

OR SIG Bulletin

Occurrence Reporting Special Interest Group (OR SIG)

February 1999



Steering Committee

SIG Coordinator

Leesa Arowood
Oak Ridge Institute for
Science and Education

DOE Advisor

Eugenia Boyle
DOE/EH-33

Karen Chandler
Lawrence Livermore
National Laboratory

Dan Connell
Fluor Daniel Hanford

Lorna Dunn
Kaiser-Hill Company,
L.L.C.

Chair

Cynthia Eubanks
Bechtel Jacobs Company,
L.L.C.

William (Bill) Leonard
B&W Hanford Company

Jeffrey (Jeff) Long
Lockheed Martin Energy
Research

Glenn Morris
DOE/OR

Tim Quinn
Bechtel-Hanford, Inc.

Thomas Rotella
DOE/DP-45

Robert (Bob) Seal
DOE/ID

1999 ORPS Users' Workshop/ TRADE OR SIG Spring Meeting

The 1999 ORPS Users' Workshop and the Training Resources and Data Exchange (TRADE) Occurrence Reporting Special Interest Group (OR SIG) Spring Meeting will be held May 17-20, 1999, in Oak Ridge, Tennessee. The ORPS Users' Workshop and OR SIG Spring Meeting will again be held concurrently to allow participants greater flexibility in selecting classes and other activities they would like to attend.

The ORPS Users' Workshop topics will include ORPS GUI Help Features and ORPS Authorities Options; ORPS GUI Data Entry Program; ORPS GUI Facility Manager, Facility Representative, and Program Manager Functions; ORPS GUI Basic and Advanced Search and Report Techniques; Analytical Tools for ORPS Data; ORPS Direct Access Using Microsoft Query; and Occurrence Reporting Binned Information Trending Tool (ORBITT). Also, Personal Tutoring/Help sessions may be offered for individuals who need additional ORPS instruction due to unique requirements or problems.

The purpose of the OR SIG Spring Meeting is to provide a forum for DOE and DOE contractor occurrence reporting personnel for the exchange of information and for networking with their counterparts. Classes and discussion sessions for the OR SIG Spring Meeting include an Introduction to Occurrence Reporting; Occurrence Report Writing; Reportable Occurrence Investigative Techniques; Lessons Learned and Corrective Action Development; Root Cause Analysis; Critique Leaders Training; Integrating Occurrence Reporting Criteria; Data Analysis Topics and Task Team Meetings. In addition, the Spring Meeting will include a TRADEing POST of products that have been developed by OR SIG members or provided by vendors.

There is no registration fee for the workshop/meeting; however, attendees are responsible for their own travel, lodging, and meals. The ORPS Workshop/OR SIG Spring Meeting will be held at three local Oak Ridge facilities: Pollard Auditorium (for the opening general session); Y-12 Training Center (for ORPS classes); and the 701 Scarboro Road Training Center (for all other ORPS and OR SIG classes/activities). A shuttle service will be provided to transport attendees to and from the 701 Scarboro Road Training Center and the Y-12 Training Center. These facilities are located less than five miles from the local hotels. Car pooling will be encouraged, but a rental car may be

Items of Interest...

1999 ORPS Workshop/OR SIG Spring Meeting	1-2	DOE/ORBITT	7
Near Miss Guidance Update	2	Quality in OR Award Winner	8
Transition to a Paperless OR SIG Bulletin	2	Occurrence Reporting Good Practice	9
Graphical User Interface (GUI) Update	3	'98 OR SIG Fall Meeting Highlights	10
OR SIG Task Team Updates	3-4, 7, 9-10	Accident Investigation	11-12
The Chair's Corner	4	Occurrence Reporting Program Survey	12
OR SIG SC Info Sheet/Nomination Form	5-6	Standardized Codes for EH Databases	13
		People Behind The Scenes	13

1999 ORPS User's Workshop/TRADE OR SIG Spring Meeting (continued)

The 1999 ORPS Workshop/OR SIG Spring Meeting information and online registration will be posted on the Internet, both on the OR SIG homepage at <http://www.ora.gov/or/> under "Upcoming Meetings and Events" and on the OCCURRENCE REPORTING PROGRAM homepage at <http://tis.eh.doe.gov/web/oeaf/orps/workmeet.html>. The material should be available by March 12, 1999.

For more information about the 1999 ORPS Workshop and the TRADE OR SIG Spring Meeting, contact **Leesa Arowood**, OR SIG Coordinator, at phone (423) 576-0595, or Internet address arowoodl@ora.gov, or **Eugenia Boyle**, DOE HQ Occurrence Reporting Program Manager, at phone number (301)903-3393, or Internet address Eugenia.Boyle@eh.doe.gov.

