

Pacific Northwest  
National Laboratory  
Operated by Battelle for the  
U.S. Department of Energy

# Voluntary Protection Program



## PNNL'S "Electronic" VPP Application



Todd Hart  
Vern Madson  
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Mary Ann Showalter  
Pat Wright

**Battelle**

U.S. Department of Energy  
Pacific Northwest National Laboratory

# Electronic VPP Application

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*Voluntary Protection Program*

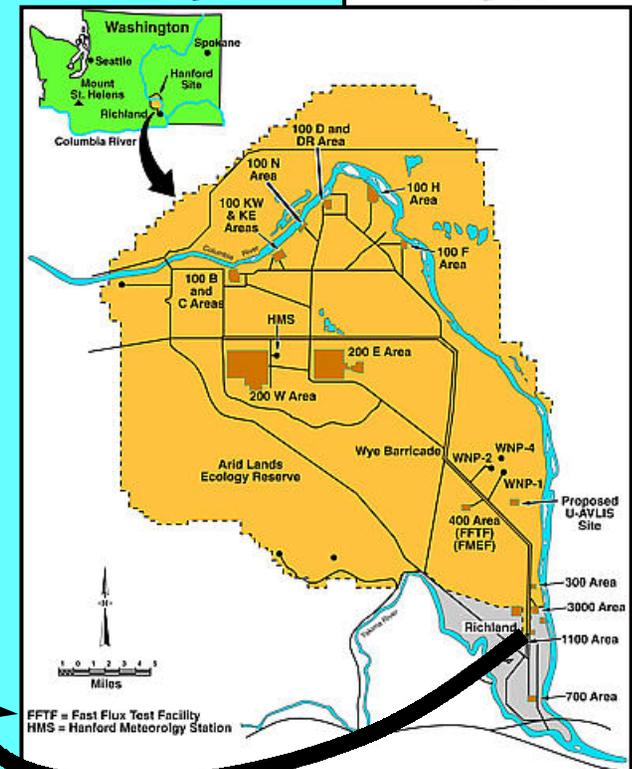
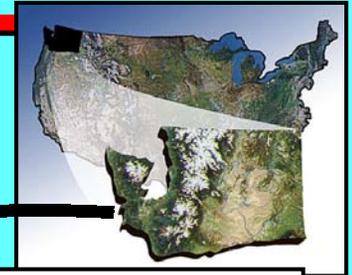


# Who we are/How we work

Todd Hart – PNNL VPP Steering Committee  
Co-Chair

# Pacific Northwest National Laboratory

- Research & Development environment
  - Diverse projects for a variety of clients
  - Work with “exotic” hazards
  - R&D and maintenance workers



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Pacific Northwest National Laboratory

# Implementation of Worker Safety & Health

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- Roles, Responsibilities, Accountabilities, and Authorities
  - Line Management – responsible for safety
  - Each individual has safety responsibility
- ES&H support services
  - Program development
  - Field-deployed support staff
- Implementing tools
  - Standards-Based Management System (our “manuals”)
  - Integrated Operations (“bench-level” controls)
  - Electronic Prep & Risk (R&D proposal planning)
  - Job Planning Packages (maintenance work planning)

***Extensive use of intranet for information and process support***

# PNNL Workers

Russ Meicenheimer – PNNL VPP Steering  
Committee Treasurer

# PNNL Workers



- “Own” their work and are responsible for safety, work planning, etc.
- Work in small teams where there is great interaction and sharing of responsibility
- Use on-line tools, their managers or co-workers, and subject matter experts to address safety issues
- Deal with safety issues in their work when they find them



# Worker Involvement

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- Lab-level requirements (SBMS) developed by employee Working Groups
- Integrated Operations System (IOPS)
  - Safety Committees (write Work Practice Documents)
  - Cognizant Space Managers  
*(individuals responsible for safety in their labs)*
- Work Teams
- Other Safety Committees
  - VPP Steering Committee
  - Laboratory Safety Committee
  - Electrical Safety Committee
  - ALARA Committee

