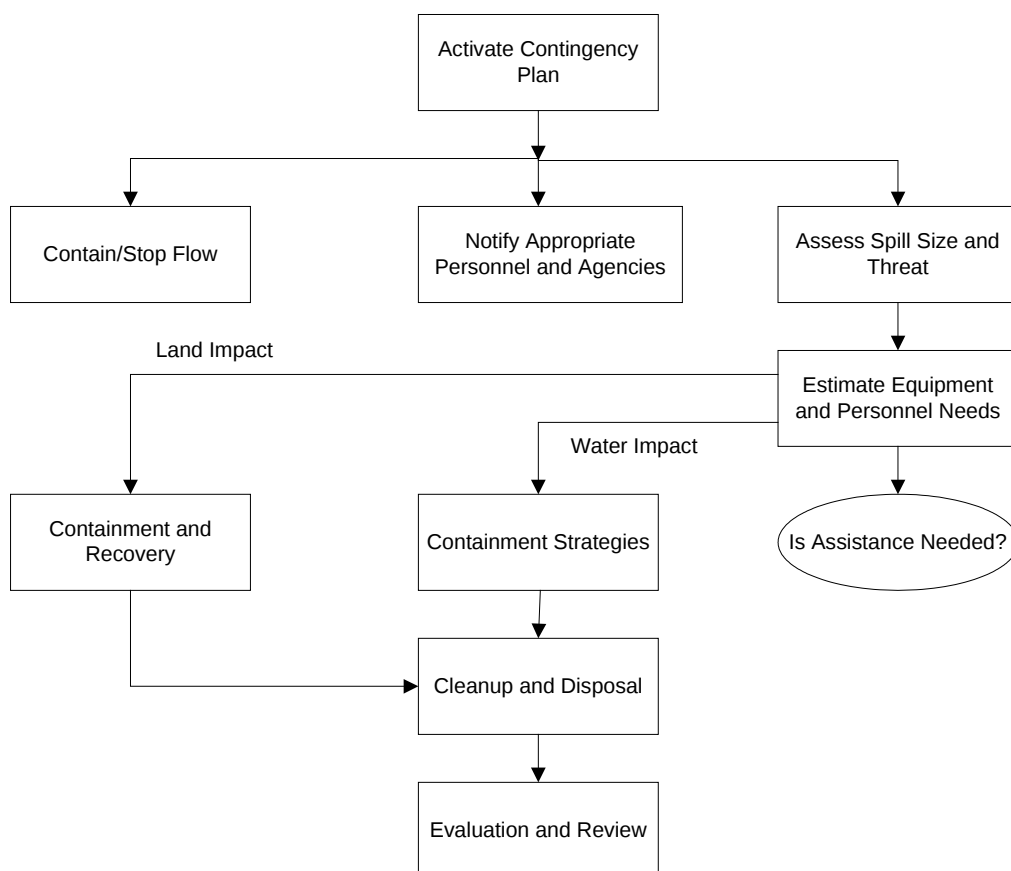
The appropriate level of response for a particular incident largely depends on both the professional judgment of the primary or alternate EC and the regulatory reporting requirements.

The factors that affect the level of response necessary for a specific incident include:

- Type of waste handling system and the necessity of suspending operations or diverting waste fuels during an emergency;
- Potential for fires, explosions, or releases to spread to other areas of the plant;
- Immediate health and safety effect of the incident on plant personnel; and
- Potential hazards to the outside environment and public health.

More detailed information on specific components and functions of the response management system is provided in Attachment G-1.

Figure G-2 Typical Spill Response



G.2 INITIAL ACTIONS

G.2.1 Spill

Upon discovery of a discharge, or imminent discharge, of hazardous waste, the discoverer shall immediately follow the steps outlined below.