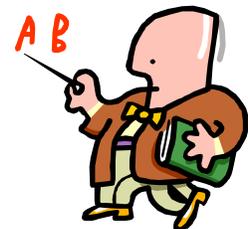
**ORPS Users' Workshop/
TRADE OR SIG
Spring Meeting
May 17-20, 1999
Oak Ridge, TN**

Near Miss Guidance Update

An initial draft of the Near Miss Guidance document was discussed at the Policy Task Team Meeting held during the 1998 OR SIG Fall Meeting. Numerous comments were received at the meeting, and several topics will be revisited, e.g., Lock

and Tag and electrical shock. Comments already received will be incorporated if no further discussion by the team is required. The document will then be sent out to Task Team members for review, and will also be available to the OR SIG membership. Comments requiring further discussion will be handled via e-mails and conference calls.

...by Kim Wilson,
West Valley Nuclear
Services, Inc.
Wilsonk@wv.doe.gov



Transition to a Paperless OR SIG Bulletin

To improve the timeliness of the Occurrence Reporting Special Interest Group (OR SIG) Bulletin and to reduce have decided OR SIG Bulletin to Bulletin is already



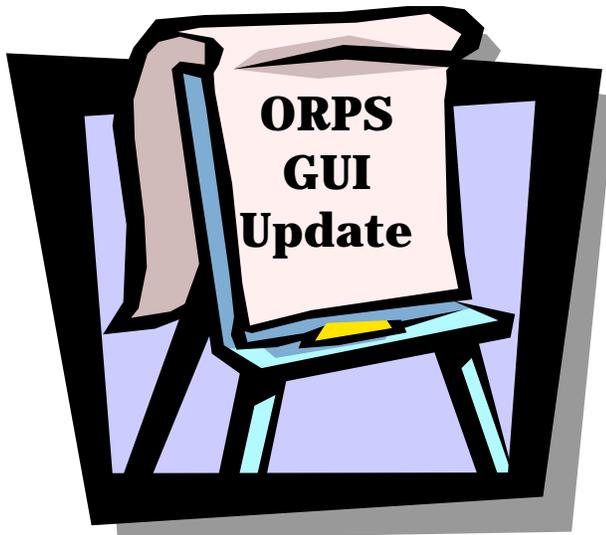
paper and reproduction costs, we to move from hardcopy distribution of the a paperless circulation. Since the OR SIG available in PDF format through a hyperlink from



the OR SIG home page (<http://www.ora.gov/or/>), no real change is necessary other than to terminate the printing and distribution of the Bulletin. This transition to a paperless OR SIG Bulletin will begin with the September 1999 issue of the Bulletin.

Subscribers to the Occurrence Reporting Information Listserver will automatically be notified by e-mail when the next OR SIG Bulletin is available. If you or any other person at your facility would like to subscribe to the listserver, please send a message to Internet address majordomo@ornl.gov with "subscribe ORSIG" in the body of the message (without the quotes). Once your subscription has been received, you will receive a "welcome message" that details how you can post messages, send file attachments, and unsubscribe.

If you have any questions or must receive a paper copy of the OR SIG Bulletin, in spite of its electronic availability, please contact Leesa Arowood at e-mail address arowoodl@ora.gov or by phone at (423) 576-0595.



The transition of all ORPS functionality from the HP to the GUI has been delayed due to various computer problems, including a new firewall installed at INEEL, changes to the Data Entry Program, and considerable user input. However, some very positive progress has been made to the program.

As part of the ORPS transition plan, a leased DEC

8400 computer was installed in the Germantown DOE building in mid-December and the operating system, ORACLE, and much of the ORPS software has been loaded on it. At transition, the final ORPS software and the complete ORPS database will be loaded on this computer, thus completing both the software and hardware transition and making the database more accessible for DOE-HQ management of the system.

In addition, the Data Entry Program has been changed significantly to eliminate the problem with the long lag time experienced when transmitting an occurrence report using the earlier version. The current version of the program has also corrected other significant problems identified during the last beta test period.

SCIENTECH has completed alpha testing the new GUI Data Entry, Manager Functions, and Search and Reports programs and the alpha test comments have all been resolved. EH-33 and some specific ORPS users are beta testing the programs to verify that they are ready for Playtime and production.

Beta testing comment resolution, the transition from the HP, and full implementation of the new GUI programs are expected to be completed early in CY 1999. We will continue to update users on the status of the ORPS transition via the OR SIG Listserver.

In parallel with the transition activities, EH-33 has initiated an ORPS R&D effort. EH-33 will take a "big picture" look at the occurrence reporting requirements and processes to determine what is working well and what needs improvement or streamlining. In addition to corrections and some fine-tuning, user requested enhancements will also be evaluated and incorporated, as appropriate.

