SYSTECH ENVIRONMENTAL CORPORATION
TULSA, OKLAHOMA

PERMIT ATTACHMENT 2

INSPECTION PLAN

SECTION F-2 – INSPECTION PLAN

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SECTION F-2 – INSPECTION PLAN

1.0 INSPECTION PLAN

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

The plan provides for inspecting:

- Monitoring equipment,
- Safety and emergency equipment,
- Security devices,
- Operating and structural equipment,
- Tanks, and
- Containers.

The inspection plan is kept at the plant and is designed to ensure there are no incidents or releases that could potentially threaten or harm human health or the environment. Table F-2-1 shows the inspection schedule for hazardous waste management units at the Systech Tulsa plant.

Systech ensures that records of inspections are entered in the inspection log and operating record. The inspection logs are maintained for daily and weekly inspections. The inspection logs include the following information:

- Date and time of the inspection,
- Name of the inspector,
- Items to be inspected
- Notation of the observations made, and
- Date and nature of any repairs made, or other remedial actions undertaken.

The inspection records are maintained at the facility for at least three years from the date of inspection. Copies of example daily, weekly, and monthly inspection forms are included in Attachment F-2.

If inspections reveal that non-emergency maintenance is needed, it will be completed as soon as possible to preclude further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occurred, remedial action is initiated immediately.

In the event of an emergency involving the release of hazardous constituents to the environment, efforts are directed toward containing the hazard, removing it, and, subsequently, decontaminating the affected area.

The frequency of the various inspections depends on the anticipated rate of deterioration in each system and the probability of an incident if the deterioration or operator error goes undetected between inspections. Inspection frequencies may be altered in the future based on the plant's actual operating experience. Plant personnel remedy any problems found during an inspection, documenting the date and

resolution. Problems with equipment covered by the leak detection and repair program are corrected as stipulated in the program. Management review and oversight is maintained to ensure problems are corrected.

Systech employees are responsible for all facility inspections.

1.1 Safety and Emergency Equipment

Safety and emergency equipment at the Systech plant is inspected per the schedule in Table F-2-1. Inspections of this equipment are also performed following an emergency event that requires its use. Timely execution of these inspections ensures the health and safety of employees and the protection of the environment should an emergency occur.

1.2 Security Devices

Security devices at the Systech Tulsa plant are inspected per the schedule in Table F-2-1.

1.3 Operating and Structural Equipment

The portions of the operating and structural equipment at the Systech plant that are inspected include the tank system (tanks, pumps, grinders, piping, valves, etc.) and the container storage area (tanker unloading area).

1.3.1 Container Inspection

Tankers delivering FQW that are on-site for more than 24 hours without being unloaded are considered to be "stored" and are kept within the truck unloading area, which is permitted as a container storage area. When entering storage, the containers are inspected for correct labeling (as applicable) and for signs of damage, corrosion, or leaks. Containers and the container storage areas are inspected at least once a week. Site-generated wastes may also be stored in the container storage area.

The inspectors look for leaking containers and for possible deterioration of the containers or of the containment system. They also check for evidence of corrosion and leaks in flanges, seals, seams, and valves. If a container is found to be leaking, its contents are immediately processed or transferred to a container in good condition.

1.3.2 Tank System Inspection

The tank system inspections are conducted, and the results of each inspection are recorded on the appropriate inspection log sheet and filed in the operating record.

Tank Construction Materials

The daily inspection includes the exterior portions of the tanks to detect corrosion, erosion, and leaking of fixtures and seams. The exteriors of the tanks are inspected for corrosion, discoloration, cracks, buckles, bulges, malfunction of seals, and corroded pipes.

Tank Surrounding Area

While checking the tanks' exteriors, personnel also inspect the area immediately surrounding the tank for obvious signs of leakage (e.g., wet spots or discoloration). All hazardous waste piping that is not within a secondary containment system is inspected daily for signs of leaks.

Tank Overfilling Control Equipment

The tank overflow control systems on each tank consist of level indicators, high level audible alarms, and stop buttons that shut off all vehicle unloading and tank transfer pumps. The tank level indicators are inspected daily during operations. The tank high-level alarms are tested monthly.

