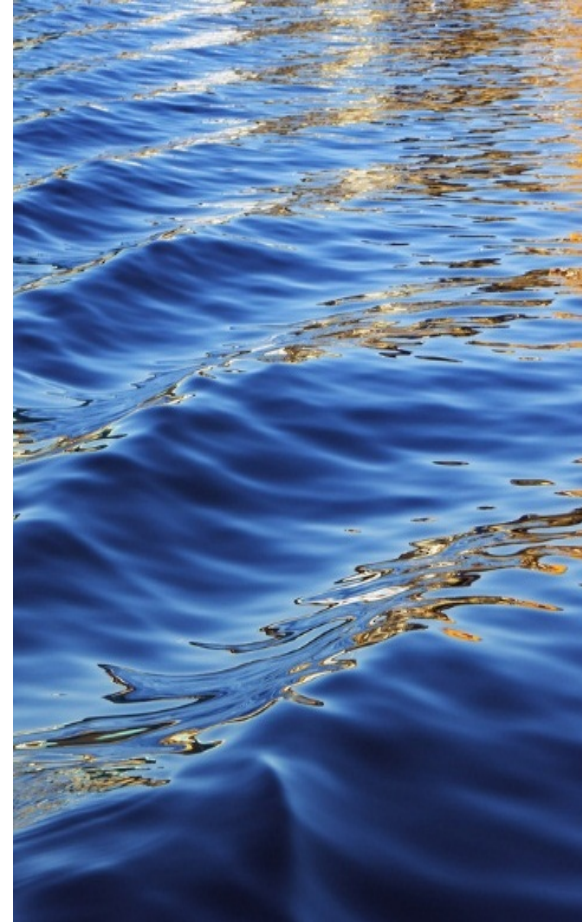




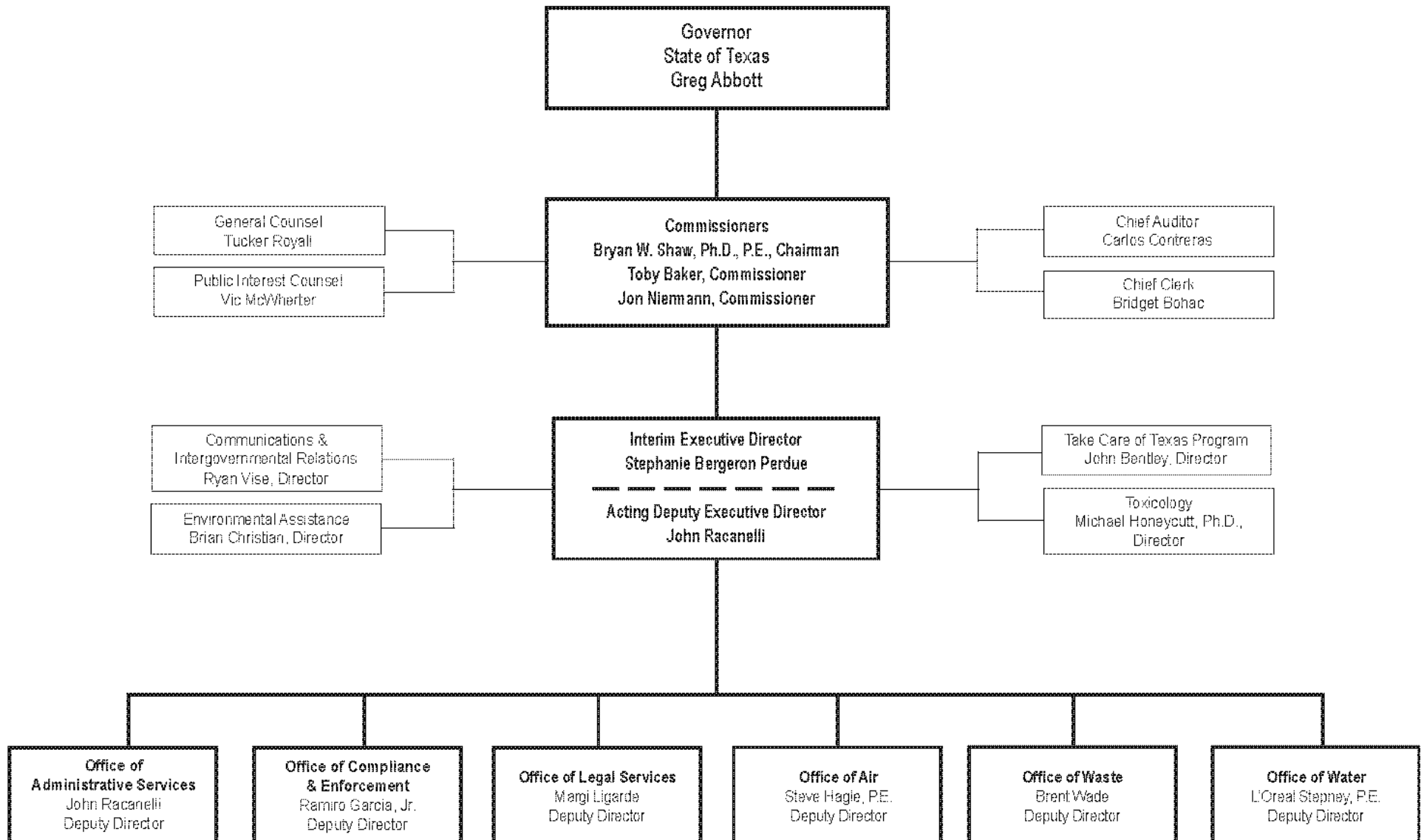
TCEQ Overview and Updates Concerning Oil and Gas Regulatory Activities

