



## A Process for Analyzing a Near Miss

Depth of analysis for a near miss investigation should be guided by the extent and likelihood of the potential consequences of a recurrence of the conditions and actions associated with the near miss. If, for example, in the course of a near miss a significant consequence was avoided, and if those conditions are deemed to be likely to reoccur, then an in-depth analysis may be called for. For a near miss deemed to be of low likelihood or consequence, then an in-depth analysis would not be needed. Depending on the depth of analysis to be performed, and the specific activities of the process to be performed, the process could be done reasonably quickly.

### Determine Whether a Near Miss Occurred and Determine Depth of Analysis.

The first decision to be made is whether a near miss merits investigation. After documenting the early information about a near miss (e.g., who and what was involved? What happened and where? What was the potential extent of loss? How near was a loss to actually being realized?), a decision must be reached as to whether a near miss should be investigated. When the actual or potential consequences of the near miss are minor, it may be sufficient to simply enter the near miss into a database. If the decision is to not investigate, relevant facts should be documented and filed – including the factors leading to the conclusion that an investigation is not necessary. When considering whether to investigate a near miss as a near miss, the following can be considered:

- What could the consequences of the near miss have been? Should the potential near miss consequences be considered an acceptable risk? The larger the potential consequences, the more resources should be committed to an investigation.
- Is the risk associated with this near miss well understood? Is the risk associated with the near miss acceptable? If a decision has been made that the risk from this near miss is acceptable, then an investigation would not result in any significant changes.
- Are adequate safeguards in place to protect the workers and the public against these near misses? If adequate safeguards are provided, then an investigation would not result in any significant changes.
- Are there apparent causes (immediately obvious causes) that require validation by means of further interviews or other causal analysis?

## A Basic Accident Investigation and Reporting Technique

Effective investigations are imperative to the success of a safety program. The purpose of accident investigation is to identify causative factors and develop corrective action to prevent accident and near miss recurrence. Effective investigations will:

- Describe what happened. Thorough investigations can sift through sometimes conflicting evidence and arrive at an accurate description of the incident.
- Determine the causation. Any investigation should be detailed and thorough in order to reach a conclusion of the causes of the incident.
- Determine the risks. Good investigations provide the basis of deciding the likelihood of recurrence and the potential for major loss -- two critical factors in determining the amount of time and money to spend on corrective action.
- Develop controls. Adequate controls that minimize or eliminate a problem can only come from a sound investigation, which has truly identified the problem. Otherwise, the problem will appear again and again but with different symptoms.
- Define trends. Few accidents and incidents are truly isolated cases. When a significant number of good reports are analyzed, emerging trends can be identified and so controls can be set.
- Demonstrate concern. Accidents give people vivid pictures of threats to their well-being. It is assuring to see a prompt, objective investigation in process. Good investigations aid personnel relations.