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EVALUATION OF P-101 COURSE
"ORIENTATION TO OCCUPATIONAL
SAFETY COMPLIANCE IN DOE" TAUGHT IN
RICHLAND, WASHINGTON
JUNE 16 TO JUNE 26, 1992

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March 1993

Prepared for
the U.S. Department of Energy
under Contract DE-AC06-76RLO 1830

Pacific Northwest Laboratory
Richland, Washington 99352

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1.0 SUMMARY

This section summarizes trainee evaluations for the Safety Training Section course, "Orientation to Occupational Safety in DOE", (P-101) which was conducted June 16 to 26, 1992 at Hanford, in Richland, Washington.

Sections 1.1 and 1.2 of this report summarize the quantitative course evaluations that trainees provided upon completion of the course. Appendix A provides a transcript of the trainees' written comments.

Numeric course ratings were generally positive and show that the course material and instruction were very effective. Written comments supported the positive numeric ratings. The course content and knowledge gained by the trainees exceeded most of the students' expectations of the course.

Results from the final examination showed that students gained significant knowledge from the course.

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1.1 SUMMARY OF TRAINEE COURSE EVALUATION

This course was conducted at Hanford, Richland, Washington, June 16 to 26, 1992. Deana Colley, Venetia Runnion and Dick Hayes presented the course to 46 Hanford Environmental Health, Westinghouse, DOE Albuquerque, Savannah River, DOE Richland, Stanford Linear Accelerator, Allied Signal, Westinghouse Environmental Management Company, Lawrence Berkeley, Kaiser, and Battelle personnel.

1.2 NUMERIC RATINGS

Twenty-nine trainees completed a course evaluation form upon finishing the course. The first rating area of the form covered five items dealing with course content; the second rating area covered one item dealing with testing materials.

For the first and second rating areas, respondents were instructed to rate the degree to which they agreed or disagreed with each statement using a five-point scale of 1 (low) anchored to "strongly disagree" to 5 (high) anchored to "strongly agree". The ratings are as follows:

COURSE CONTENT AND TESTING MATERIALS RATINGS

1. Developed specific skills and competencies in occupational safety compliance that I can use on the job.
Average Class Rating - 4.39
2. Gained a greater understanding of 29 CFR 1910, Occupational Safety and Health Standards
Average Class Rating - 4.57
3. Gained factual knowledge about Federal safety and health program requirements.
Average Class Rating - 4.32
4. Would recommend this course to others.
Average Class Rating - 4.57
5. Compliance knowledge gained from this course will make work environments safer.
Average Class Rating - 4.21

6. The final test was a good measure of the knowledge gained in the course.
Average Class Rating - 4.17

The average class rating for the course content area and testing materials area was 4.37. This high rating reinforces the applicability of the course content to the trainees' interests and work environments.

1.3 WRITTEN COMMENTS

This course was scheduled to "catch up" on Safety and Health personnel throughout the DOE complex who had previously been unable to attend the P101 course at their own site, or who could not get an open spot at other scheduled sites. The result of this effort was an all-time high of across-the-board participants; 15 off-site people representing 5 different sites. The mixture of these site problems and experiences helped make the course pertinent to everyone.

The 9 days provided opportunity to realize that safety and health issues are relatively common rather than unique to a particular operation, site or company. The instruction team took the window to use the multiple-site personnel for lessons learned and activities in which participants could work compliance/program issues with people not directly involved with themselves; a great deal of networking resulted after the 9 days. This advantage was significant, despite the diversity which made teaching and answering questions during regular modules difficult; efforts were stepped up by the teaching team to defer specific site/situation questions to the breaks, lunch time and after class. This kept distractions and pointed conversation to a minimum for the rest of the class.

After providing numeric course evaluations, participants provided written comments about the course. Written comments were transcribed and are presented in Appendix A.

1.4 EXAMINATION RESULTS

On the last day of the course, a final examination was administered to 44 attendees. There were 30 multiple-choice questions. The scores ranged from 86% to 100%, with the average score being 97.6%. Forty-four persons successfully completed the class.