Texas Commission on
Environmental Quality
August 9, 2018



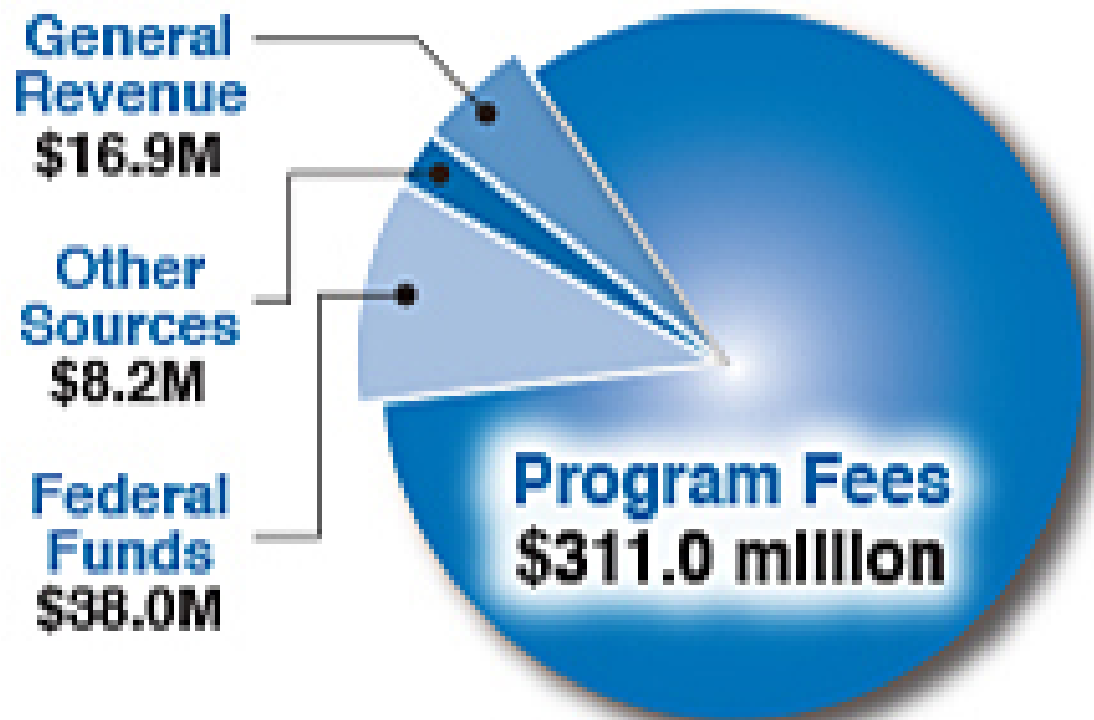
TCEQ ORGANIZATION

April 5, 2018



Staff and Budget

- TCEQ is the environmental agency for the state.
- Approximately 2,795 employees
- 16 regional offices (~ 750 employees)
- \$374.1 million operating budget
 - 83.1% program fees
 - 10.1% federal funding
 - 4.5% general state revenue
 - 2.2% other sources





TCEQ Regulatory Activities



TCEQ's Regulatory Role

- TCEQ's primary regulatory role with O&G is regulating air emissions and ensuring air quality, as well as any potential impact to water.
- Investigations performed in response to oil and gas activities in multiple programs:
 - air quality
 - water quality
 - public water supply
 - wastewater collection and treatment
 - solid waste disposal
 - illegal dumping
 - dust control
 - surface water usage
 - water rights





Water and Waste Activities Update



Water Issues (RRC, TCEQ, or EPA?)

- Process wastewater discharge and storm water run-off from O&G sites – EPA
- Drinking water
 - Private wells – suspected contamination by O&G should be reported to the RRC
 - Public water supply – concerns should be reported to the TCEQ

Who Regulates Waste at Oil and Gas Sites?

In general wastes from O&G related activities are regulated by RRC. The exceptions are:

- Waste associated with transportation of crude oil and natural gas by railcar, truck, barge, or oil tanker
- Refined petroleum products by pipeline
- Wastes generated at oil field service facilities that provide equipment, materials, or services to the O&G industry
- Wastes that are processed, treated, or disposed of at a solid waste management facility authorized by the TCEQ
- On-site sewage facilities

EPA Produced Water Study

- EPA is reevaluating the federal effluent guidelines for no-discharge from oil and gas operations, with a provision for beneficial reuse, particularly west of the 98° Meridian. (Central and West Texas)
- EPA has started engaging stakeholders to consider available approaches to manage wastewater.
- MOU signed with New Mexico “to clarify the existing regulatory and permitting frameworks related to the way produced water from oil and gas extraction activities can be re-used, recycled, and renewed for other purposes.”



Update on Air Activities

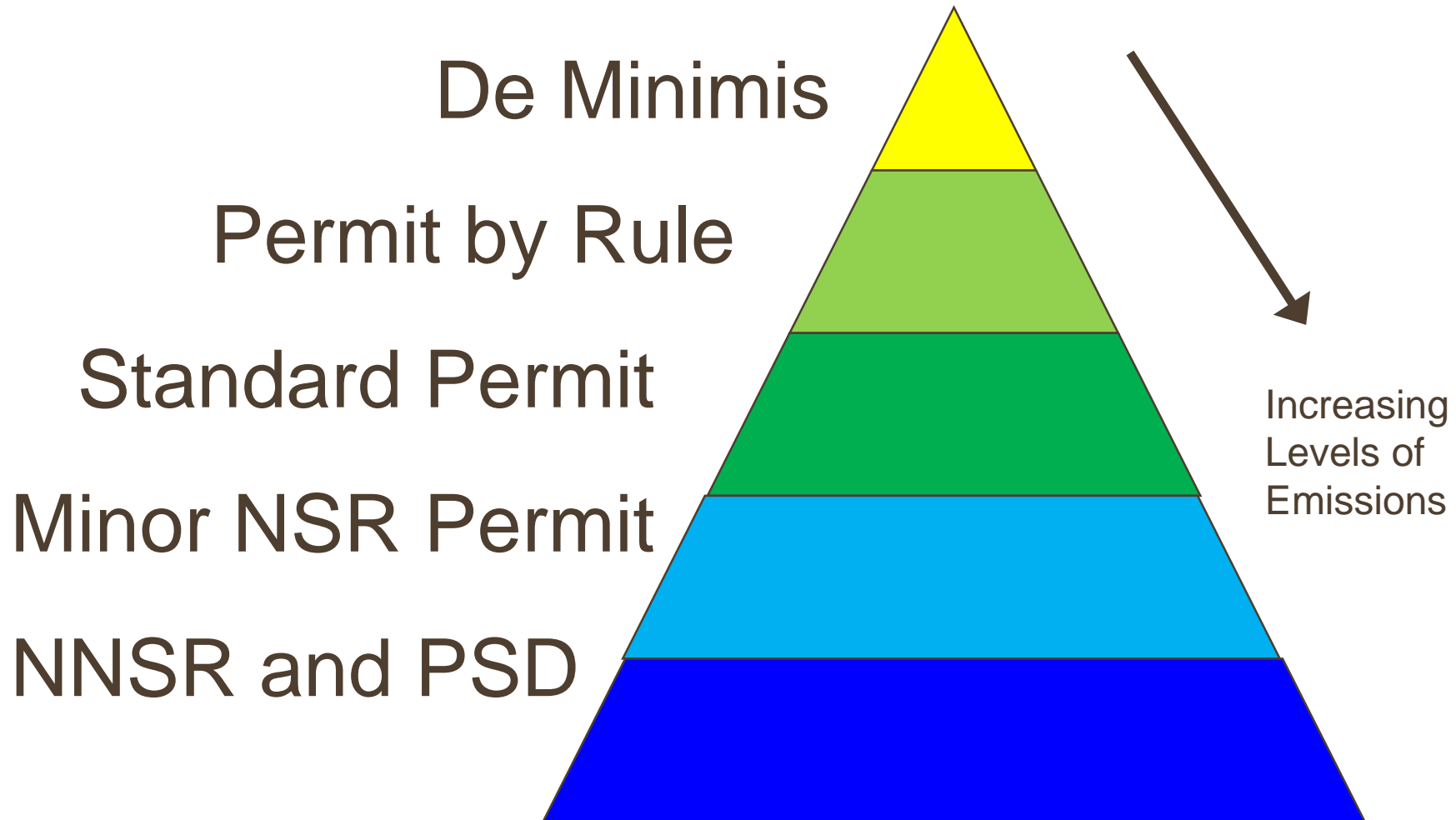


State Air Regulations – Authorizations Background

Since September 1, 1972, owners and operators of an O&G site must obtain an authorization for air emissions.

