Safety Lifecycle Solution

These OESuite® Modules Work Together To Form the Safety Lifecycle Solution

- Process Risk
- Safety Instrumented Systems + Mobile
- Alarm & IOW Management
- Management of Change + Mobile
- Inspection Management + Mobile
- Incident Management + Mobile
- Relief Device Management
- Work Permitting + Mobile

The Operational Sustainability® (OS) **OESuite® Safety Lifecycle Solution** manages regulatory compliance, standardized testing, and risk analysis layout according to the IEC 61511 and ISA 84 gold standard for functional safety in process industries. With our **Safety Lifecycle Solution**, users can manage their instrumented protective functions to help ensure safe operations and protect their organization's license to operate.

In addition to monitoring risk to enhance functional safety, the **Safety Lifecycle Solution** also:

- Manages Process Hazard Analysis (PHA) studies
- Identifies required Safety Integrity Levels (SIL) from Layer of Protection Analysis (LOPA) studies
- Feeds information to the **Safety Instrumented System (SIS) + Mobile Module** to manage conceptual designs of Safety Instrumented Functions (SIF)
- Manages emergency responses, alarm rationalization and design, and relief device management

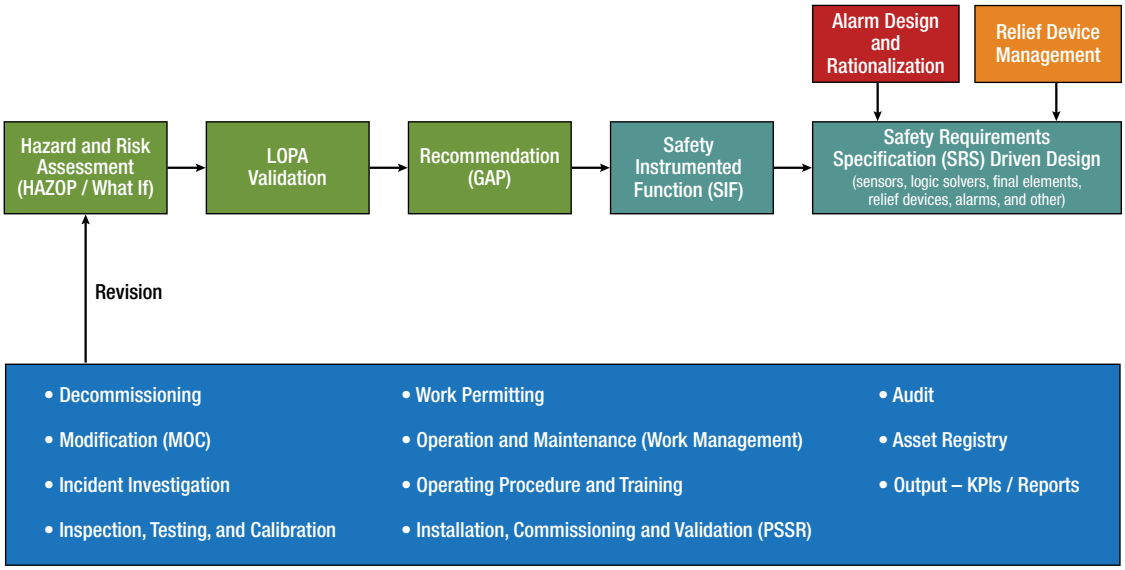

Figure 1 – Safety Lifecycle Work Process

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Safety Lifecycle Solution

Proper safety lifecycle management through our **Safety Lifecycle Solution** begins with facilitating a new PHA study or revalidating a previous study. Information from the study is made available for LOPA automatically based on risk-level filtering. OESuite® users can leverage our **LOPA Feature** to credit independent protective functions that sync to ensure you have the proper level of engineering and administrative safeguards while assessing changes to threats in real time.

