

DOI Priority Goal Action Plan

# Conduct Facility-Based Risk Inspections and Performance-Based Risk Inspections

**Goal Leader:** Scott Angelle, Director, Bureau of Safety and Environmental Enforcement (BSEE)

**Deputy Goal Leader:** Lars Herbst, Regional Director, Gulf of Mexico, BSEE

# Overview

---

## Goal Statements

- By September 30, 2021, the Bureau of Safety and Environmental Enforcement will conduct 12 facility-based risk inspections (FBRI) and 6 performance-based risk inspections (PBRI).

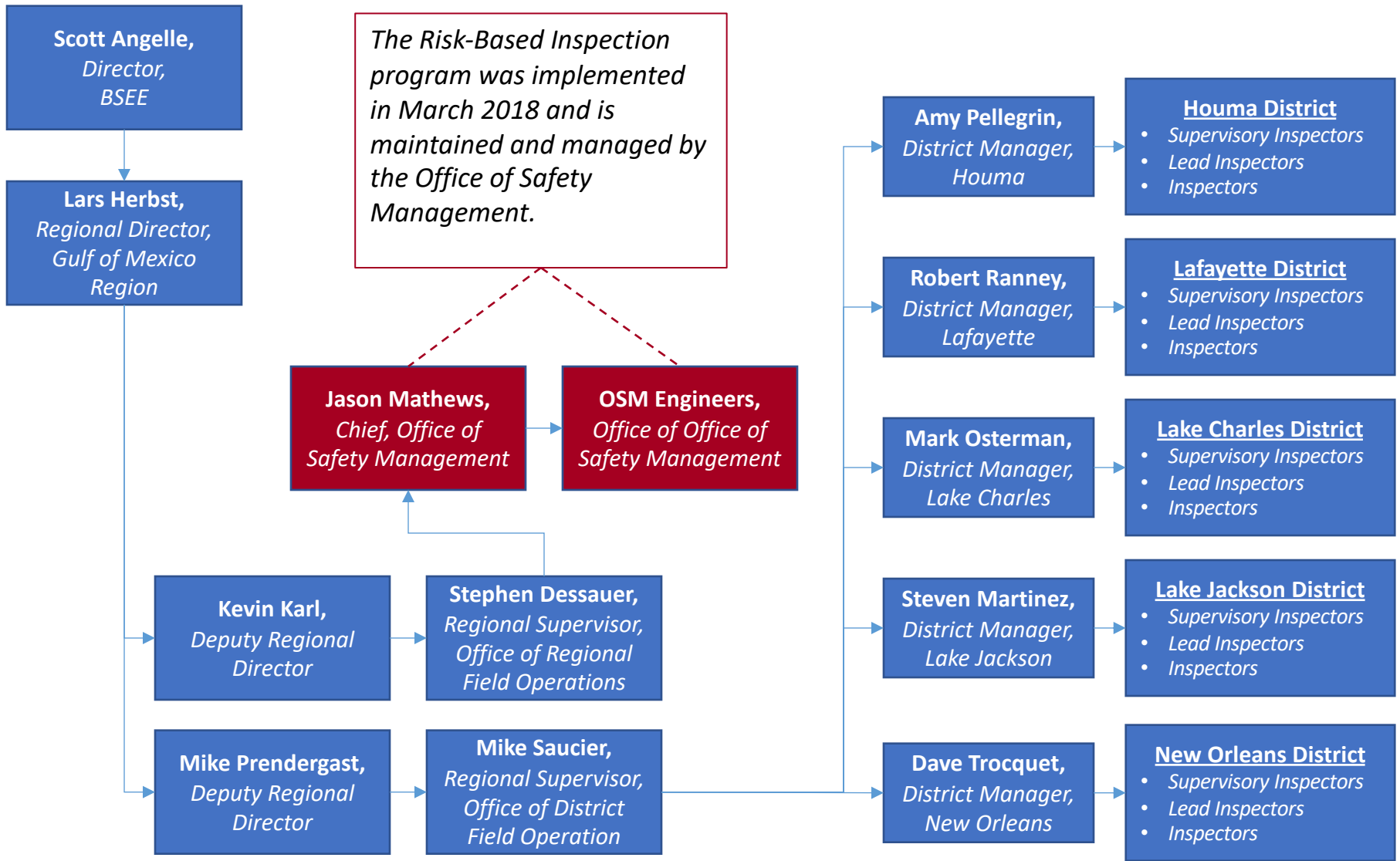
## Challenge

- Risk-based inspections present additional workload to BSEE's inspection staff, who already face numerous inspection targets to meet.
- Performance-based risk inspections are especially resource-intensive, including inspectors and engineers visiting numerous facilities typically across all 5 districts in the Gulf of Mexico.

