Education, National Assessment Governing Board, Suite 825, 800 North Capitol Street NW., Washington, DC, from 8:30 a.m. to 5 p.m. Roy Truby, *Executive Director, National Assessment Governing Board.* [FR Doc. 95–25557 Filed 10–13–95; 8:45 am] BILLING CODE 4000–01–M

DEPARTMENT OF ENERGY

Notice of Certification of the Radiological Condition of the Baker and Williams Warehouses Site, New York, NY, 1991–1993

AGENCY: Office of Environmental Management, Department of Energy (DOE).

ACTION: Notice of certification.

SUMMARY: The Department has completed remedial action to decontaminate warehouses (Buildings 513–519, 521–527, and 529–535 West 20th Street) in New York, New York, and the certification docket is available. Two of the three warehouses were found to contain radioactive surface contamination from short-term storage of uranium concentrates for the Manhattan Engineer District (MED). Radiological surveys show that the site now meets applicable requirements for unrestricted use.

ADDRESSES:

- Public Reading Room, Room 1E–190, Forrestal Building, U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585
- Public Document Room, Oak Ridge Operations Office, U.S. Department of Energy, Oak Ridge, Tennessee 37831.

FOR FURTHER INFORMATION CONTACT: James W. Wagoner II, Director, Off-Site/ Savannah River Program Division, Office of Eastern Area Programs, Office of Environmental Management (EM– 421), U.S. Department of Energy, Washington, DC 20585, (301) 903–2531 Fax: (301) 903–2461.

SUPPLEMENTARY INFORMATION: The Department's Office of Environmental Management has implemented a remedial action project at the former Baker and Williams Warehouses Site, 513–535 West 20th Street, New York, New York, as part of the Formerly Utilized Sites Remedial Action Program (FUSRAP). The objective of the program is to identify and clean up or otherwise control sites where residual radioactive contamination remains from activities carried out under contract to the Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC) during the early years of the Nation's atomic energy program. In June 1990, the Baker and Williams Warehouses Site was designated for cleanup under an expedited protocol.

During the early 1940s, the former Baker and Williams Warehouses Site was a delivery point for uranium for subsequent distribution to U.S. Government facilities. Since the 1940s, the warehouses have been leased by several businesses.

At DOE's request, in 1989 and 1991, representatives of the Environmental Survey and Site Assessment Program of Oak Ridge Associated Universities (now known as the Oak Ridge Institute for Science and Education (ORISE)) conducted designation surveys of the property. The surveys indicated that the site contained residual radioactive contamination from MED/AEC activities. In 1991, ORISE conducted characterization surveys of Buildings 521-527 and 529-535 and accessible surfaces in Building 513–519. Surface scans of Building 529-535 did not identify any residual contamination. Remedial actions at Buildings 521–527 and 513-519 were conducted by Bechtel National, Inc., from April 1 through April 26, 1991, and from May through July 1993, respectively.

Post-remedial action surveys have demonstrated, and DOE has certified, that the subject property is in compliance with DOE residual radioactive contamination criteria and standards, which are established to protect members of the general public and occupants of the site and to ensure that future use of the property will result in no radiological exposure above applicable guidelines to the general public or the site occupants. These findings are supported by the DOE Certification Docket for the Remedial Action Performed at the Baker and Williams Site in New York, New York, 1991-1993. Accordingly, this property is released from FUSRAP.

The certification docket will be available for review between 9:00 a.m. and 4:00 p.m., Monday through Friday (except Federal holidays) in the U.S. Department of Energy Public Reading Room located in Room 1E–190 of the Forrestal Building, 1000 Independence Avenue, S.W., Washington, D.C. Copies of the certification docket will also be available in the DOE Public Document Room, U.S. Department of Energy, Oak Ridge Operations Office, Oak Ridge, Tennessee.

The Department through the Oak Ridge Operations Office, Former Sites Restoration Division, has issued the following statement: Statement of Certification: Baker and Williams Warehouses Site Former MED Operations

The U.S. Department of Energy (DOE), Oak Ridge Operations Office, Former Sites Restoration Division, has reviewed and analyzed the radiological data obtained following remedial action at the Baker and Williams Warehouses site, (Block 692; Lots 15, 19, and 23; New York County. Based on analysis of all data collected, DOE certifies that the following property is in compliance with DOE radiological decontamination criteria and standards. This certification of compliance provides assurance that future use of the property will result in no radiological exposure above applicable guidelines established to protect members of the general public or site occupants.