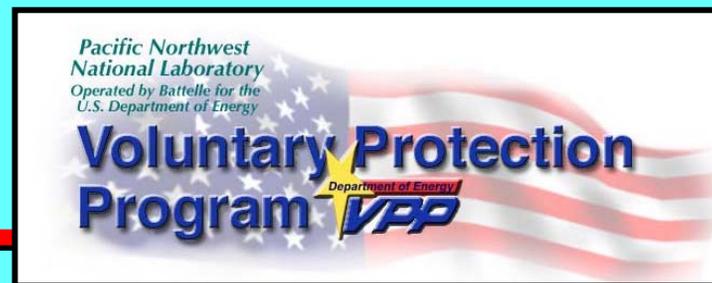


# VPP at PNNL

Vern Madson – PNNL VPP Steering  
Committee Co-Chair

# VPP at PNNL

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## VPP Steering Committee

- Worker representatives from across the Lab
- Address issues related to safety and VPP recognition

## Existing processes implement tenets

- Workers are involved at many levels
- Management supports and enables safety
- Work processes and tools have safety “built-in”

# PNNL's VPP Process

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- Employee-run VPP Steering Committee
  - Mix of Labor and R&D employee representatives
- Awareness programs
  - PNNL VPP Steering Committee Website
  - Knowledge survey – Incentive Award
  - Educational presentations (e.g. ergonomics)
  - Posters, announcements, brochures, etc.
- Electronic VPP Application

# Website Development

Mary Ann Showalter – PNNL VPP Steering  
Committee Member  
(Communications Specialist)

# Electronic Application

*PNNL makes extensive use of intranet for information and process support*

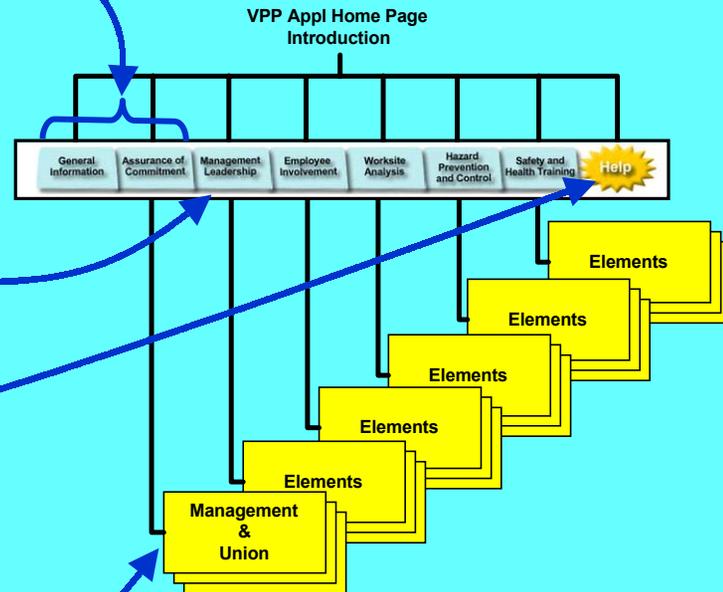
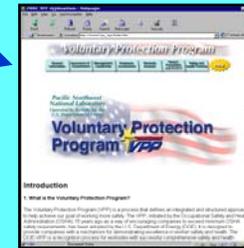
## Web-based delivery of VPP Application

- Use of web-browser
  - Netscape Navigator®
  - Microsoft Explorer®
- Hypertext Links
  - PNNL operational documents
  - Examples of documentation for VPP review
- Accessible “outside of the firewall”
  - From anywhere on the internet
  - User name and password required
  - Computer Security briefing required



# Electronic Application Site Map

- Introduction
- General Information  
Assurance of Commitment
- Tenets
- Elements (under Tenets)
- Help



