



U.S. Department of Energy
Office of Civilian Radioactive Waste Management



Yucca Mountain Project – Lessons Learned/Generic Implications

Presented to:

Society for Effective Lessons Learned Sharing (SELLS)

Presented by:

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Bechtel SAIC Company, LLC

October 18, 2005
Oak Ridge, TN

Lessons Learned - The Next Level

- Where We Were



Lessons Learned - The Next Level

- Where We Were



- Where We Are



Lessons Learned - The Next Level

- Where We Were



- Where We Are



- Where We Are Going



Where We Were



- **1999 - Program Begins**
 - Issue Procedure AP-REG-001, Managing Lessons Learned
- **2000 - Program Update**
 - Complete Rewrite of AP-REG-001 to Conform to the Intent of DOE-STD-7501, The DOE Corporate Lessons Learned Program
- **Screening Process**
 - Subjective
 - Responsibility of One Individual
- **Lessons Learned Sources**
 - Internal
 - DOE Lessons Learned List Server



Where We Were



- **Database**

- Lotus Notes-Based
- Keyword Search Capability Only
- Low Functionality Made Using the Database and Managing the Program Difficult

- **Distribution**

- 39 Lessons Learned Issued Year One

- **Program**

- Little or No Communications
- Program Awareness - Very Low

- **Integration**

- Little to no Integration with other processes
- Work Order Usage - Minimal



Where We Were



- **Measurement Tools**
 - Informal Metrics
 - Changed Frequently





Where We Were

Database Response Form



(Untitled) - Lotus Notes

File Edit View Create Actions Help

Workspace Marco Lee - Inbox CRWMS Contact Directory LL Program Coordinator - Inbox Lessons Learned No. (Untitled) notes

OFFICE OF CIVILIAN RADIOACTIVEWASTE MANAGEMENT

LESSONS LEARNED ACTION RESPONSE

DOCUMENT IDENTIFIER: OCRWM-LL-1999-001

Title: ESF Pad Drilling Incident

ACTION: Reviewed

STATUS:

Action Taken
 Action Planned

AFFECTED LESSONS LEARNED COORDINATOR: Sheryl Morris/VD/RWDOE

Reply to Program Coordinator

ENTERED BY: Sheryl Morris/VD/RWDOE
DATE: 09/11/2000 04:40 PM

Report Date

6149 unread document(s) remaining

Start (Untitled) - Lotus Notes O:\Organizational Assur... Microsoft PowerPoint - [S... 4:58 PM





Where We Were

Database Home Page View

Lessons Learned Notification - Posted Notifications - Lotus Notes

File Edit View Create Actions Help

Workspace LL Program Coordinator - Inbox Marco Lee - Inbox CRWMS Contact Directory - Phone List... Lessons Learned Notific... notes

Search in: "Posted Notifications" Not indexed

Search for Search More

Compose Lesson Learned Notification

Keyword Search Only

Document ID	Title
★ OCRWM-LL-2003-115	Document Processes And Agree To Communication Chan Complex Projects.
★ OCRWM-LL-2003-116	CPSC, HOMIER DISTRIBUTING CO. ANNOUNCE RECAL PORTABLE LIGHTS, AND FLUORESCENT WORK LIGHT
★ OCRWM-LL-2003-117	Completion Checklist Helps Achieve 100% Procedural Cor Reports (OCRs)
★ OCRWM-LL-2003-118	Hazard Identified: Overhead Lines
★ OCRWM-LL-2003-119	Vigilance Required When Backing up Trucks or Large Equ
★ OCRWM-LL-2003-120	Key Ring' Carabiner Used as Safety Equipment
★ OCRWM-LL-2003-121	It may NOT be carpal tunnel syndrome.
★ OCRWM-LL-2003-122	Inattention to Minor Discomfort and Work Priorities Leads
★ OCRWM-LL-2003-123	Schedule Delays And Evaluation Difficulties With Root Ca And 107
★ OCRWM-LL-2003-124	Worker Receives Electrical Shock After Contact with Welc
★ OCRWM-LL-2003-125	CPSC, IBM AND LITEON TECHNOLOGY ANNOUNCE EX ANNOUNCED RECALL OF COMPUTER MONITORS
★ OCRWM-LL-2003-126	Final Check of Software Package Documentation and Cod IV&V.

