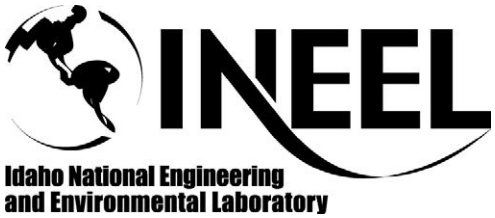

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PREPRINT

Communication – An Effective Tool For Implementing ISO 14001/EMS

Rachel W. Damewood
Bowen W. Huntsman

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COMMUNICATION—AN EFFECTIVE TOOL FOR IMPLEMENTING ISO 14001/EMS

Rachel W. Damewood
Bowen W. Huntsman
Idaho National Engineering and Environmental Laboratory (INEEL)
Idaho Falls, ID

ABSTRACT

The Idaho National Engineering and Environmental Laboratory (INEEL) received ISO 14001/EMS certification in June 2002. Communication played an effective role in implementing ISO 14001/EMS at the INEEL. This paper describes communication strategies used during the implementation and certification processes.

The INEEL achieved Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP) Star status in 2001. ISMS implemented a formal process to plan and execute work. VPP facilitated worker involvement by establishing geographic units at various facilities with employee points of contact and management champions. The INEEL Environmental Management System (EMS) was developed to integrate the environmental functional area into its ISMS and VPP. Since the core functions of ISMS, VPP, and EMS are interchangeable, they were easy to integrate.

Communication is essential to successfully implement an EMS. (According to ISO 14001 requirements, communication interacts with 12 other elements of the requirements.) We developed communication strategies that integrated ISMS, VPP, and EMS. For example, the ISMS, VPP, and EMS Web sites communicated messages to the work force, such as *"**VPP** emphasizes the **people** side of doing business, **ISMS** emphasizes the **system** side of doing business, and **EMS** emphasizes the systems to protect the **environment**; but they all define work, identify and analyze hazards, and mitigate the hazards."* As a result of this integration, the work force supported and implemented the EMS.

In addition, the INEEL established a cross-functional communication team to assist with implementing the EMS. The team included members from the Training and Communication organizations, VPP office, Pollution Prevention, Employee and Media Relations, a union representative, facility environmental support, and EMS staff. This cross-functional team used various communication strategies to promote our EMS to all organization levels and successfully implemented EMS activities through VPP geographic units.

In summary, the ISMS and VPP process at the INEEL provided the basic framework of management support and worker involvement to implement our EMS. A cross-functional communication team was established to facilitate the implementation with great success. Communication has been an effective tool for implementing an ISO 14001/EMS at the INEEL.

Introduction

The Idaho National Engineering and Environmental Laboratory (INEEL) received ISO 14001/EMS certification in June 2002. This certification satisfied the contract milestone for certification by June 30, 2002, and enhanced the INEEL's position as the Department of Energy's (DOE) lead environmental laboratory. The success of Environmental Management System (EMS) certification was facilitated by integrating EMS into the existing Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP)(Angle et al. 2002). More importantly, communication played an important role in implementing ISO 14001/EMS at the INEEL. This paper describes communication strategies used during the implementation and certification processes.

Integrated Safety Management System Implementation at the INEEL

All DOE contractors are required to implement an Integrated Safety Management System (ISMS) to achieve the objective of working safely. ISMS combines all the elements of environment, safety, and health into one system focused on working safely. The journey to operational excellence at the INEEL began in the fall of 1998. An extensive effort was made to implement the flowdown of standards and regulatory requirements to the facility level. By 2001, the INEEL implemented ISMS as a formal process to plan and execute work and involved the work force as the key ingredient to achieve safety excellence. Formal feedback mechanisms were established to improve the work planning and execution process and to promote continuous improvement. The five ISMS core functions are "**SIMPLE**" to remember (**Figure 1**):

- Scope the work
- Identify the hazards
- Mitigate the hazards
- Perform work within their controls
- Lessons learned, feedback, and continuous improvement.

The INEEL ISMS Phase II verification was completed in June 2000. The annual maintenance and update process has been in progress since 2001 to continuously improve the INEEL ISMS. The annual ISMS maintenance and update also serves to maintain VPP Star status.

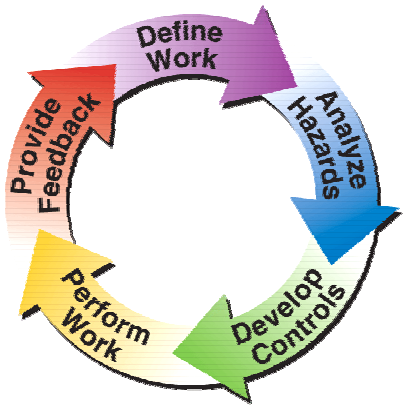

Figure 1. ISMS Core Functions.