# Electronic Application Navigation

# HOW?

## ■ Click on “objects”

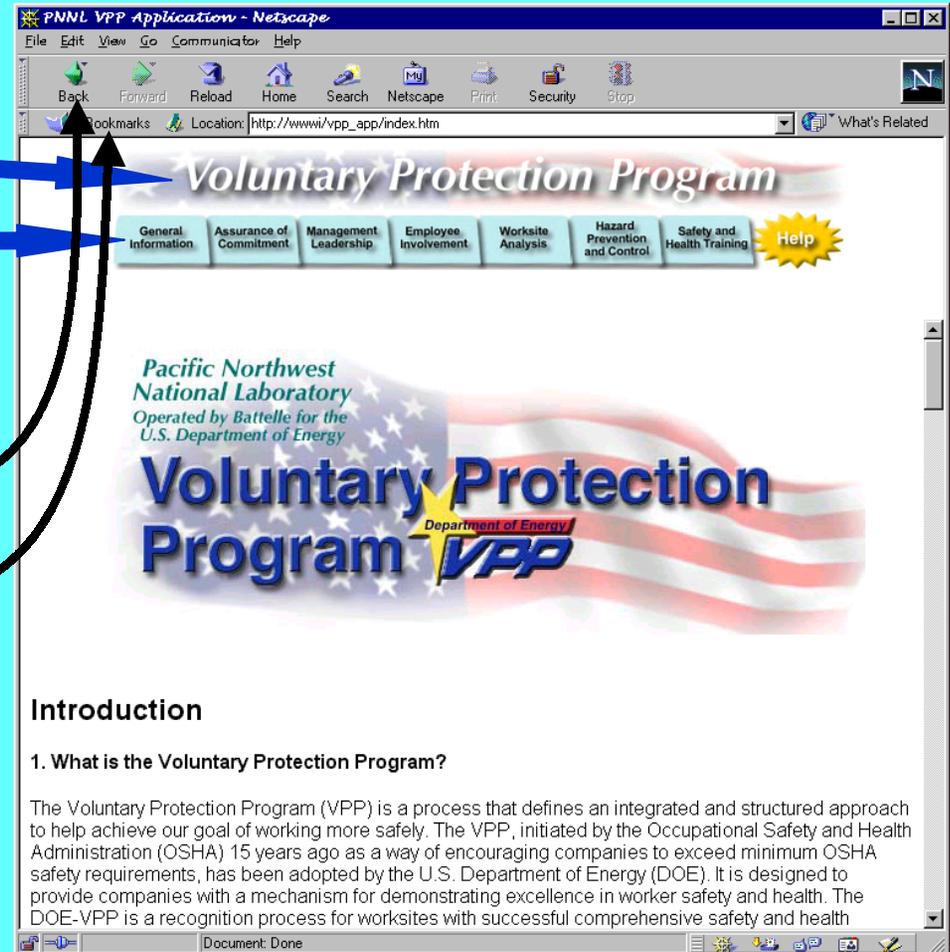
- Home banner
- Tenet tabs

## ■ Click on hypertext links

- [Blue underlined text](#)

## ■ Back button

## ■ Bookmarks



# Application Development Effort

- Time - ~5 months  
*(May – October 2000)*
- Cost - ~\$37K  
*(not counting review)*
- Team:
  - Project Management
  - Authors
  - Technical Editor
  - Web Design and Graphics
  - Review:
    - PNNL VPP Steering Committee
    - PNNL Management
    - Quality Engineers



# Lessons Learned

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## Issues

- Good web development team
- IT support early in the process
- Access through the firewall
- Glitches will happen