The agency uses a tiered approach to provide more options for permitting oil and gas facilities: de minimis sources; historical standard exemptions, permits by rule (PBR); standard permits; and case-by-case permits.

Oil and Gas Permitting Options



TCEQ Air Regulations – cont.

Your company had an “upset” at an well pad that lead to unauthorized air emissions.

- Are you required to record information concerning the event? **Yes**
- Are you required to report the event to the TCEQ? **Depends on what and how much was emitted; Reportable Quantity**
- 30 TAC §101.201 and §101.222 have all of the answers



Update on Federal Air Regulations

EPA's Part 60 Subpart OOOOa

- March 1, 2018, final rule; no longer required to make fugitive emissions repairs during unscheduled or emergency shutdowns.
- Reconsideration proposal with OMB:
 - Address certain aspects of the fugitive emissions requirements, low production wells, and
 - Alternative means to use emerging technologies or existing state or local programs to comply with the rule.
- MORE TO COME?? (proposal to address key policy issues raised in petitions, including regulation of greenhouse gases.)

Update on Federal Air Regulations (cont.)

March 1, 2018, EPA proposed the withdraw of the Control Techniques Guidelines (CTG).

April 5, 2018, AG's from numerous states and DC sued EPA; that it had a mandatory obligation to issue regulations covering existing sources once it established the performance standards for new sources. Related to ICR that was cancelled.

EPA is working on finalizing a new audit policy for streamlining disclosure of non-compliance by new oil and gas facilities.

EPA Smart Sector program is starting to work with Oil and Gas Sector.

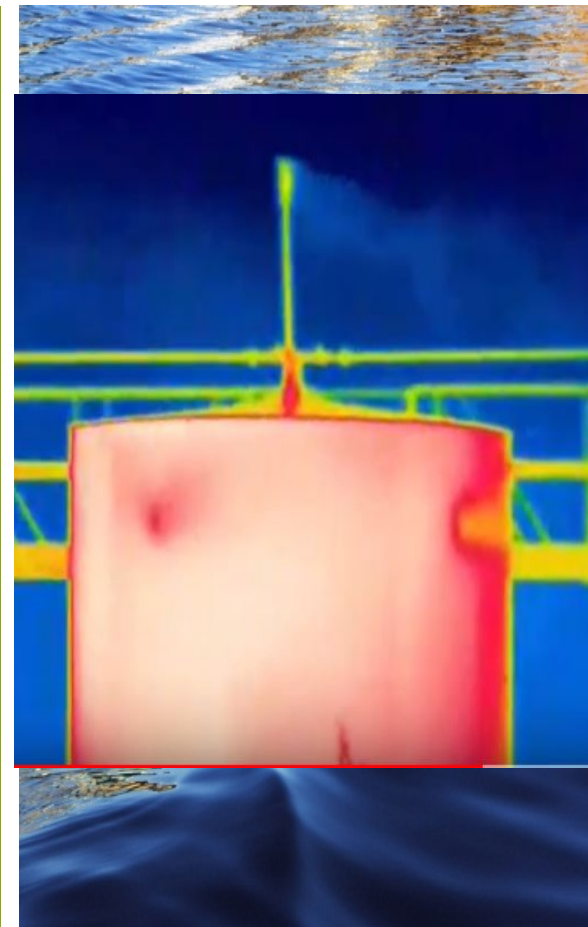
Update on National Ambient Air Quality Standards Designations

- All areas of the state are designated as attainment for NO₂ and CO
- Four areas/five counties are nonattainment for SO₂
- A portion of one county designated maintenance for lead – requesting attainment designation.
- All areas in Texas attainment/unclassifiable for 24-hour and annual PM_{2.5} NAAQS
- All areas attaining PM₁₀ except the City of El Paso – moderate nonattainment
- All areas in Texas attaining O₃ NAAQS except HGB and DFW areas, **and Bexar County**.
- BPA area maintenance for 1997 standard and attainment for 2008

Permian Basin Pipeline Takeaway Constraints

- Potential pipeline takeaway capacity issues starting in first part of next year and might not be resolved until fourth quarter of 2019; as new pipelines come on-line.
- While developing solutions to this takeaway issue, companies need to ensure that any additional air emissions are properly authorized.

Investigation Update



Office of Compliance and Enforcement Critical Functions

- Conduct Compliance Investigations
- Investigate Complaints
- Review Emission Events Reported to TCEQ
- Issue Notices of Violation
- Issue Enforcement Orders
- Conduct ambient monitoring of air quality
- Respond to environmental emergency incidents