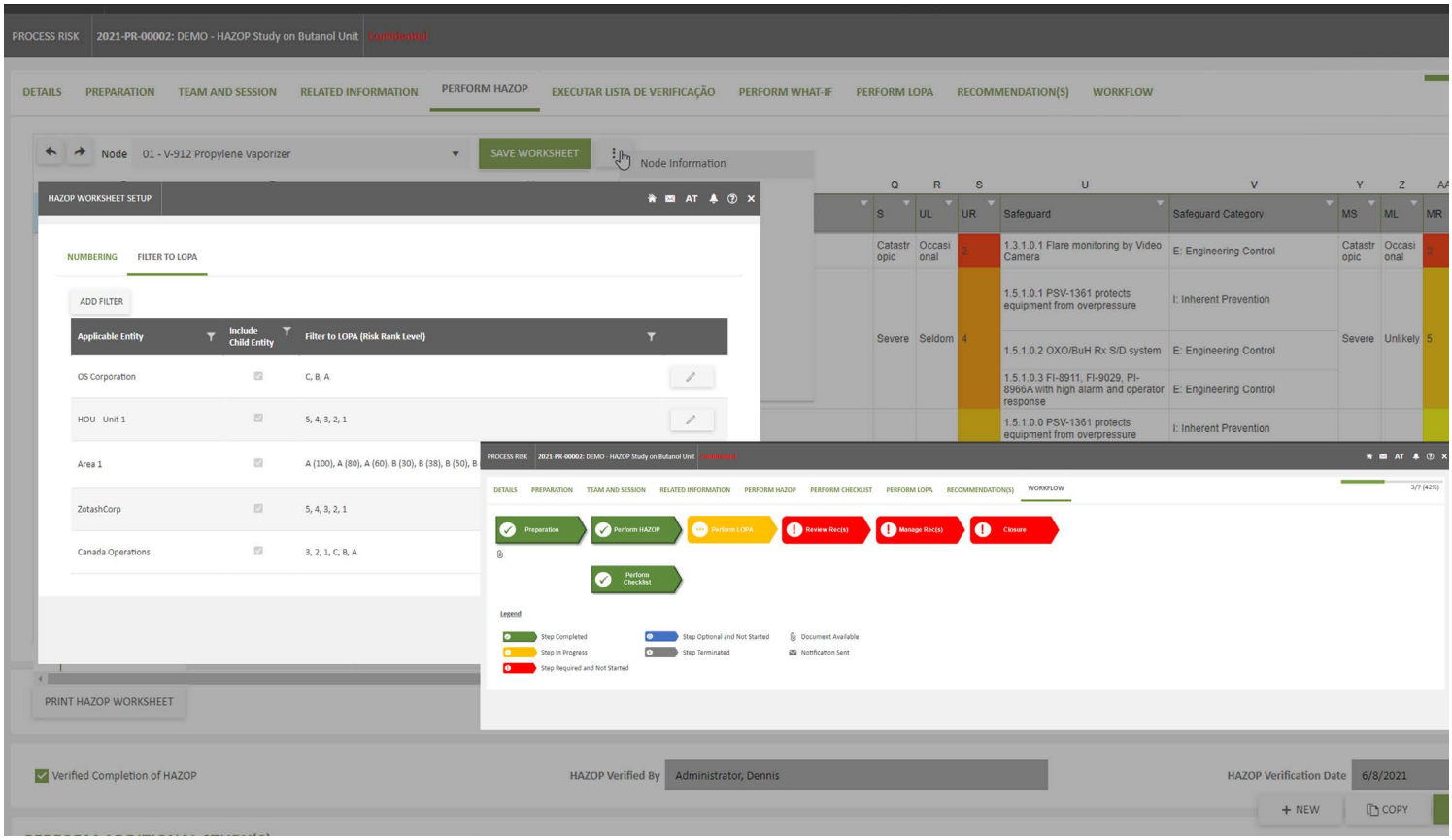

Figure 2 – OESuite® PHA / LOPA Worksheet

After identifying Independent Protective Layer (IPL) gaps, engineers can develop Safety Requirement Specifications (SRS) and facilitate SIL selection and verification. OESuite® offers a robust SIL verification calculation engine and library of component type data.

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Safety Lifecycle Solution

Through our **Safety Lifecycle Solution**, users can conduct proof testing in the field according to the defined test interval and manage their SIS processes in accordance with industry standards (e.g., ISA 84 / IEC61511, OSHA 1910.119, 40 CFR Part 68). OESuite's closed-loop system also highlights and diminishes risks and vulnerabilities before they lead to failures and incidents.

