Harris County Concrete Batch Plant Inspection Program

NACAA Fall Membership Meeting

October 18, 2023

Matt Van Vleck – Air Monitoring Services Manager



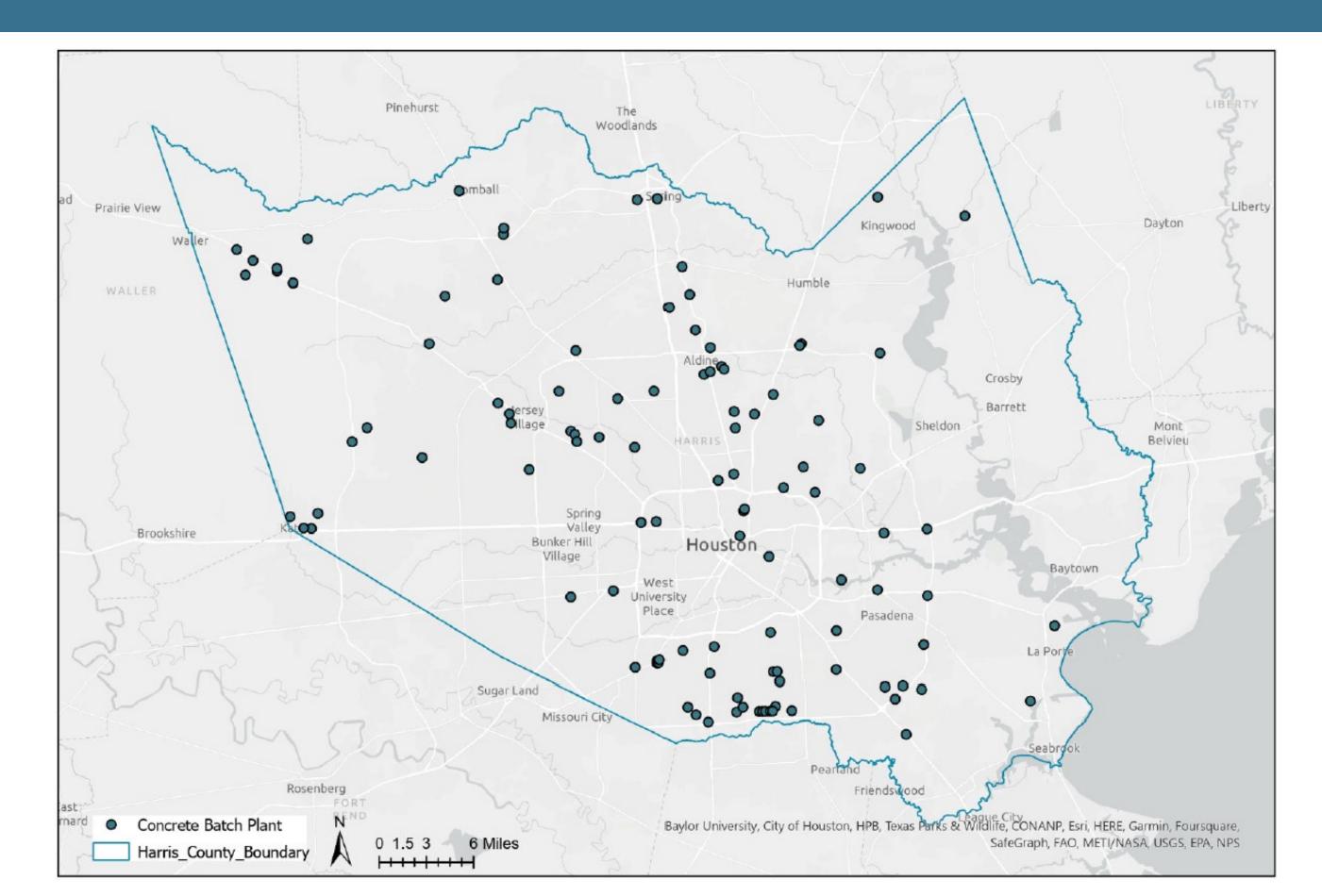


Concrete Batch Program

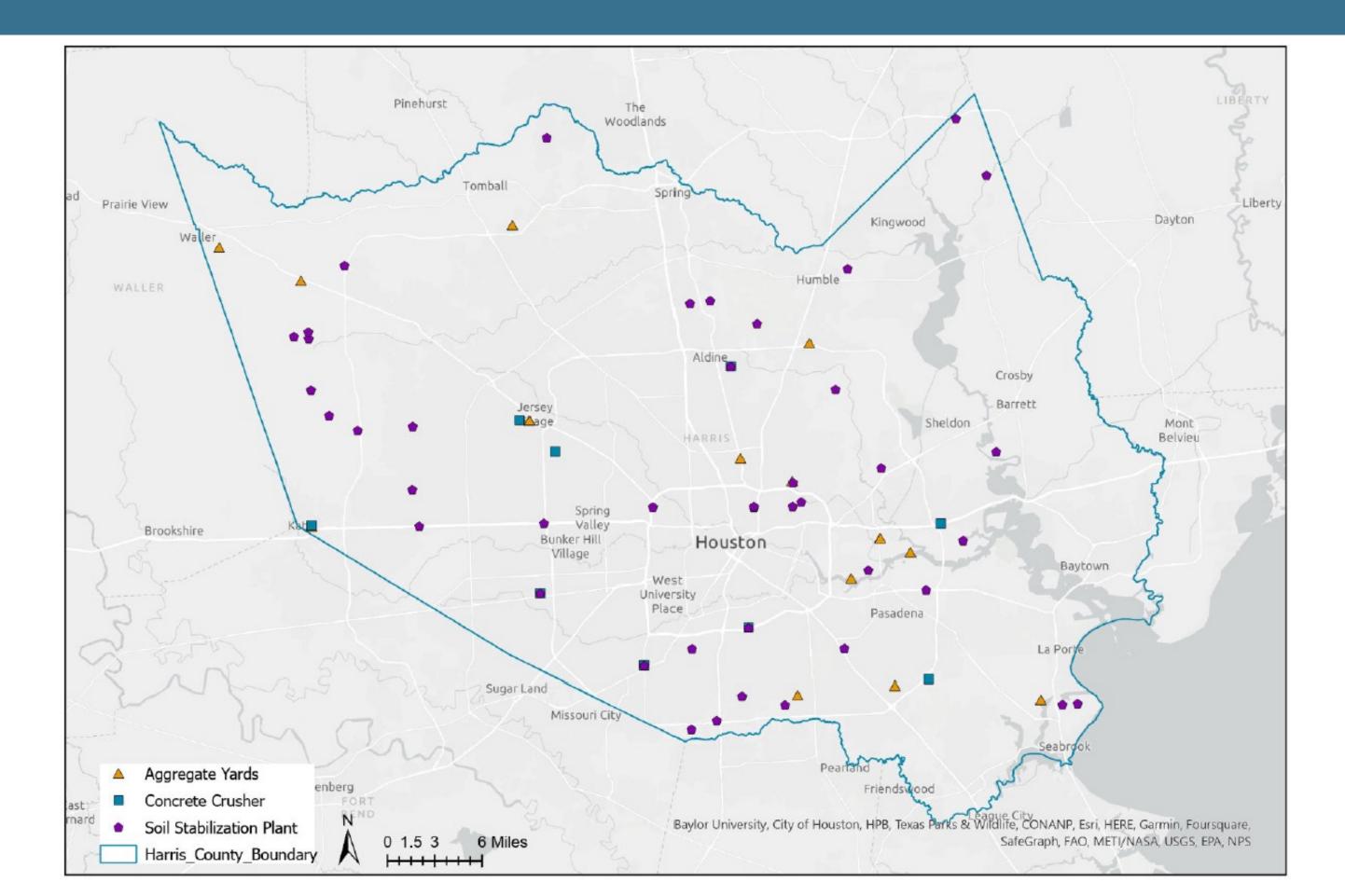


- Harris County Pollution Control Services (PCS) began its Concrete Batch Plant Program in 2020
- The program is designed to take a proactive look at the numerous concrete batch plants in Harris County
- Two full time investigators conduct unannounced proactive inspections and complaint investigations at concrete batch plants and related facilities
- 485 inspections conducted and 218 Violation Notices issued since July 2020

