# REMARKS

## PRESENTED AT THE
## 2000 WORKSHOP
## ON
## INTEGRATED SAFETY MANAGEMENT (ISM)
## - LESSONS LEARNED -
## PASCO, WASHINGTON
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## INTRODUCTION

I am glad to be able to participate once again with all of you who are engaged in making the concept of Integrated Safety Management (ISM) a reality. I wish to share with you several observations relative to the state of ISM and what I would encourage as a focus for your continued efforts.

All of you can rightfully share a sense of satisfaction in what has been accomplished to date and, hopefully, be sufficiently encouraged by the evidence of a strengthened program to stay steadily on course. While rightfully taking pride in your accomplishments, you should not delude yourselves that your job is done. Implementation of safe working practices is a never-ending task. Safety is a laurel you must win every day.

First, let me say that from a retrospective look at ISM implementation during the past five years, I remain convinced that the functions and principles of ISM are sound and practical. With respect to the principles, experience has shown the importance of worker involvement in hazardous work planning, particularly at the activity level. Some have rightfully included worker involvement as an additional ISM "principle." Such action is totally in keeping with the lessons learned, the theme of this workshop. Furthermore, measures to ensure safety at the workplace are the first barriers in a defense-in-depth approach for protection of the environment and the public.

It has often been said of the ISM program that to be successful it must be both a "top down" and "bottoms up" program. Implementation efforts to date are confirming this observation. Most rapid and effective implementation is being achieved where both senior management and workers performing hazardous tasks are deeply committed and involved.

The Department of Energy (DOE) senior management has maintained a constant course relative to ISM over the past five years. This has been sustained even though DOE experienced relatively frequent changes in top level administrators during this period. The pace toward complex-wide implementation was significantly accelerated during the past several years by commitment and initiatives of Secretary Bill Richardson and Deputy Secretary T.J. Glauthier. These included the following:

ORGANIZATIONAL

- The assignment of the Deputy Secretary as DOE's Chief Operating Officer;
- The establishment of a Field Management Council chaired by the Deputy Secretary;
- The issuance of a top-level Function, Responsibilities and Accountability Manual (FRAM);
- The establishment of Chief Operating Officers (COOs) in support of Program Secretarial Officers (PSOs); and
- The continued support of the Safety Management Integration Team (SMIT).

DIRECTIVES

- Modifying DOE's Acquisition Regulations (DEAR) to require inclusion of ISM in major acquisitions;

- Embedding ISM requirements in contracts for maintenance and operating (M&O) contracts; and

- Issuing guidance on expectations for ISM descriptions and implementing programs.

IMPLEMENTATION

- Establishing a target goal for complex-wide implementation by September 2000 and providing the resources to support implementation efforts; and

- Accomplishing the change-out of major operating contractors without disruption of ongoing safety practices or significant loss in momentum in upgrade efforts.

As many of you know, the organization of DOE was significantly altered by Congress during the past year. The National Nuclear Security Agency (NNSA) was established. Additional changes in senior management can be expected with the administration change in the coming months. Such changes, notwithstanding, the Defense Nuclear Facilities Safety Board (Board) is confident that ISM will continue to be the overarching framework for safe management of DOE's hazardous work. The Board certainly intends to work toward that end with the new DOE management.

Management commitment is a necessary condition for effective ISM but it is not sufficient. Worker involvement in planning and performance of hazardous work is very much required. It has been rewarding to see the labor work force responding to the opportunities provided them for participating in the functions of ISM as applied at the activity level. Who can better look to safety in the workplace than the worker himself?

One continuing challenge for implementation of integrated safety management is to achieve integration: more specifically the challenge is to encourage initiatives that foster improved protective practices for workers, for the public and for the environment, yet keep such efforts coupled and complementary. Furthermore, hazards at nuclear facilities are not just due to materials that are radioactive but also often involve materials that are chemically hazardous.

A considerable number of protective statutes have been enacted over the years since the Atomic Energy Act of 1954. Some of the key ones are shown in Figures 1-5. Unfortunately, this body of statutory requirements does not make for an easily defined compliant program. It represents a body of statutes developed by parts and regulated by parts.