Using database on Local

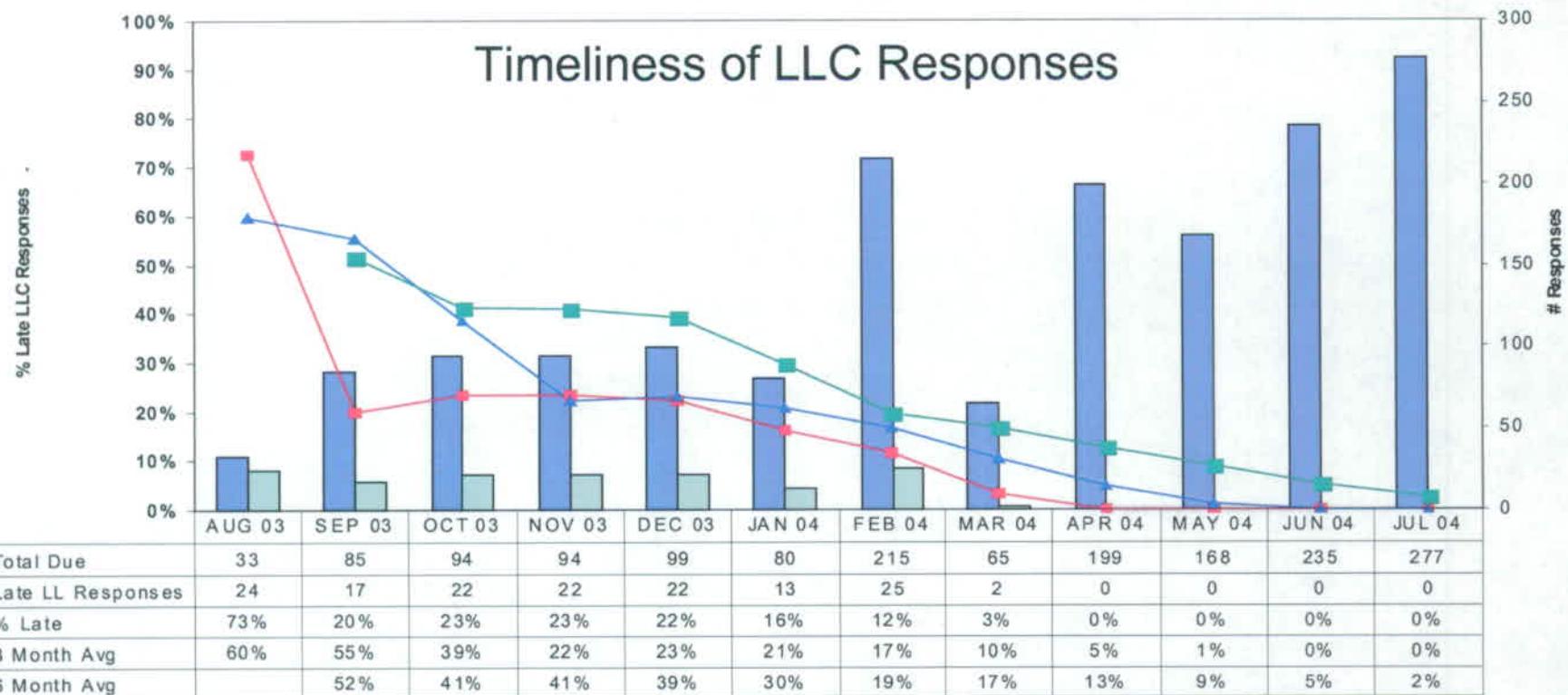
Office

Start Lessons Learned Notifi... O:\Organizational_Assur... Microsoft PowerPoint - [S... 12:33 PM

Where We Were



Metrics



Where We Are



- 2003 - Implemented Web-Based Database
- Screening Process
 - Formal Screening Process Established
 - Team of Subject Matter Experts From Key Organizations Established
 - Sources of Potentially Applicable Information Increased
- Lessons Learned Sources
 - Internal
 - DOE Lessons Learned Database
 - ORPS
 - Institute of Nuclear Power Operations (INPO)



Where We Are



- **Database**

- Web-Based
- 16-Field Drill Down Search Capability
- Refine Search Capability
- Save Query Capability
- Required Action and Response Tracking
- General User Feedback Form

- **Distribution**

- FY 2004
 - ◆ 76 Internal
 - ◆ 41 External
- FY 2005
 - ◆ 70 Internal
 - ◆ 30 External