1.5 SUGGESTIONS FOR IMPROVEMENT

Feedback from the course contents and direction was positive; safety and health personnel as well as bargaining unit representatives and training professionals have all contacted the course manager for additional training/consulting requests. This offshoot results in highly visible and program-carrying opportunities to affect improvement in safety and health throughout the DOE complex.

Efforts to continue to improve visual-aid examples in each teaching module was noticed and paid off during this course. Several comments reflected that even more was needed. The course manager and teaching teams have extensive materials available now, the use of which is dependent on the speed of the class; questions, class size, and instructor style has a great bearing on the ability to use extra materials and examples. The lead instructor makes serious efforts to remain on schedule while adjusting for individual needs and clearly coaches instructors to do so, thus providing primary materials and supplementing as allowed.

APPENDIX A

EVALUATION COMMENTS

"ORIENTATION TO OCCUPATIONAL SAFETY COMPLIANCE IN DOE"

JUNE 16-26, 1992

RICHLAND, WA (HANFORD)

APPENDIX A

TRAINEE EVALUATION RESPONSES

P101, "ORIENTATION TO OCCUPATIONAL SAFETY COMPLIANCE IN DOE"

JUNE 16 TO JUNE 26, 1992--RICHLAND, WA

HANFORD

Please briefly describe how your expectations of this course were or were not met.

Greatly increased my understandings of OSHA rules/regulations and working with the CFR's.

Expectations were exceeded.

Expectations were met well.

I expected to be taught how to find specific standards when citing violations.

Exceeded, first class I've attended that really dives into the standards and in understanding language.

Being new to this field, I didn't know what to expect.

Overview of materials was satisfied.

Overall I found the course was as I expected although I had few real solid expectations.

I hoped to gain information and experience to enhance my capabilities to recognize inefficiencies while in the field. This objective was met.

I mostly wanted greater understanding and knowledge of areas covered by 29 CFR 1910 and 29 CFR 1926. I believe the expectation was met.

The understanding of the CFR concepts and the interpretations are better and will be incorporated into daily use.

Provided the overview of silent aspects of codes, but I wish there could be a method of achieving coverage that could involve more visual depictions of hazards.

My expectations of this course were met, but some of the material presented was dry at best.

Perfect course.

Completion of course provides me with certification as required by DOE/HQ/EH. Allows continued performance of my job.

My need for an overview to OSHA was met. A very good and useful course.

Met as anticipated.

My expectation was partially met.

29 CFR was a "mystery" before this course. I was hoping to make some sense out of 29 CFR. This course did that very well.

The most helpful topics covered or activities presented in this course were:
Inspections.

All were helpful.

How to use the codes.

Electrical.

All were of great value.

How to read CFR, and locate needed information.

Hints about the code book, identification of sources, investigations techniques, inspections techniques.

The most helpful activity was the field day.

Walking/Working, guarding, construction (generally these which I had no familiarity with).

Electrical safety.

(Probably not as helpful to others but for my job tasks was how codes would apply to office or administrative areas) Very helpful to go look at a facility and also the hazard/violation search.

The overall coverage of the CFR section heightened the insight toward how to better survey the facility for unsafe conditions.

Especially appreciate the supplementary materials you have added behind class overheads. Really liked your incorporating visit to worksite(s), but wonder if better way to review what found/observed.

On Electrical safety and walking and working surfaces.

Health related since most industrial hygiene or health related tasks are performed by a separate organization, members of which are not always available on OSH inspection.

Almost all of them.

Those involving electrical.

The manuals and handouts are most helpful.

Use of the manuals.

Electrical, means of egress, portable tools, machine guarding, platforms and working surfaces, lock and tag sections will be most useful in my work.

The least helpful things discussed or done were:

Subpart Z of 1910, I just don't deal with OSHA in this area very often.

Lab film.

