GAIL (India) Limited Gas Processing Unit, Vijaypur

Utilizing Near miss Reporting Data for Implementing Targeted Solutions

1. Background

Company Name	:	Gail (India) Limited
Industry	:	Oil and Gas
Location	:	Vijaipur, Madhya Pradesh
Facility Type	:	Gas Processing Unit

2. Introduction

In Gail, Vijaipur, safety is of paramount importance. Identifying and mitigating potential hazards before they lead to accidents or incidents is crucial for maintaining a safe work environment. In this case study, we will show how we utilized our near miss reporting data to identify common root causes of near misses and implemented targeted solutions to address these issues. The goal was to proactively enhance safety measures and prevent potential accidents in the workplace.

3. Data Collection and Analysis

• **Data Gathering:** Near miss reports were collected over a specified period, including details such as location, time, contributing factors, description of the incident and root causes. It was done through an online portal for easy reporting of near misses. To promote near miss reporting by employees and workers, they were awarded for good near misses reported by them. Also, near miss report, Safety Observation & Safety Suggestion Boxes installed at strategic locations for the workers who wished to report near misses in offline mode.





- Data Aggregation: The collected data was aggregated and organized for analysis using various software tools of SAP. The aim was to identify patterns, trends, and commonalities among reported near misses.
- Root Cause Analysis: The reported near misses were analyzed for their root causes to find the most common ones.



4. Identifying Common Root Causes

The following types of Near Misses were found to be most common for the FY 2022-23.

- 1. Slip/Trip
- 2. Poor Civil maintenance
- 3. Objects falling

For the above-mentioned types of Near misses, Root Causes were analyzed. Through the root cause analysis, we identified several recurring root causes contributing to these types of near misses:

- **Inadequate Training:** Many near misses were attributed to employees not being adequately trained to work safely.
- Lack of Maintenance: Inadequate maintenance of gratings, manholes, vegetation etc. were identified as a common root cause.
- Ineffective Implementations of Safety Procedures: Workers often tend to overlook safety protocols leading to nearmisses.

5. Implementation of Solutions:

Based on the root cause analysis, the company took the following actions:

• Enhanced Training Programs: A comprehensive training calendar was designed to ensure all employees were properly trained and adhere to safety protocols. Regular refresher courses were also implemented.



- **Complaint Management System:** An online portal is made available to all employees where they may report any observation requiring maintenance. The concerned department have to complete the maintenance and submit the action taken on the portal within the timeframe.
- **Safety Surveillance Survey:** The Safety department was divided into groups and each group was assigned a specific area to ensure safety in that area in all respects by regular site survey. A safety survey report is generated and circulated on daily basis about deviations from safety practices. This have forced workers and employees to follow safety protocols.

6. **Results and Impact**

The implementation of targeted solutions based on near miss reporting data yielded significant results:

- **Reduction in Near Misses:** Over a few months, we observed a notable reduction in those specific type of near misses, indicating that the addressed root causes were being effectively mitigated.
- **Improved Safety Culture:** Employees felt more empowered to report potential hazards, leading to a culture of proactive safety awareness and participation.
- **Enhanced Efficiency:** By preventing near misses caused by inadequate training, maintenance, productivity increased as work interruptions were minimized.

7. Conclusion

Utilizing near miss reporting data to identify common root causes and implementing solutions is a powerful strategy for improving workplace safety. By systematically analyzing the data, addressing recurring issues, and fostering a culture of continuous improvement, we can create safer work environments, prevent accidents, and enhance overall operational efficiency. This case study demonstrates the importance of data-driven decision-making in creating a proactive safety culture.