SafeOCS Industry Safety Data (ISD) Participant Meeting @ OTC

May 5, 2022
I. Introductions & Agenda Review

II. SafeOCS Program Update

III. Roundtable Discussion (SafeOCS Participants Only)
   A. Data
   B. Participation & Use
   C. Development of UserShare-Type Event

IV. Wrap-Up
SafeOCS Overview

Equipment Failure Reporting Programs
- Mandatory reporting under 30 CFR 250.730(c) and 250.803.
- What's reported: Any condition that prevents covered equipment from meeting its functional specification.
- This equipment is **critical safety equipment**, meaning equipment which is part of a physical barrier system and whose malfunction could result in a catastrophic release of hazardous substances.
- E.g.: blowout preventers (BOPs), critical safety valves

Industry Safety Data Program
- Voluntary participation
- What's reported: Incidents, near misses, and stop work events that cause (or could have caused) human injury/fatality, damage or loss of assets, or negative environmental impact.

All reports to SafeOCS are confidential and protected from release under CIPSEA.
SafeOCS ISD Program in a Nutshell

Overarching Objective:
To provide a comprehensive source of near miss and safety event reports from the offshore energy industry.

- **Voluntary, confidential** reporting program for near misses and safety data in the offshore oil and gas industry.
- To participate, companies **enter an MOA** with BTS:
  - Type of data to be submitted
  - Event date ranges
  - Data format
- All companies working in the Gulf of Mexico are encouraged to participate.
  - Participating companies represent ~92% of production
- BTS **transforms** each company’s data into the standardized data fields and format.

### Environmental Stewardship
- Personal safety events
- Dropped object events
- Fires in accommodations
- Equipment collision events
- Non-work related events
- Collision events
- Station keeping events
- Aviation events
- Material overboard events
- LOPC non-process events
- Environmental events

### Personal Safety and Health
- Well control events
- Fires outside accommodations
- Explosion events
- Process safety events
- LOPC process safety events
- H2S events
- Muster events

### Process Safety
- Transportation

### Transportation
Program Contributors & Stakeholders

- Industry Organizations (13)
- Service Companies (3)
- Operators (13)
- Drilling Contractors (2)
- Academia
- Government
Scope of Confidentiality Protection

Confidential Information Protection and Statistical Efficiency Act

*Sets up framework wherein adverse actions cannot legally be taken against data submitters, nor can raw data be used for regulatory purposes*

What Is Confidential?
- Any original reports to BTS through SafeOCS
- Any BTS working documents
- Sections of root cause analysis reports developed by the SMEs
- All the above whether paper or electronic

What is Not Confidential?
- Information on preventive safety action recommendations by SMEs or other stakeholders
- Documents developed for public dissemination using confidential information
- Dashboards of industrywide aggregated data developed for public dissemination
SafeOCS by the Numbers *(post-Phase I)*

- **12** companies that have submitted data
- **10 / 7** companies with deepwater / shelf events
- **15,179** with consequences
- **2,766** Without consequences
- **30,520** Safety observations, from 2 companies
- **14** Calendar quarters represented (2018 – 2021 Q2)
  - +3 with partial data
- **174** Events reported by multiple companies (6 company pairs)
- **2** Ad hoc work groups held since 2020
Recent Milestones

(Sept.) Ad Hoc Work Group – Focus Areas

(Apr.) Ad Hoc Work Group – Dashboards

10/29 Participant Dashboard Initial Release

Dashboard Tutorials & Feedback Sessions

2/25 Public Dashboard Initial Release

3/5 Participant Dashboard Quarterly Update

Implemented ETL Process
Data Processing Overview

Process Initial Dataset

1. Receive initial dataset
2. Create schema
3. Create transformation code
4. Transform data (Error check, QA/QC)
5. Push to database

Process Subsequent Datasets

1. Receive dataset
2. Adjust schema and code
3. Transform data (Error check, QA/QC)
4. Push to database

Resolve questions with company
Dashboards Overview

- **Participant dashboard**
  - company-specific
  - behind a login
  - participant can view characteristics of their data vs. aggregate

- **Public dashboard**
  - industry aggregate
  - available to all

- **SafeOCS uses dashboards as a means of disseminating aggregated data with participants and other stakeholders**

- **Selected filters:**
  - Event Details
  - Work/Location Types
  - Event Categories
  - Causal Factors

- **Coverage: CY18 – CY20**

- **Recent updates**
  - Added a new quarter of data (through Q1 2021)
  - Improve clarity of denominators
  - Improve ease of use of secondary filters
SafeOCS ISD Participant Dashboard

Focus Area Statistics
- 16% of events involve Process Safety
- 20% of events involve Personal Safety
- 58% of events involve Environmental Stewardship
- 20% of events involve No Focus Area

Company 5 percent:
- 40% Process Safety
- 14% Personal Safety
- 60% Environmental Stewardship
- 16% No Focus Area

All ISD Data
- 58% Process Safety
- 20% Personal Safety
- 16% Environmental Stewardship
- 20% No Focus Area

Company 5
- 60% Process Safety
- 40% Personal Safety
- 16% Environmental Stewardship
- 14% No Focus Area

Note: Synthetic data shown
SafeOCS ISD Participant Dashboard – Data Analysis

Interface for Participant (behind login) to view characteristics of their data vs. aggregate (based on filters).

Views:
- Event Details
- Work/Location Types
- Event Categories
- Causal Factors

Note: Synthetic data shown
SafeOCS ISD Public Dashboard

Note: Represents actual data captured as of February 2022 https://www.safeocs.gov/sdp/dashboard/
Current Focus and Next Steps

• Current Focus
  – Continue outreach efforts, including orientation workshops
  – Establish company-specific data protocols to support effective data mapping to SafeOCS for new participants
  – Enhancements to dashboards to allow companies to view own data and compare against aggregated industry results

• Next Steps
  – Expand scope of data fields captured to further support industry needs and leverage current industry efforts
  – Continue efforts related to data quality and development of learnings
  – Consider offshore renewable energy and marine sectors
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