Over the years, government agencies, industry and standards groups have responded in various ways to statutory requirements for protection of the workers, the public, and the environment. Notably among them are:

| | |
|---|---|
| OSHA: | Voluntary Protection Program (VPP) |
| DOE: | Environmental Management System (EMS)<br>Voluntary Protection Program (VPP)<br>Radiation Protection Program (RPP)<br>Enhanced Work Planning (EWP)<br>Nuclear Criticality Safety (NCS) |
| ISO: | Environmental Management (ISO-14001) |
| CCPS: | Responsible Care |

Their relationship to ISM is illustrated by Figure 6. EMS is a new environmental initiative required of all Federal agencies by Executive Order 13148 dated April 21, 2000. It calls for an environmental management system "based upon the Code of Environmental Management Principles for Federal Agencies and/or another appropriate environmental system framework." The deadline is Year 2005.

Each of these single sector programs has merit. Each has a constituency. They have much in common, including recognized need for top management commitment, attention and systematic assessment of hazards, and establishment of safety controls.

A challenge for ISM has been to bring these programs directed at separate protective sectors into a complementary whole. The objective is to have one coherent, site-wide safety management system, not a multiplicity of systems that compete for management attention.

Board and Board staff interaction with the sites has lead us to believe that we share with DOE site management and DOE/EH a common perspective relative to these single sector initiatives. However, it is not so clear that subject matter specialists of field and contractor ES&H organizational units are consistently acting accordingly.

The Board has noted with interest the recent exchanges among the Richland Field Office, DOE/NNSA and DOE/EH relative to the DOE-VPP program. Of particular interest was the recommendation that DOE contractors with DOE Field Office support initiate a DOE VPP Participants Association (VPP PA) patterned after the OSHA participant program. The objective is to foster line input to the VPP qualification criteria and application evaluation process.

Since DOE contractors and site Federal managers have not only the prime responsibility for safety but also have the experience of implementation, such a participant's action program could be highly valuable. It would be very consistent with the feedback and improvement function of ISM.

The question can be rightfully raised, however, "why limit the Participants Action Program only to the VPP?" Why not the entire safety management framework of DOE? In my view, action by DOE to institutionalize Integrated Safety Management will not be complete unless there is established a clear, regularized process of feedback and improvement from those responsible for planning and performing hazardous work to those assigned the lead for developing and issuing safety directives.

The Deputy Secretary of Energy targeted September 30, 2000, as a goal for all sites to have verified the implementation of a basic Integrated Safety Management program. This goal had been largely met, although baseline implementation will not be achieved at several sites before the Spring of 2001.

The Deputy Secretary of Energy by memorandum issued on September 28, 2000, identified a number of post-September activities upon which improvement activities should focus in the coming year. These are:

SUSTAIN & IMPROVE ISM SYSTEMS

- Conduct effective line oversight and contract management
- Make annual updates meaningful
- Strengthen activity level work planning and worker involvement
- Continue independent oversight of ISM implementation

INTEGRATE KEY PROCESSES WITH ISM

- Apply ISM throughout the Facility Life Cycle
- Strengthen Application of ISM in the Budget Process
- Improve Use of Feedback and Improvement Mechanisms

The Board has encouraged these DOE actions. In addition, the Board by Recommendation 2000-2, Vital Safety Systems, advised DOE of the need to give greater attention to the operational status and projected, reliable, operational life times of these vital engineered systems. DOE has accepted the recommendation and recently (October 31, 2000) provided the Board with a plan for performing assessments.

During the coming year, the Board will be focusing much of its ISM attention on these 2001 activities.

A major challenge for the Board in the coming months will be gaining the confidence and support of the new DOE administrators in maintaining the course and the momentum of the ISM program.

In summary, I encourage you to:

- Satisfy the criteria established for the September 30, 2000, implementation goals;

- Address the activities identified by Deputy Secretary Glauthier in his September 28, 2000, memorandum for sustaining and improving post-September 2000 programs;

- Target work planning at the activity level for enhanced worker protective programs;

- Target vital safety systems to ensure high reliability of operation should they be called upon to function;

- Bring safety programs directed at single sector targets into a complementary whole; and

- Move aggressively to institutionalize processes for effective/feedback from those responsible for defining and executing safety measures to those attempting to capture and issue new safety practices and directives.