1910.1000 and PPE (those which I was already familiar with).

All helpful, but perhaps less time on such topics as communication exercise.

Nearly none of them.

Injury/illness reporting.

Lab safety.

It was all interesting.

More emphasis should be given to:

Inspections and investigation, most cited violations.

Health topics.

Classroom participation.

Questions continued to arise to show specifics as to what to look for in the workplace. Need to specifically "show" examples that would create citations. Perhaps on inspection day more instructors could be recruited to point out infraction that would interest them. The student would then locate the citation as the assignment.

Inspection techniques and most complicated standards like .106 and .107 and 1.94, might show slides or aid of equipment/situations and what/how to measure to evaluate specifics of whether in compliance.

Walking and working surfaces.

Construction.

LOTO, construction, hazardous materials, machine guarding.

Case studies, more examples.

More time given to OSHA investigations - it is an important topic (and interesting) that we all should have to use at one time or another.

Actual inspection activities. Pictures of actual shop areas could be shown. We wouldn't have to have more days in the field necessary.

Less emphasis should be given to:

Chemical hazards portion is covered in the 40 hour HAZ waste training if you could have had the course.

Less lecture time. Venetia had a hard time keeping anyone interested in some of the later chapters, she said we looked like zombies. This was not a reflection on her lecture style but rather an indication that the class was on overload.

Also think (A/V) review of inspection areas might be more time efficient exercise of groups compiling and presenting.

Areas which do not exist at any of the attendee's facilities.

What specific suggestions do you have for improving future sessions?

Perhaps you might evaluate some of the videos for more timely or general content.

On the inspection have each group spend more time in one room and do more thorough job.

Suggest a list of video tape references and respective outlines of their content which were used during this course would be useful.

Provide more examples of citations.

Because of the enormous amount of information, the schedule was held tight, this didn't always allow for much classroom participation. Thanks for sticking to the 10 minute breaks each hour.

Perhaps instructors could use video camera during next inspection exercise to capture focus on some of most significant hazards, then rerun for class and describe in detail specifics of hazard evaluation and how special standard would apply.

Case studies would have been helpful.

Reduce classroom time; increase field trip time - learn by doing.

It might be helpful to have a professional video crew tape an inspection done at a facility and then use it for class instruction.

Just keep on pounding on people that you can't solve specific site questions and management policies during class. A very good job was done on this but some people didn't get it.

In recordkeeping told about reportability before recordability.

Look up 3M 8710 dust mask. It is a respirator.

Have pictures to show examples of violation in each major subsection.

Other materials to supplement or substitute for the provided handouts?
Some of the materials discussed, like the NEC, would be nice to have as reference.

Bigger bibliography.

Good handouts! Perhaps more student exercises like violation/standards search practice, i.e., pictures of hazards or descriptions of situations and have student analyze major hazards (then cross-check vs. a key).

Very good, they look like they will be useful at work.

Can't think of any right now.

The additional handouts contribute to the information overload. A suggestion I would have is to format the handouts to be a part of the binders in the appropriate locations within the binder.

A sample report may be useful to show neophytes what the real thing should look like.

Picture so actual sites as mentions inc.

Daily schedule/timing of activities, worktime?
More organization during inspection.

Scheduling was good. 8 am is humane.

Breaks may be a little long.

Ideal.

Great.

Went pretty fast through most sessions.

Seemed okay for most part.

Don't specifically appreciate make-work (looking up regulations just for practice), but that's my own opinion. I get lots of practice when I have to look them up.

Scheduling is fine.

Reduce classroom time. My attention span decreases rapidly after the first hour as a result absorption decreases.

Sufficient.

Good. Very good at covering information identified on the schedule.

Well scheduled.

Just right.

Okay.

Facilities/training room arrangements?

Needed more desk space to spread out at times.

The room used during week 2 was too small.

More room.

Excellent.

Good.

Excellent.

Second room was poor. The pillars got in the way. Not a good facility for this many people.