Voluntary Protection Program Implementation at the INEEL

DOE has established a rigorous set of criteria for its safety program. When implemented, it results in a safety culture that promotes management leadership and employee involvement. INEEL initiated the Voluntary Protection Program (VPP) in 1995. VPP provided the INEEL with an appropriate means to initiate worker involvement based on the five key elements:

- Management commitment
- Employee involvement
- Work site analysis
- Hazard prevention and control
- Safety and health training.

The entire INEEL work force implements the VPP. Geographic units were established with employee points of contact and management champions. Twelve VPP units were established to more effectively implement the VPP and ensure that all employees are included (**Figure 2**). Each employee belongs to one of these units. These VPP units are the foundation of the INEEL's VPP infrastructure.

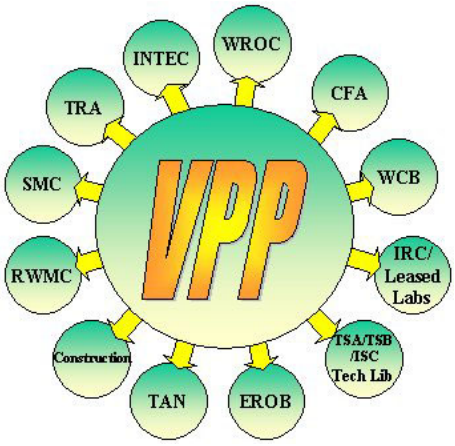

Figure 2. Twelve VPP Units at the INEEL.

INEEL received VPP Star status in 2001 and has been recognized by the DOE as having a highly effective safety and health program. The annual safety and health assessment has been conducted since 2002. In September 2002, the INEEL was recognized at the National VPPPA conference for its highly effective safety and health program and was presented with the DOE-VPP Star of Excellence award. The Star of Excellence award states that the INEEL is "a leader in safety and health performance" (INEEL 2003).

Environmental Management System Implementation at the INEEL

An Environmental Management System (EMS) is a systematic approach to work that protects the environment and complies with environmental requirements. The INEEL EMS was developed to integrate the environmental functional area into its ISMS and VPP. The 1999 DOE Idaho Operations Office (NE-ID) contract required the INEEL to implement an EMS.

The INEEL EMS is based on the international standard ISO 14001 and the five core functions of the ISMS. The 17 ISO 14001 elements follow the "Plan-Do-Check-Act" Process (**Figures 3 and 4**) (MGMT Alliances Inc. 1997 and Global Environment & Technology Foundation 1998). The EMS five core functions include:

- Environmental policy
- Planning ***(Plan)***
- Implementation and operation ***(Do)***
- Checking and corrective action ***(Check)***
- Management review ***(Act).***

Figure 3. "Plan-Do-Check-Act" Process.