Where We Are



- **Program**

- Communication Blitz (Brochures, Posters, Home Page Hyperlink, Intranet Site, Articles)
- Program Awareness – High
- Special Emphasis Area - Work Control
- Quarterly Award Program for LL Initiators

- **Integration**

- Through Procedure Call-Outs LL Program Integrated with:
 - ◆ Corrective Action Program
 - ◆ Safety
 - ◆ Self-Assessments
 - ◆ Work Control
 - ◆ Quality Assurance
 - ◆ Specifications



Where We Are



- **Measurement Tools**

- Formal Metrics Established Including:
 - ◆ Lessons Learned Use in Work Control
 - ◆ Lessons Learned From Significant Condition Reports
 - ◆ Timeliness of Dissemination





Where We Are

Database Response Form



Lessons Learned
Generic Implications

Database

Submit New Search Just-in-Time Reports Top Ten Related Links Coordinators

Admin Help LLHome

Previous Page View this Lesson Learned Printer Friendly Version

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

LESSONS LEARNED ACTION RESPONSE

DOCUMENT IDENTIFIER: OCRWM-LL-2005-092

Title: Ensure Product Output Including DTNs Are Correct, Accurate, And Technically Appropriate

Coordinator: David Broach

Document results of actions below in 'Feedback/Additional Comments:'

Lessons Learned Evaluated. Does Apply. The following actions were taken:

Forwarded to appropriate personnel via e-mail

initial entry on 7/26/05: Forwarded to science training program owner and developer for checker training to determine applicability and actions.
<cp>
Updated entry 08/29/2005: Not applicable to engineering personnel.

Discussed with staff in meeting

Required Action taken

Initiated Policy, Desk Instruction, or Procedure Change





Where We Are

Database Response Form



<input type="checkbox"/> Other Action taken	
<p><input checked="" type="radio"/> Lessons Learned Evaluated. Does Apply. No Actions Necessary because...</p> <p><input type="checkbox"/> Our procedures, processes, culture already reflect the lesson that was learned</p>	
<input type="checkbox"/> Other	
<p><input checked="" type="radio"/> Lessons Learned Evaluated. Does Not Apply because...</p> <p><input type="checkbox"/> Does not relate to job function</p>	
<input type="checkbox"/> Other	
<p>FeedBack/Additional Comments:</p>	
<p><input type="checkbox"/> Final Response Once you check this box and submit your response, you will not be able to edit this response again unless you receive permission from an LLPC.</p>	





Where We Are

Database Home Page View



Lessons Learned
Generic Implications

Database

Submit New Search Just-in-Time Reports Top Ten Related Links Coordinators

Admin Help LLHome

Click [here](#) to manage your responses.

Date	Identifier	Most Recent Lessons
08/29/2005	OCRWM-LL-2005-103	Repeated Faxing Leads to Illegible Records
08/29/2005	OCRWM-LL-2005-102	Good Work Practices Improve Self-Assessment Quality and Effectiveness
08/26/2005	OCRWM-LL-2005-101	More Care Needed for Subcontract Work on BSC Property
08/18/2005	OCRWM-LL-2005-100	Review Hazards Even For Routine Tasks
08/09/2005	OCRWM-LL-2005-099	Ensure the Traceability and Transparency of Project Documentation
08/08/2005	OCRWM-LL-2005-098	Unsafe Attitudes and Risky Behaviors Result in Electrical Shock
08/03/2005	OCRWM-LL-2005-097	Participate in Evacuations and Evacuate Calmly But Quickly to Ensure Your Own Safety and the Safety of Others
08/01/2005	OCRWM-LL-2005-096	Improve the Execution of Long-Range Change Management Plans
08/01/2005	OCRWM-LL-2005-095	Change Management Successful Through Selecting The Right Strategy, Plan Elements, And Team
08/01/2005	OCRWM-LL-2005-094	Change Management Plan Successfully Executed Despite Emerging Issues
07/28/2005	OCRWM-LL-2005-093	Evaluate Hazards and Use Proper Equipment When Working With Locomotives
07/26/2005	OCRWM-LL-2005-092	Ensure Product Output Including DTNs Are Correct, Accurate, And Technically Appropriate
07/22/2005	OCRWM-LL-2005-091	Using Performance Indicators To Improve Performance
07/20/2005	OCRWM-LL-2005-090	Minimize Link Maintenance in Websites
07/14/2005	OCRWM-LL-2005-089	Ensure Traceability Within The Corrective Action Program

[Next 15 Lessons Learned >>](#)

The way to document and share!