Property owned by Mr. Rouhollah Kalimian: Baker and Williams Warehouses, 513–535 West 20th Street, New York, New York 10011.

Issued in Washington, DC on October 5, 1995.

James Owendoff,

Deputy Assistant Secretary for Environmental Restoration.

[FR Doc. 95–25592 Filed 10–13–95; 8:45 am] BILLING CODE 6450–01–P

Record of Decision Dual Axis Radiographic Hydrodynamic Test Facility

AGENCY: Department of Energy. **ACTION:** Record of decision.

SUMMARY: The Department of Energy (DOE) is issuing this Record of Decision (ROD) regarding the DOE's proposed Dual Axis Radiographic Hydrodynamic Test (DARHT) facility at Los Alamos National Laboratory (LANL) in northern New Mexico. DOE has decided to complete and operate the DARHT facility at LANL while implementing a program to conduct most tests inside steel containment vessels, with containment to be phased in over ten years. The environmental analysis to support this decision was issued by DOE in the August 1995, DARHT Facility Final Environmental Impact Statement (EIS). DOE/EIS-0228, which identified the Phased Containment Option of the Enhanced Containment Alternative as DOE's preferred alternative. DOE has decided to implement the preferred alternative. DATES: This ROD is effective immediately. On January 27, 1995, DOE was enjoined from further procurement or construction of the DARHT facility pending completion of the DARHT EIS

and this ROD. Actions to implement this ROD will not occur unless and until the injunction is dissolved; DOE will seek immediate dissolution of the injunction.

ADDRESSES: Requests for copies of the DARHT EIS or this ROD should be addressed to: Ms. Elizabeth Withers, NEPA Compliance Officer, Los Alamos Area Office, Department of Energy, 528 35th Street, Los Alamos NM 87544. Ms. Withers may be contacted by telephone at (505) 667–8690 or by facsimile at (505) 665–4872.

FOR FURTHER INFORMATION CONTACT: For general information on the DOE NEPA process, please contact Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Assistance, EH–42, Department of Energy, 1000 Independence Avenue SW., Washington DC 20585. Ms. Borgstrom may be contacted by leaving a message at (800) 472–2756 or by calling (202) 586–4600.

SUPPLEMENTARY INFORMATION:

Background

DOE is responsible for ensuring that the United States nuclear weapons stockpile remains safe, secure, and reliable. As part of its mission to ensure the safety and reliability of the weapons in the stockpile, DOE and its predecessor agencies have conducted a hydrodynamic testing program at LANL since the late 1940's. The existing hydrodynamic testing facility at LANL is the Pulsed High-Energy Radiation Machine Emitting X-Rays (PHERMEX), which has been in operation since 1963. In 1983, DOE began hydrodynamic testing operation of the Flash X-Ray (FXR) facility at the Lawrence Livermore National Laboratory (LLNL) in California.

In September 1992, President Bush declared a moratorium on all nuclear testing by the United States. In July 1993, President Clinton extended the moratorium, and in August 1995 the President announced that the United States will seek a "zero-yield" Comprehensive Test Ban Treaty. He further stated that the conduct of a science-based stockpile stewardship program is a condition of U.S. entry into such a treaty.

PHERMEX and FXR historically have been used in conjunction with underground nuclear testing to identify and correct potential problems with the stockpile. Neither PHERMEX nor FXR can provide the degree of radiographic resolution, x-ray intensity, or threedimensional or time-sequenced views that are needed to provide answers to current questions regarding weapons condition or performance necessary for

science-based stockpile stewardship. Although DOE expects to operate and upgrade the FXR facility as described in section 3.3.4 of the final EIS, and also expects to operate and appropriately upgrade PHERMEX until use of the latter is phased out after initial DARHT operation, neither facility can fully meet DOE's purpose and need to provide enhanced high-resolution radiography capability. In addition to its radiographic performance limitations, PHERMEX is over thirty years old, and DOE does not expect it to remain a viable facility over an extended time because of the increasing difficulty and cost of maintaining and operating the facility as it ages.