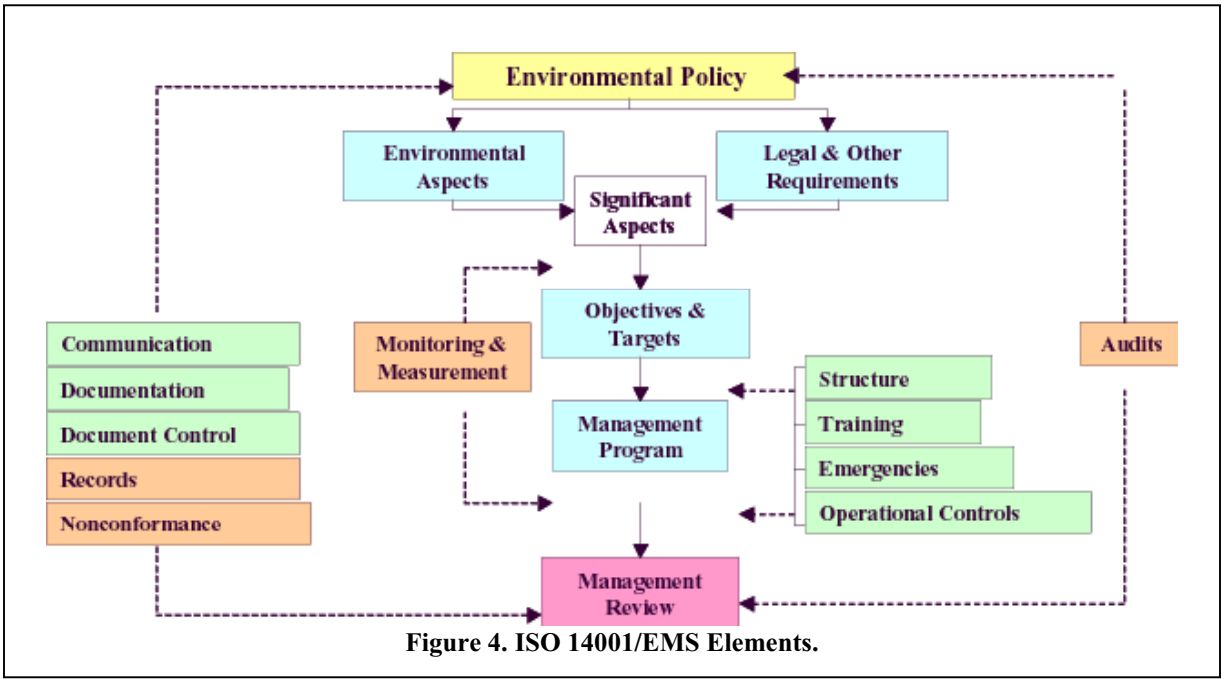

Figure 4. ISO 14001/EMS Elements.

Environmental Policy

The INEEL Environmental Policy presents the environmental commitments and guiding principles of the company. It states our commitment to environmental performance and continuous improvement. It is the basis for our entire EMS.

Plan

Planning focuses on identifying any potential hazards to the environment and controls. It includes legal and other requirements; environmental aspects (or potential environmental impacts) of our work and associated controls to

protect the environment; establishing environmental objectives and targets; and implementing management programs to support the objectives and targets.

Do
This is the implementation and operation phase. It includes establishing structure and responsibilities by developing roles, responsibilities, authorities, accountabilities, employee position descriptions, and training requirements; providing training to perform work; documenting the programs that make up the EMS; maintaining a document control process; maintaining processes and procedures to provide operational controls; and establishing an emergency preparedness and response process. The work is performed within the specified controls.

Check
This is the checking and corrective action phase. It includes integrated self-assessments, independent oversight, lessons learned, corrective actions, records management, and EMS auditing. The work is checked to ensure controls meet the needs and to ensure protection of the environment.

Act
Senior management reviews environmental performance and provides direction for future actions to promote continuous improvement. This is conducted on an on-going basis.

Communication Is Essential To Successfully Implement an Environmental Management System

Our contract with NE-ID required ISO 14001/EMS certification by June 2002. The preliminary work for EMS at that time was to align the existing systems with ISO 14001 elements. The progress was slow because achieving ISMS and VPP Star status was a pressing priority. By June 2001, INEEL achieved both ISMS and VPP Star status. The EMS was then expedited to integrate the environmental functional area into ISMS and VPP. The strategies to implement EMS at the INEEL were to utilize the existing infrastructure and framework established by ISMS and VPP with emphasis on the environmental function. The challenge was how to promote the EMS to a work force that suffered from "information overload" after the extensive effort of achieving ISMS and VPP status. In addition, communication is an important factor required by two-thirds of the elements in the ISO 14001 standard (**Table 1**). After analyzing the situation, it was very clear that communication had to be an essential factor in EMS implementation at the INEEL.

Table 1. ISO 14001 EMS CHECKLIST FOR REQUIREMENTS (Communication Related)

4.2 Environmental policy
How does the EMS communicate the policy to its employees and to the public?

4.3 Planning
4.3.2 Legal and other requirements
How does the EMS communicate legal and other requirements to employees?

4.3.3 Objectives and targets
How does the EMS communicate the company's objectives and targets to all levels of organization?

4.4 Implementation and operation
4.4.1 Structure and responsibility
How does the EMS communicate and document roles, responsibilities and authorities to facilitate effective environmental management?

4.4.2 Training, awareness and competence
How does the EMS communicate (or make aware) significant environmental aspects to those employees whose work could significantly affect the environment?

4.4.3 Communication
How does the EMS communicate between the levels of company organization?
How does the EMS communicate with inquires from 'external' parties?

4.4.6 Operational control
How does the EMS communicate relevant procedures and requirements to suppliers and contractors?

4.5 Checking and corrective action
4.5.4 Environmental management system audit
How does the EMS communicate information related to audits to management?

To involve employees from all disciplines, a cross-functional communication team was established to assist with implementing the EMS. The team included members from the Training and Communication organizations, VPP office, Pollution Prevention, Employee and Media Relations, union representation, facility environmental support, and EMS staff. This cross-functional team used various communication strategies to promote the EMS to all organization levels and successfully implemented EMS activities through VPP geographic units.