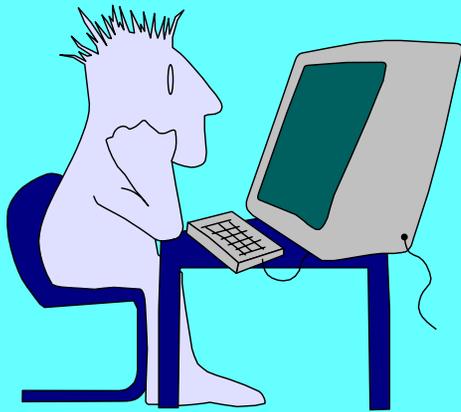
## Solutions

- Good people
- Committed to project
- Get on issues early
- Expect issues

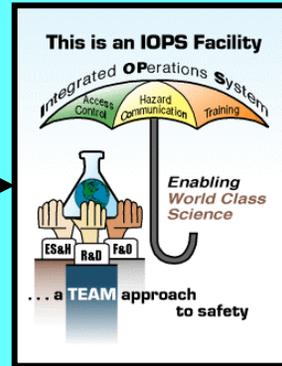
# Electronic Application, Program Evaluation, Summary

Pat Wright – PNNL Safety & Health  
Representative

# PNNL's "electronic" infrastructure



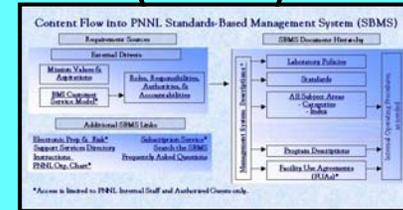
**Bench-level controls**



**VPP**

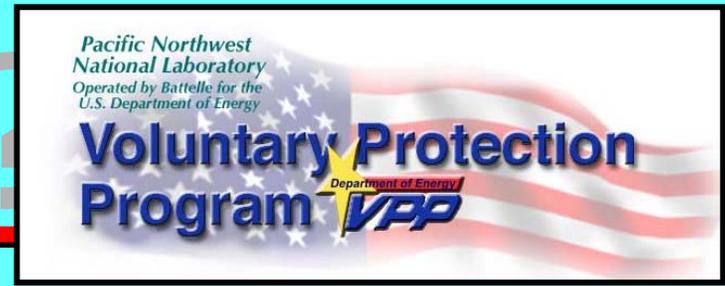


**Requirements (SBMS)**



# PNNL DOE-VPP

## “Electronic” Application



## Benefits:

### ■ Accessible

- DOE-VPP reviewers
- PNNL staff members

### ■ Comprehensive

- Drill down to actual PNNL operating documents

### ■ Current

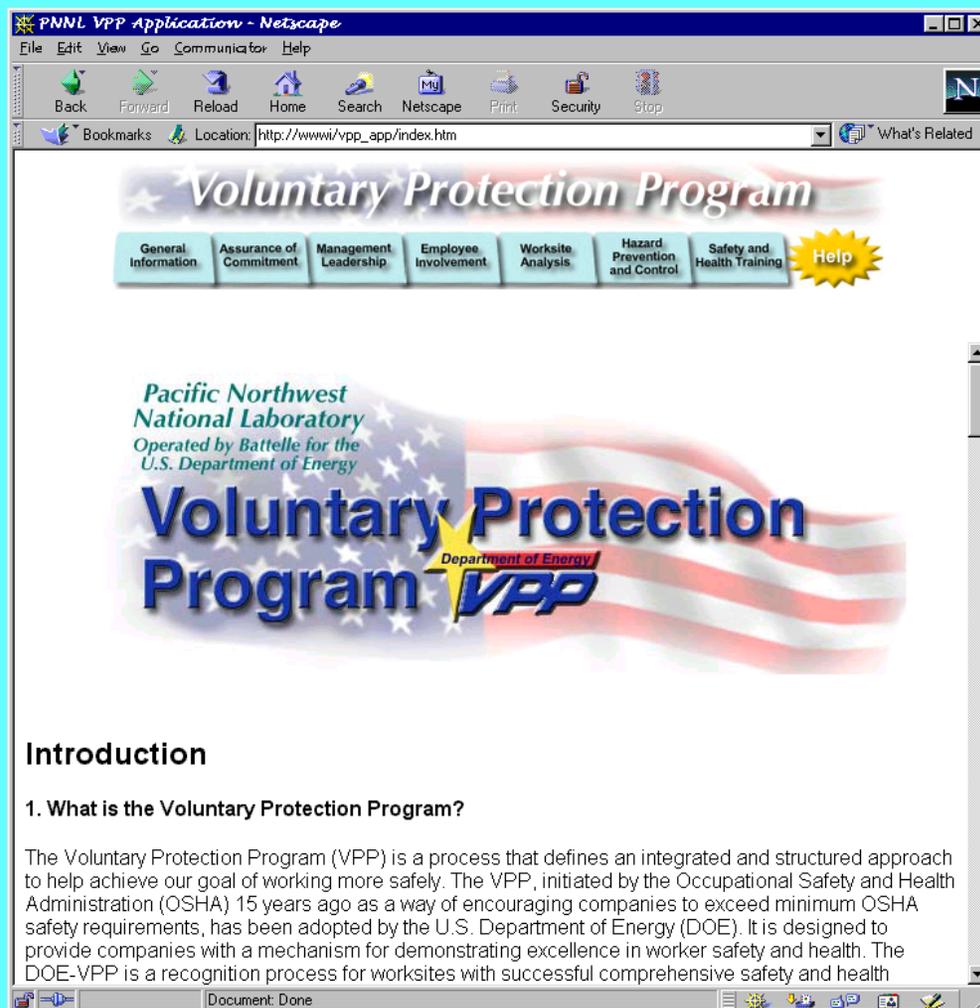
- Links to PNNL operating documents show current, updated versions

