

Process Safety Incident Root Cause Analysis Outline

1. Incident Description

- Date, Time, and Location of Incident
- Brief Summary of the Incident
- Immediate Consequences or Impacts

2. Initial Response

- Actions Taken Immediately After Incident
- Personnel Involved in Initial Response
- Emergency Measures Applied

3. Data Collection

- Gathering Available Evidence (Photos, Logs, Reports)
- Witness Statements
- Relevant Operating Data

4. Chronology of Events

- Timeline Leading Up to the Incident
- Key Actions and Decisions Noted in Sequence
- Identification of Abnormal Conditions

5. Root Cause Analysis

1. Problem Statement
2. Identification of Immediate Causes
3. Systematic Analysis (e.g., "5 Whys", Fishbone Diagram)
4. Identification of Underlying (Root) Causes

6. Contributing Factors

- Human Factors
- Equipment or Process Failures
- Organizational or Procedural Weaknesses

7. Corrective and Preventive Actions

- Immediate Corrective Actions Implemented
- Long-Term Preventive Measures Proposed
- Assignment of Responsibilities and Timelines

8. Lessons Learned

- Key Findings from the Investigation
- Recommendations for Organization-wide Improvement

9. Appendices

- Supporting Documents and Evidence
- Investigation Team Details
- Additional Notes