1. DO NOT enter a hazardous area without proper personal protective equipment: respirator, gloves, rubber boots, goggles, and monitoring equipment as appropriate.
2. Stop flow by closing valves or shutting off pumps.
3. If spill is FQW, stop all transfer activity to the kiln area.
4. Shut off all ignition sources in the area, including, but not limited to, electrical equipment, automobiles, cigarettes, and welding equipment.
5. Contact the EC that is on-site...

G.2.2 Fire

Upon discovery of a fire, the discoverer shall immediately follow the steps outlined below.

1. Contact the EC that is on-site (in the order listed on Table G-1). If the primary EC is not on site, contact the alternate EC.
2. Activate local emergency response.
3. DO NOT enter any area that would jeopardize your safety.
4. Contain fire with hand-held extinguisher if the fire is manageable and does not present a threat to safety.

G.2.3 Tornado

Upon issuance of a tornado warning for the plant location, the discoverer shall immediately follow the steps outlined below.

1. Contact your immediate supervisor promptly so that he/she may contact all other employees using established communications systems.

2. The Control Room Operator will activate the emergency siren.
3. Go directly to a shelter which is the nearest identified tornado shelter and away from windows or open areas. If at all possible, do not shelter alone.
4. Upon notification that the danger has passed, proceed to the primary rally point for a headcount.

G.2.4 Medical Emergency

Upon discovery of a medical emergency, the discoverer shall immediately follow the steps outlined below.

1. Assess the situation. If the accident scene is safe to enter, provide first aid to the best of your ability. If the accident scene is not safe, proceed to step 2.
2. Contact the designated first responder (9-1-1). Inform him of the nature of the emergency and location and state of the victim.
3. Contact the on-site EC. If the on-site EC is not available, contact the primary or alternate EC. Inform them of the nature of the emergency, and if emergency services are required.
4. If the accident scene is safe, stay with the victim. Make them as comfortable as possible until help arrives.

G.3 NOTIFICATION

G.3.1 Internal

At the time a fire or release, which is not readily containable, or if a tornado warning is issued, the internal facility alarm is activated as instructed by an onsite, primary or alternate EC. The responding EC will implement the Contingency Plan and notify appropriate emergency response agencies, as needed. A list of emergency contacts is listed in Table G.3.

The Emergency Coordinator is responsible for implementing the Contingency Plan. The Emergency Coordinator or designated alternates are available to facility personnel at all times. They will be on the facility premises or on call and therefore available to respond to an emergency by reaching the facility within a short period of time. The Emergency Coordinator, who is responsible for coordinating all emergency response measures, is familiar with:

- All aspects of the facility's Contingency Plan.
- All operations and activities at the facility.
- The location and characteristics of waste handled.
- The location of all records within the facility.
- The facility layout.

The emphasis on immediate response to emergency conditions requires that the Emergency Coordinator be free to use his or her judgment in an emergency situation. Therefore, the Primary Emergency Coordinator and alternates have the authority to commit the resources needed to carry out the Contingency Plan.

G.3.2 External

All reportable spills >1 gallon are recorded in the Operating Record. Copies of these records are maintained by the Operations Supervisor. The EC or alternate is responsible for determining if a spill must be reported to federal, state, or local agencies. Any spill to surface waters is reportable. The EC or alternate is also responsible for notifying the

appropriate agencies if needed. Information to be included in the notification is addressed in Section G.3.3.

G.3.2.1 Notification of National Response Center (NRC)

Spills of hazardous substances, which exceed the Reportable Quantity (RQ) for that substance, must be immediately reported to the NRC. Any quantity of oil or fuel that reaches surface waters must be reported to the NRC. The information to be provided to the NRC by telephone is included in Section G.3.3.

G.3.2.2 Written Notification to ODEQ Director

The Site Manager is responsible for preparing spill reports for the regulatory agencies. All releases reported to the NRC will also be reported to the Oklahoma Department of Environmental Quality (ODEQ) by telephone. In addition, any spill of oil or fuel that exceeds 25 gallons should also be immediately reported to ODEQ.