***“Availability of electronic references...provided an abundance of records and information”***

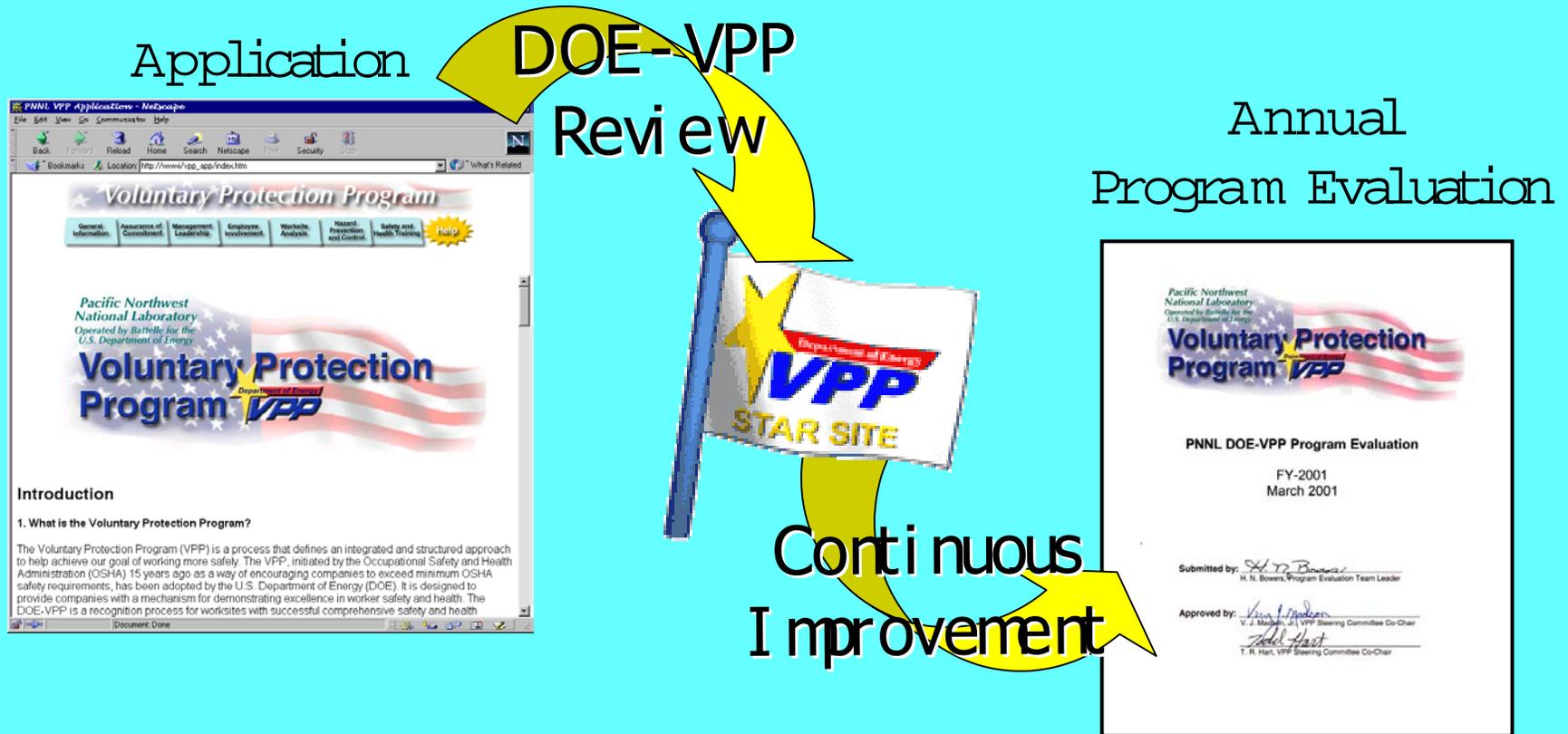
***“The electronic links within the application provided easy access to information”***