*Note: This site was developed in and is best viewed using a display resolution of 800 x 600 pixels or greater. To change your settings, please contact the Computer Support Center at 821-8200.

Contact a Lessons Learned Program Coordinator: James A. McLaughlin, Sr. or Marco Lee
General Concerns/Comments





Where We Are

Database Search



Lessons Learned
Generic Implications

Database

Submit New Search Just-in-Time Reports Top Ten Related Links Coordinators Admin Help LLHome

Search Lessons Learned

Please enter search criteria.

Reset for New Search Show Help Search

Free Text Search

Any words All words Exact phrase

Lessons Learned # (yyyy-###)
OCRWM-LL-

LL Date (mm/dd/yyyy)
from to

External/Internal Source

Priority Descriptor

ISMS Core Function

Hazard

Cause Code

Equipment

Functional Category

Site Area

Consequence

Work Discipline

Sub-Hazard

Select a Hazard First...

Sub-Cause Code

Select a Cause Code First...

Sub-Equipment

Select Equipment First...

Search

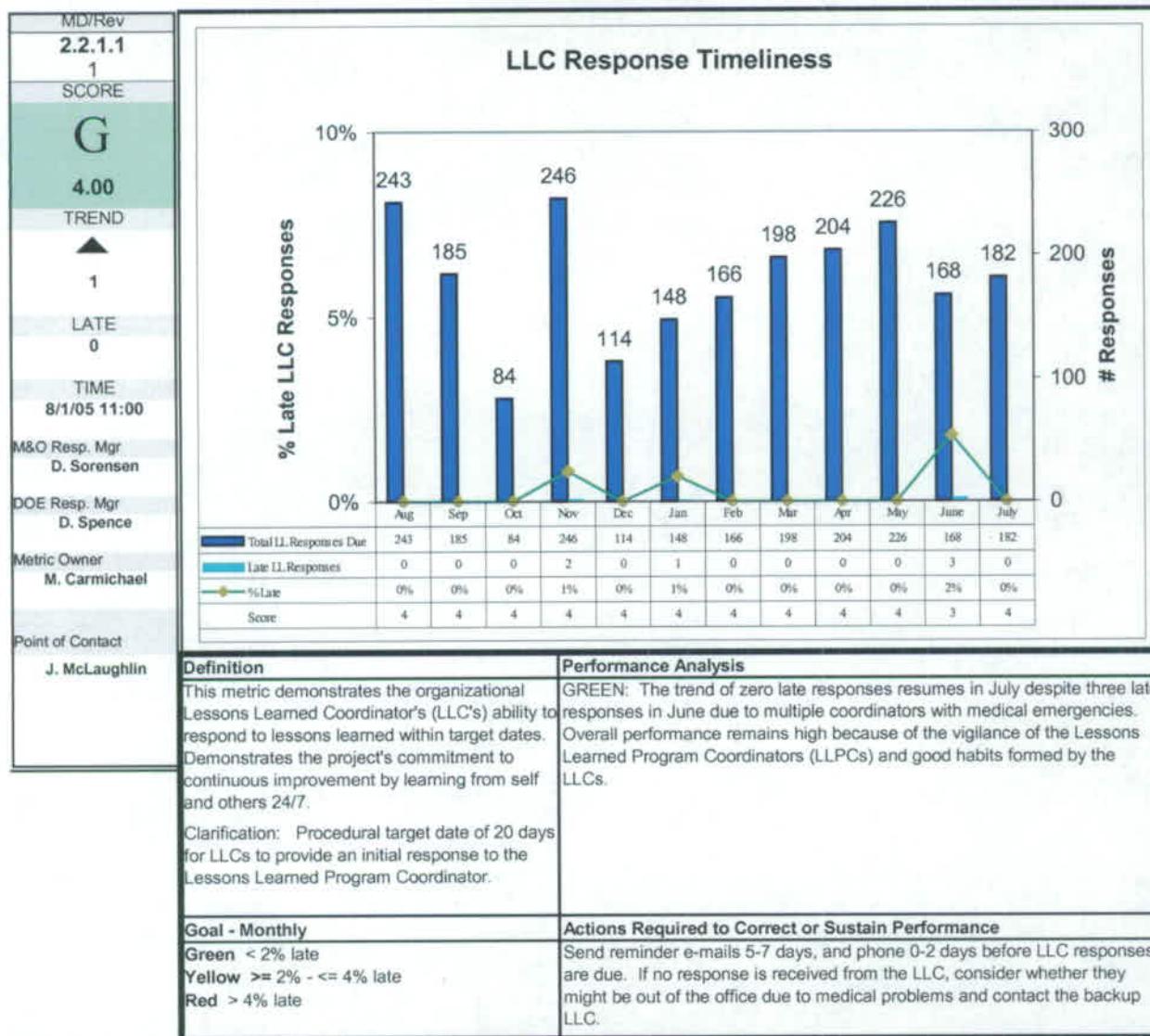
Your Saved Queries

Query Name		
Fall Protection	Run this Query	Delete this Query



Where We Are

Metrics



Where We Are Going



- **2006 - Program Update**
 - DOE Operating Experience Order Issued
 - ◆ Rewrite LP-REG-009-BSC, Lessons Learned
