Train the Trainer Instructions: Incident Investigation, Causal Factor, and Corrective Actions

Background

What is an incident investigation? It is a step-by-step analysis of an incident with the purpose of discovering and correcting the factors that caused or contributed to the incident.

Why do we do this? To prevent another incident or incident by correcting the causes of an incident or incident that has occurred. The purpose is most emphatically not to place blame, but to discover **WHY** an event occurred.

Isn't this obvious, why do we need training? The Eaton incident investigation, causal factor analysis and corrective action plan demands a rigorous investigation and analysis in order to discover and correct causes of incidents. This process has been shown to produce consistent results when the investigators understand and follow the process. If this process is not rigorously followed, the investigation may fall short of identifying all of the causal factors and another incident could result.

Is this required? Eaton's Framework for Safety Management, Work Plan, and ESP Implementation Guide have sections which require Incident Investigation be a routine part of the way work is conducted at Eaton sites.

What is the course objective? At the end of the session, students should be able to:

Review the basic techniques in conducting incident investigations
Describe the purpose for and benefits of causal factor analysis
Identify causal factors
Identify root causes
Understand the definition of "systems" and "system failures"
Identify corrective actions and develop a corrective action plan
Understand the benefits and purpose of trend analysis

How do I prepare to teach this course?

Training Materials

- ❑ Student and instructor manuals (see instructions below)
- ❑ Overhead transparencies (see instructions below)
- ❑ Classroom with tables and chairs for each student

- Overhead projector and screen (You may also use a computer projector for the PowerPoint® presentation, but you will need an overhead projector for some of the samples.)
- Flip chart and markers
- Sharpie pen for writing on overheads
- Heavy stock paper for “tents” for attendees to write their names on.
- Pencils for each student

How do I prepare to teach this course?

- Obtain the OSHA publication, Incident Investigation, a small business training tool, available at http://www.osha.gov/SLTC/smallbusiness/sec6.html
- Print out all Word®, PowerPoint®, and Excel® documents and organize into the instructor’s manual and student manuals making sure to print the appropriate number of copies. Use Table 1 – Documentation Dispersal as a guide for organizing the manuals. For Sections 2, the PowerPoint® presentation, be sure to print note pages for instructor’s manual and 2 slides per page for student manuals. DO NOT PRINT THE NOTES FOR THE STUDENTS. Read the speaker notes on the note pages prior to delivering the class to be sure to understand course content and flow.
- Decide on the schedule for the course. Refer to the Course outline. Modify as necessary.

TABLE 1 – Documentation Dispersal	
o ***Table of Contents - Instructor***	o ***Table of Contents - Student***
o Agenda.course.outline.doc o Table of Contents.doc o Train the Trainer.doc o Lesson Plan –Incident Investigation.doc o OSHA “Accident Investigation”	o Course outline.doc o Table of Contents.doc

TABLE 1 – Documentation Dispersal	
o *Table of Contents - Instructor*	o *Table of Contents - Student*
Section 1 o Incident Investigation – students.ppt (with notes pages) o Fill-in-the-Blank o NSC Forklift Incident Video	**Section 1** o Incident Investigation – students.ppt (with 2 slides per page) o Attachments (Blank) o Causal Factor Form (NSC)
Section 2 o 6.0 Incident Reporting, Investigation, & Tracking.doc o 6.0 Attachment 1.doc o 6.0 Attachment 2.doc o 6.0 Attachment 3.doc o 6.0 Attachment 4.doc o 6.0 Attachment 5.doc	**Section 2** o 6.0 Incident Reporting, Investigation, & Tracking.doc o 6.0 Attachment 1.doc o 6.0 Attachment 2.doc o 6.0 Attachment 3.doc o 6.0 Attachment 4.doc o 6.0 Attachment 5.doc
Section 3 o Fill-in-the-Blank (NSC) o Bagger Scenario o Bagger Report (complete) o Acid Splash Scenario o Acid Splash Report (complete) o Site accident scenario o Accident Investigation Report (complete)	o Fill-in-the-Blank (NSC) o Bagger Scenario o Bagger Report (partial) o Acid Splash Scenario o Acid Splash Report (blank) o Site accident scenario o Accident Investigation Report (blank)
	Section 4 o Course Evaluation.doc

- Make overhead transparencies of the Word®, Excel® and PowerPoint® files as displayed in Table 2, Instructor Slides. (Note: if you have access to a computer projector, you may display the PowerPoint® presentation from a computer. However, you will still need overheads for the other materials.) Store the transparencies in three folders: Presentation, ESP Implementation Guides, and Incident Investigations. During your presentation, you may go back and forth among these materials and it will help you stay organized if they are stored in labeled folders.