To conduct an effective science-based stockpile stewardship program, DOE needs to obtain an enhanced capability to conduct radiographic hydrodynamic tests and dynamic experiments. The capability to obtain high-resolution, multiple-time, multiple-view information is needed to assess the safety, performance, and reliability of nuclear weapons; evaluate aging weapons; obtain information about plutonium through dynamic experiments; and for other uses. Such an enhanced capability cannot be obtained at either PHERMEX or FXR, as currently configured. Accordingly, DOE has decided to complete and operate the DARHT facility to provide an enhanced high-resolution radiographic capability to perform hydrodynamic tests and dynamic experiments in support of its historical mission and the near-term stewardship of the nation's nuclear weapons stockpile.

DOE began construction of the DARHT facility in April 1994. In October 1994, three citizen groups requested of the Secretary of Energy that DOE prepare an EIS on the DARHT facility, and halt further construction until an EIS was completed. On November 16, 1994, two of these groups filed suit in the United States District Court for the District of New Mexico, seeking to enjoin DOE from proceeding with the DARHT project until completion of an EIS and associated ROD. On November 22, 1994, DOE published a notice of its intent to prepare the DARHT EIS [59 FR 60134]. On January 27, 1995, the court issued a preliminary injunction of further construction of the DARHT facility, and related activities such as the procurement of special facility equipment, pending completion of the EIS and ROD. The court entered final judgment on May 5, 1995. No construction or procurement for DARHT has taken place since January 27, 1995; in January and February, 1995, DOE

took actions allowed by the court to stabilize the construction site.

The DARHT EIS was prepared pursuant to the National Environmental Policy Act of 1969 (NEPA) [42 U.S.C. 4321 et seq.], the Council on Environmental Quality NEPA regulations [40 CFR Parts 1500-1508] and the DOE NEPA regulations [10 CFR Part 1021]. DOE issued the final DARHT Facility Environmental Impact Statement, DOE/EIS-0228, in August 1995 following the issuance of the draft DARHT EIS for public review in May 1995. The Environmental Protection Agency published its Notice of Availability regarding the final DARHT EIS on September 8, 1995 [60 FR 46833]

The DARHT EIS includes a classified supplement that provides additional information and analyses. The NEPA regulations provide that EISs which address classified proposals may be restricted from public dissemination; however, the document may be organized so that classified information is segregated in order that the unclassified portions can be made available to the public [40 CFR Part 1507.3(c); 10 CFR Part 1021.340(a)]. NEPA's public disclosure requirements are subject to the exceptions spelled out in the Freedom of Information Act (FOIA) [5 U.S.C. 552; 42 U.S.C. 4332(2)(c)]. FOIA exempts materials from public disclosure where specified by statute. Under the Atomic Energy Act [42 U.S.C. 2011 et seq.], material pertaining to nuclear weapons design or related national security matters is classified and exempted from public disclosure under FOIA and therefore under NEPA. Accordingly, DOE prepared a classified supplement to the DARHT EIS, and relied on information in that supplement to make this decision. The classified supplement has been withheld from public dissemination, but DOE provided the draft classified supplement for review by appropriately cleared representatives of parties with a need to know the classified information. These representatives include the Department of Defense, the Environmental Protection Agency, the State of New Mexico and certain American Indian tribal governments, so that in accordance with the provisions of NEPA, these government agencies could ensure that the public health and welfare are being adequately protected.

DOE invited the public to comment on the adequacy and accuracy of the draft EIS, and on any other matter concerning the DARHT review. The public comment period on the draft DARHT EIS ended on June 26, 1995; DOE held public hearings on the draft EIS in Los Alamos, New Mexico, on May 31, 1995, and in Santa Fe, New Mexico, on June 1, 1995. The final DARHT EIS includes transcripts of the public hearings and copies of written comments, and explains how DOE considered all comments received.

Alternatives Considered

The DARHT EIS analyzed six alternative ways to implement DOE's proposed action to obtain enhanced radiographic capability. DOE considered, but did not analyze in detail, other alternatives which DOE determined would not meet the Department's purpose and need for enhanced testing capability.