Table G-2 Spill Quantity and Appropriate Response		
Size	Response	Notify
> 1 pound to environment (offsite)	Cleanup and Report (if not immediately contained and cleaned up)	ODEQ
<25 gal in containment	Cleanup	Operation Supervisor
>25 gal in containment	Cleanup	ODEQ
Anything to surface water	Contain and Cleanup	NRC, ODEQ
>1000 gal to surface water	Contain	NRC, ODEQ
>RQ on-site, outside of containment	Cleanup	NRC, ODEQ
>RQ leaving site	Cleanup	NRC, ODEQ, LEPC

Table G-3 Emergency Contacts					
Branch	Agency	Address (if written notification is required)	Phone #	Type of Report	Reporting Deadline
FIRE	Catoosa Fire Department		911	Telephone	As Needed
HAZMAT	Tulsa Fire Department		911	Telephone	As needed
POLICE	Catoosa Police Department		911	Telephone	As Needed
HOSPITAL	Hillcrest Health Care System	1120 S. Utica Tulsa, OK 74104	918-579-1000	Telephone	As Needed
	Bailey Medical Center	106 th & Garnett Owasso, OK 74055			
AMBULANCE	Pafford Ambulance		911	Telephone	As Needed
LEPC	Rogers County Emergency Management Agency	219 S. Missouri, Rm. B113, Claremore, OK 74017	918-341-2060	Telephone	Immediately
	Tulsa Area Emergency Management Agency	411 S. Frankfort Ave., Tulsa OK, 74103	918-596-7361	Telephone	Immediately
STATE/ FEDERAL	Oklahoma Dept. of Env. Quality (ODEQ)	707 N Robinson Oklahoma City, OK 73102	800-522-0206	Telephone	Immediately
				Written	15 days
	National Response Center		800-424-8802	Telephone	Immediately

G.3.2.3 Notification of the Local Emergency Planning Committee

The Local Emergency Planning Committee (LEPC) contact for the area is the Rogers County and Tulsa County Emergency Management Agency. The LEPC will be notified when any other agency is notified of a spill that leaves the site.

G.3.3 Identification

The responding EC will identify the following characteristics of any released material:

- Identification;
- Exact Source;
- Amount; and
- Impacted area.

This may be accomplished by visual observation of materials, review of facility records or manifests, or, if necessary, by chemical analysis.

G.3.4 Assessment

During an emergency, the responding EC will assess the following possible hazards to human health or the environment:

- Direct and indirect effects of any materials released;
- Effects of gases generated;
- Effects of hazardous surface runoff from fire control materials;
- Effects of chemicals used to control the emergency; and
- Potential for surface water contamination.
- Will this emergency threaten human health or the environment outside the facility?

If the responding EC determines that a significant quantity of hazardous waste has been released, or that an emergency will threaten human health or the environment, the responding EC, or his designee, will immediately activate the plant evacuation alarm and notify local authorities by calling the emergency 911 number.

By calling 911, the Fire Department and the Police Department will be aware of the situation. If necessary, the responding EC, or the police or fire department, will notify the Hospital and Ambulance Service.

If a reportable quantity of waste has been released, the primary EC will also notify the National Response Center as well as other appropriate agencies and authorities.

The EC will include the following information in the notification:

- Name, address, and telephone number of the plant owner or operator;
- Name, address, and telephone number of the plant;
- Date, time, and type of incident (e.g., fire, explosion);
- Name and quantity of material(s) involved;
- Location of the spill;
- Surface on which the oil spilled;
- Amount of time before the spill will flow into a storm sewer inlet or other drainage pathway;
- Cause of the spill;
- Extent of damages and injuries, if any;
- Assessment of actual or potential hazards to human health or the environment, if applicable;
- Actions taken to mitigate the spill;
- If an evacuation will be required, and;
- Estimated quantity and disposition of any recovered materials.