Thank you for your continued patience during this transition time. We hope that the delay will make the transition easier for all ORPS users. If you have any questions, please contact **Eugenia Boyle** via e-mail at

OR SIG Task Team Updates

Facility Representative Task Team –

This task team was formed to provide the DOE Field perspective for the occurrence reporting process. The task team identified 19 concerns/activities, some of which include becoming involved in the ORPS interpretation process, collecting and distributing Facility Representative helpful hints, delegation of authority to the field for report approval, and whether unusual occurrences should be included in the roll-up process. The task team hopes to produce products that are helpful to everyone.

Lessons Learned

Task Team – There was very good attendance at the Lessons Learned Task Team Meeting, both from DOE and the contractor side. Most of the attendees were new to Lessons Learned so their focus was more on "instruction" rather than as a working group.

The following issues were among several that were discussed during the meeting:

(con't. on page 4)





The Chair's Corner...

by Cynthia Eubanks

1999 promises to be a great year – for those of us in Tennessee it is already off to a fantastic start (How 'bout them VOLS!!).

The 1998 OR SIG Fall Meeting provided the opportunity for us to look ahead to many great initiatives within the Occurrence Reporting Program for 1999. The interest and response for the topics covered during the meeting was overwhelming. Those of you who attended had the opportunity to attend and participate in training to help you use the new ORPS GUI interface, as well as take part in the many Task Team initiatives. The new Facility Representatives Task Team provided a needed forum for DOE Facility Representatives to collectively share thoughts and ideas, and provide recommendations for improvements to the overall occurrence reporting program. There were opportunities to discuss interpretation issues – and we found that there were very different thoughts in some of these areas.

We had the opportunity to learn the new interface for ad-hoc analysis of occurrence reporting information, as well as provide input on additional needs. We also heard about the new DOE Occurrence Reporting Binned Information Trending Tool (DOE ORBITT). DOE ORBITT is a web-based trending and lessons learned tool created to provide an analysis and feedback mechanism for the DOE complex for determining the performance of facility management and work controls and to promote continuous improvement in defining and planning work.

There were many initiatives that came out of this Meeting that the OR SIG Task Teams are continuing to work. These task teams provide the opportunity for everyone in the OR SIG, or those involved in the implementation of the occurrence reporting program, to share their thoughts, ideas, and – most importantly – move forward with implementation. There is increasing emphasis within the DOE community to not just report occurrences – but to also use the information to prevent future events and incorporate the lessons learned. Participating in the OR SIG activities and task teams can help us all to improve the processes and capabilities we have to analyze and improve our operations such that we have a healthy and safe working environment.

May all of you have a successful and safe year, and I hope to see you at the 1999 ORPS Workshop/OR SIG Spring Meeting in Oak Ridge.

"There is increasing emphasis within the DOE community to not just report occurrences – but to use the information to prevent future events and incorporate the lessons learned."

OR SIG Task Team Updates Con't.

(continued from page 3)

Lessons Learned Task Team Con't. –

- The need for a tool to search for lessons learned. The task team discovered after the meeting that a product already exists (DOE ORBITT) that does exactly this.

- The need to establish links to various Lessons Learned Web Pages and provide a brief description of each.

- Improve the quality in writing lessons learned and deciding what a "good lessons learned" is.

Policy Task Team –

The Policy Task Team will be working on a new process for resolving issues as well as developing a tracking system for these issues. The tracking system will be put up on the OR SIG Home Page.

In addition, the Task Team will forward a draft position on Lockout/Tagout to the Facility Representatives Task Team and the Enhanced Work Plan Group for ISMUS.