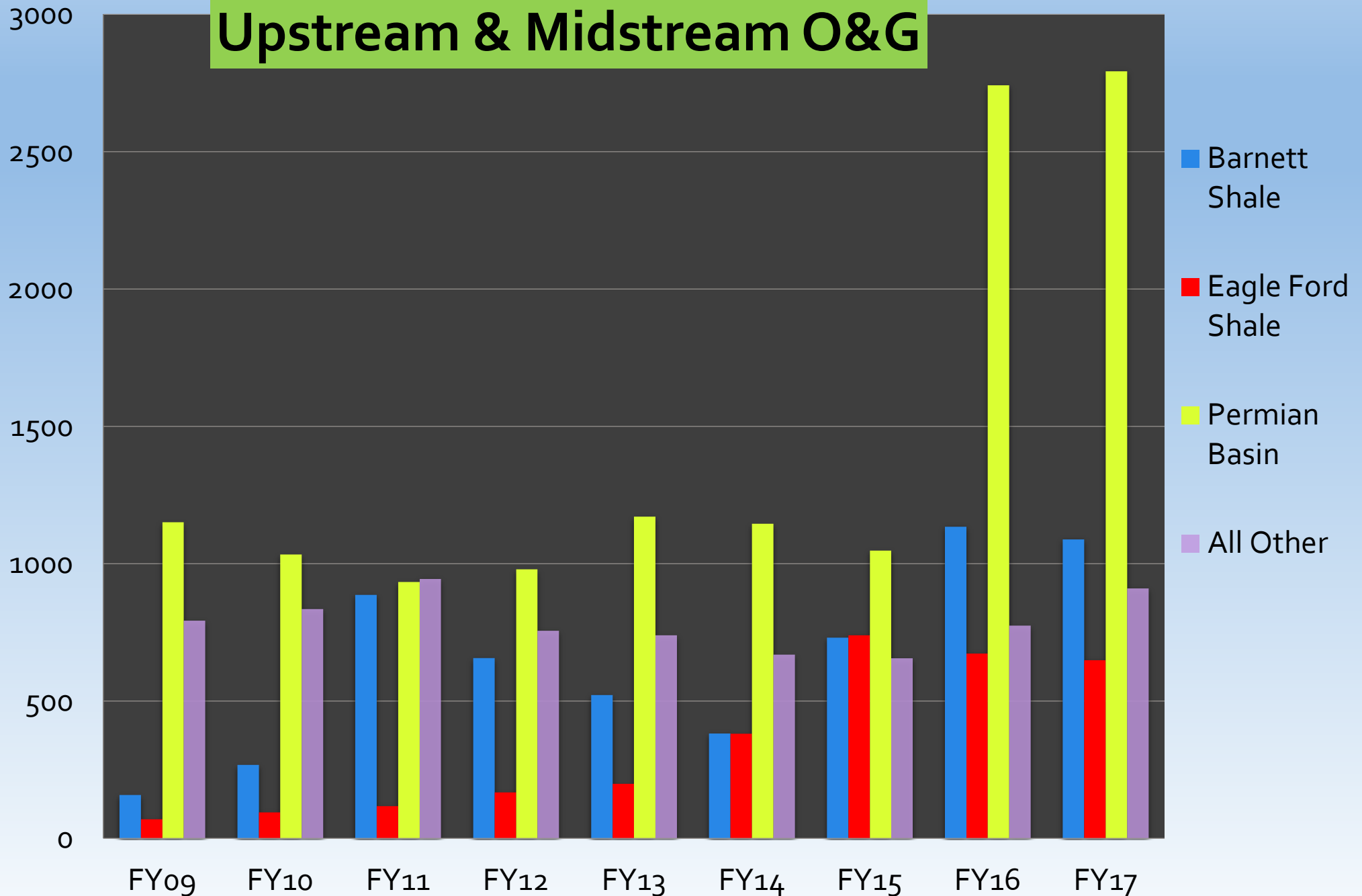


TCEQ Investigation Types

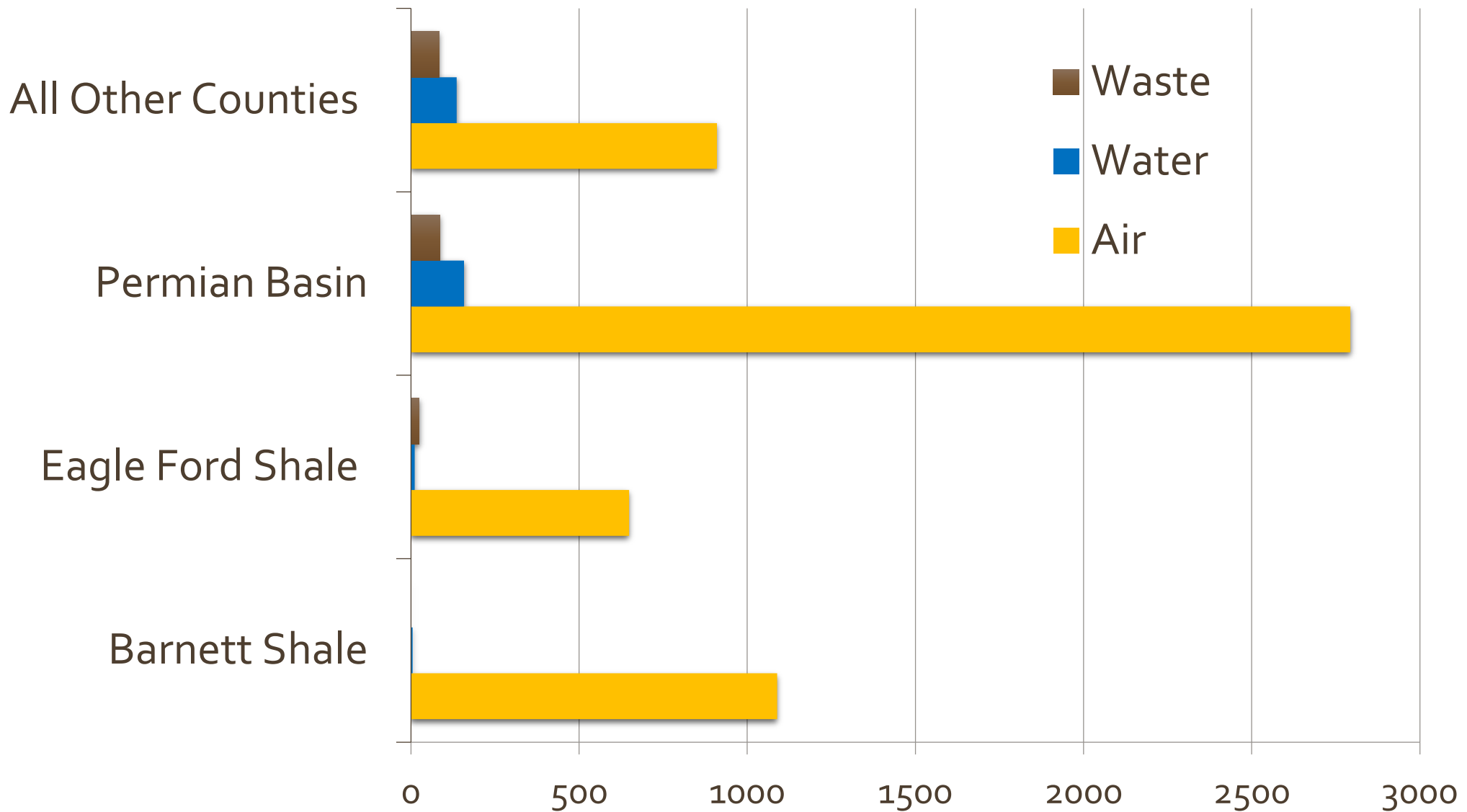
- Regularly scheduled investigation
- Complaint response investigation
- U.S. EPA or TCEQ initiative
- Spill response or emergency response
- Referral from another governmental entity