## Opportunity

- Risk-based inspections allow BSEE inspectors to target (1) areas that need special attention given trends in safety and environmental performance and (2) facilities that warrant additional inspection time given risks inherent to a given facility. The analysis of raw inspection and incident data allows BSEE to create insightful and actionable inspections to continually improve operator performance.

# Leadership & Implementation Team



# Goal Structure & Strategies

- The Risk-Based Inspection Agency Priority Goal will be achieved using:
  - Analysis of inspection & incident (e.g., Incident of Non-Compliance (INC)) data
  - Routine review of offshore assets on Increased Oversight List
  - Soliciting feedback from inspectors



- Challenges to meeting the agency priority goal include:
  - Weather, which can be mitigated against with proper planning.
  - Competing inspection priorities, which is mitigated against with the inclusion of Risk-Based Inspections in the Gulf of Mexico's annual inspection strategy.

# Summary of Progress – FY 2020 Q4

---

- **Level of Results Achieved**

- Since October 1, 2019, BSEE has conducted:
  - 2 of the proposed 6 facility-based risk inspections for FY 2020;
  - 4 of the proposed 3 performance-based risk inspections for FY 2020.

- **Likelihood of Success**

- High

## **Basis for the Assessment**

- Because of limited access to offshore facilities previously identified to receive an FBRI, BSEE was not able to conduct all FBRI planned for FY 2020 but was able to conduct an additional PBRI; however, the Office of Safety Management (OSM) has identified 5 facilities that will receive a facility-based risk inspection by March 30, 2021;
- OSM has completed all 3 performance-based risk inspections for FY 2020, as well as initiated a 4<sup>th</sup> PBRI, for which all inspections are complete and analysis and report development are underway.

- **Actions planned to ensure achievement of the goal**

- OSM will identify in Q2 FY 2021, based on trend analyses, the remaining 5 facilities that will receive a facility-based risk inspection.

# Key Milestones – Performance-Based Risk Inspections (PBRIs)

Key Milestone	Milestone Due Date	Owner	Milestone Status	Comments
PBRI 1 (Compliance with Real-time Monitoring Reqs.)				
<i>Complete planning and train inspectors</i>	Q2 FY20	OSM	Complete	
<i>Conduct inspections</i>	Q2 FY20	OSM, Districts	Complete	
<i>Analyze results, develop reports, and share results</i>	Q3 FY20	OSM	Complete	
PBRI 2 (Pandemic Management Planning)				
<i>Complete planning and train inspectors</i>	Q3 FY20	OSM	Complete	
<i>Conduct inspections</i>	Q3 FY20	OSM, Districts	Complete	
<i>Analyze results, develop reports, and share results</i>	Q4 FY20	OSM	Complete	
PBRI 3 (Hurricane Preparedness)				
<i>Complete planning and train inspectors</i>	Q4 FY20	OSM	Complete	
<i>Conduct inspections</i>	Q4 FY20	OSM, Districts	Complete	
<i>Analyze results, develop reports, and share results</i>	Q1 FY21	OSM	Complete	
PBRI 4 (Subsea Leak Detection)				
<i>Complete planning and train inspectors</i>	Q4 FY20	OSM	Complete	
<i>Conduct inspections</i>	Q4 FY20	OSM, Districts	Complete	
<i>Analyze results, develop reports, and share results</i>	Q1 FY21	OSM	On-Track	

# Key Milestones – Facility-Based Risk Inspection (FBRIs)

Key Milestone	Milestone Due Date	Owner	Milestone Status	Comments
FBRIs 1 & 2 (Murphy/Front Runner and EnVen/Brutus)				
<i>Complete planning and train inspectors</i>	Q1 FY20	OSM	Complete	
<i>Conduct inspections</i>	Q1 FY20	OSM, Districts	Complete	
<i>Analyze results, develop reports, and share results</i>	Q2 FY20	OSM	Complete	
FBRI 3 Talos Green Canyon 18				
<i>Complete planning and train inspectors</i>	Q1 FY21	OSM	Ongoing	
<i>Conduct inspection</i>	Q1 FY21	OSM, Districts	On-Track	
<i>Analyze results, develop reports, and share results</i>	Q1 FY21	OSM	On-Track	
FBRI 4-7				
<i>Complete planning and train inspectors</i>	Q2 FY21	OSM	On-Track	
<i>Conduct inspections</i>	Q2 FY21	OSM, Districts	On-Track	
<i>Analyze results, develop reports, and share results</i>	Q2 FY21	OSM	On-Track	
FBRI 8-12				
<i>Complete planning and train inspectors</i>	Q3 FY21	OSM	On-Track	
<i>Conduct inspection</i>	Q3 FY21	OSM, Districts	On-Track	
<i>Analyze results, develop reports, and share results</i>	Q4 FY21	OSM	On-Track	