NOMINATION OF NEW OR SIG STEERING COMMITTEE MEMBERS INFORMATION SHEET

General Information	The OR SIG will accept nominations of OR SIG members for three (3) new Steering Committee positions. The new Steering Committee members will be elected by the general membership at the OR SIG Spring Meeting to be held May 17-20, 1999, in Oak Ridge, Tennessee.				
Steering Committee Composition	<p>The composition of the Steering Committee is as follows:</p> <ul style="list-style-type: none"> 1 DOE Headquarters Sponsoring Advisor 2 DOE Field Office Members (one of which will be a Facility Representative) 1 DOE Headquarters Program Office member 7 DOE Contractor members 1 ORISE/TRADE OR SIG Coordinator <p>The DOE Headquarters Sponsoring Advisor and the ORISE/TRADE Coordinator are permanent members of the Steering Committee. The remaining members are elected to serve three-year terms.</p>				
Nominations for New Steering Committee Members	<p>Nominations are to be made on the OR SIG Steering Committee Member Nomination Form enclosed in this packet. Since absentee ballots will be accepted by those members who are unable to attend the Spring Meeting, there will be no nominations accepted from the floor.</p> <p>Of the three available slots, all are to be filled by DOE Contractor members. Since the Steering Committee is committed to having a broad representation from the DOE contractor community, the Steering Committee has voted to limit membership to one representative per contractor organization, unless otherwise changed by a two-thirds approval of the Steering Committee. Therefore, since several contractor organizations are already represented on the Steering Committee, nominations should exclude persons from the following organizations:</p> <table border="0" style="width: 100%;"> <tr> <td>B&W Hanford</td> <td>Lawrence Livermore National Laboratory</td> </tr> <tr> <td>Kaiser-Hill, L.L.C.</td> <td>Lockheed Martin Energy Research</td> </tr> </table>	B&W Hanford	Lawrence Livermore National Laboratory	Kaiser-Hill, L.L.C.	Lockheed Martin Energy Research
B&W Hanford	Lawrence Livermore National Laboratory				
Kaiser-Hill, L.L.C.	Lockheed Martin Energy Research				
Cut-off Date for Accepting Nominations	Nomination forms must be returned to Leesa Arowood, OR SIG Coordinator, by fax (423) 241-4380, or e-mail (arowoodl@ora.gov) no later than April 22, 1999 .				
What Happens Next?	Once the nomination results have been compiled, the nominees will be contacted to ensure their willingness to serve on the Steering Committee. After these contacts are made, a ballot will be prepared listing the nominees, as well as giving a brief background summary on the nominees. This ballot will be included in the OR SIG Spring Meeting Participant packets for voting at the Spring Meeting. If you are unable to attend the Spring Meeting and would like to vote absentee, please contact Leesa Arowood, at 423-576-0595, fax 423-241-4380, or Internet address "arowoodl@ora.gov" to request your ballot. Ballots will be mailed out immediately upon request and will need to be returned to the specified address by COB, May 7, 1999 .				

OCCURRENCE REPORTING SPECIAL INTEREST GROUP (OR SIG) STEERING COMMITTEE NOMINATION FORM

Guidelines for Nomination

- Steering Committee members will be those whose primary responsibility is for occurrence reporting and occurrence reporting related activities within their organization.
- Steering Committee members must be willing to perform tasks that allow the OR SIG to fulfill its mission.
- Steering Committee members are expected to actively participate by attending periodic meetings, providing input on OR SIG activities, hosting meetings, and becoming familiar with other TRADE activities.
- Steering Committee members must have the support of their management.
- The Steering Committee will actively seek membership representation from different types of DOE facilities (research and development, laboratory, production facilities, etc.) and DOE Operations and Program Offices.
- Steering Committee members are expected to attend meetings themselves rather than send an alternate in their place.

Nomination

Name

Title

Organization

Address

Phone Number Fax Number

Internet Address

Brief Statement of Job Responsibilities

Nominated by

**RETURN BY COB, APRIL 22, 1999, VIA FAX TO LEESA AROWOOD,
TRADE/ORISE,
AT (423) 241-4380**



Department of Energy/Occurrence Reporting Binned Information Trending Tool (DOE/ORBITT)

The Office of the Assistant Secretary for Defense Programs, Deputy Assistant Secretary for Program Support, Associate Deputy Assistant Secretary for Technical and Environmental Support, (DP-45), in conjunction with other departmental support organizations, is pleased to announce the release of DOE Occurrence Reporting Binned Information Trending Tool (DOE/ORBITT). DOE/ORBITT is a web-based trending and lessons learned tool created to provide an analysis and feedback mechanism for the DOE complex for determining the performance of facility management and work controls and to promote continuous improvement in defining and planning work.

DOE/ORBITT uses an integrated, user friendly, web-enabled PC browser interface capable of generating topical lessons learned and trended operational event bin-data extracted from DOE occurrence reports. The output generated is based on menu-driven user selections including Program Office, Operations Office, Area Office (if applicable), facility name, contractor, bin (event classification category) and/or sub-bin, and date range or any combination of these fields. The data in DOE/ORBITT is currently updated monthly and ranges from 10/94 to the present previous month (e.g., December '98). The data base is compiled from subject matter expert daily review of all DOE occurrence reports submitted from across the complex. The constituent events are then binned into one or more of 78 different sub-bins within 11 major categories. The major categories currently tracked include: Conduct of Operations, Environmental, Fire Protection, Instrumentation and Controls, Mechanical/Structural, Radiological, Electrical, OSHA/Industrial Hygiene, Safeguards/Security, Transportation, and Other.