Certain aspects of the DOE hydrodynamic testing and dynamic experiment program would not change regardless of the course of action selected, and were considered to be common to all alternatives. These include: the way hydrodynamic tests are conducted; the conducting of contained dynamic experiments with plutonium; infrastructure requirements; continued operation of the FXR Facility at LLNL; continued operation of the LANL Radiographic Support Laboratory at Technical Area 15; waste management considerations; decontamination and decommissioning considerations; and other operational and site characteristics of LANL. (Aside from the provisions in this ROD regarding PHERMEX and DARHT, this ROD does not affect operation of any other facility at LANL or any other DOE site, including the continued operation of the FXR facility at LLNL or the continued operation of the Radiographic Support Facility at LANL.)

Alternatives analyzed in the DARHT EIS are as follows:

- —No Action Alternative. DOE would continue to use PHERMEX at LANL and FXR at LLNL in support of its stockpile stewardship mission. The DARHT structure would be completed for other uses.
- —DARHT Baseline Alternative. DOE would complete and operate the DARHT facility and phase out operations at PHERMEX, but would not pursue a program of enhanced containment.
- Upgrade PHERMEX Alternative. The DARHT facility would be completed for other uses. DOE would construct major upgrades at PHERMEX, including installing the highresolution radiography planned for DARHT and constructing a second accelerator for two-axis imaging.
 Enhanced Containment Alternative.

DOE would complete and operate the

DARHT facility and phase out operations of PHERMEX as under the DARHT Baseline Alternative; in addition, some or all tests would be conducted inside a containment vessel or structure. Three options were considered: (1) Vessel Containment Option (most tests would be contained in modular steel vessels, starting with operation of the first axis of DARHT); (2) Building Containment Option (all tests would be contained inside a permanent building starting with operation of the first axis of DARHT); and (3) Phased Containment Option, the DOE's preferred alternative (most tests would be contained in modular steel vessels, to be implemented over a tenyear period). Under options 1 and 3, DOE would construct and operate a Vessel Cleanout Facility to clean the portable steel vessels and recycle materials as appropriate; under option 2, DOE would construct and operate a separate cleanout facility to assist in maintaining the containment building and recycling materials as appropriate.

- —Plutonium Exclusion Alternative. DOE would implement the DARHT Baseline Alternative; however, plutonium would not be used in any of the experiments at DARHT. Under this alternative, in the future, DOE may perform some dynamic experiments with plutonium; those involving radiography would be conducted at PHERMEX and would be contained in double-walled vessels.
- —Single Axis Alternative. DOE would implement the DARHT Baseline Alternative; however, only one accelerator hall (single axis) would be operated for hydrodynamic tests or dynamic experiments. The other hall would be completed for other uses.

Environmentally Preferable Alternative

While some of the alternatives analyzed in the DARHT EIS were unacceptable in that they did not meet programmatic needs, none posed unacceptable environmental impacts. The analyses in the DARHT EIS indicate very little difference in the environmental impacts among the alternatives analyzed. The major discriminators would be contamination of soils near the firing point, health effects to workers, and the amount of construction materials consumed. After consideration of the environmental impacts identified through the EIS, DOE has determined that the three options of the Enhanced Containment Alternative, including DOE's preferred alternative (the Phased Containment Option),

would be somewhat environmentally preferable. These three options, particularly the building containment option, would result in considerably less release of depleted uranium and other metals to the general environment than would the other alternatives analyzed (including No Action because of the continued use of PHERMEX). However, these options would result in a higher radiation dose to workers over the life of the project compared to the other alternatives analyzed (although the dose would be well below regulatory and administrative limits). The benefit of reducing the amounts of materials released is directly related to DOE's responsibility for environmental stewardship and the desire to minimize cleanup activities at the end of the facility's lifetime.

Environmental Impacts of Alternatives

DOE weighed environmental impacts as one factor in its decision making process regarding the DARHT facility. DOE considered the impacts from construction and operation of alternative facilities, and the consequences that might be expected under accident scenarios. After consideration of the environmental impacts identified and analyzed in the DARHT EIS, DOE concludes that for the most part, environmental impacts would be expected to be similar among all six of the alternatives analyzed. None of these alternatives would present an unacceptable level of adverse environmental impact to the human environment.