Tank Level of Waste

The tanks are covered; therefore, overtopping by wave or wind action or by precipitation is not possible. The tank level indicators are inspected daily during operations. The tank high-level alarms are tested monthly.

Tank Condition Assessment

Systech performs a detailed, annual, visual inspection of the tank exteriors and measures the shell thickness of each tank wall with a non-destructive, ultrasonic thickness gauge. Shell thickness readings are recorded and are analyzed to identify any reduction of wall thickness or structural integrity.

Tanks may be taken out of service temporarily for cleaning, maintenance, or minor alterations. At these times, it may be possible to inspect the interior of the tank for signs of corrosion or erosion on the tank sides and bottom.

TABLE F-2-1 INSPECTION SCHEDULE

TYPE OF EQUIPMENT	ITEM	CRITERIA	FREQUENCY
Safety and Emergency Equipment	Tank level indicator alarms	Proper function	Daily
	Communications equipment	Functional	Daily
	Protective clothing (coated full-body coveralls, gloves, and boots)	Adequate supply, no deterioration	Weekly/after use
	Emergency shower and eyewash	Functional, leaks	Weekly
	First aid equipment and supplies	Adequate supply	After use
	Emergency alarm	Proper function	Weekly
	Face shields	Adequate supply	Weekly
	Half-face respirators	Adequate supply	Weekly
	Organic vapor monitor	Functional, calibrated	Weekly
	Hand-held radios	Functional	Weekly
	Fire extinguishers	Need for recharging, adequate supply	Monthly
	Empty 55-gallon drums	Adequate supply	Monthly
	Absorbent	Dry, sufficient quantity	Monthly
	First aid supplies	Adequate supply	Monthly
Security Devices	24-hour surveillance system	Proper function	Daily
	Warning signs	Legibility	Weekly
	Lighting	Bulbs burned out	Weekly
Operating and Structural	Unloading pumps	Leaks, vibration, noise	Daily
	Kiln feed pumps	Leaks, vibration, noise	Daily
	Grinder pumps	Leaks, vibration, noise,	Daily
	Unloading hoses	Leaks, vibration, noise	Daily
	Piping	Leaks, gaskets, broken/inoperative gauges, proper operation	Daily
	Tanks	Leaks, corrosion	Daily
	Secondary containment	Cracks, leakage, sumps empty	Daily
	Housekeeping	Waste disposed, clean containers closed	Daily
	Valves, vacuum relief	Functioning, proper function	Daily

TYPE OF EQUIPMENT	ITEM	CRITERIA	FREQUENCY
Operating and Structural (Cont'd.)	Aisle space in container storage area	Adequate space for inspection and access	Daily
	Containers	Leaks, swelling	Daily
	Tank bases	Cracks, wet spots, uneven settlement	Daily
	Tank externals	Corrosion, buckles, gaskets, leaks	Daily
	Tank ladder & platforms	Damage, stability	Weekly
	Electrical	Open boxes, exposed wiring	Weekly
	Tank fittings	Leaks	Daily
	Tank valves	Leaks	Daily
	Valves, vacuum relief and tank roof	Preventative maintenance	Monthly
	Tank roof - vents, valves, flame arresters (Tanks #1 and #2)	Preventative maintenance	Monthly
	Feed & unloading pump and lines	Preventative maintenance	Monthly
	Grinder pumps	Preventative maintenance	Monthly
	Tank shells	Preventative maintenance	Daily
	Pumps	Preventative maintenance (check shut-in pressure)	Monthly
	Tank high-level alarm	Preventative maintenance	Monthly
	Protective coating, tanks	Rust spots, blisters	Annually
	Tanks and piping, thickness	Corrosion, erosion	Annually