DOE/ORBITT is a valuable tool for use at all levels of the complex. It can be used to identify circumstances indicative of deteriorating or poor performance. Generation of a customized report depicting a facility trend and the associated corrective actions collected for a particular bin or sub-bin can establish a starting point for further data analysis or investigation. The user must note that the data has not been normalized for activity levels. DOE/ORBITT also provides a near instant lessons learned feedback mechanism for the job planner for selected types of work. DOE's Integrated Safety Management, Feedback and Improvement function proposes and encourages the use of lessons learned during hazard analysis and work planning activities. In short, DOE/ORBITT is seen as a DOE quality assurance vehicle.

If you desire assistance in querying DOE/ORBITT topical lessons learned or operational bin-data trends, please contact Tom Rotella, DOE/DP-45, at (301) 903-2649; or Chris Coccagna, SAIC, at (301) 353-8302.

OR SIG Task Team Updates Con't. *(continued from page 4)*

Training Task Team -

Attendance was fairly low at the Training Task Team Meeting held during the OR SIG Fall Meeting. Attendees discussed the results of the survey that was distributed via the OR SIG ListServer. The following issues were discussed during the meeting:

- Possibility of offering Trending Training (NOTE: It was decided to let the 1999 DOE Data Analysis Forum fill this void).
- Possibility of developing/offering Lessons Learned Training. Survey respondents indicated that they would like to see more training in this area and would like to see a closer association with SELLS.
- Updating existing OR SIG training materials and trying to combine the Critique Process and Investigation materials into a single set of training materials.
- Look for better ways to get information from the OR SIG Home Page (other than PDF files).
- Establishing an occurrence reporting certification process.
- Establishing Training Points-of-Contact for each site and perhaps posting this information on the EH-33 or OR SIG Web Site.
- Capturing order issue changes, status of short form reporting, etc.

(con't. on page 9)



Quality in Occurrence Reporting Award Winner: Kim Wilson

To promote and encourage excellence in the field of occurrence reporting, the OR SIG established a special award, "The Quality in Occurrence Reporting Award," to be given annually at the fall OR SIG Meeting. This special award is presented to one of the more than 700 OR SIG members in recognition of his or her contributions to improving occurrence reporting throughout the DOE complex.

Kim Wilson, West Valley Nuclear Services, Inc., was the winner of the "**Quality in Occurrence Reporting Award**" in 1998. Kim was nominated for this award by several members of the OR SIG. Her nomination was based on her ongoing willingness to actively support the OR SIG and the DOE complex in the implementation of the Occurrence Reporting Program.

Kim administers the Event Investigation and Reporting Program for the West Valley Demonstration Project (WVDP). This includes maintaining the implementing manual, researching requirements and issues, monitoring corrective actions, performing oversight activities, and providing ORPS support. She is the site's occurrence reporting point of contact.

Kim has been actively involved in the OR SIG since its inception. She was instrumental in the development of many of the reference materials available to assist in implementation of occurrence reporting programs. She has conducted training sessions and facilitated topical discussions at ORPS Workshops/OR SIG Meetings. She was actively involved in the revisions to the Occurrence Reporting Order and Manual, and in the efforts associated with interpretation. She has facilitated the development of guidance associated with reporting near-miss occurrences.

Kim served on the OR SIG Steering Committee from its' inception until 1998 and now serves as the Users' Group Task Team Lead. In this role, she has been involved in coordinating input from ORPS users on the testing of the new ORPS interface and in recommending changes to the system capabilities. The list of areas in which Kim has been an active participant and valuable contributor is lengthy.



In the words of **Jeannie Boyle**, DOE Occurrence Reporting Program Manager, and OR SIG Sponsor, "Kim is always willing to take on whatever task is needed and she follows it through to completion. She is very capable and someone that you can count on to provide you with a quality product. She is a joy to work with and has made significant contributions to the complex-wide Occurrence Reporting Program."

According to **Cynthia Eubanks**, OR SIG Chair, Bechtel Jacobs Company, L.L.C., "There have been numerous times when I have needed input on how to handle an Occurrence Reporting Program issue and I contacted Kim. Her perspective on the issues and suggestions on how she would handle the situation at her facility were always helpful. If she didn't know the answer, she knew the right person to call."

All members of the OR SIG have benefited from the efforts that Kim has expended in supporting the implementation of the Occurrence Reporting Program. Congratulations Kim - and thanks for your support!!!

**OR SIG Task Team
Updates Con't.**
(continued from page 7)

**Training Task Team
Con't.** -

- Establish links between the OR SIG and EH-33 Home Pages regarding training products.

- Prioritize and develop an action list. The team may ask for input from other task team leads and various sites as to what kind of training they think is good/helpful, what type of training they offer for FRs, Users, etc.

Trending Task Team – The Trending Task Team is currently in the process of gathering input to develop a table to list occurrence trending and analysis reporting from across the DOE complex. The table lists a) the organization providing trending, b) the types of data trended, c) the tools utilized to conduct trending, d) the distribution of the trending information, e) the point of contact for the organization, and f) any available web address. The current version of the table is available on the web at <http://www.ornl.gov/oratt23082.htm>.