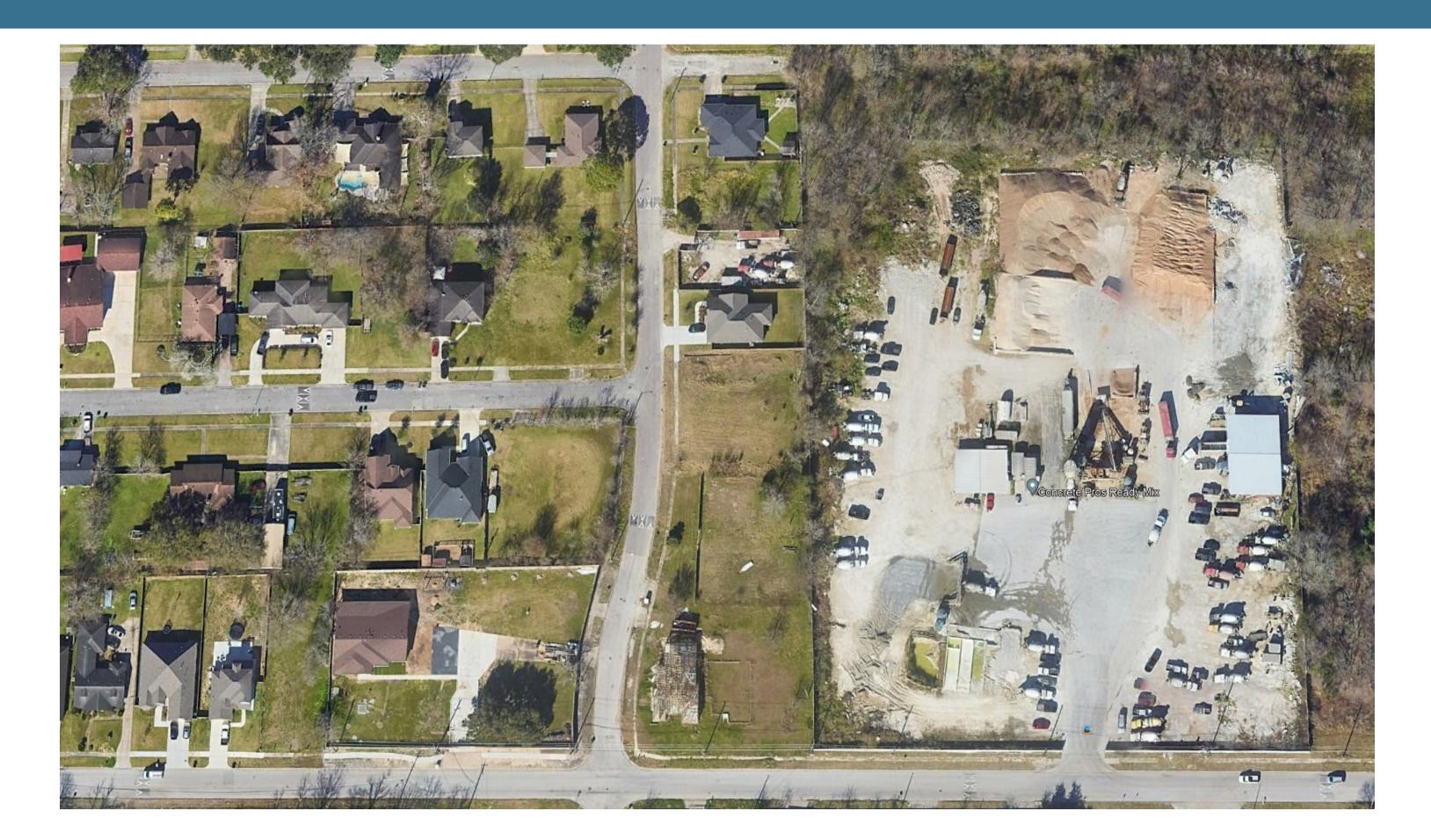
Concrete Batch Plants



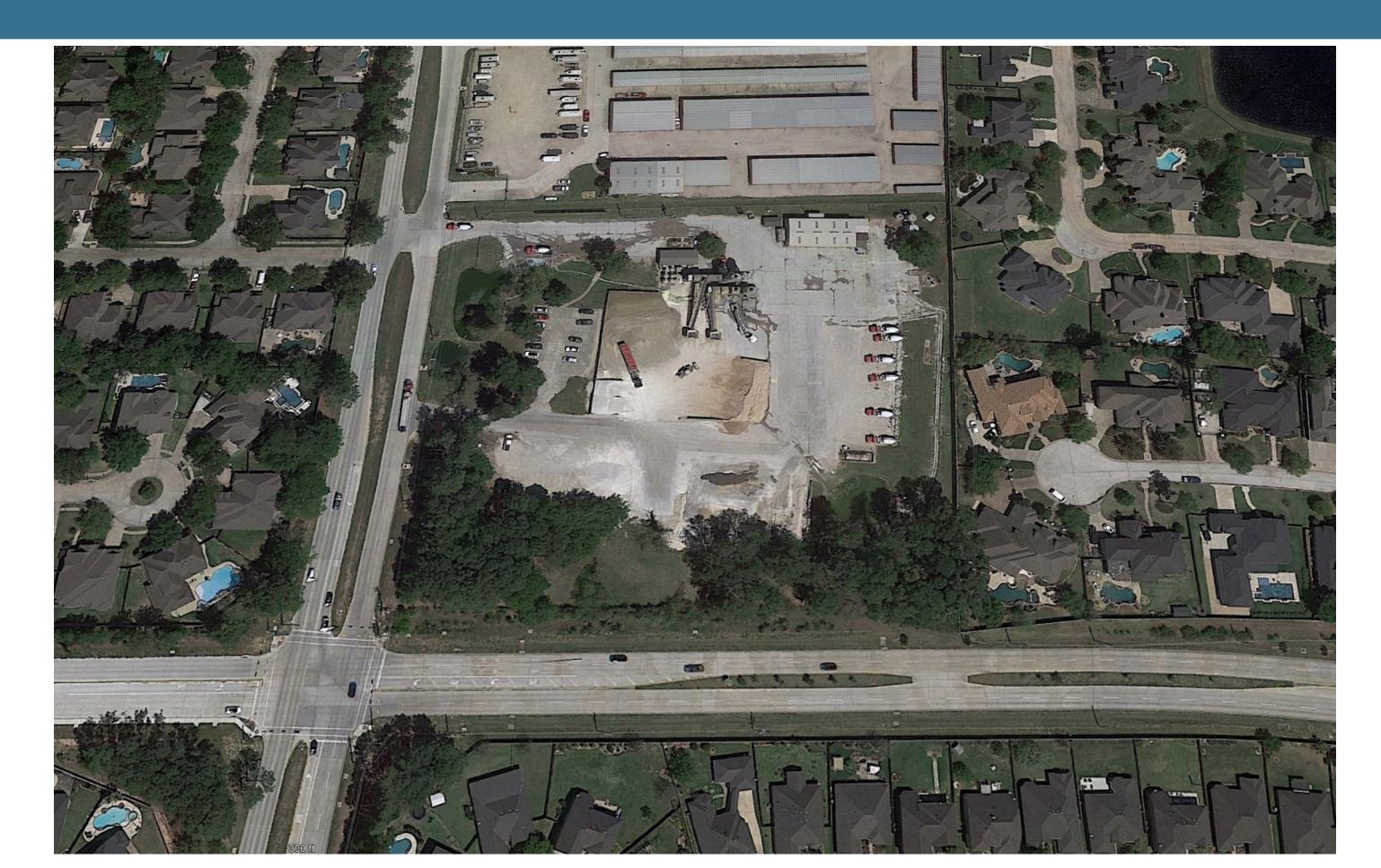
Related Facilities











Common Permit Violations

Harri 101 S. I		•	Pollution Cont	trol Services					
Pasade Main:	ena, T	exas	77506		FAX: 713-274-6475				
			PERMAN	ENT CONCRETE BAT(CH PLANT INSPEC	TION	CHECKLIST		
Inspec	tion ID	: 19	3747	Date: _ 6/7/23	Time:	1:21	PM	<u>2:40</u> PM	
PCS I.D). No.	11	864				Key Map:	497M	
Facility Name: Concrete Ready-Mix Photos: 16									
Physica	al Addı	ress:	1492 Gravel St	reet, Houston, TX 77015			Telephone No.:	281.555.4444	
Contact Person:			John Smith		Tit	tle: (Owner		
Mailing address: 1492 Gravel Street, Houston, TX 77015									
Weath	er: <u>Cl</u>	ear		Wind Direction:	SSE	Wind Speed		MPH	
Primary SIC Code:			3273		Secondary SIC	Code:	n.a		
Facility Volume: cu yds/hr X 200 cu yds/hr									