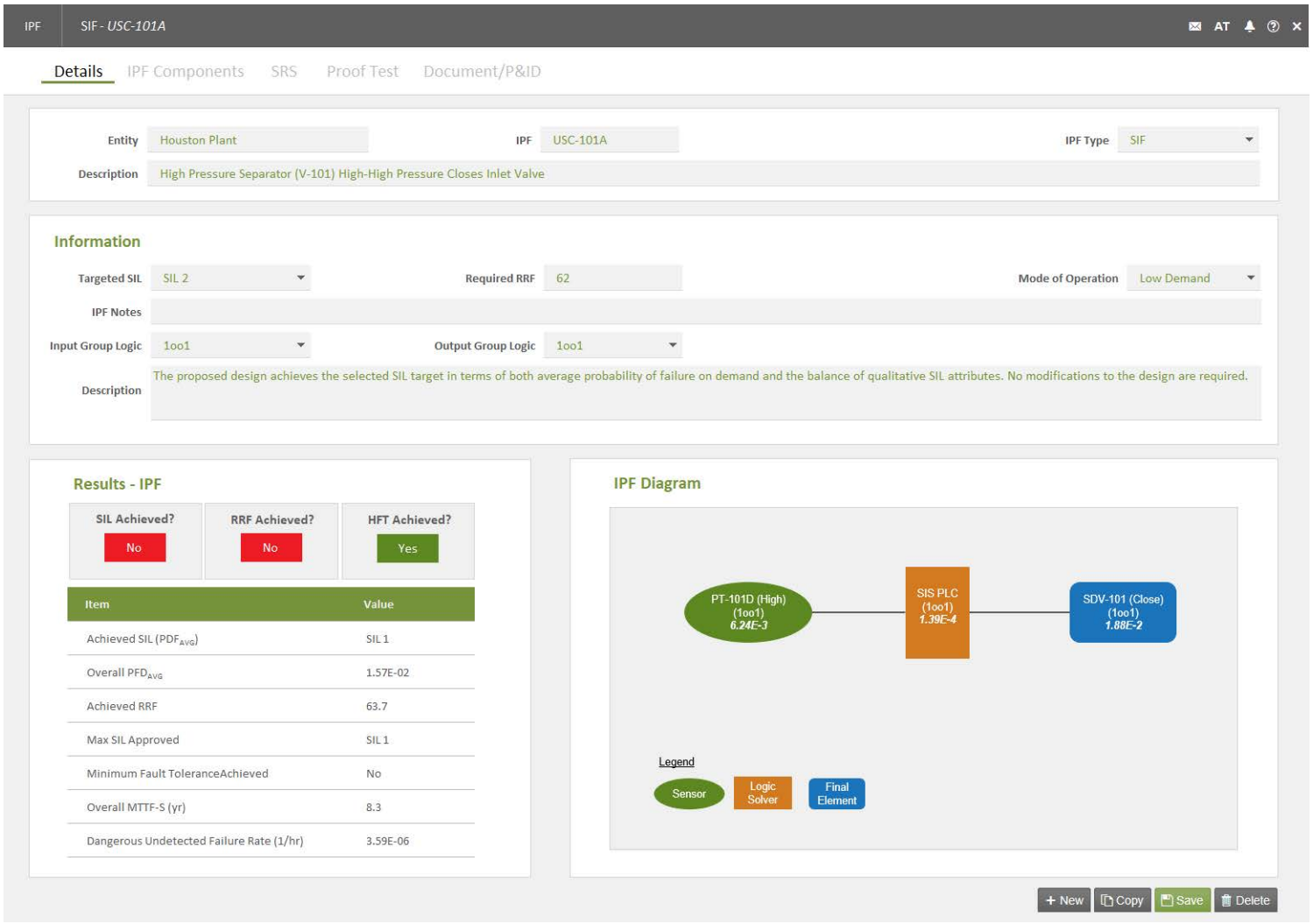

Figure 3 – OESuite® IPF SIL Verification

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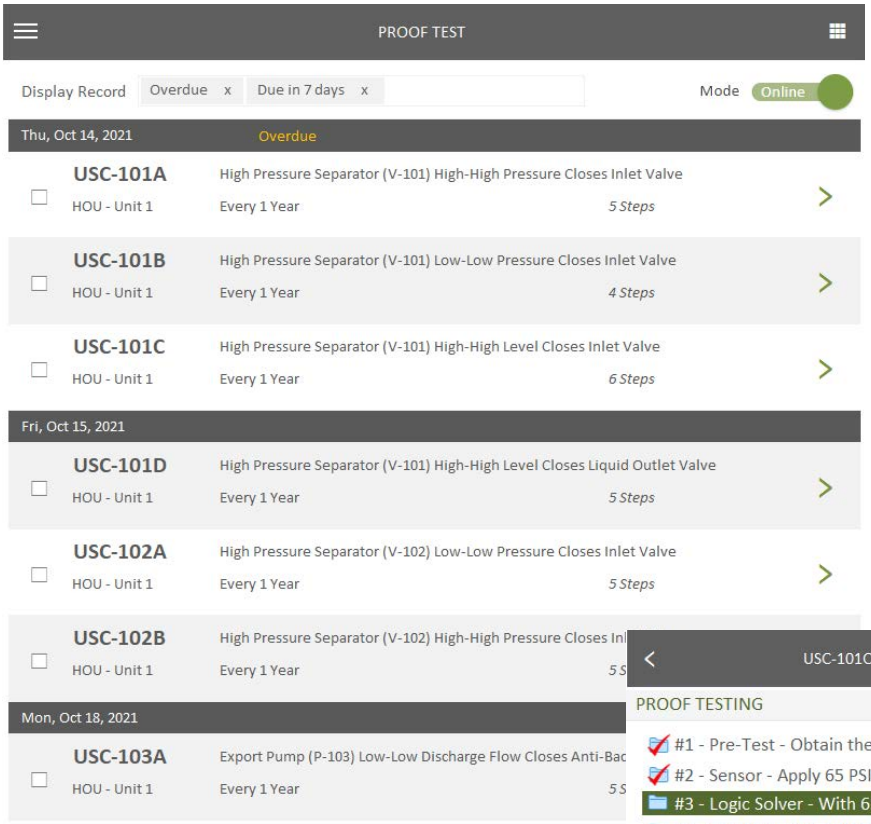

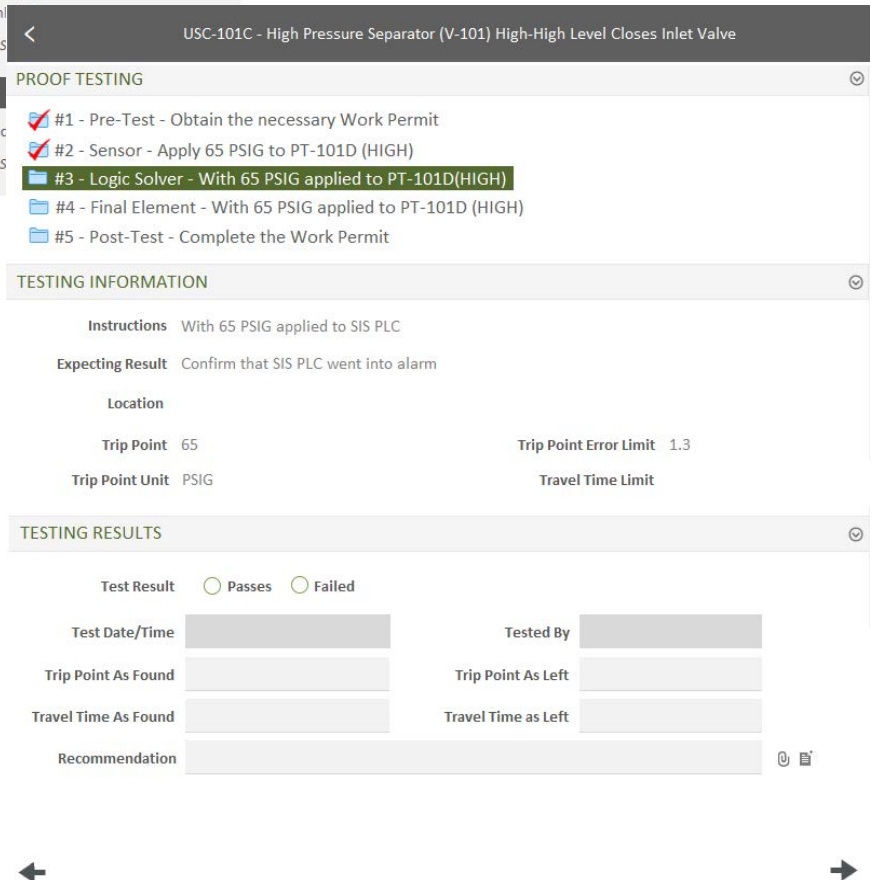

Figure 4 – OESuite® SIS Mobile

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Safety Lifecycle Solution

Whether you are operating a plant or addressing a capital project need, your personnel need to have a shared understanding of safeguard availability, plant configuration changes, and the necessity of managing risks as threats emerge. Through the **OESuite® Safety Lifecycle Solution's** inherent interoperability, users can address changes to equipment and alarm setpoints, track operations and maintenance work orders, and track process safety tag bypasses.