(Con't. on page 10)



Start the New Year off right by reviewing some Do's and Don'ts associated with performing root cause analysis:

"DO":

Find the solution that –

- Prevents recurrence
- Is within your control
- Meets your goals and objectives

Use risk assessments to determine the level to which you will analyze and fix the problem

Use subject matter experts to understand the event/condition and the facts

Evaluate the solution to determine if it will cause other undesirable consequences

"DON'T":

- Use personnel too close to the event to conduct the analysis
- Implement corrective actions that will create other undesirable consequences

The bottom line is to do what is within your control to prevent recurrence. Don't implement corrective actions that could create other abnormal events. Use subject matter experts to understand the event, but don't use those too close to the event when conducting your root cause analysis

... by Bill Leonard, B&W Hanford, w_j_iv_bill_leonard@rl.gov



OR SIG TASK TEAM UPDATES (continued from page 9)

Users' Group Task Team –

Members of the Users' Group Task Team have continued to beta test the ORPS GUI Data Entry, FM, and FR functions. A portion of the meeting was devoted to a discussion of the experiences with the new system while it was in the Playtime period. The brand new Data Entry system (which was seen at this workshop) was discussed, with the team helping EH-33 determine the path forward for implementation of this system.

Possible enhancement needs for the Corrective Action portion of ORPS were identified, and, in some cases, revisited. The ability to update or close Corrective Action dates while the report is in the pre-final stage is still considered to be very important. Other Corrective Action items include:

- Addition of a comment field for use when closing a Corrective Action (similar to justification for an extension, used for documentation/comments).

- Ability to change wording of Corrective Actions on approved finals electronically rather than submitting a hard copy request.

A preliminary method for "unsubmitting" a pre-final OR has been developed. This could only be used before the Facility Representative signed the Occurrence Report.

A Headquarters task team on integrating DOE information systems has identified a set of codes that may be able to be used to clarify and/or standardize data. This document will be sent to the field for review, and will be available on the Internet as well.

The User's Group will continue to work towards the implementation of short-form reporting and pop-up menus, providing support as it is needed.



1998 TRADE OR SIG Fall Meeting Highlights

The Occurrence Reporting Special Interest Group (OR SIG) held its' first standalone Fall Meeting November 16-19, 1999, in Albuquerque, New Mexico, at the Energy Training Complex (ETC) and the Sandia Computer Training Laboratory. In spite of the challenges associated with training on a brand new ORPS Data Entry System, the OR SIG Fall Meeting was a success. Part of this success can be attributed to the efforts of the ETC staff, ORISE, Sandia, SCIENTECH personnel, and OR SIG members who met the challenge of ORPS training class enrollments that were considerably higher than anticipated.

In addition to ORPS GUI computer training on the new Data Entry Program, the new Manager screens, and Search and Reports, the workshop included a highly attended General Session and an introductory training course for the much-anticipated ORPS SQL Direct Access.

The General Session on Wednesday, November 18, included a number of interesting and thought-provoking presentations. **Larry D. Kirkman**, Assistant Manager, Office of Technical Management and Operations, Albuquerque Operations Office, welcomed meeting attendees to the Albuquerque area, and spoke about the criticality of communications within the Department of Energy and within the occurrence reporting system. In addition, he spoke about Integrated Safety Management (ISM) and the implementation of this process and about the role of ORPS in protecting workers, the public, etc.

In addition, the following interesting and thought-provoking presentations were included:

- The future of ORPS and other EH Information Systems by **Tom Rollow**, DOE/EH-33;
- Department Standards Committee (DSC) Corporate Lessons Learned Initiatives by **Phillip Thullen**, ISM Program Manager, Los Alamos National Laboratory;
- The impact of external regulation on occurrence reporting by **Mary Haughey**, DOE/EH-31;
- Occurrence Reporting and the Price-Anderson Amendments Act (PAAA) by **Al Elliott**, PAAA Coordinator, Los Alamos National Laboratory;
- Use of the Occurrence Reporting Pop-Up Menu by **Thomas Rotella**, DOE/DP-45;
- Lessons Learned from Incident Investigations by **Bob Seal**, DOE/ID and presentation of a video on the lessons learned from the INEEL accident in which one death resulted from an unintended CO₂ system activation;
- Emergency Action Levels and ORPS reporting requirements (**Dave Freshwater**, SAIC and **Reed Hodgin**, AlphaTrac); and
- Root Cause Analysis Discussion - Initiatives to Improve by **Glenn Morris**, DOE/OR, **Bob Steitler**, WSRC, and **Bill Leonard**, B&W Hanford.