Facility Status: Permanent Temporary Specialty									
Description of Facility: Dry (rotary mix truck) batch plant, one drop point, duel elevated storage silos									
Industrial, adjacent to I-10 @ Beltway, numerous CBP and rock crushing operations in the Description of Area Surrounding Facility: immediately area.									
AIR									
Permit Permit Issued Date: October 7, 2015 (applicable to CBP w/ standard permits issued 2012-2021)									
Instruc	tions:			olation Found, NA = Not applicab ion is noted, add a description of					
С	v	NA		STANDARD PERMIT S	ECTION 3: ADMINIS	TRATI	E REQUIREME	NTS	
			(J) Records shall be maintained on-site for a rolling 24-month period for the following:						
		\boxtimes	(i) 30 TAC § 101.201, Emissions Event Reporting and Recordkeeping Requirements;						
		\boxtimes	3(J)(ii) 30 TAC § 101.211, Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements						
\boxtimes			(iii) production rate for each hour and day of operation that demonstrates compliance with subsection (8)(A),(9)(A), or (10)(A) of this standard permit, as applicable;						
\boxtimes			(iv) all repairs and maintenance of abatement systems;						
\boxtimes			(v) Material Safety Data Sheets for all additives and other chemicals used at the site;						
\boxtimes			(vi) road cleaning, application of road dust control, or road maintenance for dust control;						
\boxtimes			(vii) stockpile dust suppression;						
\bowtie				arning davias or shut off a	interna testa:				



Damaged/Disconnected Air Abatement Equipment



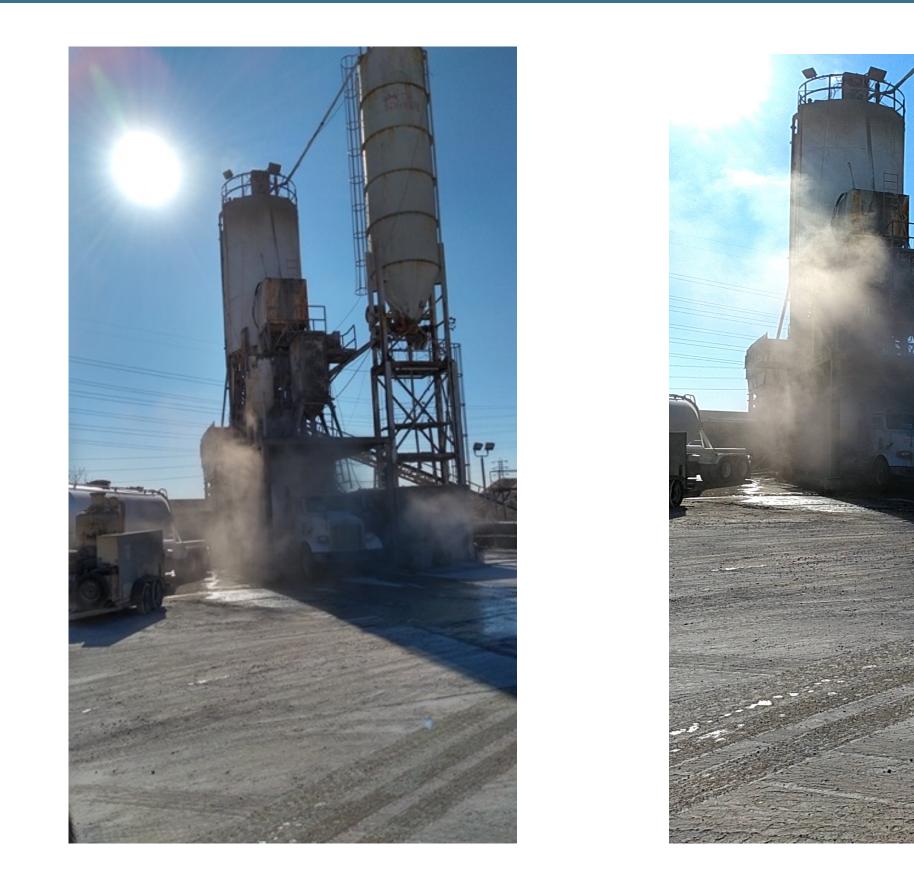
Failure to maintain fabric or cartridge filters and collection systems