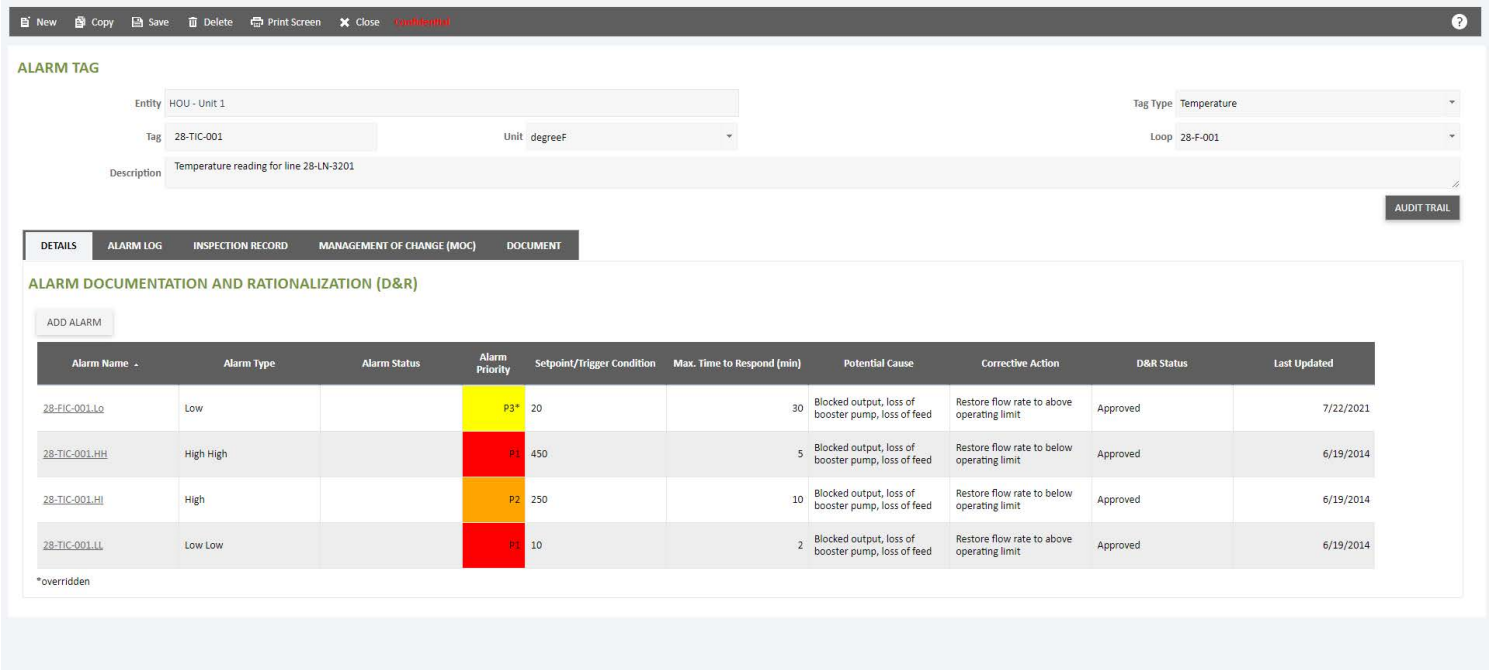

Figure 5 – OESuite® Alarm Review Checklist

OESuite® can also:

