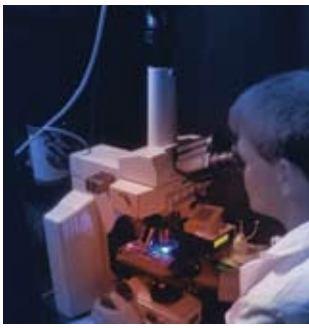
ENVIRONMENTAL PROTECTION AT THE IDAHO NATIONAL LAB



The Department of Energy requires its contractors to comply with all applicable laws and regulations.

Beginning in the early 1970s, with a deeper appreciation for the way industrial operations can affect our health and the environment, this nation began changing the way business and government operate. Several new laws were enacted to protect workers, the public and the environment. These laws govern how we do business at the INL.

The first layer of protection is the U.S. Department of Energy. The DOE requires its contractors who operate at the Idaho National Laboratory to comply with all applicable laws and regulations. In addition, the DOE has a set of requirements described in Federal Regulations and DOE directives that control the impacts of work activities. The DOE can take action against contractors if they fail to comply.

The DOE and its contractors are also accountable to our environmental regulators. These regulators include the state of Idaho, and the U.S. Environmental Protection Agency, among others.

Following is a summary of the important environmental laws that govern activities at the INL and how they are enforced.

MAJOR LAWS INCLUDE:

Performing missions while safeguarding the environment

The **National Environmental Policy Act** of 1969, amended in 1975 and 1982. This law is the national law for environmental planning. It declared a national policy which encourages harmony between humans and their environment and established a process for informed federal agency decision making with the aim of minimizing impacts to the environment. This process established by this law requires federal agencies proposing actions having potential to significantly impact the environment (such as constructing a new facility) to:

- Identify and analyze environmental consequences of proposed federal actions in comparable detail to economic and operational analyses;
- Assess reasonable alternatives to agency-proposed actions;
- Document the environmental analysis and findings; and
- Make environmental information available to public officials and citizens before agency decisions are made.

This law ensures decision makers have the environmental information needed to make informed decisions on proposed federal actions. This law requires that the effects of federal actions on the environment are considered equally with economic, technical, and other factors associated with the proposed action.

Federal regulations to accomplish this law require one of three levels of environmental analysis and documentation:

Categorical Exclusions apply to those actions that do not normally have the potential for significant impacts and do not require a detailed level of environmental analysis, such as an environmental assessment or an environmental impact statement.

Environmental Assessments are an intermediate level of environmental analysis. These are conducted when an action does not fit an existing Categorical Exclusion, or its potential for significant impacts is unknown.

Environmental Impact Statements are the most detailed level of environmental analyses, conducted for actions that may have significant impacts.

Cleaning Up Waste

The **Comprehensive Environmental Response, Compensation and Liability Act** of 1980, amended in 1986 by the Superfund Amendments and Reauthorization Act. This law governs cleanup of sites where hazardous materials have been released to the environment. At a government site like the INL, the government must pay for the cost of cleaning up past releases.

This law is a risk-based law. That means that federal agencies, along with regulators (in our case, the state and EPA), study whether a specific release site poses an unacceptable risk to the public or the environment. If so, the federal agency and regulators look at what potential cleanup remedies are available to reduce those risks to acceptable levels. For example, potential remedies for a spill of hazardous material in the soil might involve digging up the spill, or taking some action like a cap or cover over the spill to prevent the hazardous material from moving into the water table.

This law also requires public involvement, which means that DOE and our regulators listen to the public's input before making a final decision on the best remedy for a particular site.

Steps in this law's cleanup decision-making process are as follows:

Remedial investigation – A remedial investigation (RI), conducted by the lead agency, determines the nature and extent of the problem presented by the release.

Feasibility study – The lead agency undertakes a feasibility study (FS) to develop and evaluate options for remedial action. The remedial investigation and feasibility study are collectively referred to as the "RI/FS."

Record of decision – After completing the RI/FS, an appropriate cleanup option is selected by DOE, EPA and the state. It is published as a document known as the Record of Decision (ROD).

Remedial design – Includes the technical analysis and procedures that follow the selection of a remedy for a site.

Remedial action – Involves actual construction or implementation of a cleanup.

If a hazardous substance will remain at the site, a review of the remedial action is required five years after implementation of the remedy. This review evaluates the protectiveness of the remedial action and, for long-term remedial actions, the technology effectiveness and specific performance levels.

Managing hazardous materials

The **Resource Conservation and Recovery Act** was passed in 1976 as an amendment to the Solid Waste Disposal Act of 1956, amended in 1984. This law is enforced by the state of Idaho via the Idaho Hazardous Waste Management Act and authority delegated from the EPA.

The intent of this law is to prevent spills and encourage recycling.

This law is divided into four interrelated programs, addressing:

- hazardous waste;
- solid, primarily non-hazardous waste;
- underground storage tanks; and
- medical waste.

While the **Comprehensive Environmental Response, Compensation and Liability Act** deals with cleaning up inactive and abandoned hazardous materials sites, the **Resource Conservation and Recovery Act** deals with wastes from current processes that are generated, stored, transported, treated, or destined for disposal or recycling.

Protecting our air

The **Clean Air Act** of 1970, amended in 1977 and 1990. This law limits the amount of air pollution that government or industry can release into the air. These limits are set to protect people and the environment.

Keeping our water safe

The **Safe Drinking Water Act** of 1974, amended in 1986 and 1996. This law requires protection of drinking water and its sources. It authorized the U.S. Environmental Protection Agency to set national health-based standards for drinking water, to protect people from naturally-occurring and man-made contaminants.

Court-enforceable agreements. As part of the requirements to comply with environmental laws, DOE and the state of Idaho, and in some cases the EPA, entered into several agreements that govern activities at INL and provide a framework for legal compliance. These are the **Federal Facilities Agreement and Consent Order**, the **Site Treatment Plan** and the **Idaho Settlement Agreement**.

The **Federal Facilities Agreement and Consent Order** outlines how the INL will comply with **Comprehensive Environmental Response, Compensation and Liability Act**. It sets up a process for DOE to work with its regulators to safely execute cleanup of past release sites at the INL.

The **Site Treatment Plan** is an agreement between DOE and its regulators on how the INL will – in compliance with the laws of the nation and the state – manage hazardous wastes stored on site that can't be treated and disposed quickly.

The **Idaho Settlement Agreement** established timelines for DOE to treat and/or remove specific radioactive and hazardous wastes and spent nuclear fuel now stored at the INL. All of the above agreements are enforceable through penalties established in the agreements and through the courts.

Idaho INL Oversight Office. In 1989, the Idaho Legislature established a comprehensive oversight program to oversee DOE activities in Idaho. Around that time several other states hosting DOE facilities established state offices with similar oversight functions. The program is in the Idaho Department of Environmental Quality's INL Oversight and Radiation Control Division. INL Oversight developed an effective monitoring program to help evaluate the effects of the INL on public health and the environment, and to share information with the public.