# Overview of Completed PBRI 1

## (Compliance with Real-time Monitoring Reqs.)

---

- Decision to conduct a PBRI related to real-time monitoring (RTM) resulted from BSEE's January 2020 data analysis on related well control equipment failures and kick events.
- The RTM PBRI included 6 rounds of inspections conducted between March 10 and March 20, 2020.
  - Over 300 BSEE work hours prior to the PBRI were spent in developing correspondence, protocol, training material, and company-specific RTM plan reviews.
  - The PBRI included 15 of the 33 rigs operating in the Gulf of Mexico and that use subsea blowout preventers (BOPs), surface BOPs on floating platforms, or operate in high-pressure and high-temperature environments.
  - These 15 rigs included 6 unique operators: Beacon, Chevron, EnVen, Hess, Cosmos, and Shell.
  - For the PBRI, BSEE reviewed 194 files submitted in advance of audits and committed over 200 audit hours.
- No Incidents of Non-Compliance or civil penalties were issued, and no investigations were initiated; however, numerous findings were identified, and OSM made 8 recommendations to operators and other BSEE staff.



# Overview of Completed PBRI 2: (Pandemic Management Planning)

---

- BSEE conducted a PBRI related to pandemic management planning in response to the COVID-19 pandemic.
- Inspection-related activities occurred between May 18 and May 27, 2020.
  - The PBRI included 8 unique operators.
  - BSEE committed over 275 work hours in developing correspondence and protocols, as well as conducting operator reviews. Operator reviews were conducted virtually.
- No Incidents of Non-Compliance or civil penalties were issued, and no investigations were initiated; however, BSEE identified 13 findings, including numerous recommendations to operators and one recommendation to BSEE and the American Petroleum Institute.

# Overview of Completed PBRI 3: (Hurricane Preparedness)

---

- BSEE conducted a PBRI related to hurricane preparedness in response to the effects on facility manning from commodity pricing and the COVID-19 pandemic.
- Inspection-related activities occurred between June 1 and June 11, 2020.
  - The PBRI included 5 unique operators.
  - BSEE committed over 250 work hours in developing correspondence and protocols, as well as conducting operator reviews. Operator reviews were conducted virtually.
- No Incidents of Non-Compliance or civil penalties were issued, and no investigations were initiated; however, BSEE identified 16 findings, including 15 recommendations to operators. BSEE also highlighted 7 best practices.

# Overview of Completed PBRI 4:

## (Subsea Leak Detection)

---

- BSEE conducted a PBRI on subsea leak detection (SSLD) in an attempt to reduce the likelihood of events and compliance issues on the entire Outer Continental Shelf similar to those associated with Glider, Delta House, and Katmai leaks.
- The PBRI included 5 operators (Anadarko, Chevron, Enven, Fieldwood and LLOG) based on their current operations, subsea inventory, volume of production, and technology used in leak detection.
- Since SSLD is currently voluntary, no INCs were issued, but BSEE issued multiple recommendations to the Operators to improve their performance.