You can look to the Board to remain a strong supporter and advocate for your endeavors.

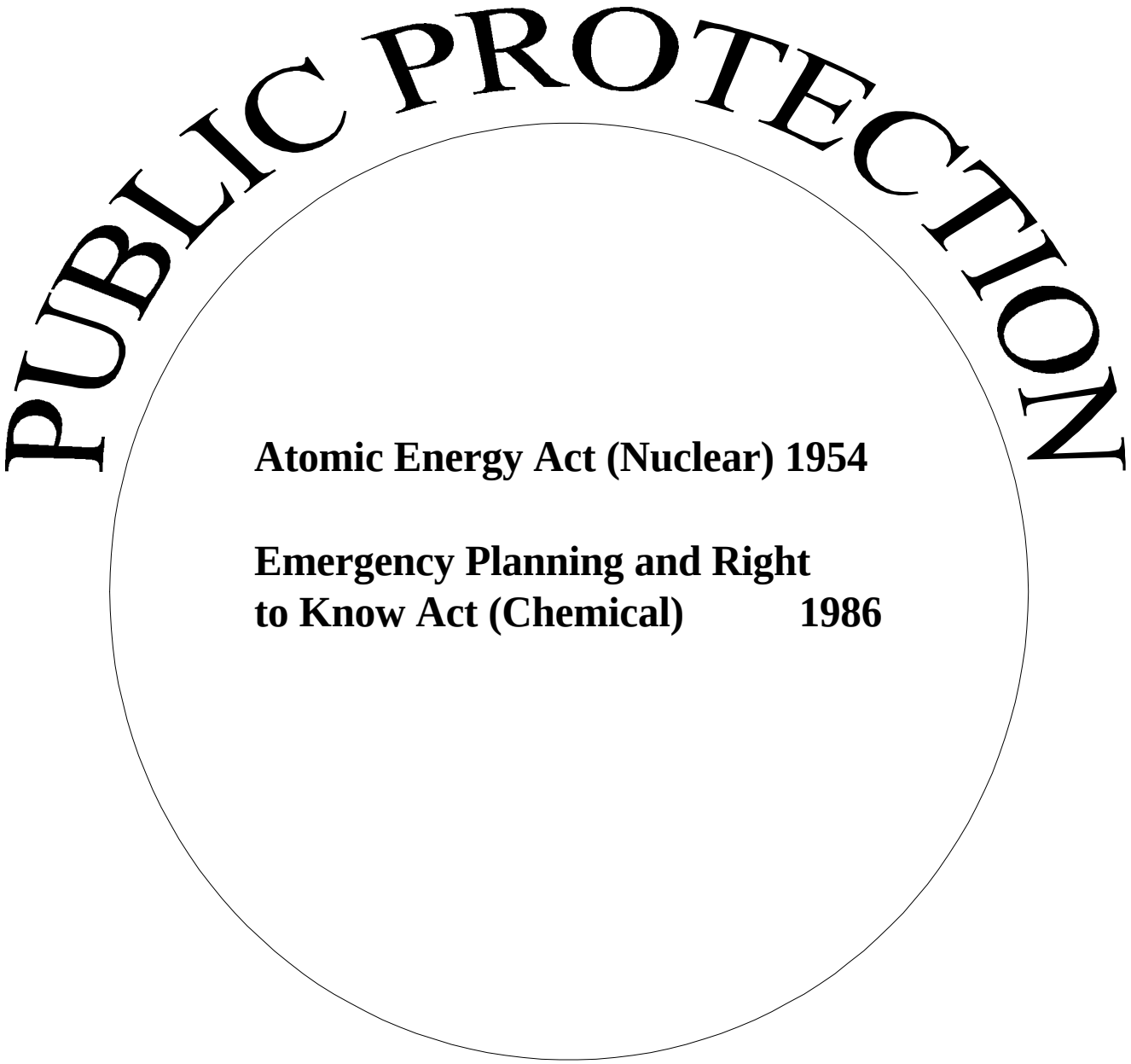

PUBLIC PROTECTION
Atomic Energy Act (Nuclear) 1954
Emergency Planning and Right to Know Act (Chemical) 1986

