

**INTERACTIONS OF THE NAEG INFORMATION
SUPPORT PROJECT WITH OTHER PROJECTS**

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**Nevada Applied Ecology Group
Plutonium and Other Transuranics Information Conference
Las Vegas, Nevada
February 12-13, 1976**

***Operated by Union Carbide Corporation for the Energy Research and Development Administration.**

Proceedings of the Nevada Applied Ecology Group Plutonium and Other Transuranics
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ABSTRACT

In the past year the Information Support Project to the Nevada Applied Ecology Group has interacted with many other research projects on the transuranics and other radionuclides. Group interactions through symposiums, workshops, and responding to search requests have proven to be mutually beneficial. The NAEG Information Support Project will draw on the information resources of the Oak Ridge National Laboratory to produce a bibliography of the radionuclides (other than the transuranics) of interest to the Nevada Test Site.

PROGRESS

The major objective of the Information Support Project to the Nevada Applied Ecology Group (NAEG) is to inform NAEG contractors of all the developments and techniques in their areas of interest. In the past year the Information Support Project has, while pursuing this objective, interacted with many other research projects on the transuranics and other radionuclides. Mutual benefits arising from these interactions have accrued to both groups, especially in the case of conference and workshop interactions. The staff of the NAEG Information Support Project has relayed to the appropriate NAEG contractor, as often as possible, the information gained at conferences. We inform the NAEG contractor when we hear about a presentation at a meeting or

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a study being done that seems to coincide with the contractor's interests. We either send the contractor a preprint of the presentation or we offer to send the pertinent information so that the NAEG contractor can contact other researchers in his field. In the process of providing the most up-to-date information, we have found all NAEG researchers did not receive announcements of meetings with presentations related to their fields because they did not belong to the society sponsoring the meeting. The computerized data base of the Information Support Project has provided a mechanism for generating distribution lists for conferences on transuranium elements since it can be machine searched to generate a directory of current researchers. The names of the NAEG personnel and contractors will always be on the Information Support Project's generated distribution lists.

During July and October of last year, the Information Support Project was demonstrated at two workshops with a computer terminal connected via dial-up telephone lines to the Oak Ridge National Laboratory IBM 360/75. The terminal utilized an on-line search and retrieval program to access the data base on the Environmental Aspects of the Transuranics. These two workshops were: 1) the National Commission on Radiation Protection (NCRP) Committee #31 (Plutonium) Workshop held in Seattle, Washington, and 2) the Workshop on the Biological Effects and Toxicity of Plutonium 239 and Radium 226 held in Sun Valley, Idaho. These demonstrations gave non-NAEG researchers and decision makers the benefit of an information resource that had been directed and supported by the NAEG for the preceding four years. The quick response of the computer terminal and breadth and depth of the data base on the Environmental Aspects of the Transuranics were impressive to those new to automated, specialized data bases. This was the first time an on-line information resource had been used as a time-saving device at a committee meeting at which standards were being formulated.

The Information Support Project has been informing NAEG researchers of

requests in their areas of interest. This is a means of keeping the NAEG investigators informed of new projects being proposed and new research being initiated as well as giving the NAEG researchers an opportunity to help the Information Support Project to answer the requests with more current and detailed data. Responding to search requests is another way information support groups interact.

The NAEG Information Support Project draws on the information resources of the Information Division and the Information Center Complex of Oak Ridge National Laboratory (ORNL) for selection of documents for inclusion in the data base on the Environmental Aspects of the Transuranics. Table 1 gives the data base available for searching at ORNL. We select new additions of interest to the Information Support Project by use of a profile or search procedure stored in the computer to search new magnetic tapes of these data bases available at ORNL. Use of these large-scale, automated data bases is only one of the ways the data base selects new documents. Being on the distribution lists for new documents is a much quicker way because the documents are available to be entered into the data base much sooner.

Several nontransuranium radionuclides on the Nevada Test Site will be considered by the NAEG in the near future in relation to decontamination efforts. The radionuclides so far identified for which information is desired are: cobalt 60, ruthenium 102, silver 108, antimony 125, cesium 137, europium 152, 154, and 155, zinc 65. A draft bibliography of these nuclides in relation to soil movement, plant uptake, and resuspension has been compiled by the Information Support Project using a variety of computerized data bases. Table 2 gives a list of the computerized data bases built by the Ecological Sciences Information Center from which this bibliography was drawn. The large-scale, automated data bases available at ORNL were searched as well. This bibliography and the machine-searchable data base compiled as a basis for the bibliography are a logical foundation for a more extensive effort and may provide the literature background for making research decisions.

Table 1. Data bases available for searching at ORNL

Non-ORNL data bases

Nuclear Science Abstracts

National Agricultural Library Data Base

Government Research and Development Reports (NTIS)

Biological Abstracts

Chemical Abstracts

Bio-Research Index

Searchable Physics Information Notices

Information Center Complex data bases

Toxic Materials Information Center Data Base

Environmental Mutagenesis Data Base

Energy Abstracts for Policy Analysis

Energy R and D Inventory Data Base

**Table 2. Data bases built by the Ecological Sciences
Information Center in the subject area of radioecology**

Date base	Years of literature covered	Abstracted	Indexed
Environmental Aspects of the Transuranics	1948 - 1976	yes	yes
Radionuclide Movement in Soils and Uptake by Plants	1948 - 1975	yes	yes
Klement & Schultz Radioecology Bibliographies	1962 - 1974	no	yes
Personal Literature Collections of ORNL Environmental Scientists & Publications by ESD Researchers	1956 - 1974	yes	yes
Behavior of U and Th in Th Fuel Cycle	1941 - 1975	yes	yes

Our selection of material for the data base depends on research plans for the coming year as well as present interests. Please let the Information Support Project know when your research direction changes or when you anticipate new information needs so that the Information Support Project can be ready with complete answers when you need them. The information from documents is abstracted with the needs of the NAEG contractors in mind. Each year more detailed data is abstracted for you as we become more aware of your anticipated information needs.

PLANNED ACTIVITIES

The new data base on the radionuclides other than transuranics on the Nevada Test Site will be expanded to meet the needs of the NAEG, and input of information to the data base on the Environmental Aspects of the Transuranics will continue. The fifth and sixth bibliographies of the data base on the Environmental Aspects of the Transuranics were published in 1975 and the seventh is in press. Two additional bibliographies are planned for this fiscal year. Special bibliographies on resuspension phenomena, decontamination methods and effects, and/or transport of the transuranics in the terrestrial environment are possible if the need is shown. The Information Support Project will continue to keep the interests of the NAEG as a first priority, but this service is contingent on our awareness of current interests.