 - ◆ Develop and Distribute Project-Wide Communication
- **Screening Process**
 - Expand Key Organization Participation to Include Site Operations and Others as Applicable
 - Formalize Screening Criteria to an Increased Level of Detail (i.e. pass over found and fixed ORPS items)
 - Increase the Number of Required Actions



Where We Are Going



- **Lessons Learned Sources**

- Nuclear Regulatory Commission
- INPO
- DOE Sources
- Internal Sources

- **Database**

- Develop Features That Elicit Feedback to Ensure Content is Current and Useful

- **Distribution**

- Keep Quantity at approximately 10/month
- Focus On Quality and Impact



Where We Are Going



- **Program**

- Implement Quarterly Success Story Award Program For Best Use of LL/GI Information

- **Integration**

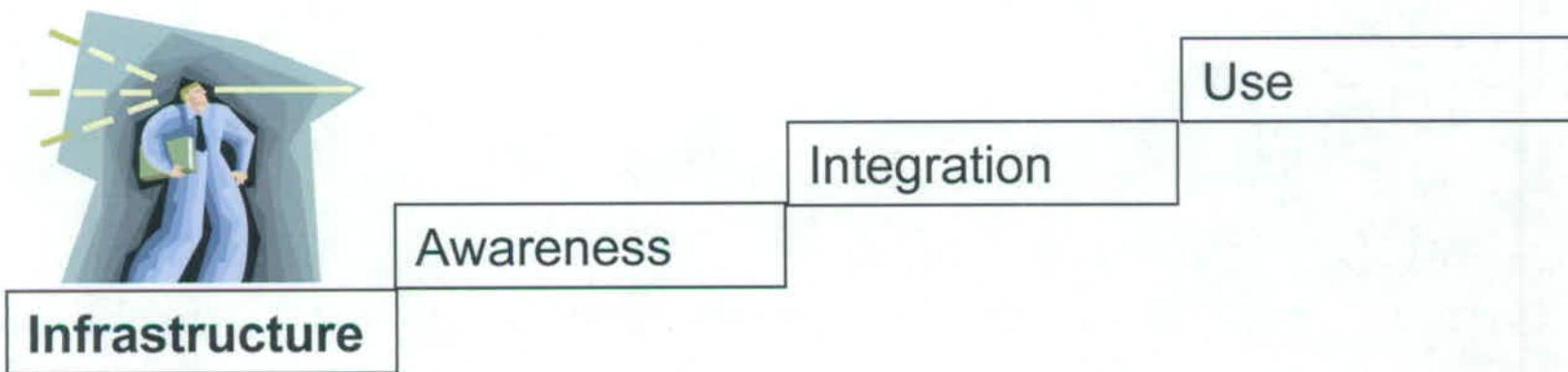
- Lessons Learned Integrated With Human Performance and Performance Indicators
 - Second Nature for Employees to Apply Lessons Learned
 - ◆ During Development of New Processes
 - ◆ During the Implementation of New and Existing Processes
 - ◆ When Archiving Old Processes

- **Measurement Tools**

- Feedback From Post Work Control Process
 - Measure Use in Other Areas Beyond Work Control (i.e. Procedures, Six Sigma)