Figure 1

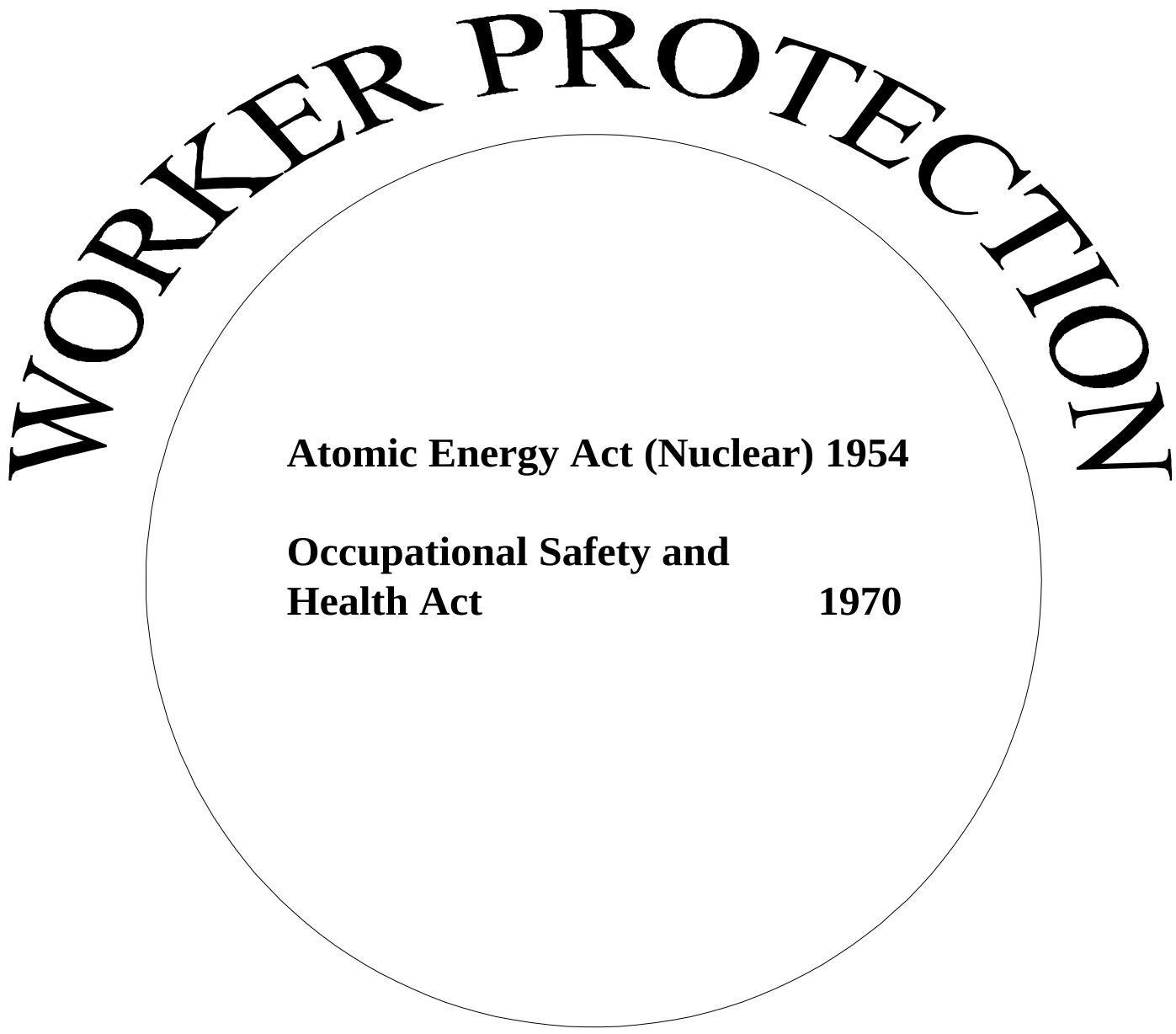

WORKER PROTECTION
Atomic Energy Act (Nuclear) 1954
Occupational Safety and Health Act 1970