Visible emissions from storage silos



Faulty suction shroud and central dust collection unit





Failure control emissions from in-plant roads



Failure to pave batch and material delivery routes with a cohesive hard surface



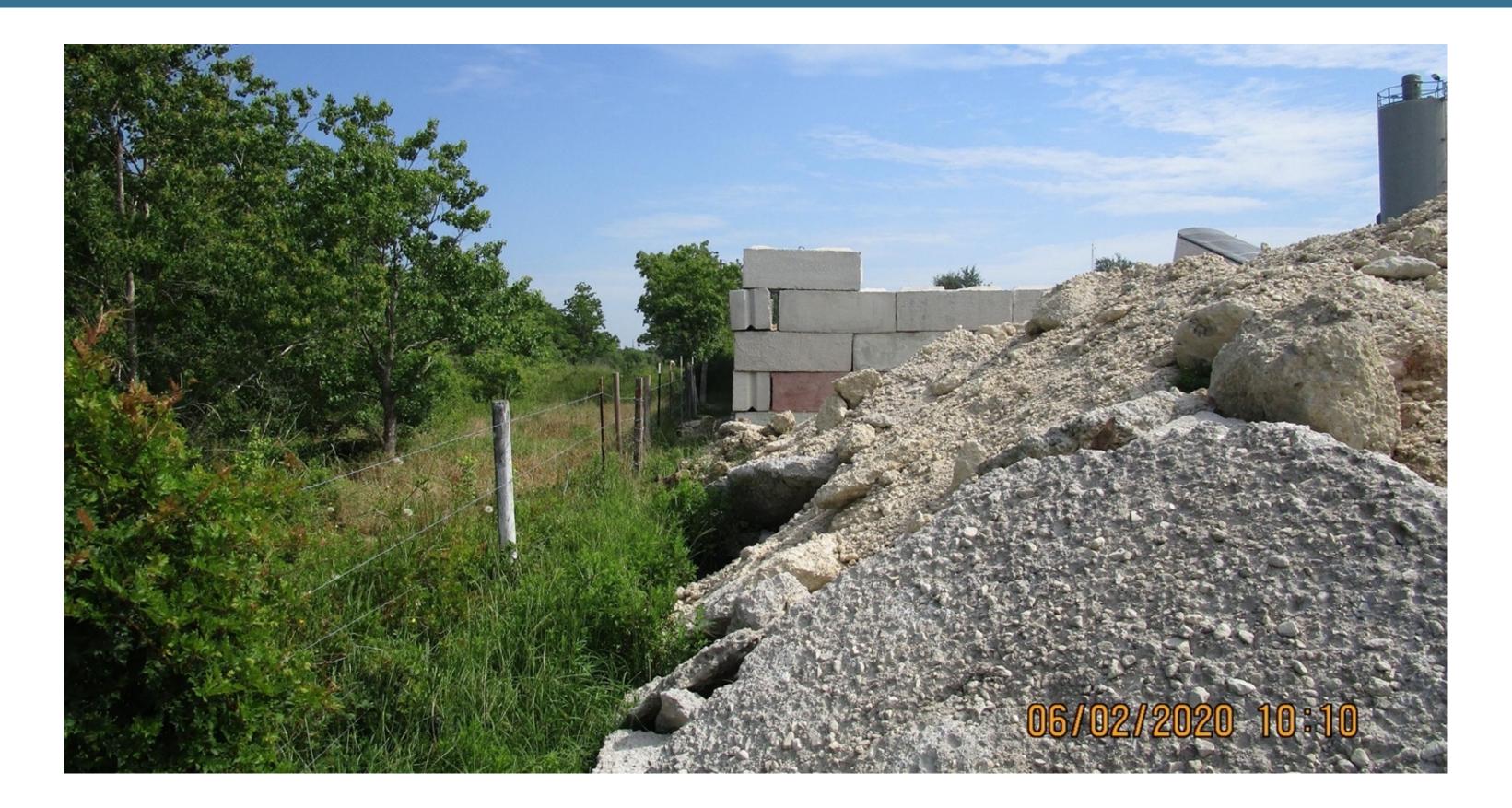
Tracking & Road Dust Emissions







Improper storage of sand and aggregates



Failure to maintain a 12-foot dust suppressant fence



Failure to maintain three-walled bunkers



Industrial Solid Waste Violations



Harris County Pollution Control Services Department

Water Code Violations