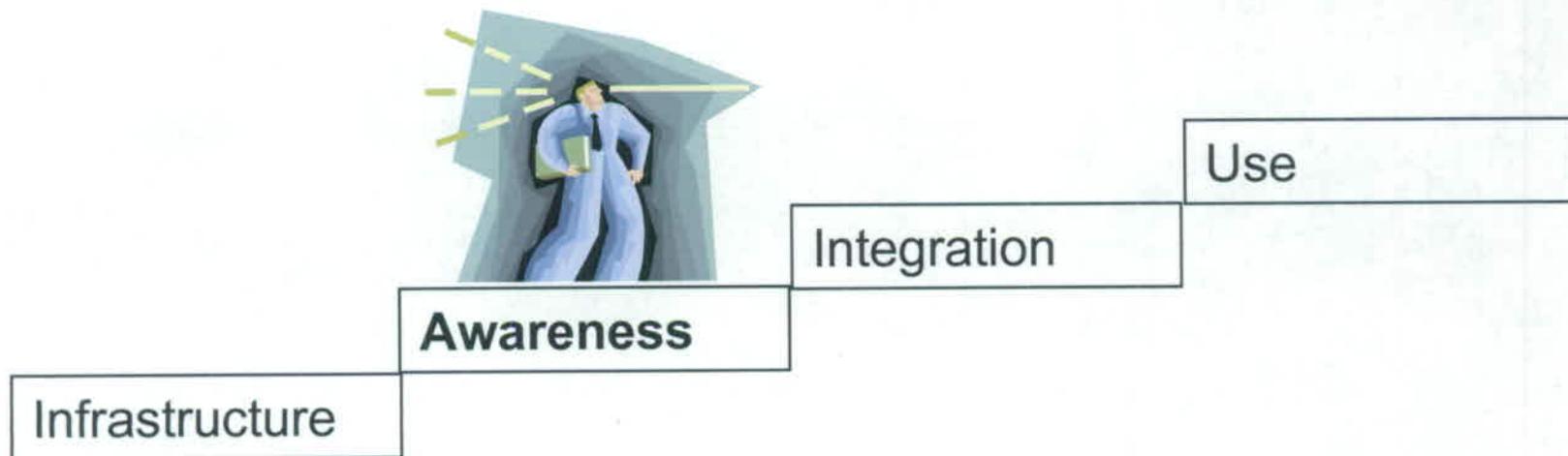
STEPS TO EFFECTIVENESS



Procedure, Process, Database, Roles & Responsibilities.