Figure 2

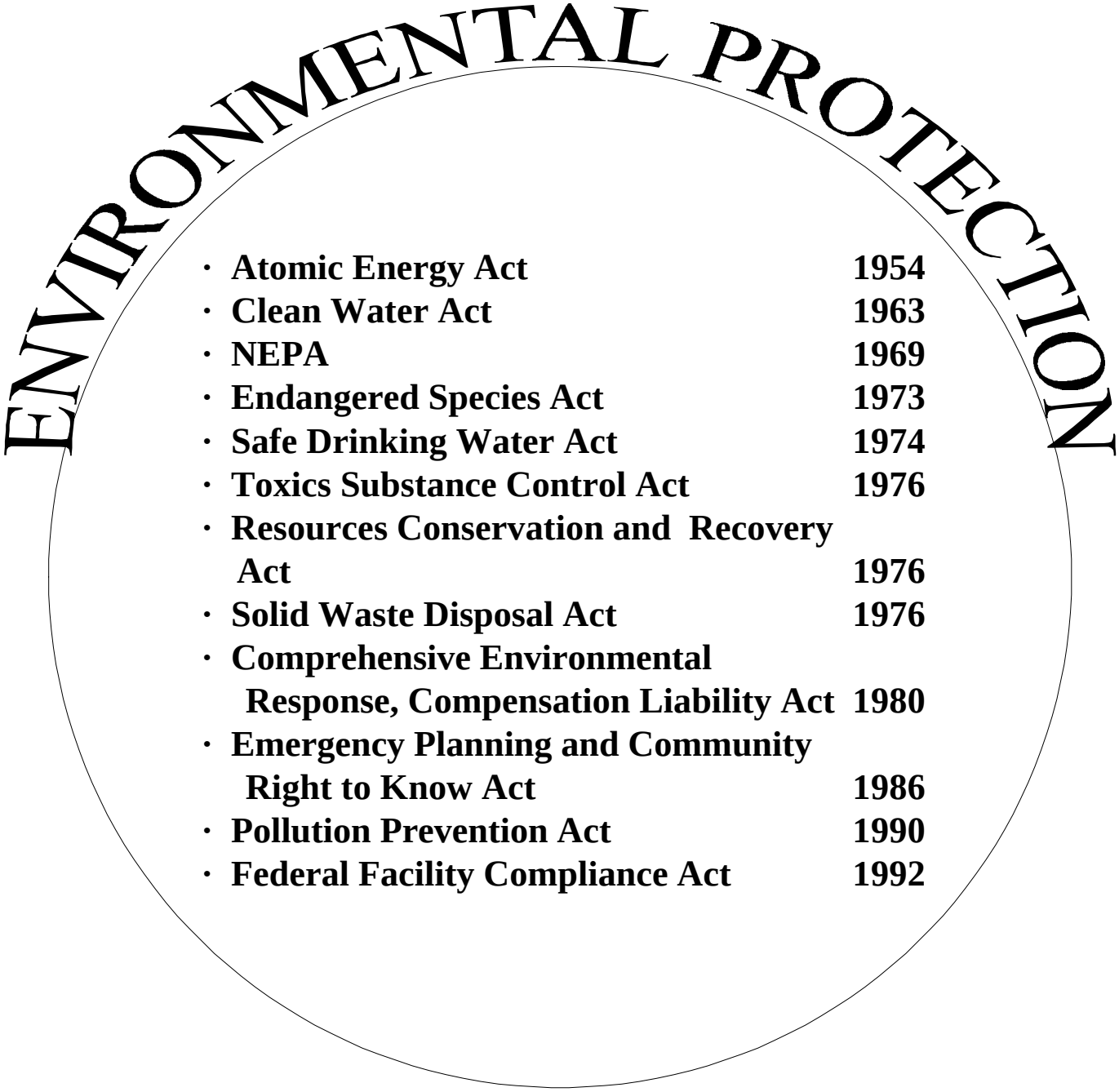

ENVIRONMENTAL PROTECTION
· Atomic Energy Act 1954
· Clean Water Act 1963
· NEPA 1969
· Endangered Species Act 1973
· Safe Drinking Water Act 1974
· Toxics Substance Control Act 1976
· Resources Conservation and Recovery Act 1976
· Solid Waste Disposal Act 1976
· Comprehensive Environmental Response, Compensation Liability Act 1980
· Emergency Planning and Community Right to Know Act 1986
· Pollution Prevention Act 1990
· Federal Facility Compliance Act 1992