The cross-functional team recognized two important aspects of communication strategies. First, an identity needed to be created for the INEEL EMS—an INEEL EMS logo. This helped employees recognize the EMS when they saw the logo. Second, a visual display was needed to link the concept of EMS to the existing ISMS and VPP. This helped employees to associate the EMS with the already familiar ISMS and VPP.

A "Plan-Do-Check-Act" logo was developed to represent the principles of the INEEL EMS and to facilitate EMS communication to employees (**Figure 5**). It incorporated the ISMS core functions in the transparent background. The logo was used on EMS training and promotional materials. It has become a recognizable logo at the INEEL.

Since the core functions of ISMS, VPP, and EMS are interchangeable, it was easy to integrate EMS concepts into ISMS and VPP. We developed a visual display that integrated the ISMS, VPP, and EMS (**Figure 6**). The ISMS, VPP, and EMS Web sites communicated messages to the work force, such as "**VPP** emphasizes the **people** side of doing business, **ISMS** emphasizes the **system** side of doing business, and **EMS** emphasizes the systems to protect the **environment**; but they all define work, identify and analyze hazards, and mitigate the hazards." As a result of this integration, the work force supported and implemented the EMS. The rest of the paper describes various communication activities used during the EMS implementation and certification process.

Figure 5. Principles of the INEEL EMS.

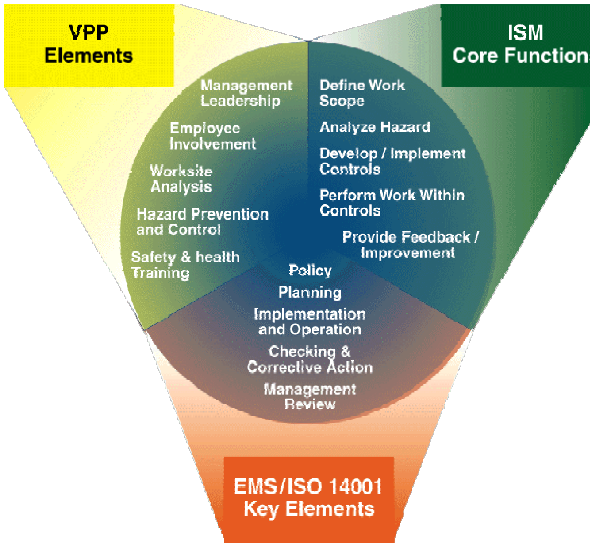

Figure 6. ISMS-VPP-EMS Logo.

Communication Activities for the Environmental Management System Certification Audit

As mentioned, the ISO 14001 communication team was established in September 2001 to prepare for the EMS certification audit in May 2002. The team developed a communication plan, which focused on establishing upper management support, employee buy-in, general announcement of EMS certifications, EMS training for all employees, aspect training, and homestretch activities for audit preparation.

Establishing upper management support and employee buy-in were the two critical elements to prepare for the EMS certification audit. The team started communication activities in these two areas eight months before the certification audit. The following is a summary of accomplishments:

- A management briefing was provided to the company president and Integrated Executive Council.
- Three ***iTalk*** messages *("ISO 14001 certification Environmental Management System"; "ISO 14001 certification will validate the INEEL's environmental excellence"; and "ISO 14001 audit is imminent; know what is expected of you")* were issued by the company president to all employees in October 2001,

January 2002, and April 2002. [***iTalk*** is the hard-copy medium for important INEEL messages, issued on an as-needed basis.]

- An ISO 14001 overview was presented to the Company Employee Safety Team (CEST). The Environmental Policy posters were sent to CEST members for distribution to Employee Safety Team (EST) members (**Figures 7 and 8**).

Figure 7. Environmental Policy.

Figure 8. Environmental Policy Poster.

- Union representation provided EMS presentations at facility VPP EST meetings and the union safety summit conference to promote employee awareness and support of ISO 14001 certification.

- An ***iNote*** message (*"ISO 14001 certification information"*) was distributed to all employees electronically. [***iNote*** is the INEEL electronic medium for sending all-employee messages.]

- ISO 14001 information was included in the ***Daily Constitutional*** (December 2001 issue). [***Daily Constitutional*** is the poster (8.5" x 11") for safety-related messages, issued bi-monthly by the INEEL VPP Program.]

- The EMS Web site was developed. ISM and VPP/ISM Web sites were updated with the ISO 14001 logo and the reference links.

- The "***Did You Know***" slide presentations were posted on the INEEL intranet: Part 1 and Part 2 in January 2002, and Part 3 in February 2002.