- Manage alarm design, operator documentation, setpoint changes, alarm rationalization, alarm shelving, automated event logs, and key performance indicator generation from the **Alarm & IOW Management Module**
- Track relief device information, scenarios, orifice sizing requirements, inspection requirements, and pop-test results in the **Relief Device Management Module**
- Associate assets back to individual LOPA scenarios as safeguards and IPLs through the **LOPA Feature**
- Log events, conduct formal investigations, and track recommendations to completion in the **Incident Management + Mobile Module**
- Manage design, equipment, operation, and technology changes to ensure every change is thoroughly evaluated before any modification and to inform impacted personnel through the **Management of Change + Mobile Module**
- Use the **Inspection Management + Mobile Module** to manage the periodic inspection and calibration of sensors and critical elements and the findings from those inspections
- Protect your personnel while executing work orders and capture any findings using the **Work Permitting Module + Mobile**

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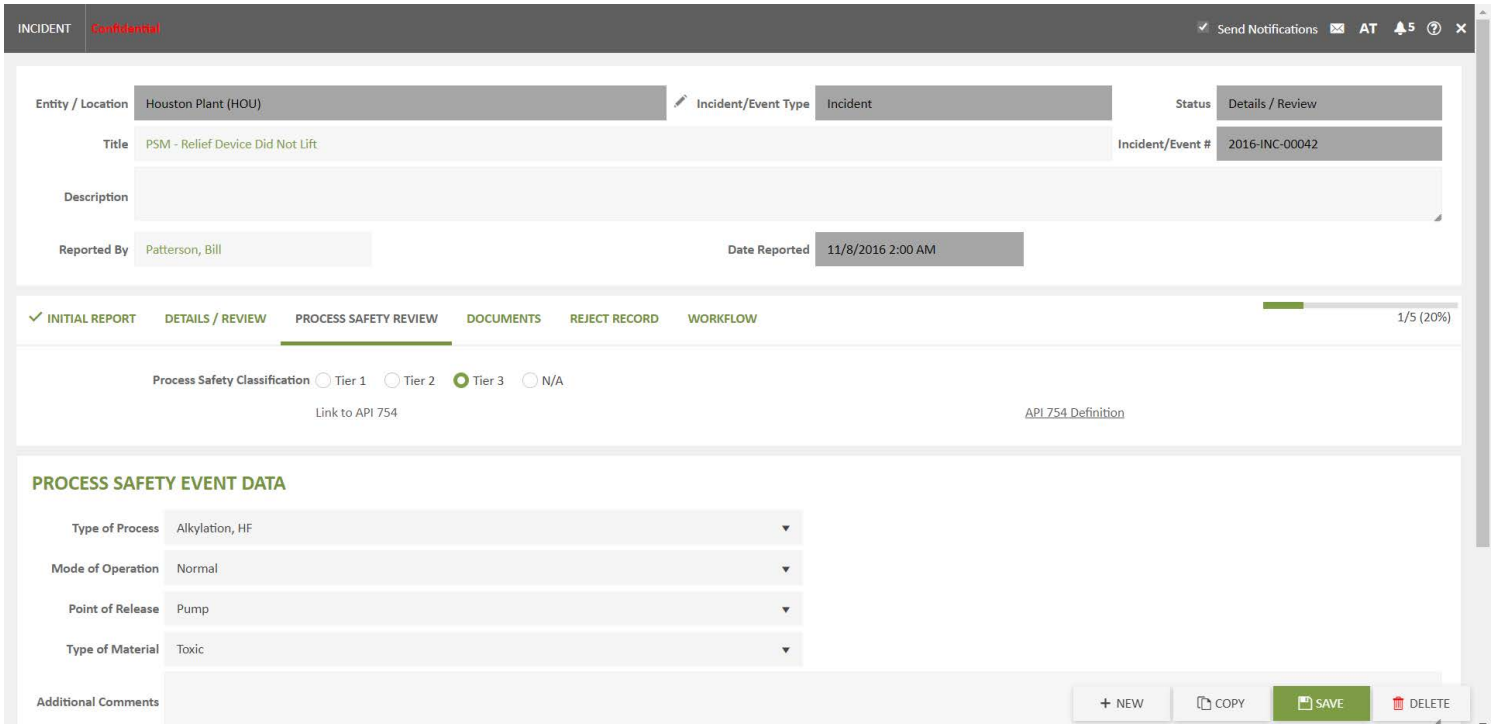

Figure 6 – OESuite® Incident Details

The safety and success of every process facility depends on comprehensive safety lifecycle management. Enable unified risk management through the **OESuite® Safety Lifecycle Solution**, covering all your safety lifecycle management needs – so that real visibility can lead to real peace of mind.