*...PNNL Application Evaluation Review Report*

# PNNL VPP Application Website

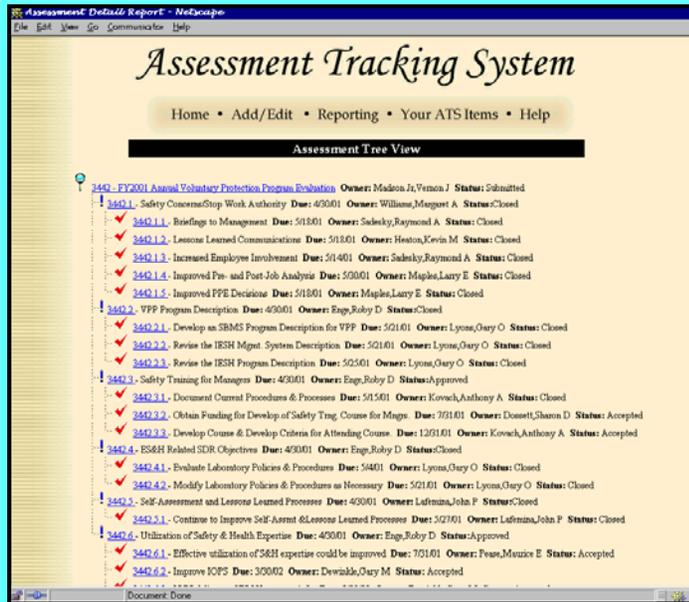
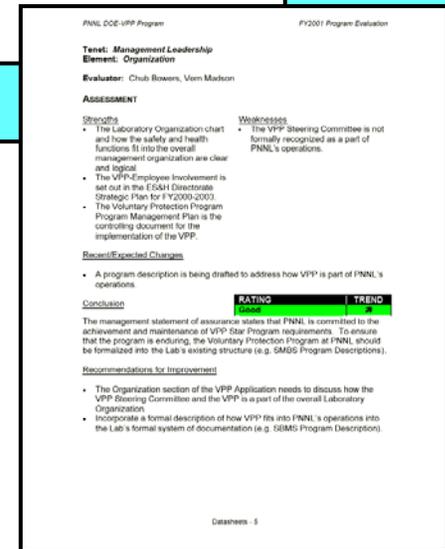
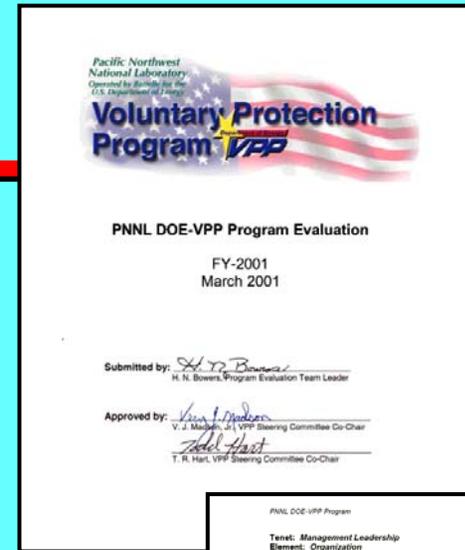