ATTACHMENT F-2 EXAMPLE INSPECTION FORMS

Daily Inspection Form
Weekly Inspection Form
Monthly Inspection Form

SYSTECH - TULSA DAILY INSPECTION

Date: _____ Inspector: _____ Time: _____

SAFETY & EMERGENCY EQUIPMENT	CRITERIA	STATUS	IMMEDIATE ACTION	NOTIFIED CO-WORKERS	DATE CORRECTED NATURE OF REPAIR
First aid equipment and supplies	Adequate supply				
SECURITY DEVICES					
24 hour surveillance system	Functioning properly				
OPERATING AND STRUCTURAL					
Unloading pumps: East & West	Leaks, vibration or noise				
Grinders	Leaks, vibration or noise				
Unloading hoses	Leaks, vibration or noise				
Piping	Leaks, vibration or noise				
Satellite drums	Leaks or swelling				
Waste drums	Leaks or swelling				
Carbon filtration system	Functioning properly				
Bulk nitrogen tank	Leaks and level	%			
Tanks	Leaks, vibration or noise				
Tank fittings and valves	Leaks, vibration or noise				
Tank shells	Preventative maintenance				
Tank bases	Cracks, wet spots or leaks				
Containment area	Cracks, leakage, sumps empty				
Sump pumps pits	Empty				
Kiln feed pumps	Leaks, vibration or noise				
Kiln feed pump barrier fluid	Level adequate				
Barrier fluid main nitrogen valve	Open				
Housekeeping	Area clean of spills and trash				
Burn line	Leaks or corrosion				
Electrical					
Electrical transformer	Leaks or corrosion				
Fire Protection					
Valves and system	Set properly and operating normal				
Water pressure	PSI				

Status: / - Means OK, X - Means Not OK

SYSTECH - TULSA
WEEKLY INSPECTION LOG

Date: _____
Inspector: _____
Time: _____

SAFETY & EMERGENCY EQUIPMENT	CRITERIA	STATUS	IMMEDIATE ACTION	NOTIFIED CO-WORKERS	DATE CORRECTED NATURE OF REPAIR
Protective Clothing (coated full body coveralls, gloves and boots)	Adequate supply, no deterioration				
Emergency shower and eyewash	Functional, leaks				
Emergency alarm	Proper function				
Face shields	Adequate supply				
Full face respirators	Adequate supply				
Organic vapor monitor	Functional, calibrated				
Hand held radios	Functional				
SECURITY DEVICES					
Warning signs	Legibility				
Lighting	Bulbs burnt out				
OPERATING AND STRUCTURAL					
Tank ladders & platforms	Damage, stability				
Electrical	Open boxes, exposed wires				
VOC Condensation Pipe on Tank1 and Tank2	Drained, Any condensation				
Carbon Drums	Drained, Any condensation				
Foam Chamber - VOC Valve	Drained, Any condensation				
Disc Flow Pumps	Check pump oil level				
TK1 and TK2 agitators	Check gear box oil				
Oil chamber for TK1 agitator seal	Check level				
Oil chamber for TK2 agitator seal	Check level				

Status: / - Means OK
X - Means Not OK

SYSTECH - TULSA
MONTHLY INSPECTION LOG

Date: _____
Inspector: _____
Time: _____

SAFETY & EMERGENCY EQUIPMENT	CRITERIA	STATUS	IMMEDIATE ACTION	NOTIFIED CO-WORKERS	DATE CORRECTED NATURE OF REPAIR
Fire Extinguishers	Charged, adequate supply				
Empty 55 gallon drums	Adequate supply				
Absorbent / Booms	Dry, adequate supply				
First aid supplies	Adequate supply				
Ladders	Working condition, no damage				
Office, MCC exit signs	Working correctly				
OPERATING AND STRUCTURAL					
Valves, vacuum relief and tank roof	Preventive Maintenance				
Flame arresters TK1 & TK2	Preventive Maintenance				
Feed and unloading pumps and lines	Preventive Maintenance				
Grinders	Preventive Maintenance				
Discoflo pumps	Preventive Maintenance				
Tk1 & Tk2 high level alarms	Preventive Maintenance				
Fire / MCC smoke detectors	Preventive Maintenance				
Facility bolt check	Preventive Maintenance				

Status: / - Means OK
X - Means Not OK