TABLE – 2 Instructor Slides
o The PowerPoint® slides: Incident Investigation o The ESP Implementation Guide 6, Incident Investigation, Causal Factor, and Corrective Actions and Attachments 1-5 o Acid Splash Report.doc o Bagger Causal Factor Report.doc o Photos of your incident scenario (May be included in the ppt)

How do I teach this course?

Steps needed before you teach your first session.

- Print a copy of ESP 6, Incident Reporting, Investigating, & Tracking Implementation Guide. This is a business expectation of Eaton.
- This should be completed for your facility, by completing the information asked in the Master Element 6 Form.
- Print the course materials - instructor's manual and slides– to understand the topics, the footnotes and the direction and pace that the training takes.
- Make sufficient copies of the student's manual for this course.
- Read the OSHA "Incident Investigation" publication.
- Print and review the sample completed Incident Investigation forms.
- Discuss any questions you may have with site safety management; e.g., who will keep records; how corrective actions are tracked; the site goals for completion of Incident Investigations, etc.
- Review the incident log and incident reports for the site(s) for the past year and compare these reports with the expectations presented in this course. Are the reports thorough?
- Select one incident and prepare overhead transparencies of the report, deleting the names of the injured employee. Select reports that use the Eaton Incident Investigation Report form.
- Select an incident and prepare an incident scenario, like the write-ups for the "Acid Splash" and "Bagger" scenarios. This will be used by the class to prepare an Incident Investigation Report. Take some pictures of the location or equipment to illustrate the scenario. Prepare overhead transparencies of the photos. Prepare an Incident Investigation Report for your scenario for your own use during the class exercise. Do not share your report with the class, but refer to it during the discussion to be sure the class has properly filled out their report.
- Reserve a suitably sized conference room for the date of the course.
- Practice showing the overheads and using the computer projector (if used) to be sure that you know how to run the equipment.
- Check to be sure that all training materials are set out in the room before the class begins.

Steps to be taken before the session begins.

- Visit training room the day before the class to be sure that there are adequate tables and chairs and that the projection equipment works with your PowerPoint presentation or overheads.
- Assure refreshments are ordered and/or are on hand.

At the beginning of the session:

- Welcome everyone and take attendance.

- Discuss emergency exit plans for the room – where to go in case of emergency.
- Discuss lavatory locations.
- Discuss the agenda and estimated timing for the day's training.
- Distribute the student manuals.
- Have each attendee identify who they are, where they work, what they do, and how they became interested in this course.
- "Warm up" the attendees by having attendees discuss any injury that may have happened to them or a co-worker and under what some of the causal factors might be.
- Discuss some injury types from your review of the site injury logs. Use the transparencies you prepared of actual investigations to illustrate what the class will be learning.
- Let the group know why they are there – to learn how to do Incident Investigations, Causal Factor Analyses, and Corrective Action Plans – and then let them know some of the benefits.
- Start with the overhead PowerPoint slide transparencies.
- Pace for necessary breaks for refreshments, rest rooms, etc.
- Show videos as the presentation calls for them.
- For the first scenario, read the scenario together and then show the slides of the photos (or video if you use the NSC). Go causal factor by causal factor, gaining consensus on applicability, and promoting discussions and disagreements. For the second incident investigation scenario (either one of the standards, or one that you prepared), again review the scenario, go through some pictures, and have the class perform analysis on their own, perhaps in groups. Go section by section (of the Causal Factor form) so you do not loose participants. The third scenario should again be one you prepared, based on an actual incident at your plant. As before, have the class read the scenario, break out into small groups (2-3 people) and have them complete the Incident Investigation Report. Each group can report on what they interpret as the causal factors, Immediate fixes and system fixes.
- Continue the PowerPoint® presentation, getting to the corrective action part. Lead them through discussions, and perhaps let the groups perform an exercise to see if they can draft thoughtful corrective actions. Review and critique, based on your own pre-prepared corrective actions.
- Use the flip chart to ask students to summarize the day and what are the important "takeaways." Add the items from the course objectives that they may fail to mention.
- List and discuss any unanswered questions that you will pursue.
- If appropriate, discuss how Incident Reports and Corrective Action Plans will proceed at the site; the investigative teams; who will keep records; where the records will be available; when the process is to begin and what role each of the attendees is to play.

- Agree to a schedule for each class member to complete a future Incident Report that will be reviewed by the Instructor or ESH Manager.
- Have each of the attendees complete and submit a course evaluation form.

Later:

- Brief the site safety management on how the course went. Discuss any questions that may have been asked for which answers are needed for the group. Determine how the answers will be communicated back.
- Compile the course evaluation forms and determine what changes you may need to make before the next session.
- As class members prepare Incident Investigation Reports, review them with the team to point out examples of thorough analysis and weak analysis. The purpose is to reinforce the procedures taught in this class and to correct any deficiencies in a positive manner.
- Provide constructive feedback to safety management for enhancements to this program that you believe are needed.