Air Investigation Activities Upstream & Midstream O&G



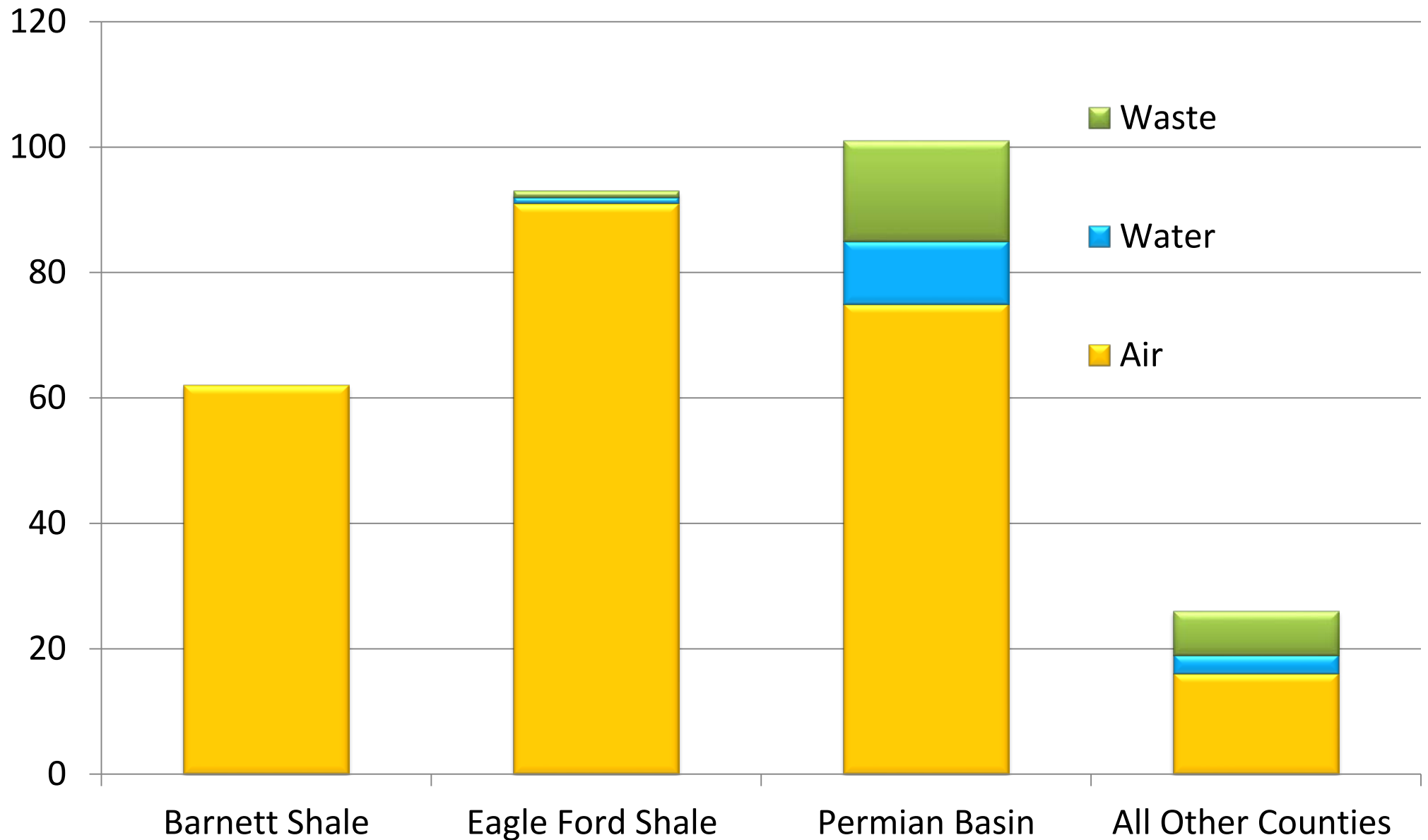
FY2017 Investigation Activities Upstream and Midstream O&G



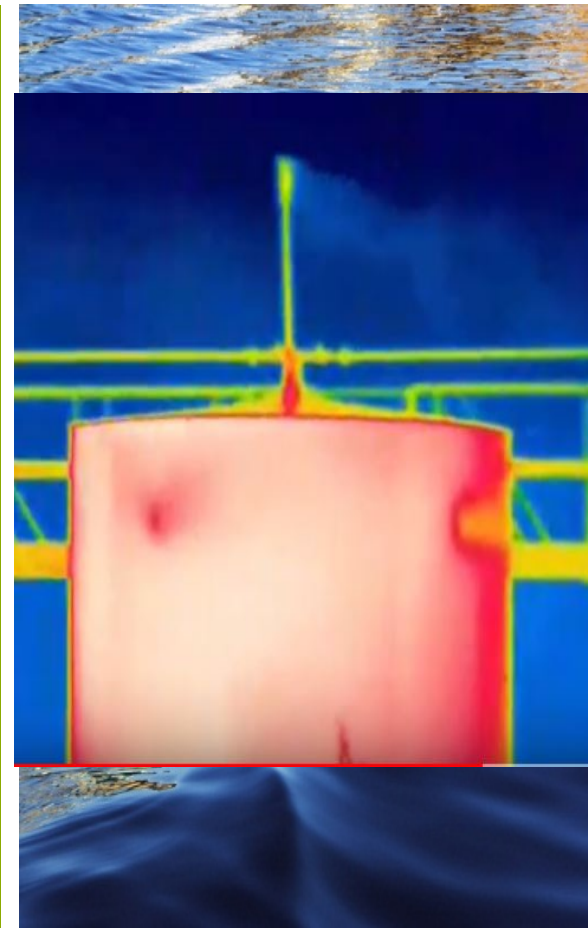
Complaint Response

- TCEQ responds to all complaints received under its jurisdiction:
- Considered a core mission of the agency
- Complaints are assigned a priority with corresponding investigation timeline
- Alleged health related issues are considered our highest priority