Two focused training courses were provided in early 2002. INEEL EMS/ISO 14001 training familiarized employees with the Environmental Policy and the EMS at INEEL. Environmental Aspects Overview Training was designed to help workers whose actions have the potential to significantly impact the environment to better understand the potential impact of their activity and the controls available to minimize the impacts.

The following "homestretch" activities were implemented three weeks before the certification audit to prepare for the audit and to help employees understand EMS requirements:

- Facility environmental leads and VPP EST members performed walkabouts to check the Environmental Policy postings at the INEEL facilities.

- Cafeteria personnel performed walkabouts to check the Environmental Policy postings at all cafeterias. They also initiated Environmental Policy awareness promotion activities during lunch hours at all cafeterias.

- An INEEL Environmental Policy awareness promotion was announced electronically to all employees. It included a brief EMS questionnaire for employees to fill out and send back to their VPP/EST chairpersons for drawings of various awards.

- Environmental Policy posters were displayed on INEEL buses to promote awareness, (**Figure 9**).

- As part of Earth Day celebration in April 2002, the INEEL liquid natural gas bus and compressed natural gas cars were displayed at the local shopping mall for public education of environmental-friendly alternative fuel vehicles. The Environmental Policy poster was also displayed on the bus to promote public awareness.

Figure 9. EMS Poster for INEEL Buses.

- EMS badge cards (**Figure 10**) and EMS Question and Answer Checklists (**Figure 11**) were mailed to all employees.

- A special ***Daily Constitutional*** *(April 2002, No. 10)* was issued on EMS/ISO 14001 (**Figure 12**).

- An ***iNote*** message (*"Reminder: ISO 14001 audit begins Monday"*) was sent to all employees one week before the audit to remind them of the Q&A checklists and the EMS badge cards.

- ISO 14001 messages were displayed on electronic (and outdoor) marquees during the audit week.

Through the on-going effort of implementing the EMS since 1998, the INEEL achieved official ISO 14001/EMS certification on June 17, 2002, by a third party auditor. INEEL is the sixth DOE site to achieve certification to the ISO 14001 standard and thus a federal agency leader with ISO 14001-certified facilities.

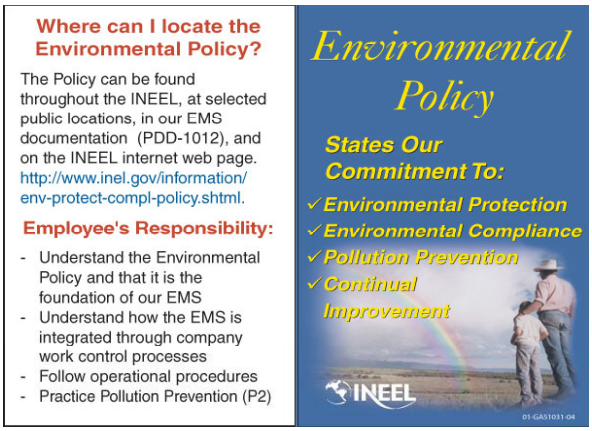

Figure 10. EMS Badge Card.

Environmental Management System (EMS)

☑ What is the INEEL Environmental Management System (EMS)?

Our EMS is a systematic approach to show we:

- Perform our work to ensure we protect the environment
- Comply with regulatory and other requirements
- Continue to improve.

We implement the EMS through the Integrated Safety Management System (ISMS). Our procedures implement the ISMS. So, when we follow our procedures, we also implement the EMS. When we implement our EMS, we:

- Define work
- Identify and analyze hazards to the environment
- Mitigate the hazards
- Work in a manner that protects the environment
- Comply with regulations.

☑ What is ISO 14001? What is the ISO 14001 certification audit?

ISO 14001 is an international standard for the design and accreditation of environmental management systems (EMS). The INEEL will undergo an ISO 14001 certification audit during the week of May 6th. An independent party will conduct the certification audit. It will be similar to our ISMS verification and our Voluntary Protection Program Star site review.

☑ What does ISO 14001 require?

ISO 14001 requires that we:

- Develop and maintain an environmental policy
- Develop and maintain a structured management system that implements the environmental policy
- Address the elements of the ISO 14001 standard.

Program Description Document (PDD)-1012, "Environmental Management System," describes these requirements.

Environmental Policy

☑ Are you aware of our Environmental Policy? Do you know where it is documented?

Our Environmental Policy applies to all employees. Our environmental policy is documented:

- In PDD-1012, "Environmental Management System"
- On posters displayed throughout the site
- On the INEEL Internet home page, which is available to employees and the public.

☑ What is our Environmental Policy? What are its key points?