G.4 FOLLOW-UP

G.4.1 Control and Containment

During an emergency, the responding EC must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other areas at the plant. These measures may include, where applicable, shutting off the flow of liquids, shutting down the flow of fuel into the kilns, and shutdown of the kilns. The EC will also monitor for leaks, pressure buildup, or other potential problems when the fuel flows and kilns are shut down.

G.4.2 Remediation

The following specific procedures will be initiated following an emergency:

- Immediately after an emergency, the primary EC will make arrangements for treatment, storage, or disposal of recovered wastes, contaminated soil, contaminated groundwater, contaminated surface water, or any other contaminated materials. Materials that result from a release, fire, or explosion will be analyzed and if the materials meet fuel requirements will be reintroduced into the tank system. Materials determined to be hazardous waste, and not meeting fuel requirements, will be sent to an appropriate off-site treatment or disposal facility. If the system is damaged, the waste will be containerized and either stored at Systech until repairs are made or sent to an appropriate off-site treatment or disposal facility. The Emergency Coordinator will ensure that no waste that may be incompatible with the released material is treated, stored, or disposed of until clean-up procedures are completed. Storage operations will be suspended in the affected area.
- The primary EC will ensure that cleanup procedures are completed and that emergency equipment is clean and fit for use before resuming operations in an affected area. Contaminated equipment will be rinsed with clean solvent or pressure water where necessary. Any resulting

contaminated solvent will be retained in a catch bucket or container and transferred into the fuel storage tanks. Small quantities of water used to clean contaminated equipment will be managed similarly.

- The primary EC will investigate the cause of the emergency and will take steps to prevent the recurrence of such incidents.

G.4.3 Termination and Follow-Up Actions

If a release to the environment occurs in an amount greater than 1 pound, the primary EC will notify ODEQ, in compliance with 40 CFR 264.196(d), within 24 hours of detection. The primary EC will also ensure that any waste that may be incompatible with the released materials is not treated, stored, or disposed of until cleanup procedures are completed; and that all emergency equipment listed in the Contingency Plan is decontaminated and fit for its intended use before operations can resume in affected areas of the plant.

The EC will note in the plant's operating record the time, date, and details of any incident that requires the implementation of the Contingency Plan. Within 15 days of the incident, the Primary EC will submit a report to ODEQ, and the Local Emergency Planning Committee (LEPC). The report will contain the following information:

- Name, address, and telephone number of the plant owner or operator;
- Name, address, and telephone number of the plant;
- Date, time, and type of incident (e.g., fire, explosion);
- Name and quantity of material involved;
- Extent of injuries, if any;
- Assessment of actual or potential hazards to human health or the environment, if applicable; and
- Estimated quantity and disposition of any recovered materials.

The Contingency Plan will be reviewed and amended, if necessary, whenever:

- The facility permit is revised.

- The plan fails in an emergency.
- Changes occur in the facility's design, construction, operation, maintenance, or other circumstances which materially increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes occur in the response necessary in any emergency.
- The list of Emergency Coordinators changes.
- The list of emergency equipment changes significantly.

Attachment G-1 EMERGENCY RESPONSE OPERATIONS

Spill Response

INITIAL RESPONSE	
	DO NOT enter a hazardous area without proper personal protective equipment: respirator, gloves, rubber boots, goggles, and monitoring equipment as appropriate.
	Stop waste flow by closing valves or shutting off pumps.
	Stop all transfer activity.
	Shut off all ignition sources in the area including, but not limited to: electrical equipment, automobiles, cigarettes, and welding equipment.
	Contact the EC that is on site, who will contact the primary or secondary EC. If an RQ is exceeded or the spill threatens to spread outside the plant, immediately notify the NRC.