FY17 Complaint Incidents Investigated Upstream and Midstream O&G



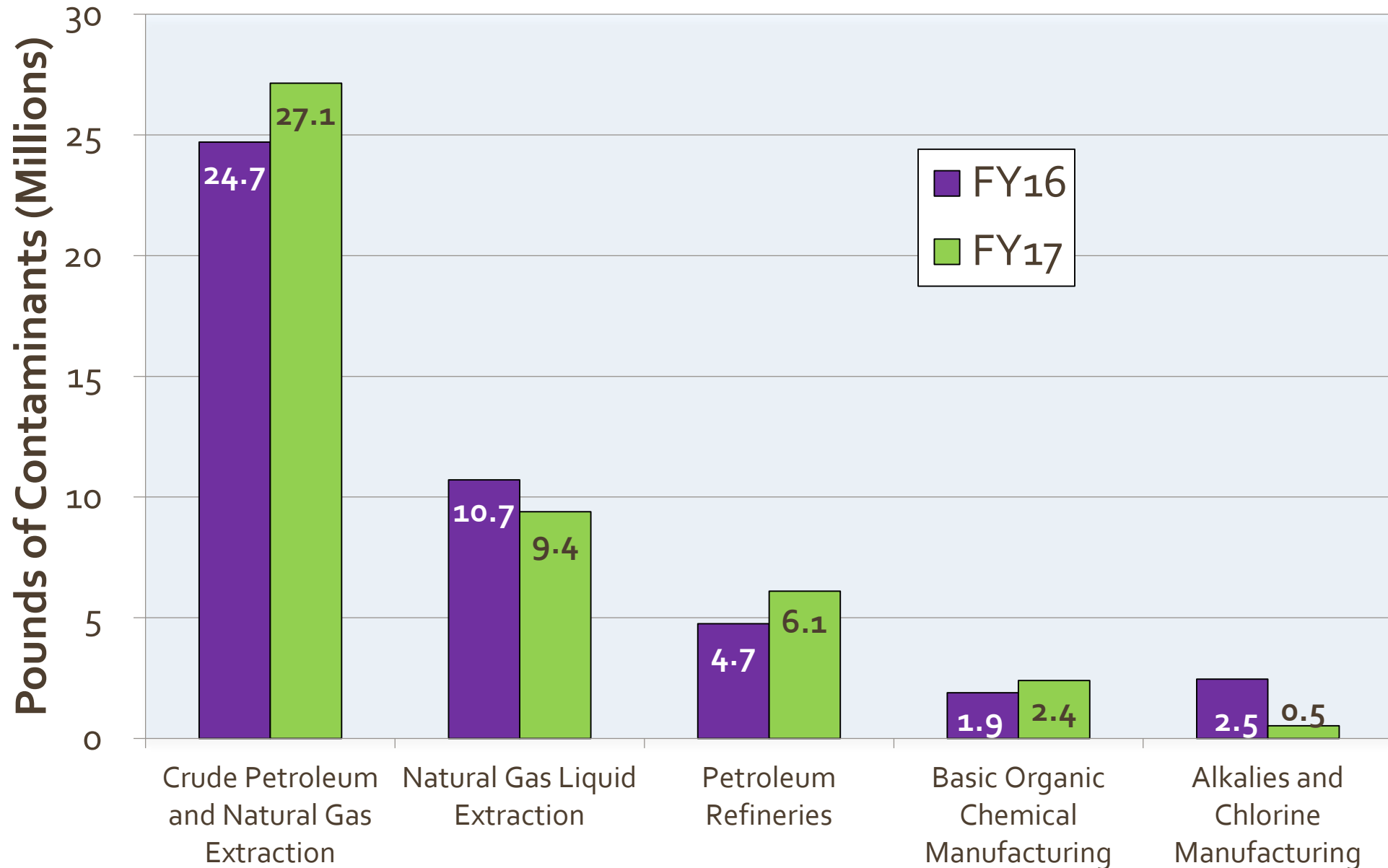
Reported Emissions



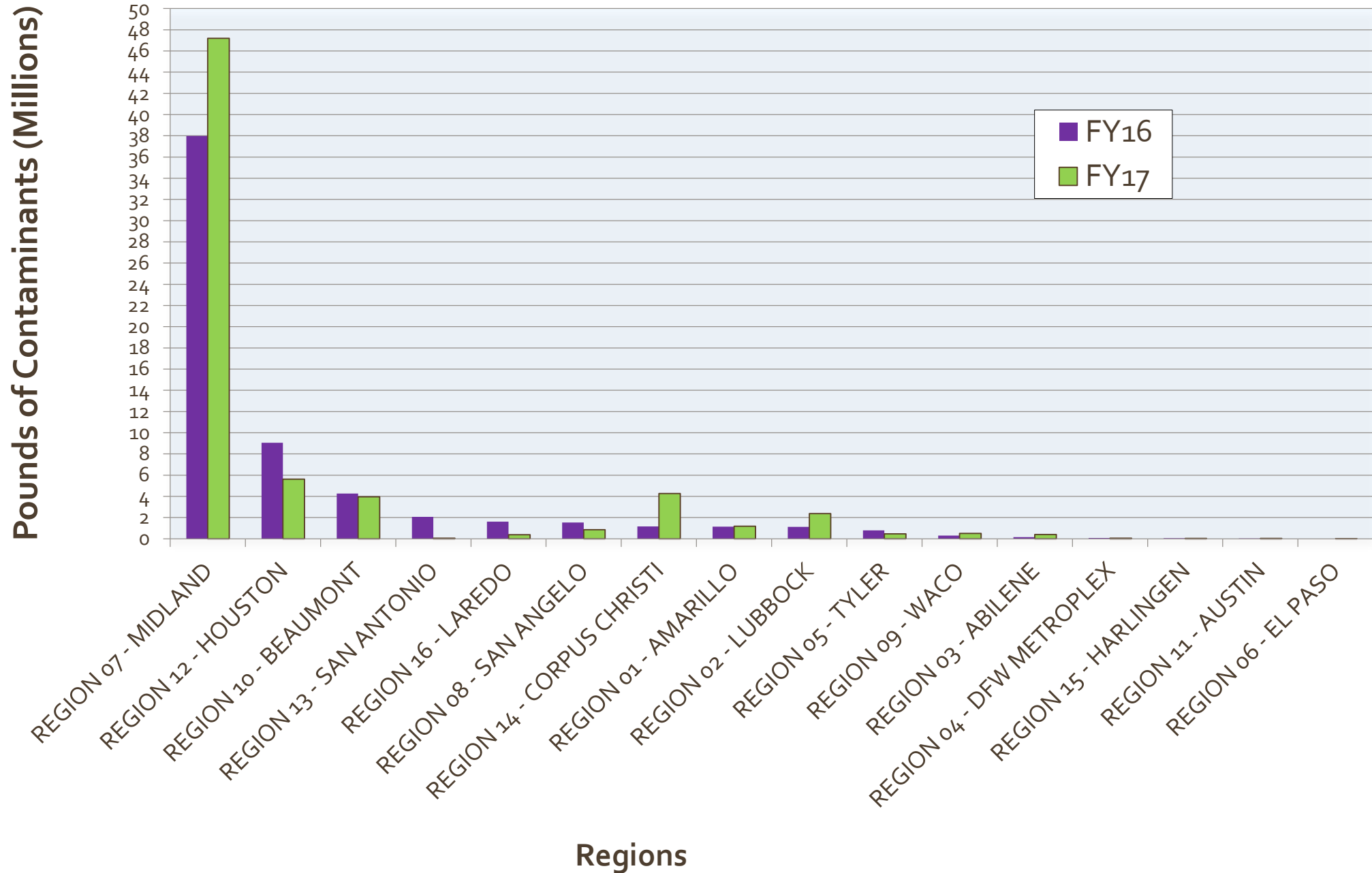
FY2017 Incidents Reported by Industry Type Under 30 TAC Chapter 101, Subchapter F