Utilizing the conference and computer training rooms at the ETC and Sandia provided DOE with significant cost savings compared to renting similar facilities. Further contributing to the cost savings was the high level of par-

Accident Investigation: Your Witness is Your Most Valuable Player

"Witness" is defined by Webster's Dictionary as "a person who saw, or can give a firsthand account of something". As an Accident Investigator (AI), you know the most valuable way to gain information and insight into why an accident occurred is to seek out and interview the witnesses. Witnesses typically hold the keys to uncovering the causes of an accident. The AI must know how to identify a potential witness, obtain statements from the witness, and conduct interviews. The AI should understand that each witness is different and can not be expected to respond the same as another witness. Prior to the interview, the AI must do the homework. This means visiting the accident scene, reading the witness statements, reviewing the accident information already gathered, learning about the witness, understanding the work process that was going on at the time of the accident, and developing questions to be asked during the interview.



Use of the following guidelines should help ensure that witness statements are provided freely and accurately, subsequently improving the validity of the information obtained.

Create a Relaxed Atmosphere

- ◇ Introduce yourself and shake hands. Be polite, patient, and friendly.
- ◇ Treat witnesses with respect.
- ◇ Dress appropriately
- ◇ Chose/arrange furniture to create a casual atmosphere
- ◇ Interview each witness separately

Prepare the Witness

- ◇ State that the investigation's purpose is to prevent accidents, not to assign blame.
- ◇ Explain that witness statements are very important in determining the facts.
- ◇ Stress how important the facts given during the interview are to the investigation.
- ◇ Explain that witnesses may be interviewed more than once.
- ◇ Explain the provisions of the Freedom of Information Act and the Privacy Act.

Record Information

- ◇ Rely on a court reporter to provide a detailed record of the interview.
- ◇ Ask permission to take notes or use a tape recorder. If notes are taken, they must be very detailed and precise.

Ask Questions

- ◇ Establish a line of questioning and stay on track during the interview.
- ◇ Ask the witness to describe the accident in full before asking a structured set of questions.
- ◇ Let witnesses tell things in their own way. Start the interview with a statement such as "Would you please tell me about...?"
- ◇ Ask several witnesses similar questions to corroborate facts.
- ◇ Aid the witness with reference points; e.g., "How did the lighting compare to the lighting in this room?"
- ◇ Keep an open mind; ask questions that explore what has already been stated by others, in addition to probing for missing information.

(continued on page 12)

Accident Investigation: Your Witness is Your Most Valuable Player

(continued from page 11)

Ask Questions , cont.

- ◇ Assist witnesses with visual aids, such as photos, drawings, maps, and graphs.
- ◇ Be an active listener, and give the witness feedback. Restate and rephrase key points.
- ◇ Ask open-ended questions that generally require more than a "yes" or "no" answer.
- ◇ Observe and note how replies are conveyed by voice inflections, gestures, expressions, as they reply.
- ◇ Ask the witness if they know of anyone else that may have pertinent information.

Close the Interview

- ◇ End on a positive note. Thank the witness for his/her time and effort.
- ◇ Tell the witness to feel free to contact you at any time if they remember any additional information.
- ◇ Allow the witness to read the interview transcript and to make comments if they wish.

Interviewing Don'ts

- ◇ DO NOT rush the witness while he/she is describing the accident or answering questions.
- ◇ DO NOT judge, display anger, refute, or be hostile toward the witness.
- ◇ DO NOT suggest answers.
- ◇ DO NOT threaten, intimidate, or blame the witness.
- ◇ DO NOT make promises that cannot be kept, such as assuring confidentiality.
- ◇ DO NOT use inflammatory words such as "violate," "kill," "lie," "stupid."
- ◇ DO NOT omit questions during the interview because you think you already know the answer.
- ◇ DO NOT ask questions that suggest an answer, such as "Was the odor like rotten eggs?"
- ◇ DO NOT accept witness conclusions and reactions as facts

... by Tim Quinn, Bechtel Hanford,
tsquinn@bhi-erc.com



Occurrence Reporting Program Survey

EH-33 has developed a survey to help us determine how well our products and services meet the needs of our customers throughout the DOE Complex. Besides the DOE and Contractor organizations in the field that create occurrence reports, our customers include other DOE organizations that rely on occurrence reports and the ORPS database for notification, analysis, and lessons learned. The objective of this survey is to get a big picture look at the major elements of the DOE Occurrence Reporting Program from the customer's point of view. To help us determine what is and what is not working well, we would appreciate your answers to the survey by **February 26, 1999**. The elements covered by the survey include:

- Occurrence Reporting Order/Manual
- ORPS Database
- Occurrence Reporting Program Homepage
- ORPS Bulletin
- Occurrence Reporting Special Interest Group

The survey is provided as a pdf file and it can be found as a new link on the Occurrence Reporting Program homepage. You must have Adobe Acrobat Reader installed to open the file. If you are unable to open and print the survey, please contact **Eugenia Boyle** at phone number (301) 903-3393 or Internet address Eugenia.Boyle@eh.doe.gov. Instructions for completing and submitting the survey are included on the survey form. We will compile the responses and let you know the

Standardized Codes for EH Databases: Project Update

In September 1997, the Office of Environment, Safety and Health established a working group consisting of database managers, analysts, and developers. The goal of the group was to develop and implement a plan to link like entities across EH database systems. Ultimately, the result will be a common data entry and retrieval point for multiple databases.