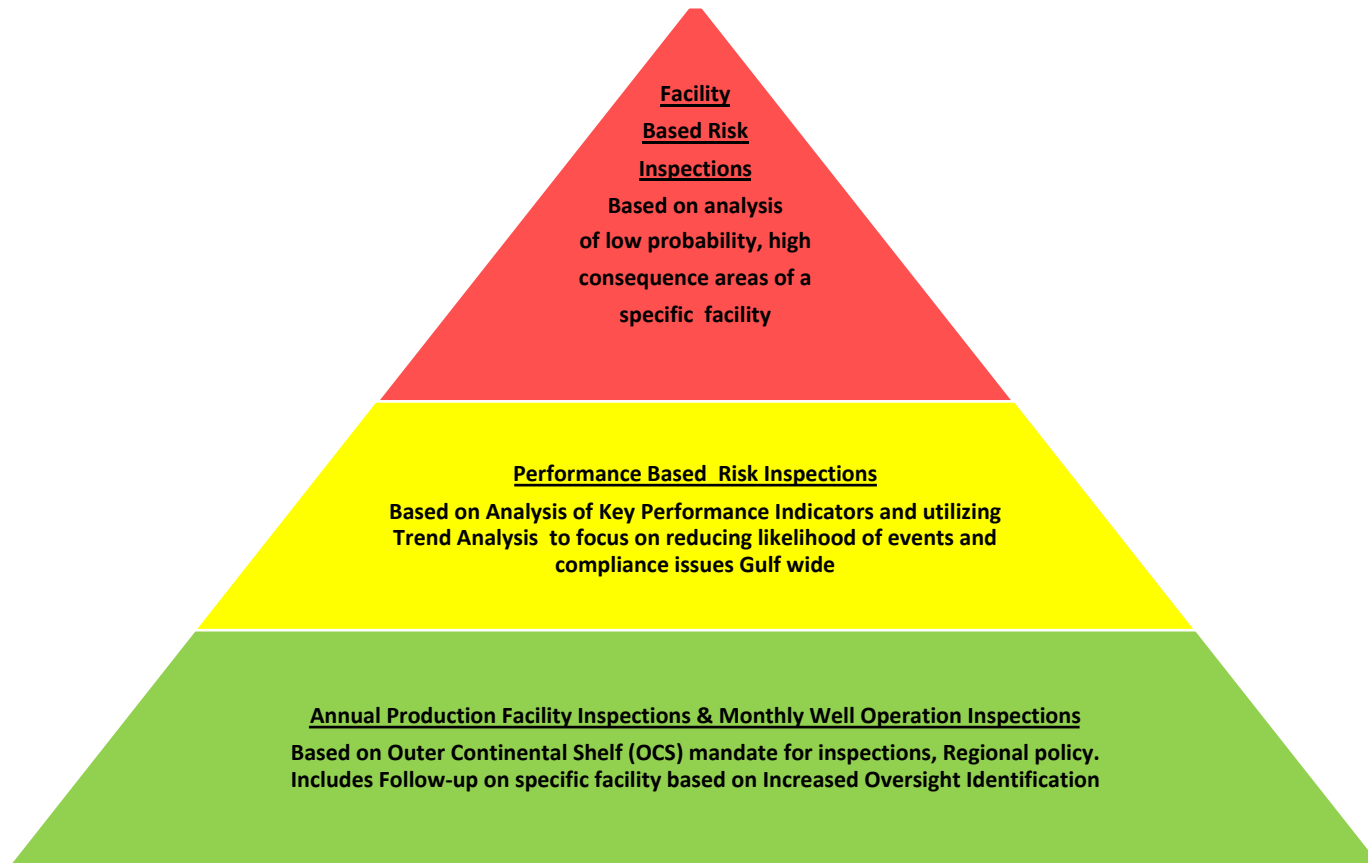
# Overview of Completed FBRI 1 and 2

---

- FBRI 1 occurred from December 2, 2019, through December 9, 2019, with inspection of a production platform (Front Runner) and associated platform rig (Nabors MOD 201) operated by Murphy.
  - The FBRI included physical inspection of the platform and rig, as well as an office review with EnVen staff.
  - No Incidents of Non-Compliance or civil penalties were issued, and no investigations were initiated.
  - BSEE identified 12 areas for improvement with Murphy's management systems on the inspected facility.
- FBRI 2 occurred from December 9, 2019, through December 19, 2019, with inspection of a production platform (Brutus) and associated platform rig (DD 202) operated by EnVen.
  - The FBRI included physical inspection of the platform and rig, as well as an office review with EnVen staff.
  - No Incidents of Non-Compliance or civil penalties were issued, and no investigations were initiated.
  - BSEE identified 4 good practices and 10 areas for improvement with EnVen's management systems on the inspected facility.

# Key Indicators

Risk-Based Inspections allows BSEE the opportunity to perform enhanced and targeted inspections using customized protocols to address those facilities and offshore activities that pose significantly higher risk.



# Data Accuracy and Reliability

---

All of the data used to support Risk-Based Inspections is contained within BSEE's corporate database, which contain controls related to inputting and managing that data. Much of the information (e.g., inspection data, facility data, INCs) is directly inputted into BSEE's database by bureau employees and is used regularly by bureau employees.

Data related to incidents is contained within BSEE's corporate database, but given that incidents are reported directly to the bureau by operators per regulatory requirements, BSEE acknowledges that some minor incidents may go unreported. Historically, incidents are typically reported to BSEE and there is sufficient data to utilize in trend analyses.

# Additional Information

---

## Contributing Programs

### Program Activities:

- BSEE's inspections program
- BSEE's program to issue civil penalties
- BSEE's Safety and Environmental Management Systems (SEMS) program

### President's Management Agenda:

- The Risk-Based Inspection (RBI) program is supported by two performance measures:
  1. Percentage of high risk well operations (e.g., drilling) inspected
  2. Percentage of high risk production facilities and operations inspected

### Regulations:

- 30 Code of Federal Regulations (CFR) 250: Oil and Gas and Sulphur Operations in the Outer Continental Shelf

### Policies:

- The RBI program was formally established in March 2018 through Bureau Interim Directive 2018-033G

## Stakeholder / Congressional Consultations

BSEE provides continuous updates on the results of RBI activities to the Offshore Operators Committee and other industry members.