Figure 3

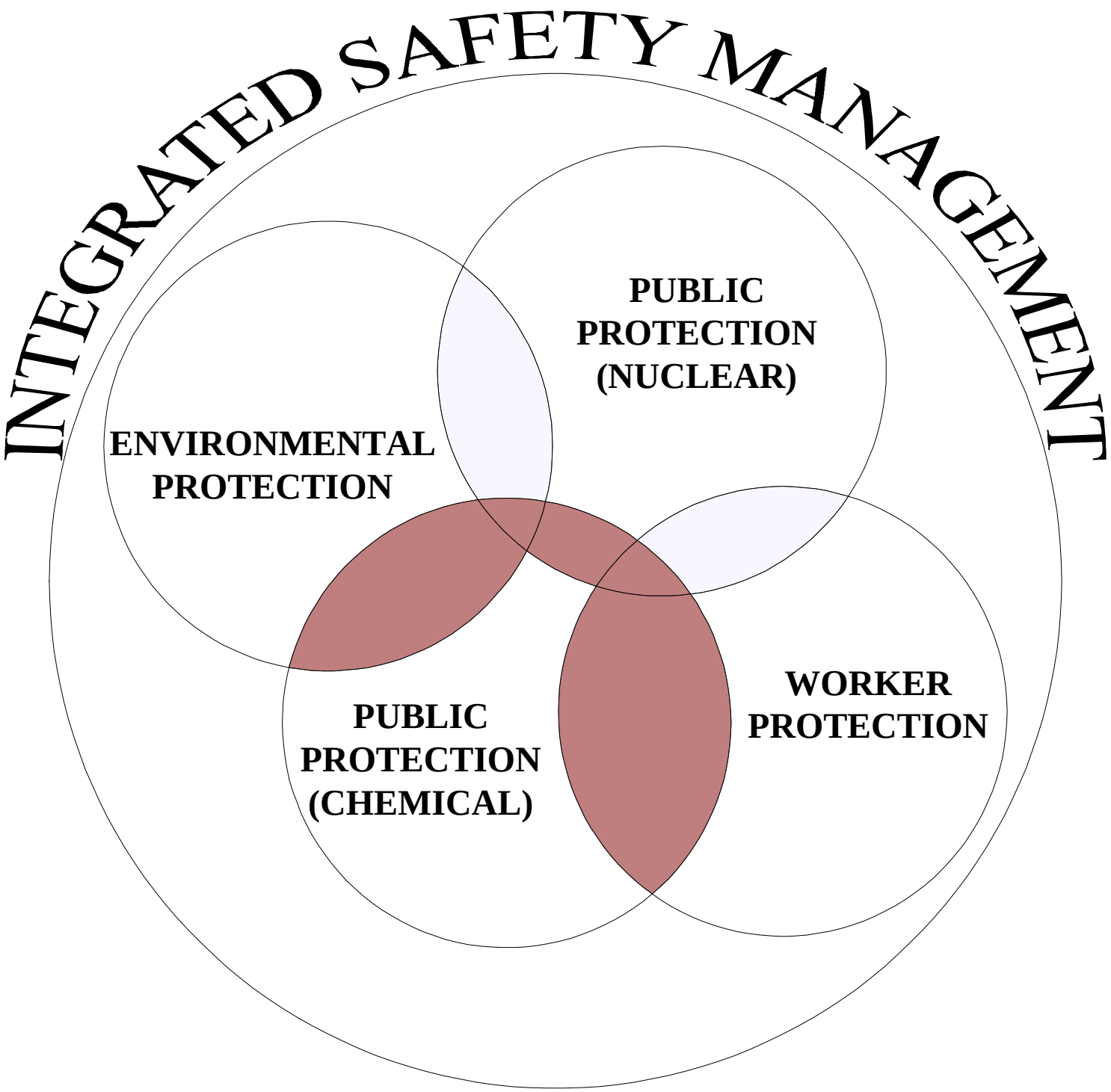

INTEGRATED SAFETY MANAGEMENT
PUBLIC PROTECTION (NUCLEAR)
ENVIRONMENTAL PROTECTION
PUBLIC PROTECTION (CHEMICAL)
WORKER PROTECTION