# Path Forward



# Annual Program Evaluation

- Process
- Template
- Tracking of actions
- Worker access/review/input



# Annual Program Evaluation

## - *Process*

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### ■ Team

- Worker representatives and safety & health professionals
- Trained & qualified as DOE-VPP evaluators

### ■ Approach

- Review & update Application
- Identify strengths, weaknesses, recent/anticipated changes
- Rate status and trend for each element
- Roll-up results at Tenet & Program levels

### ■ Action

- Review findings with stakeholders (e.g., workers & management)
- Formal tracking & close-out of action plan

 ***Continuous Improvement***

# Annual Program Evaluation - Template

## ■ Data Sheet for each Element

- Strengths
- Weaknesses
- Recent/anticipated changes
- Summary (rating & trend)

## ■ Roll-up

- Each Tenet & Program (overall)
- Color-coded (visual) scorecard

PNL DOE-VPP Program FY2001 Program Evaluation

**Tenet:** Management Leadership  
**Element:** Organization  
**Evaluator:** Chub Bowers, Vern Madison

**ASSESSMENT**

**Strengths**

- The Laboratory Organization chart and how the safety and health functions fit into the overall management organization are clear and logical.
- The VPP/Employee Involvement is set out in the ESH Director's Strategic Plan for FY2000-2003.
- The Voluntary Protection Program Management Plan is the consulting document for the implementation of the VPP.

**Weaknesses**

- The VPP Steering Committee is not formally recognized as a part of PNL's operations.

**Recent/Expected Changes**

- A program description is being drafted to address how VPP is part of PNL's operations.

**Conclusion**

The management statement of assurance states that PNL is committed to the achievement and maintenance of VPP Star Program requirements. To ensure that the program is enduring, the Voluntary Protection Program at PNL should be formalized into the Lab's existing structure (e.g. OMS Program Descriptions).

**Recommendations for Improvement**

- The Organization section of the VPP Application needs to discuss how the VPP Steering Committee and the VPP is a part of the overall Laboratory Organization.
- Incorporate a formal description of how VPP fits into the Lab's operations into the Lab's formal system.