Our Environmental Policy is the foundation of the INEEL Environmental Management System (EMS). It conveys our values and commitments to:

- Environmental protection
- Environmental compliance
- Pollution prevention (P2)
- Continual improvement.

☑ Are you aware of the importance of conformance with our Environmental Policy and our EMS requirements?

Conformance to our Environmental Policy and our EMS requirements means carrying out our work activities in a manner that protects human health and the environment, meets objectives and targets, and continously improves.

☑ How do you integrate the Environmental Policy into your work activities?

We integrate the Environmental Policy into our work activities by:

- Implementing environmental requirements and pollution prevention into our work planning
- Following our work control processes and procedures.

☑ Which documents do you use to implement environmental requirements into your day-to-day work?

MCP-3480, "Environmental Instructions for Facilities, Processes, Materials and Equipment," implements environmental requirements into our day-to-day work. The work instructions in MCP-3480 are also integrated with our work control documents (STD-101, MCP-3571, and MCP-3562.)

☑ What are our roles and responsibilities in implementing the Environmental Policy?

Our roles and responsibilities are to:

- Understand that we have an Environmental Policy, the importance of complying with it, and where to find it
- Understand that the Environmental Policy integrates with the work control process and documents (STD-101, MCP-3562, and MCP-3571)
- Follow procedures
- Prevent pollution
- Participate in required training.

☑ How is environmental-related information communicated in our work area?

Environmental information is communicated through:

- Pre-job walkdowns
- Plan-of-the-day meetings
- Staff meetings
- Company communications such as *iNotes, iTalk,* and the INEEL Intranet and Internet home pages
- Other established operational communication methods.

Figure 11. EMS Question and Answer Checklist

☑ What document describes the EMS and our Environmental Policy?

PDD-1012, "Environmental Management System," describes our EMS. It references processes and procedures that implement our EMS and the Environmental Policy. Some of those documents that PDD-1012 references include:

- PDD-1029, "Pollution Prevention Program (P2)"
- STD-101, "Integrated Work Control Process"
- MCP-3562, "Hazard Identification, Analysis and Control Of Operational Activities"
- MCP-3571, "Independent Hazard Review"
- MCP-3480, "Environmental Instructions for Facilities, Processes, Materials And Equipment"
- MCP-598, "Corrective Action System"
- LST-96, "Environmental Aspects for INEEL Work Activities"
- PDD-11, "Records Management"
- Detailed Work Plans
- PEMP
- Program Execution Guidance Documents.

Most of the documents referenced in PDD-1012 existed before we identified them as part of our EMS. However, they were not integrated. PDD-1012 ties them together, shows how we integrate them into our work processes, and shows how we comply with the ISO 14001 EMS standard.

Pollution Prevention

☑ What does P2 stand for?

P2 stands for "**p**ollution **p**revention."

☑ What is the Pollution Prevention Program?

The Pollution Prevention Program is an integral part of our work planning and implementation process to protect the environment. We protect the environment by:

- **Reducing** waste generated
- **Reusing** material instead of disposing of it
- **Recycling**
- **Rebuying** recycled products.

Environmental Aspects of Work Activities

☑ What are my responsibilities if my work can significantly impact the environment?

If my work can impact the environment, I must:

- Recognize the environmental aspects and specific hazards of my work activities
- Know how to implement appropriate controls to mitigate those hazards.

Those responsibilities were covered in the required facility-specific aspects training (TRN 939) completed in March.

LST-96, "Environmental Aspects of INEEL Work Activities," Appendix D lists work activities that can significantly impact the environment, and Appendix E lists the job titles/codes of employees at the affected site areas.

☑ What is LST-96, "Environmental Aspects of INEEL Work Activities"?

LST-96 identifies:

- Three categories of INEEL work activities, which are:
  1. The work activities that have a **positive** impact on the environment
  2. The **general** work activities that have **recognized environmental aspects and environmental requirements** (described in MCP-3480)
  3. The **specific** work activities that could result in a **significant** environmental impact.
- The environmental aspects of each activity
- The criteria used to determine if an activity could result in a **significant** environmental impact
- The significant environmental aspects of work activities
- The principal **controls** used to mitigate the potential significant environmental impacts.