Water Code Violations





Harris County Pollution Control Services Department

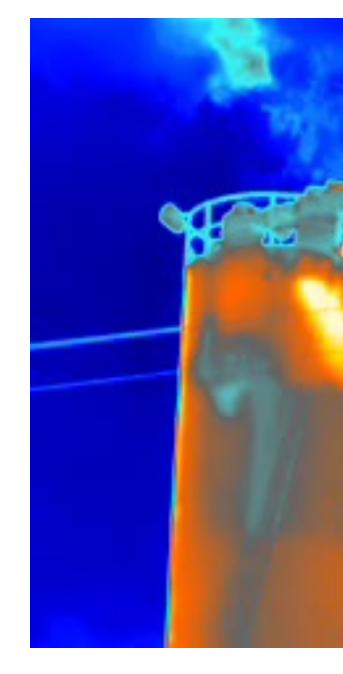
FLIR optical gas imaging (OGI)

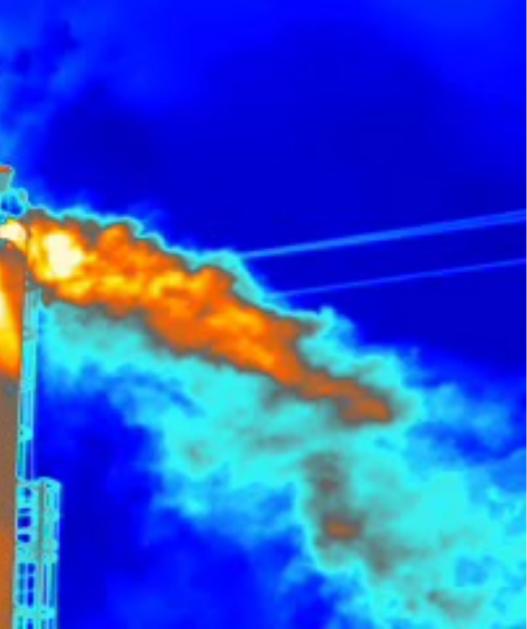
- Infrared camera commonly used to find invisible gas (Hydrocarbon) leaks in industrial settings.
- This camera can also detect fine particulate matter due to a temperature difference between the particulate and background and the particulate's IR reflectivity.



FLIR Camera vs. Standard Digital Camera







FLIR Camera vs Standard Digital Camera





High Sensitivity FLIR Video