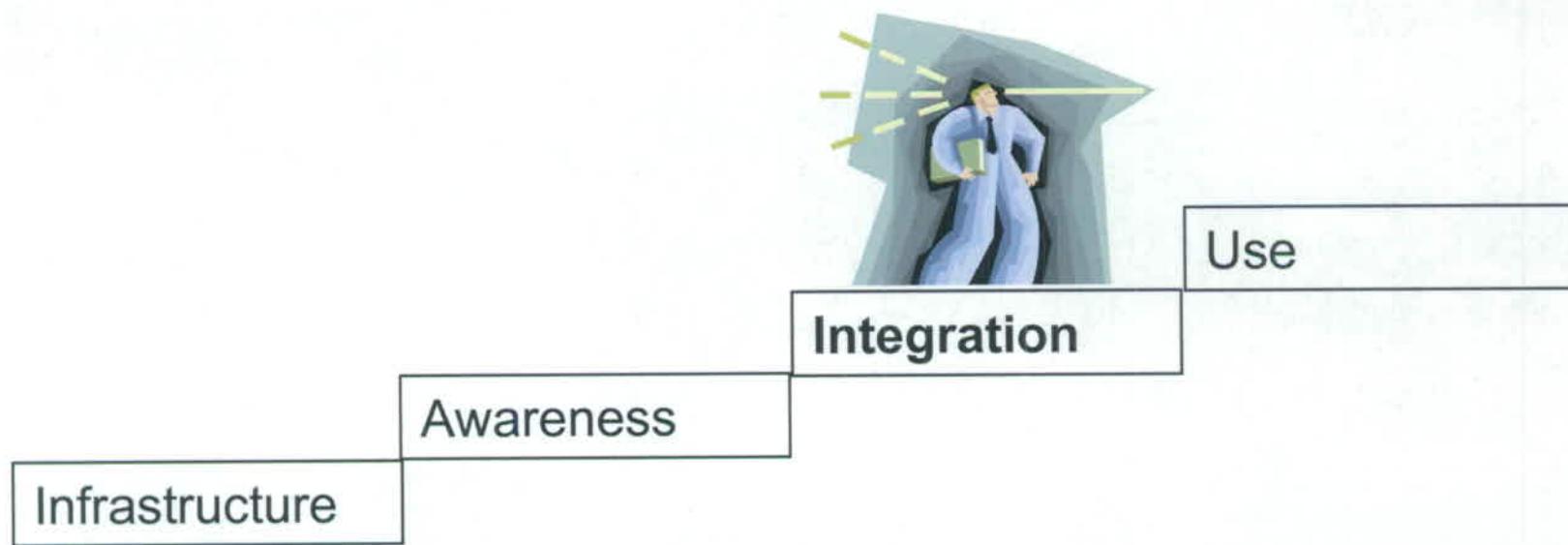
STEPS TO EFFECTIVENESS



Project personnel are aware of the program and the part they play in it.



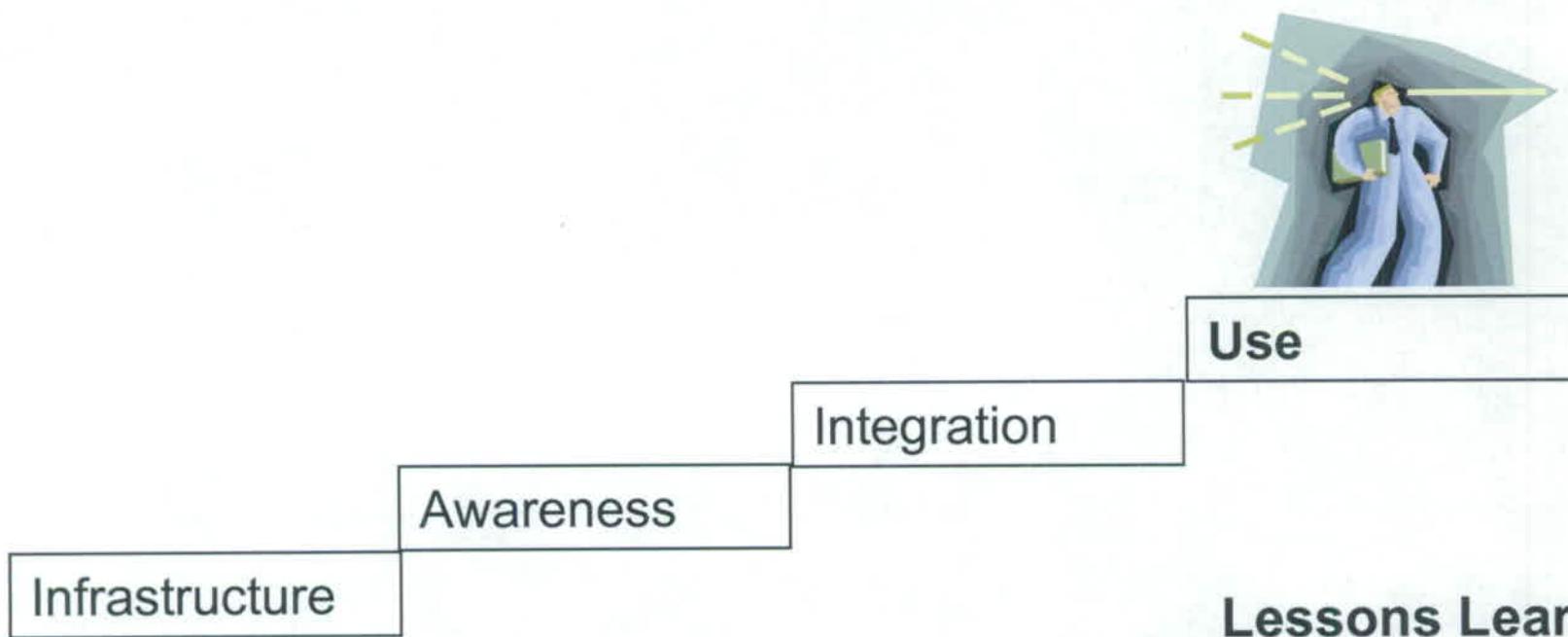
STEPS TO EFFECTIVENESS



**All applicable
processes tie to
lessons learned
and vice versa.**



STEPS TO EFFECTIVENESS



Lessons Learned
are used to
improve safety,
quality and best
business
practices.