The following databases are included in this project:

- Occurrence Reporting and Processing System (ORPS)
- Noncompliance Tracking System (NTS)
- Computerized Accident/Incident Reporting System (CAIRS)
- Radiation Exposure Monitoring System (REMS)
- Facility Information Management System (FIMS)
- Medical Surveillance Information System (MSIS)

Common data elements exist between all of the databases; however, since differing purposes of the databases necessitated different database structures, each database has unique ways of identifying and characterizing the data elements. Over the last year, a task team has developed a set of tables that use 'master' codes to define a common language for the common data elements. This effort, when completed, is expected to help reporting organizations, as well as analysts, save time and effort by minimizing the system-specific knowledge needed for each database.

In the coming weeks, the working group expects to make these tables available for review and comment by the user community. More information on the status of this project will be provided in future ORPS and OR SIG Bulletins. If you have any questions, you can contact Eugenia Boyle at (301)903-3393 or Internet Address

PEOPLE BEHIND THE SCENES

Chris Coccagna, Science Applications International Corporation (SAIC)

In recent months a new talent has arrived on the scene. Chris Coccagna, SAIC, has made substantial contributions to the accessibility and use of occurrence information. Specifically, Chris was and is responsible for the development of a new web-enabled software product called, "DOE Occurrence Reporting Binned Information Trending Tool (ORBITT)." The website URL is available (<http://twilight.saic.com/orbitt>) and links are being established from various organization's home pages. DOE ORBITT provides an easy way to trend performance and pull ORPS information up quickly. Chris has also been instrumental in facilitating enhancements to ORBITT when ideas have been received by beta testers and others in and out of the OR SIG community. We all now have easy Internet access to more than four years worth of binned DOE event data for any of the 78 topical bins and direct access to Final report corrective actions, lessons

learned, etc. This kind of access has tremendously improved our ability to implement the Integrated Safety Management Feedback and Improvement functions at all levels, including the working level, across the DOE and its contractors. Thanks Chris, and keep those enhancements coming!

i
Chris Coccagna

i
John Fehringer

i
Nihar Ray

John Fehringer, LMITCO, DP/GTN
Nihar Ray, LMITCO, DP/GTN

For the past several years, the Department of Energy's (DOE's) Office of Defense Programs and the DOE in general have been supported by the Lockheed Martin Idaho Technologies Company (LMITCO) in the area of analysis and feedback of operating experiences throughout the complex. Nihar and John are directly responsible for producing many lessons learned articles and summary reports from extracted ORPS data, including the "Semi-Annual Analysis and Trending of Suspect/Counterfeit Items at DOE Facilities," and the "Defense Programs Facilities Semi-Annual Occurrences Summary Report." In addition to their regular duties in DP, John and Nihar conduct a daily DOE-wide telephone bridge conference call during which DOE and Contractor subject matter experts and other interested parties call in to discuss and "bin" DOE's operational events. John or Nihar typically prepares an E-mail every business day for literally hundreds of DOE and DOE contractors in preparation for the call. The file contains event information downloaded from ORPS, typically for the previous 24 hours, and facilitates the binning and dissemination of occurrence information, discovery of generic issues, and the sharing of lessons learned. In fact, John and Nihar are directly responsible for the development of the Fox Pro Bin data base that is at the heart of the new DOE ORBITT.

John has a strong conduct of operations background. Nihar has been the lead on the project and has been an active member of the OR SIG for years. John and Nihar have facilitated ORPS data trending and analysis techniques across the DOE. Both of these professionals have done outstanding jobs and have made huge contributions in furthering DOE's operating experience review and occurrence reporting programs. Our hats are off to you both!



ORISE/TOPS/TRADE
MS-16
P.O. Box 117
Oak Ridge, TN 37831-0117

**Is your mailing address and
Internet address correct or
do you have an Internet
address that's not listed?**

If not, please contact
Leesa Arowood by Phone:
423.576.0595, Fax:
423.241.4380, or Internet:
arowoodl@orau.gov.

URGENT!!!

OR SIG Steering Committee Nomination Form due April 22, 1999