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INEEL Environmental Management System (EMS) Question and Answer Checklist

ISO 14001 Certification Audit

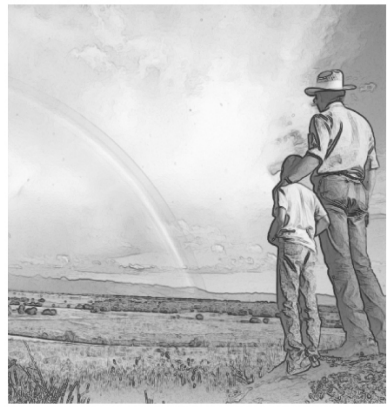

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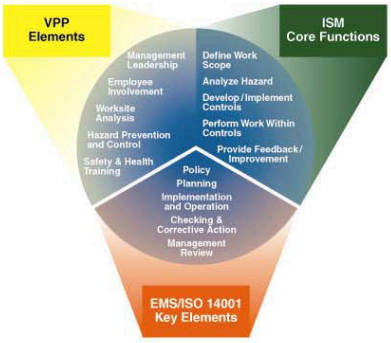
Figure 11. EMS Question and Answer Checklist (Cont.)

the Daily Constitutional

April 29, 2002
No. 10

It is all about "Doing Work Safely" and "Protecting the Environment"

Like VPP, that brings worker safety involvement to the ISMS, the Environmental Management System (EMS) implements the environmental policy and integrates environmental protection and compliance into the company ISMS and culture.



What is our Environmental Management System (EMS)?

Our EMS is a systematic approach to performing work that integrates environmental protection, environmental compliance, pollution prevention, and continual improvement into work planning and execution. Our EMS implements the company environmental policy. We will certify our EMS by an independent acknowledgment (ISO 14001 certification) that our program meets the standard.

The company Environmental Policy expresses our values and commitments to:

- **Environmental Protection**
- **Environmental Compliance**
- **Pollution Prevention**
- **Continual Improvement**

Idaho National Engineering and Environmental Laboratory
VPP Star Site

The Policy can be found throughout the INEEL, selected public locations, in our EMS documentation (PDD-1012), and on the INEEL internet web page http://www.inel.gov/information/env-protect-compl-policy.shtml.

What is my role in getting our EMS/ISO 14001 certified?

- **Understand the Environmental Policy and that it is the foundation of our EMS**
- **Understand how the EMS is integrated through company work control processes**
- **Follow operational procedures**
- **Practice pollution prevention (P2)**
- **Understand the impact your work activity could have on the environment.**

When will the ISO 14001 Registration Team be on site for the Certification audit?

May 6th through the 10th

What will they be doing?

- **Interviewing employees to determine their understanding of the Environmental Policy**
- **Visiting Site facilities to verify we have controls and have implemented them**
- **Observing work activities that have potential significant environmental impact and interviewing those relevant employees.**

In a nutshell . . .

It is all about doing work safely, following requirements, protecting the environment and continually improving.

Send in pictures or statements of *"Why I Work Safely"* or submit your *"Safety Stories"* – both on & off-the-job to **VPP Program Office at "ID:bwh" or Fax 6-0665**

01-GA51322-10

Figure 12. Daily Constitutional – Special Issue on EMS/ISO 14001.

Communication Activities for the Environmental Management System Semiannual Surveillance Audits

Semiannual EMS surveillance audits are required to verify that INEEL continues to conform to the ISO 14001 standards. INEEL had three EMS surveillance audits since its EMS certification in June 2002. The communication activities to prepare for these surveillance audits were greatly simplified because of the successful EMS promotional activities during the certification audit. It is evident that ISO 14001 concepts have been integrated into ISMS, VPP, pollution prevention, and other environmental compliance-related activities. Environmental policy-related questions were included in the VPP annual assessment.

"Pollution Prevention on Wheels" was sent to all employees to promote pollution prevention practices as an important aspect of the INEEL Environmental Policy. Environmental Policy badge cards are provided to new employees as part of Environment, Safety and Health (ES&H) training during the new hire orientation. Facility ES&H personnel have promoted the Environmental Policy and awareness of the significant environmental activities at their facilities by signing the enlarged Environmental Policy and facility significant activity posters to show their commitment to environmental protection (**Figures 13-15**). Facility involvement in preparing for EMS surveillance audits has provided synergy among the INEEL facilities. "Did You Know - ISO 14001/EMS information" slide presentations were created by one facility and later shared with others facilities to promote EMS awareness. Facility VPP employee safety teams continuously distribute ISO 14001 information. EMS awareness has been included in facility safety bulletins and safety celebrations. Continuous improvements, supported by senior management, are routine ongoing events at the INEEL.