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Safety Lifecycle Solution

These are the core functions in all OESuite® Modules:

- Ad Hoc Reporting
- Archiving
- Asset Registry / Navigation
- Audit Trail
- Calculation Engine
- Coordination Compliance
- Configurable Notifications
- Damage Mechanisms
- Data Export / Import
- Document Links / Attachments
- Form Builder
- Integration / Connectors
- Multi-Lingual / International Formatting
- KPI Manager
- Material Library
- Mobility
- Module and Hierarchy Specific Security
- My Obligations / Calendar
- My Subscriptions
- Obligation Reassignment
- OE View
- Planning / Scheduling
- Portal
- RACI Chart
- Redlining
- Report Builder
- Risk Ranking
- Risk Registry
- Robust Search
- Single Sign On (SSO)
- Standard Reporting
- Tags
- Verification
- Visual Operations
- Workflow (Initiate, Approval, Execution, etc.)

For more information email us at info@DrivingOE.com or call (713) 355-2900.

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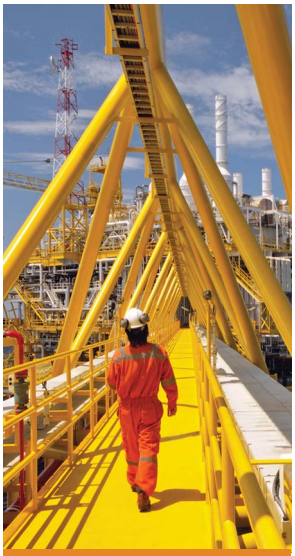
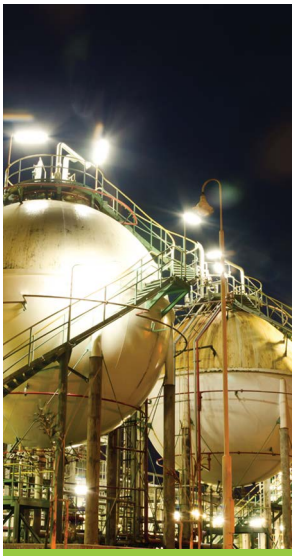
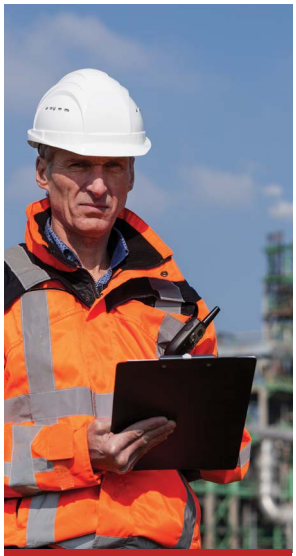
Operational Sustainability®

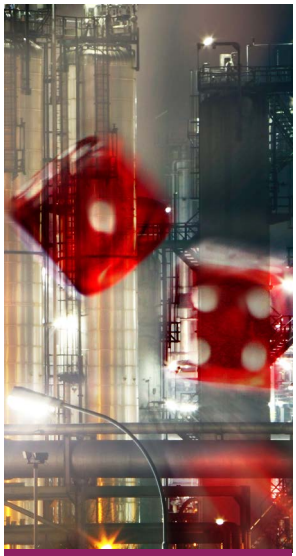
Driving Operational Excellence™


Workforce


Assets

Operations


Compliance


Risk

Operational Sustainability® makes operational excellence simple.

Succeeding in today's complex, highly-regulated industries depends on how well your company manages **operational risk** and enables **operational discipline**. Our world-class advisory services and our industry-leading cloud-based, highly configurable software work together to enable your company to achieve **operational excellence**. To implement OE 4.0 and sustain **operational integrity**, companies must balance production goals with reliability, safety, and human and environmental factors. We identify and help you solve any issues to move to a real-time, mobilized risk-aware culture. With an average of more than 30 years of industry experience each, our advisors can design a solution tailored to your company's culture and needs.

Learn how Operational Sustainability can advise your workforce through our consulting services and support your journey to operational excellence through our OESuite® software platform. See our full slate of free webinars, white papers, detailed module information, and scheduled workshops online at **www.DrivingOE.com**.

Schedule your free consultation and demo today.

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16225 Park Ten Place Drive, Suite 810, Houston, Texas 77084 | info@DrivingOE.com

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