Figure 4

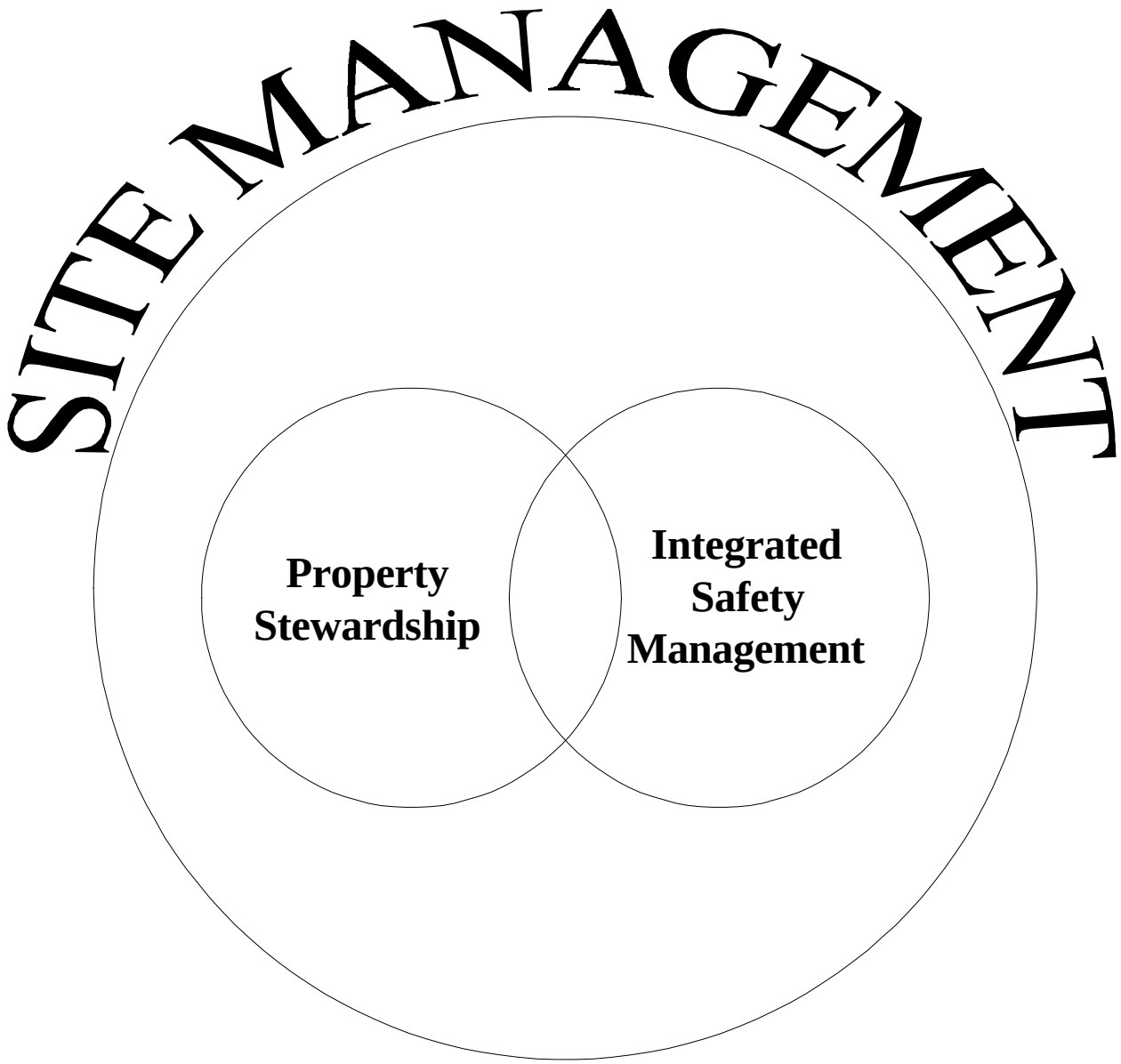
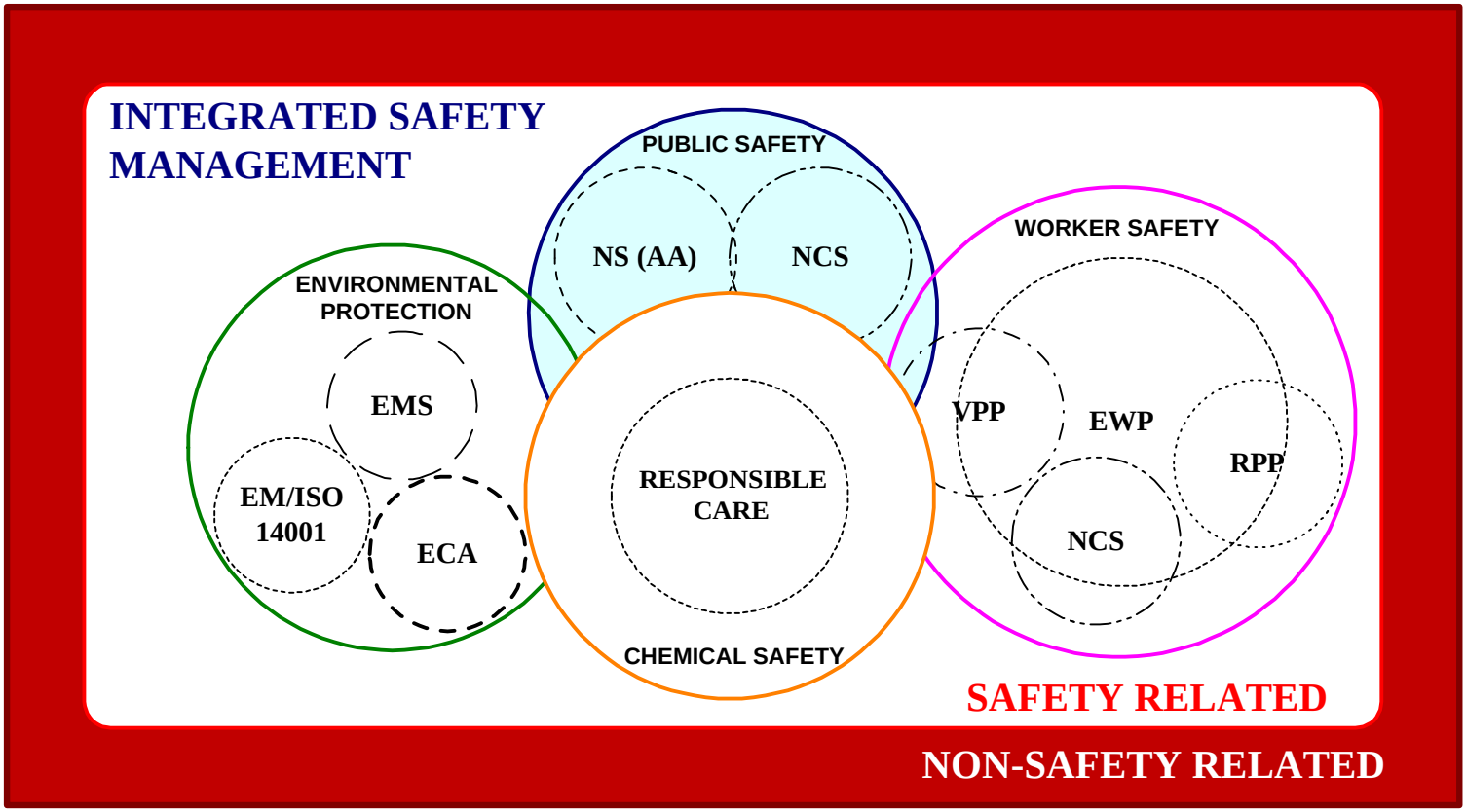

SITE MANAGEMENT
Property Stewardship
Integrated Safety Management

Figure 5

# Site Management

DOE Management Directives




**EWP = Enhanced Work Planning**
**VPP = Voluntary Protection Program**
**NS(AA) = Nuclear Safety/Authorization Agreement**
**EMS = Environmental Management System (Executive Order 13148)**

**ECA = Environmental Compliance Agreements**
**ISO 14001 = Environmental Management System**
**RPP = Radiological Protection Program**
**NCS = Nuclear Criticality Safety**

Figure 6