

**Finding of No Significant Impact  
Environmental Assessment  
of the  
Carlsbad Environmental Monitoring & Research Center  
Carlsbad, New Mexico**

**AGENCY:** U.S. Department of Energy

**ACTION:** Finding of No Significant Impact

**SUMMARY:** The U.S. Department of Energy (DOE) has prepared an Environmental Assessment (EA), DOE/EA-1081, to assess potential impacts of a proposal to continue funding the Carlsbad Environmental Monitoring & Research Center (the Center).

Operation of the Center would meet the DOE need for independent monitoring and assessment of environmental impacts associated with the planned disposal of transuranic waste at the DOE Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. The purpose of this monitoring would be not only to detect concentrations of environmental pollutants that are likely to adversely affect human health and the environment, but also to detect changes in concentrations below levels likely to affect human health or the environment in the vicinity of WIPP. This basic research along with the development of improved environmental monitoring techniques by the Center will give DOE additional knowledge regarding the movement of pollutants in the environment and could help DOE to improve its waste management operations in the future. The Center would contain laboratories to analyze chemical and radioactive materials typical of potential contaminants that could occur in the environment in the vicinity of the WIPP site or other locations. The facility also would have bioassay facilities to measure radionuclide levels in the general population and in employees of the WIPP.

Based on evaluation in the Environmental Assessment, the DOE has determined that the proposed action is not a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321, *et seq.* Therefore, the preparation of an Environmental Impact Statement is not required.

**Addresses and Further Information:**

Single copies of the Environmental Assessment and further information about the proposed project are available from:

Mr. Harold Johnson, NEPA Compliance Officer  
U.S. Department of Energy  
Carlsbad Area Office  
101 West Greene Street  
Carlsbad, NM 88220  
Phone: (505) 234-7349

For further information regarding the DOE NEPA process, contact:

Ms. Carol M Borgstrom, Director  
Office of NEPA Oversight (EH-25)  
U.S. Department of Energy  
1000 Independence Ave., S.W.  
Washington, D.C. 20585  
Phone: (202) 586-4600 or leave a message at (800) 472-2756

**Background:** The Center was established in 1991 and is funded through a DOE grant. DOE funding has been used primarily to establish environmental monitoring programs in the Carlsbad area, to evaluate air and soil samples collected near the WIPP, and to plan the future activities of the Center. The Center has been conducting limited operations from rented commercial office space in Carlsbad, New Mexico.

**Proposed Action:** The proposed action would involve continuation of DOE funding for the Center. While DOE is not funding construction of the planned Center facility, operation of that facility is dependent upon the continuation of funding. To implement the proposed action, the Center initially would construct a facility of approximately 2,300 square meters (25,000 square feet). The facility and parking lot would occupy approximately 1.2 hectares (3 acres) of a tract of land (of approximately 8.9 hectares [22 acres]) which was donated to New Mexico State University (NMSU) for this purpose.

**Alternatives Considered:** In addition to the no action alternative, which would discontinue DOE funding of the Center and thereby eliminate programs to independently monitor and assess impacts of the WIPP program, the Department considered continued sponsorship of the Center operations at facilities constructed other locations or at existing facilities.

If the Center's funding was discontinued, DOE would need another means of assessing impacts associated with transuranic waste disposal at the WIPP. Existing buildings do not have the type of laboratory facilities needed for the Center's tests and monitoring studies. Construction of suitable facilities at alternative locations would create impacts similar to those of the proposed action, but cause an indeterminate delay in the availability of the Center's services due to the need to obtain additional funding to purchase another site.

**Environmental Impacts:** The proposed action would take place on approximately 8.9 hectares (22 acres) of land. The Center's facilities and parking lot would occupy approximately 1.2 hectares (3 acres). The total land area that would be impacted by construction activities is expected to be approximately 2 hectares (5 acres).

Construction activities would generate noise and dust. Noise and air emissions resulting from construction of the building would be equivalent to those from any medium-scale construction project in the area, and would have only minor, temporary effects. These impacts would be temporary and should have no substantial effect on the surrounding community. No long-term impacts from noise or dust are expected once the facility becomes operational.

Once the laboratory is fully operational, routine laboratory sample processing may generate small quantities of chemical and radiological emissions. Sample processing would take place within laboratory ventilation system enclosures that exhaust air outdoors. Emission levels including radiological emissions are not expected to exceed New Mexico Environment Department standards.

As an additional precaution, radiological materials would be filtered. Air emissions are expected to have no discernible impact on the environment or human health.

The impact to local traffic would be minimal. The increase in traffic over a 24-hour period is expected to be 1.25 percent, which can easily be accommodated by existing streets. The probability of a vehicular traffic accident involving a vehicle from the Center would be very remote. For example, based on the average truck accident rate for the U.S. of 3.1 accidents per 10,000,000 kilometers (6.21 million miles), the likelihood of an accident involving the mobile bioassay laboratory would be approximately 1 in every 667 years or 0.0015 accidents per year. The mobile bioassay laboratory would contain no radioactive or hazardous materials that could be released to the environment if it were to be involved in a traffic accident.

The rate of water use, sanitary waste disposal, and solid waste generation would be typical for a facility of this type and would be less than for a number of single family residences of similar total square footage. The Center also would generate small amounts of hazardous chemical wastes and low-level radioactive wastes that would be transported by a commercial service to an existing permitted disposal facility.

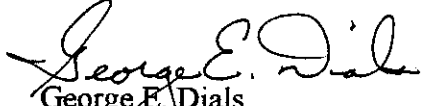
The construction site was surveyed for plant and animal species and historic and cultural resources. No historical sites, archeological resources, or cultural resources were found. No species present at the proposed construction site are listed as threatened, endangered or sensitive species nor would construction activities disturb any such species. The proposed action is expected to have little impact on the natural environment.

**Cumulative Impacts:** The proposed action is expected to have minimal impacts on the surrounding community. The Center would be located in the vicinity of the New Mexico State University Carlsbad campus, the Guadalupe Medical Center, and the Radiation Oncology Center. None of these facilities release any radioactive materials. There are some chemical emissions from the New Mexico State University chemistry laboratory, but these emissions are even smaller than those from the Center. The combined impacts of chemical emissions from the Center and New Mexico State University would be essentially the same as from the Center alone.

The Center is also a potential location for the National Park Service National Cave and Karst Research Institute. The Institute would further scientific research, education, and management policies dealing with Karst and cave management. The Institute would have the same or even less impact than the Center because no chemicals (except those used in the photographic laboratory) and no radionuclides would be used in operating the Institute.

**Determination:** Based on the analysis in the EA, I conclude that the proposed action is not a major Federal action significantly affecting the human environment within the meaning of the National Environmental Policy Act. Therefore, an Environmental Impact Statement is not required for the proposed action.

Issued at Carlsbad, N.M. this 10<sup>th</sup> day of October, 1995.

  
George E. Dials  
Manager  
Carlsbad Area Office