RATING	TREND
Good	↑

PNL DOE-VPP PROGRAM EVALUATION SUMMARY - FY 2001

TENET/ELEMENT	ASSESSMENT SUMMARY	TREND
<b>Management Leadership</b>		
Commitment	Good	↑
Organization	Good	↑
Responsibility	Adequate	↓
Accountability	Adequate	↓
Resources	Good	↓
Planning	Good	↓
Contract Workers	Adequate	↓
Program Evaluation	Good	↓
Self-Correction	Good	↓
Employee Involvement	Adequate	↓
Degree and Manner of Involvement	Adequate	↓
Self-Correction	Adequate	↓
<b>Worksite Analysis</b>		
Preliminary Worksite Analysis	Good	↑
Comprehensive Worksite Analysis	Good	↑
Self-Inspections	Good	↑
Routine Hazard Analysis	Good	↑
Employee Reporting of Hazards	Adequate	↓
Accident Investigation	Adequate	↓
Trend Analysis	Adequate	↓
<b>Hazard Prevention &amp; Control</b>		
Professional Expertise	Good	↑
Safety & Health Rules	Good	↑
Personal Protective Equipment	Good	↑
Preventive Maintenance	Good	↑
Emergency Preparedness	Good	↑
Respirator Protection Program	Good	↑
Medical Programs	Good	↑
Occupational Safety & Health Programs	Good	↑
<b>Safety &amp; Health Training</b>		
Employees	Good	↑
Supervisors	Adequate	↓
Managers	Adequate	↓
<b>SUMMARY OF EVALUATION OF TENETS</b>		
TENET	ASSESSMENT SUMMARY	TREND
Management Leadership	Good	↑
Employee Involvement	Adequate	↓
Worksite Analysis	Good	↑
Hazard Prevention & Control	Good	↑
Safety & Health Training	Good	↑

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# Annual Program Evaluation

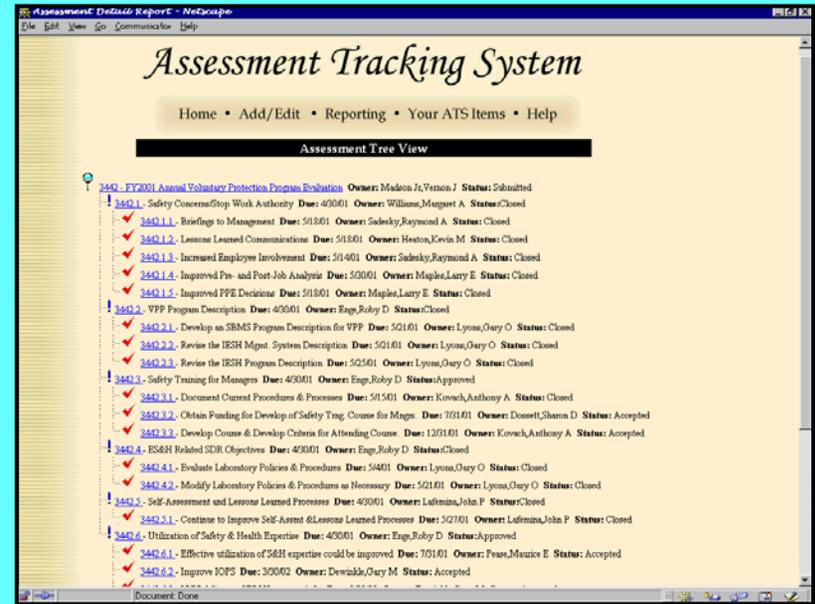
## - Action Tracking & Employee Involvement

### ■ Program Evaluation findings entered in Lab's Assessment Tracking System

- Action plan
- Action owners
- Due dates

### ■ Management & support groups monitor progress

### ■ All employees have access



# Summary

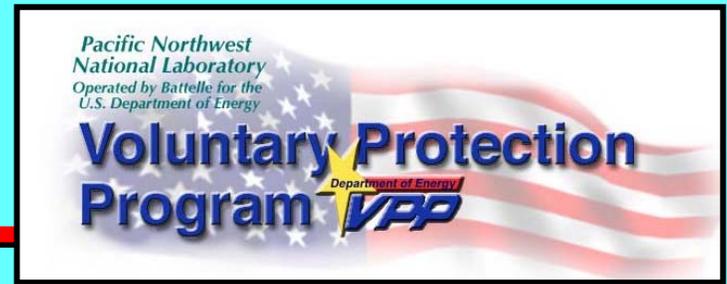
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- “Electronic” VPP Application is an efficient & effective way for PNNL to address VPP documentation requirements (*based on an existing “electronic” infrastructure*)
- Teamwork & commitment on the part of employees, management, & support workers is essential
- Dedication to ***continuous improvement*** is key to long term success

***Remember, it's about worker safety & health  
Not just VPP!***

# More information needed?

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## Contact us!

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