Industry Type	Emissions Events	Scheduled Maintenance	Scheduled Startup	Scheduled Shutdown	Excess Opacity	Total
Crude Petroleum and Natural Gas Extraction	1,762	31	3	2	1	1,799
Natural Gas Liquid Extraction	325	22	2	8	9	366
Petroleum Refineries	274	21	11	15	16	337
Basic Organic Chemical Manufacturing	164	10	4	8	6	192
Basic Inorganic Chemical Manufacturing	32	24	20	33	2	111
Pipeline Transportation of Natural Gas	71	0	8	0	0	79

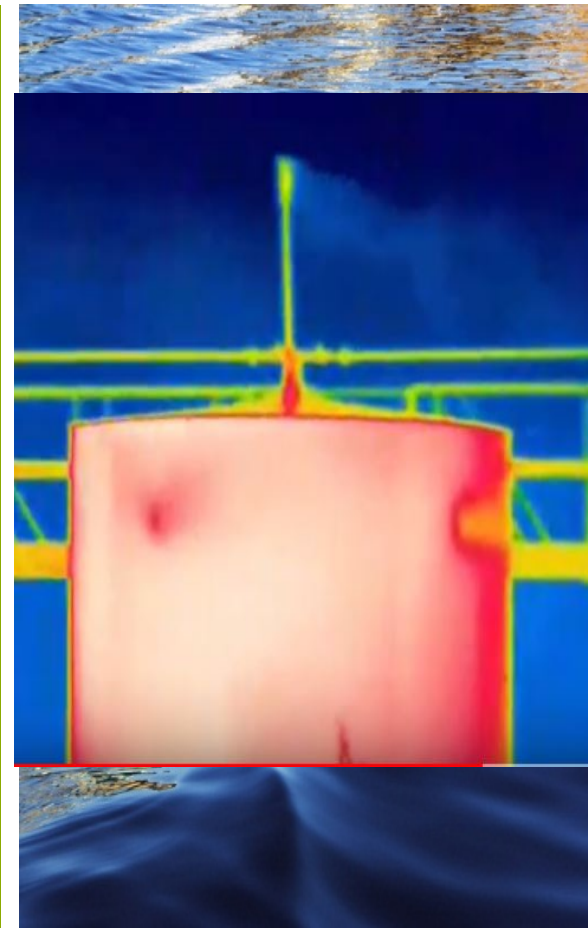
Quantity of Contaminants by Industrial Classification FY2016 & FY2017



Total Quantity of Emissions Reported Statewide



Innovative Approaches & Outreach



Optical Gas Imaging Camera (OGIC)



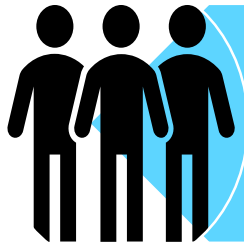
- Using the OGIC, we can potentially locate under reported or unrecognized VOC source types
- The camera is capable of locating and imaging emissions from various sources of air pollution
- Documented images of emissions for follow-up

OGIC

By the Numbers



20 Cameras



124 Certified Operators



2 Flyovers in FY2017

Flyovers with OGIC

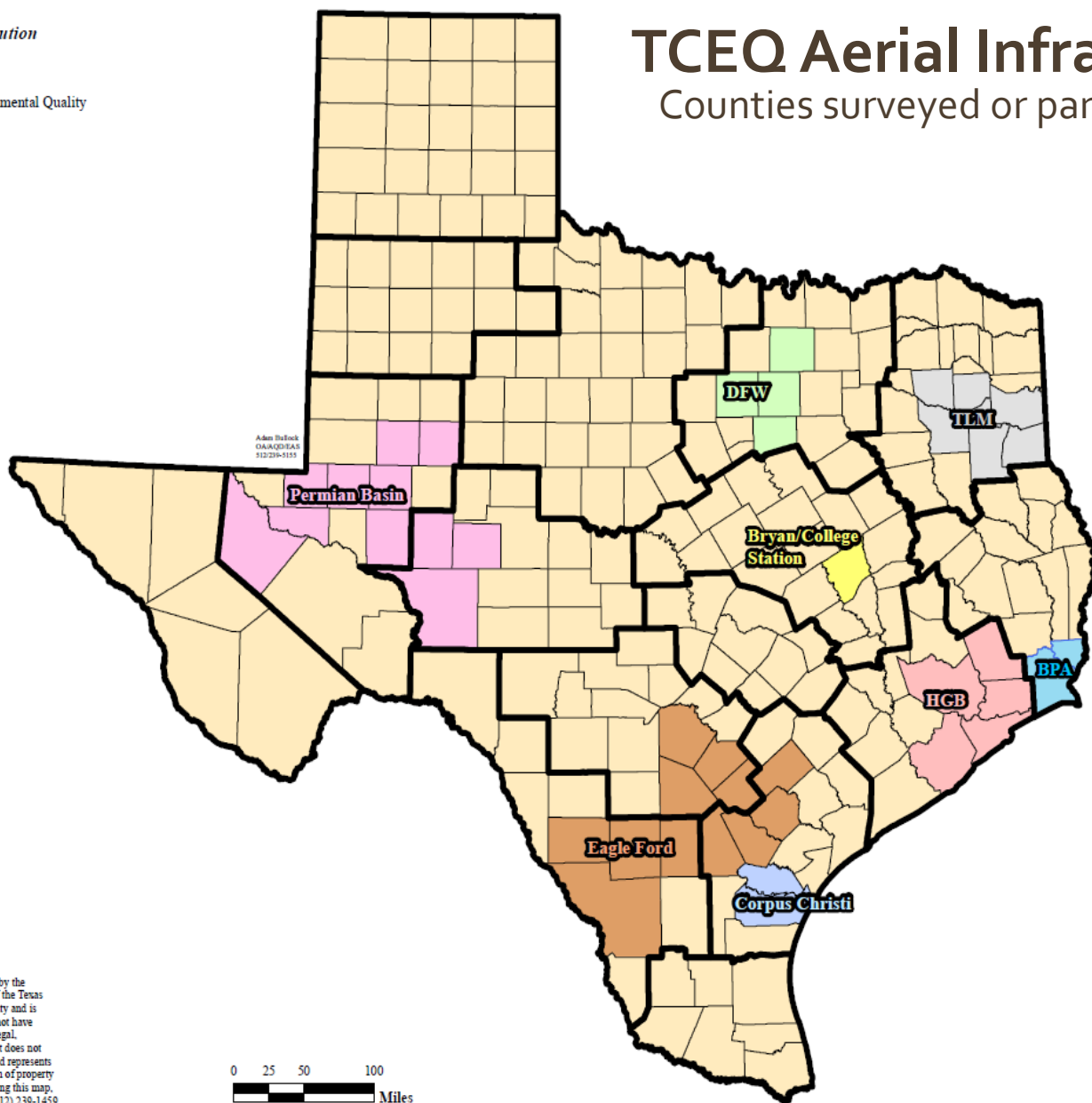


- TCEQ has conducted multiple contractor-led aerial surveys or flyovers using a helicopter mounted with an optical gas imaging camera (OGIC) capable of detecting sources of air emissions:
- Effective screening tool;
- Evaluate large geographical areas;
- Allows TCEQ to focus resources on potentially problematic areas; and
- Thousands of individual tanks have been surveyed.