DUTIES OF RESPONDING EC	
	Attempt to determine the source of spill without risking personal safety.
	Identify the material spilled and determine the hazards involved in terms of the potential for fire, hazardous gas release, corrosion, explosion, or water pollution. If it is a reportable spill, notify appropriate agencies.
	Evacuate all endangered or unnecessary personnel. In case of the release of toxic or flammable gases, determine if off-site evacuation is advisable. Remove nearby wastes that may be incompatible with the spilled material.
	Investigate the spill and check analytical records and inventory data. Evaluate the hazard potential and assign trained personnel to clean up the spill.

SPILL RESPONSE PROCEDURES	
	Contain the spill as much as possible while attempting to stop the spill.
	If flammable material, rope off the spill area a minimum of 50 feet away from spill.
	To contain the spill: With absorbent booms or CKD: 1) Use booms in tandem (one placed a few inches behind the other) or CKD dikes to help control the flow of material. 2) Oil sorbent booms should be used on any water that could possibly be contaminated; they will serve as backups for materials that might get by the tandem sorbent booms With absorbent: 1) Pour absorbent from bags or barrels to form a dike. 2) Barrels can be turned on their sides and rolled to create a dike. 3) Use front-end loader buckets of absorbent or CKD for major spills.
	After the spill is contained, recover as much FQW liquid as possible and return to the FQW tanks; treat the remaining spill with neutralizing agents to decrease the risk of fire, corrosion, explosion, or other hazards. Apply non-reactive sorbent materials.
	If contamination of the area occurs, depending on instructions from the regulatory agencies, excavate the area and isolate removed materials from rainfall and runoff in a container or containment area.
	After the material has been characterized, develop a disposal plan. A plan may include, but not be limited to: blending with other materials and using as a fuel in the hot end of the kiln, or off-site disposal.
	Use on-site monitoring to determine safety of the area.
	Make any temporary repairs.
	Complete a written description of the event.
	The Primary EC will report the spill, if necessary.

Fire or Explosion Response

INITIAL RESPONSE	
	Contact the EC that is on site, who will contact the primary or secondary EC.
	EC will notify Fire Department and send an employee to the front gate for escort.
	DO NOT enter any area that would jeopardize your safety.
	Contain fire with hand-held extinguisher if the fire is manageable and does not present a threat to safety.

DUTIES OF RESPONDING EC	
	Determine what material is on fire by location, inventory, or log.
	Determine if the staff is endangered by the fire or if the fire could spread to other wastes.
	Define the limits of the fire, estimate the potential dangers with respect to other materials in the immediate vicinity, and call the local Fire Department if needed.
	Evacuate all endangered personnel to the designated rally points. In case of a release of toxic gases or a potential for explosion, determine if off-site evacuation is necessary.
	Determine the best and safest approach to handling the fire, taking into consideration not only the type of fire, but also the direction of the flame, spread, wind direction, potential dangers and any physical limitations.

FIRE RESPONSE PROCEDURES	
	The EC will help Fire Department personnel decide if the fire should be left to burn or should be extinguished.
	Use only as much water as necessary, to minimize the amount of water that may become contaminated.
	Allow only emergency vehicles into the plant during the emergency.
	Contain any spilled material or contaminated water by using absorbent or absorbent booms
	Collect all contaminated absorbent for disposal
	Make any temporary repairs.
	Complete a written description of events.
	Begin equipment and area decontamination and replacement
	The Primary EC will report the fire, if necessary.

FIRE RECURRENCE AND SPREAD PREVENTION PROCEDURES	
	To reduce the possibility of sparking or heat generation that may result in a fire or explosion, shut down all mechanical equipment. Turn off all equipment not required for emergency response and close all pipelines feeding the kilns, if it can be done without hazard to personnel.
	After system shutdown is accomplished, monitor gauges and indicators for evidence of system changes. If changes develop, take steps to immediately identify and remedy the condition.
	Periodically inspect the affected areas for leaks, including, but not limited to, drops, sprays, pooling of liquids, or wet areas. Examine piping for evidence of failure, including cracks, ruptures, or abnormal distortion.
	The Primary EC will ensure that no material that may be incompatible with the released material is treated, stored, or disposed until cleanup procedures are complete.