Seemed okay. (Bet with our class of 45. Perhaps a little crowded.)

Uncomfortable chairs and not enough workspace.

There was some days when the temperature was too warm.

Satisfactory.

Sufficient. May want to use a better setup for the video. There are machines that allow 2 tv's to be used and setup on 60" movable carts.

Good (hotel was responsible for air and did not attempt to adjust when asked. First few days in 2nd room were warm.).

More room per individual.

More space/student.

Fine.

Should have larger tables or desks with three code books and two big coverage books, it was very crowded on that narrow, short tables we had.

What other types of safety training courses would you like to see available?
Basic electrical, NEC, life safety, system safety.

None at this time.

MORT.

NFPA.

Life safety.

"Myriad" of areas where I would like to improve background/competitions. Especially construction, welding, electrical, and hazard recognition.

Communication in safety. It's one thing to point out violations. There is a crying need to move toward improving the system vice "fixing the symptoms". A method must be developed to investigate for improvement!

The ones I need are already available.

All that might be available.

MSHA and NEC, code training in this format.

Filling out injury reports.

Any further comments?

I felt the instructors were very knowledgeable of this subject and the class material was very well organized.

Instructors were very knowledgeable and professional. Should be commended for their efforts.

Instructors were good and knowledgeable in the subject matter.

It would be helpful to have the most frequently cited violations for each subpart.

Provide advance information to attendees on equipment needed (safety glasses, etc.) location of course, start times.

Stress Hanford procedures for implementing safety. Knowing is one thing, implementing is another.

I had a good time and learned a lot. You guys are a fun bunch. Maybe see you again. Thanks.

This course is the finest course I have ever attended and the people presenting the material are very knowledgeable. More personnel at DOE sites should be offered this course as possible.

Great instructors!

All three instructors did a good job of keeping it interesting by bringing in personal experiences and example. Good job.

If time constraints do not permit incorporating more A/V programs, have them available to view and encourage viewing before/after class or during lunch.

All the instructors were great and really got the information across.

As a note to the recordable incident value discussion (injury recordkeeping) a units analysis of the equating yields units of (injuries/to workers)(years). These units could be presented digitated to clear up confusion that way. Apparent when only raw equation was presented sans units.

APPENDIX B

TRAINEE EVALUATION FORM

EVALUATION FORM
P-101—Orientation to Occupational
Safety Compliance in DOE

Date _____
 Name (optional) _____
 Title _____
 Location _____

Please evaluate various features of the course you have just completed. The information you provide here will be combined with that from other attendees and summarized for the sponsor, the U.S. Department of Energy. Results from this evaluation will be used to improve this course.

Course Content	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Overall, as a result of this course I believe that I:					
developed specific skills and competencies in occupational safety compliance that I can use on the job. ... 5	4		3	2	1
gained a greater understanding of 29 CFR 1910, Occupational Safety and Health Standards. 5	4		3	2	1
gained factual knowledge about Federal safety and health program requirements 5	4		3	2	1
would recommend this course to others. 5	4		3	2	1
compliance knowledge gained from this course will make work environments safer. 5	4		3	2	1

Testing Materials	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
The final test was a good measure of the knowledge gained in the course. 5	4		3	2	1

Comments

- Please briefly describe how your expectations of this course were or were not met. _____

- The most helpful topics covered or activities presented in this course were: _____

- The least helpful topics or activities in this course were: _____

- More emphasis should be given to: _____

5. Less emphasis should be given to: _____

6. What specific suggestions do you have for improving future sessions?

7. Other materials to supplement or substitute for the provided handouts? _____

8. Daily schedule/timing of activities, worktime? _____

9. Facilities/training room arrangements? _____

10. What other types of safety training courses would you like to see available? _____

11. Any further comments? _____

12. **Overall rating:** Based on your comments above, please rate the course on a 5-point scale by circling the number of your choice.

5 Excellent 4 Very Good 3 Good 2 Satisfactory 1 Unsatisfactory

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