Texas Commission on Environmental Quality
Office of Air
Air Quality Division
P.O. Box 13087 (MC-164)
Austin, Texas 78711-3087

March 2, 2018



Disclaimer: This map was generated by the Office of Air, Air Quality Division of the Texas Commission on Environmental Quality and is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For information concerning this map, contact the Air Quality Division at (512) 239-1459.

TCEQ Aerial Infrared Survey Areas

Counties surveyed or partially surveyed since 2005

Area	Survey Date
HGB	Summer 2005 Summer 2007 August 2009 May 2010 September 2017
Houston Ship Channel	Sept & Nov 2016
BPA	Summer 2005 Summer 2007 August 2009 September 2017
DFW	August 2007 April 2010
Corpus Christi	Summer 2007 August 2009
TLM	June 2009
Eagle Ford	August 2011* Summer 2013* Dec 2014-Jan 2015** May-June 2015*** September 2015**** February 2016+ June 2016++ January 2018+++
Bryan/College Station	August 2017
Permian Basin	August 2013

*Bexar County not part of 2011 and 2013 surveys
 ** Bexar, Karnes, Dimmit, & La Salle Counties only
 *** Karnes & Atascosa Counties only
 **** Dimmit & La Salle Counties only
 +Bee, De Wit, Goliad, & Karnes counties only
 First time Goliad surveyed
 ++ La Salle, Webb, & Karnes counties only
 +++ Dimmit, La Salle, & McMullen counties only

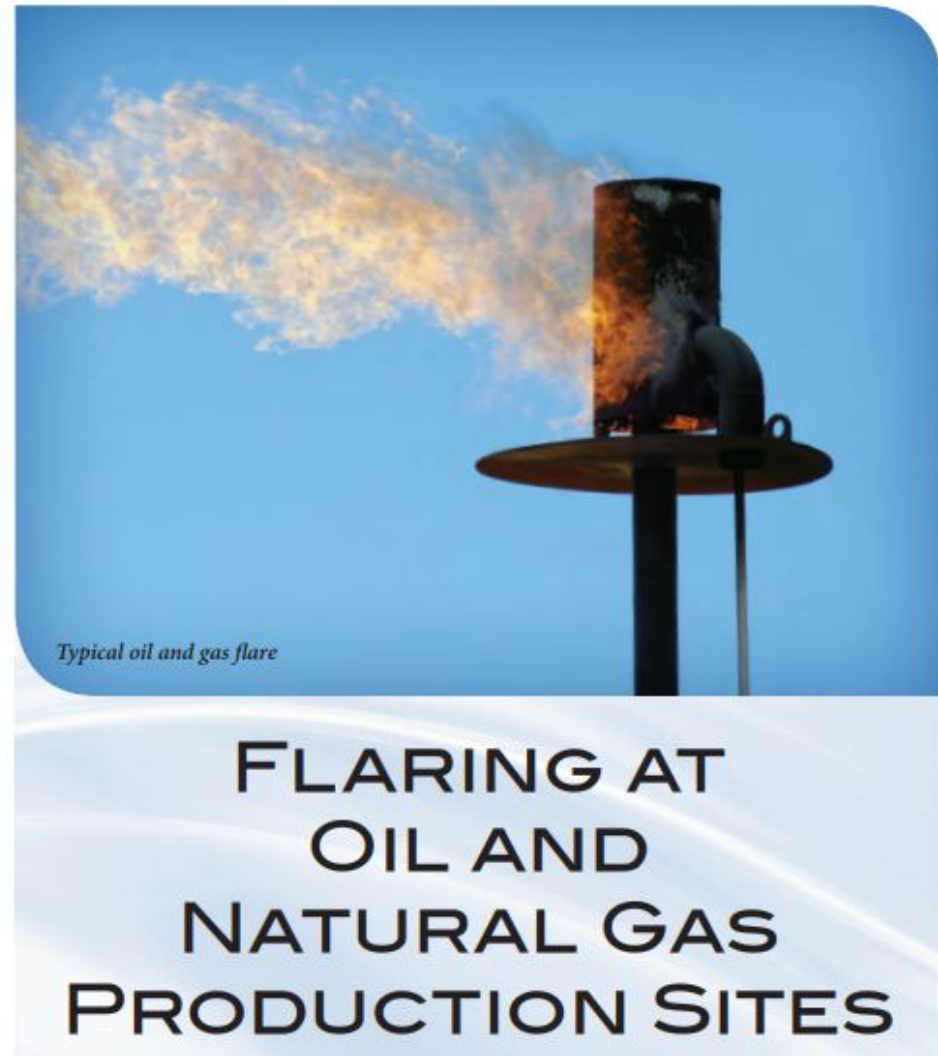
TCEQ's Outreach Activities



- Publications, Web Info, & FAQs
- Local Government Workshops, Public Workshops, Town Hall Meetings & Open Houses
- Outreach to County Judges
- Coordination with Railroad Commission of Texas
- TCEQ Environmental Trade Fair – Oil & Gas Track
 - In May of each year

TCEQ GI-457

- Explains what production flares are and why they are necessary
- If a visible flame is really ok
- Why a flare smokes
- Contains links to additional resources and contact information for submission of complaints



Other Avenues to Compliance

- ✓ The Texas Audit Act is one avenue to helping an entity achieve voluntary compliance
- ✓ The TCEQ Environmental Assistance Division also offers assistance through programs like the EnviroMentor Program and other compliance assistance options.


TCEQ Publication RG-173

- A Guide to the Texas Environmental, Health, and Safety Audit Privilege Act
- May be found on our website at:
https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-173.pdf

TCEQ's Oil and Gas Web Site

- Oil and Gas Facilities: Compliance Resources:
<http://www.tceq.texas.gov/assistance/industry/oil-and-gas/oilgas.html>
- Compliance information on air, water, waste, and spill issues
- Guidance documents for local governments
- Sign up for email updates for Oil & Gas

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