Emergency Evacuation Procedures

DUTIES OF RESPONDING EC	
	The responding EC is responsible for implementing the evacuation and will notify personnel if an evacuation is necessary.
	Employees and visitors will be directed to the proper exit and to the assigned safe areas.

EVACUATION PROCEDURES	
	The EC will assess the conditions and order an evacuation or any other action that is required.
	The EC will notify personnel if an evacuation is necessary by sounding the emergency alarm (a continuous blast on a siren or by providing instructions to evacuate using the radio/telephone system).
	When an evacuation is announced, work will be stopped. Personnel should go to the nearest exit.
	All employees should leave the plant and report to the designated rally points. Employees should not run or linger in entranceways or driveways and should congregate in the designated rally points.
	The Site Manager will bring the guest log to the rally point and account for all plant guests.
	All employees will be accounted for by their immediate supervisors.
	The Primary EC will notify personnel when it is safe to re-enter the facility. Re-entry will not be permitted until the Primary EC declares that it is safe to do so and issues an all-clear signal.

RALLY POINTS and Routes	
	Employee Parking Lot – Primary, evacuation should be by most direct route that does not put employee at risk of exposure, (e.g. directly South past cement plant office building.)
	Scale House – Alternate, evacuation should be by most direct route that does not put employee at risk of exposure, (e.g. directly West then Southwest across gravel lot.)

EMERGENCY EVACUATION PRECAUTIONS	
	Keep calm, think and avoid panic and confusion. WALK to the nearest exit.
	Know all exit locations; be sure that you know the quickest way out of the building.
	Do not lock office doors when evacuating the building.
	Do not delay evacuation for any reason.
	Do not assist in fire control unless you are properly trained and qualified.
	Stay clear of the plant and DO NOT interfere with emergency operations.

Tornado Procedures

DUTIES OF RESPONDING EC	
	The responding EC is responsible for sounding the tornado alarm and will notify personnel if shelter is necessary.
	Employees and visitors will be directed to the proper shelter and to the assigned safe areas.

SHELTER PROCEDURES	
	The EC will assess the conditions and order personnel to seek shelter or any other action that is required.
	The EC will notify personnel if shelter is necessary by sounding the emergency alarm (a continuous blast on a siren or by providing instructions to seek shelter using the radio/telephone system).
	When an alarm is sounded, work will be stopped. Personnel should go to the nearest shelter.
	All employees should report to a designated tornado shelter. Employees should not run or linger in entranceways or driveways and should congregate in the designated shelters. Do not shelter alone if possible.
	The Primary EC will notify personnel when it is safe to leave shelter and proceed to the rally point. Departure from shelter will not be permitted until the Primary EC declares that it is safe to do so.
	Once the Primary EC announces an "all-clear" over the radio/telephone system, personnel should proceed to the designated rally point.
	The Site Manager will consult the guest log and account for all plant guests.
	All employees will be accounted for by their immediate supervisors.

RALLY POINTS and Routes	
	Employee Parking Lot - Primary, evacuation should be by most direct route that does not put employee at risk of exposure, (e.g. directly South past cement plant office building.)
	Scale House – Alternate, evacuation should be by most direct route that does not put employee at risk of exposure, (e.g. directly West then Southwest across gravel lot.)

SHELTER PRECAUTIONS	
	Keep calm, think and avoid panic and confusion. WALK to the nearest shelter.
	Know all shelter locations; be sure that you know the quickest way to shelter.
	Do not lock office doors when seeking shelter.
	Do not delay taking shelter for any reason.
	Go below ground if possible.
	Stay away from any opening.
	After the all-clear is given, stay clear of the plant and DO NOT interfere with emergency operations.