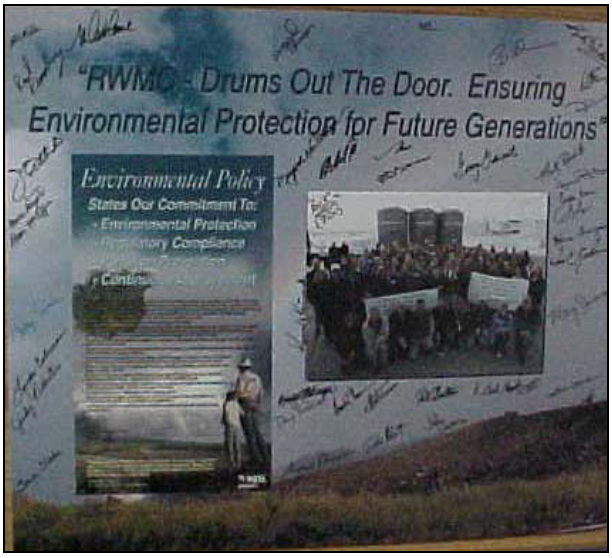


Figure 13. Policy Poster signed by RWMC Employees

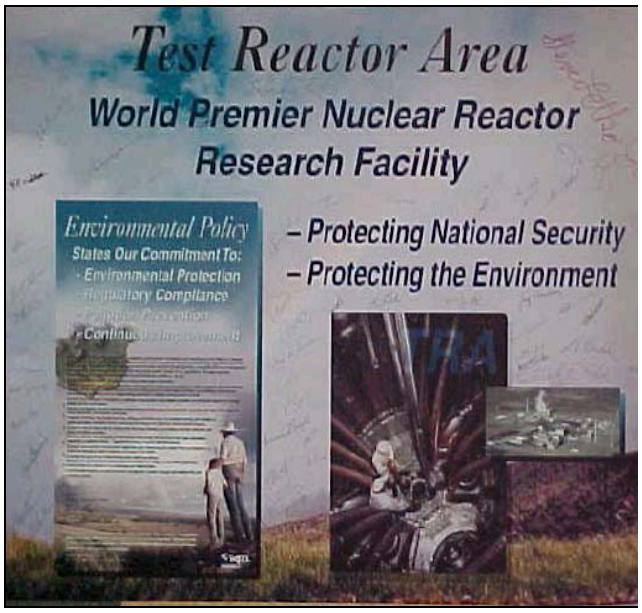


Figure 14. Policy Poster signed by TRA Employees.

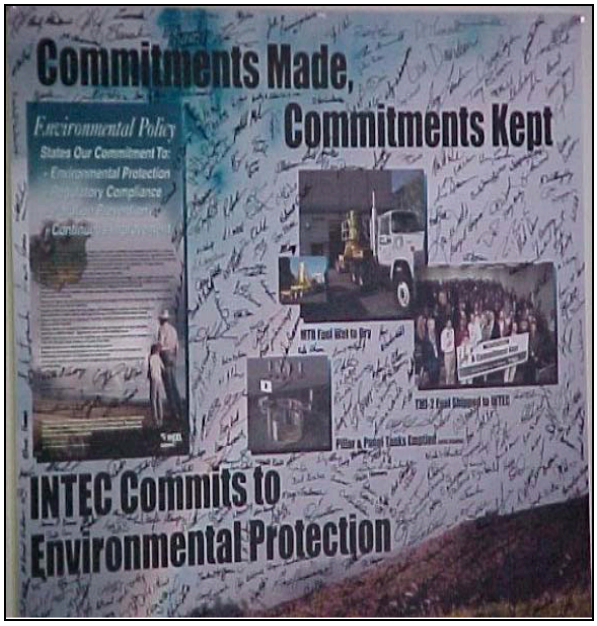


Figure 15. Policy Poster signed by INTEC Employees.

Conclusions

ISO 14001 is designed for continual improvement of the EMS by integrating with other systems. The INEEL implemented the EMS by utilizing the existing infrastructure and framework of ISMS and VPP with emphasis on the environmental function and by using effective communication strategies.

The ISMS provided the INEEL a formal work planning and execution processes with control and feedback mechanisms to promote continuous improvement. VPP involved workers in the safety culture by establishing geographic units.

The INEEL faced challenges in promoting EMS to a work force that suffered from "information overload" following an extensive effort of achieving ISMS and VPP status. Therefore, communication was essential to implement the EMS at the INEEL. Key to successfully implementing the EMS at the INEEL includes:

- Establishing a cross-functional communication team to involve employees from several disciplines
- Utilizing the geographic VPP units to communicate with all employees and to facilitate the bottom-up implementation of the EMS
- Creating an INEEL EMS logo to help employees recognize EMS
- Developing a visual display that links EMS to the existing ISMS and VPP to help employees associate EMS with the already familiar ISMS and VPP
- Using various communication activities to promote EMS awareness to all organization levels.

As a result of effective communication strategies, the INEEL received ISO 14001 certification in June 2002 and has successfully passed several surveillance audits.

References

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