SEVERE WEATHER SHELTERS	
	Main Office – North hallway by break room
	Console – console basement
	Cooler Building – Tunnel to console
	Quarry – Basement of gyratory
	Blending – Interstice at man lift elevator
	Garage – Parts room
	Packhouse – Silo interstices
	Mill Building – Basement of load center
	Coal – Drag and hopper tunnel

Procedures for Recovery of Personnel

DUTIES OF RESPONDING EC	
	The responding EC is responsible for polling supervisors and determining which, if any, personnel are not accounted for.
	If EMS is requested, EC will send an employee to the front gate for escort.
	EC will ensure plant is safe for personnel to conduct search and rescue operations.
	EC will arrange needed personnel in groups of four to conduct search and rescue.

SEARCH AND RESCUE PROCEDURES	
	Groups of four will comb assigned areas for personnel (with Lafarge personnel).
	Found employees should be reported over the radio.
	Search groups should not move injured employees except in case of immediate danger.
	Search groups will stay with injured employees until emergency personnel have arrived on-scene.

Attachment G-2 EMERGENCY RESPONSE RESOURCES

Emergency Equipment	Location	Outline of Capabilities
Internal Communication Systems		
Portable radios	Facility-wide office, personnel, kiln area	Internal communication
FQW emergency shutdown switch	Kiln control room	Shut off primary feed pumps to kiln
Telephone (intercom)	Lab, office, facility-wide	Internal communication, plant-wide public address, emergency alarm
Emergency alarm	Plant-wide, kiln area	Plant-wide, audible fire alarm
External Communications Systems		
Telephones	Office, lab, kiln area, EC	Call outside for emergency assistance
Fire Extinguishing System		
Extinguishers: 20-lb ABC	Tank Farm, Truck Offloading Area, Fuels Laboratory	For use on Type A, B, or C fires
AFFF Fire Protection System	Tank Farm	Automated response to control fire
Spill Control Equipment		
Absorbent	Truck Offloading Area	Contain, absorb, and clean up spills from off-loading pads, container building
Solvent Absorbent Booms	Truck Offloading Area	Absorb spills
Organic vapor monitor	Fuels laboratory	Exposure monitoring
Empty containers	Truck Offloading Area	Receptacle for leaking or damaged containers and for spilled materials
Other Emergency Equipment		
First aid supplies: bandages, gauze bandages, tape, butterfly bandages, antibacterial ointments, splints, aspirin, eyewash, local/topical anesthetics	Lab	Immediate first aid for minor injuries
Emergency eyewash, fountain and drench showerhead	Lab, Truck Offloading Area	Immediate treatment for personnel in case of contact with waste materials

Emergency Equipment	Location	Outline of Capabilities
Protective clothing and equipment: hard hats, protective eyewear, rubber and neoprene boots, impervious gloves, face shields, protective eyeglasses, half-face dust/chemical cartridge respirators, chemical cartridges	Office	Protect personnel from possible hazards
Clean solvent	Truck Offloading Area	Rinse contaminated equipment

Attachment G-3

PLOT PLAN

Attachment G-4

**EXAMPLE OF
AGREEMENT FOR EMERGENCY ASSISTANCE**

**AGREEMENT FOR EMERGENCY ASSISTANCE
BY AND BETWEEN SYSTECH TULSA 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:

Systech Environmental Corporation
2701 N. 145th East Avenue
Tulsa, Oklahoma 74116
918-437-3902

Any request for emergency assistance will be issued by telephone by the primary emergency coordinator, the on-site coordinators, or their designee. Systech will have someone at the plant 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 Systech facility which is located within the Systech Tulsa facility. A copy of the Systech 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.

The _____ agrees to provide emergency assistance to the Systech Tulsa facility, at their request, if an incident occurs which requires facilities, equipment or expertise not available at the facility.

Systech Tulsa: _____:

By: _____ By: _____

Date: _____ Date: _____