DOE analyzed the potential impacts that might occur to land resources, air quality, noise, water resources, soils, biotic resources, cultural resources, socioeconomics, and human health. DOE considered impacts that might occur from use of plutonium; facility accidents, and transportation of radioactive materials. DOE considered the amount of waste that would be generated under different alternatives; irreversible or irretrievable commitments of resources; and the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. For all alternatives analyzed, DOE determined that some contamination of soils could occur and would present an unavoidable adverse impact.

Most impacts identified were essentially the same for all alternatives analyzed. For the Vessel Containment Option and the Phased Containment Option, one additional acre of land would be disturbed to construct the Vessel Cleanout Facility. All three options under the Enhanced Containment Alternative would result in less materials dispersed (the amount of depleted uranium released to the environment is of particular interest because of its potential to result in soil or water contamination); therefore, soils and water resources would be less contaminated under that alternative. Under the postulated testing program analyzed in the DARHT EIS, the amount of materials released from the firing point under any of the action alternatives would be 15% lower than under the No Action Alternative. Because all of the action alternatives would provide an enhanced radiographic capability, less material would need to be expended to obtain more and better data. An even greater reduction would be achieved under the Enhanced Containment Alternative options (a total of 95% reduction for Building Containment, 75% for Vessel Containment, and 50% for Phased Containment). Annual releases of depleted uranium would be up to 90 pounds (41 kilograms) under the Building Containment Option; up to 450 pounds (205 kilograms) under the Vessel Containment Option; and up to 720 pounds (327 kilograms) (averaged over the lifetime of the project with a range of from 1,460 pounds [664 kilograms] to 450 pounds [205 kilograms] per year) under the Phased Containment Option. Under the other five alternatives, up to 1,540 pounds (700 kilograms) would be released annually. Compared to the other five alternatives, the Enhanced Containment Alternative would result in an unquantified beneficial impact to noise levels, wildlife habitat and cultural resources; the benefit would be greatest under the Building Containment Option.

The adverse impact to the health of the uninvolved public would be less under the Enhanced Containment Alternative than the other five alternatives: the dose to the affected population would be 8 person-rem over the 30-year life of the project under the **Building Containment Option**, 13 person-rem under the Vessel Containment Option, and 17 person-rem under the Phased Containment Option, compared to 30 person-rem under all other alternatives. However, due to the concentration of depleted uranium and other hazardous materials inside the Vessel Cleanout Facility, the health hazard to workers would be greater under the three options of the Enhanced Containment Alternative when compared to the other alternatives, although doses would be well below

regulatory and administrative limits. The average annual dose to workers under the three options of the Enhanced Containment Alternative would be 0.6 rem compared to 0.3 rem for the other five alternatives and the collective dose over the 30-year life of the project would be 60 person-rem compared to 9 person-rem. No additional latent cancer fatalities would be expected over 50 years to the general population or workers under normal operations under any of the six alternatives analyzed.

Under the accident scenarios examined, an unexpected highexplosives detonation would result in 15 fatalities (all personnel present) at the facility under all alternatives analyzed. No additional latent cancer fatalities would be expected over 50 years among members of the general public from accidental release of depleted uranium under any of the alternatives. Between 5 and 12 additional latent cancer fatalities could occur from the accidental release of vaporized plutonium. Such an accident is extremely unlikely (estimated to occur once in every 10,000 to 1,000,000 years).

The two alternatives involving major additional construction (the Upgrade PHERMEX Alternative and the Building Containment Option of the Enhanced Containment Alternative) would result in considerably greater commitment of construction resources (concrete and diesel fuel); the Vessel Cleanout Facility under the Vessel Containment Option and the Phased Containment Option would result in a slightly greater commitment of construction resources.

Socioeconomic impacts would vary for each alternative, primarily driven by duration and timing of new construction and whether PHERMEX would be phased out of operation. More people would be employed under any other alternative than under the No Action Alternative. The Vessel Containment Option would result in the greatest increase in employment (321 additional full-time jobs generated in the regional economy). Under the Plutonium Exclusion Alternative, 273 additional jobs would be generated, compared with 253 under the Phased Containment Option, 238 under the Building Containment Option, 199 under the Upgrade PHERMEX Alternative, 191 under the DARHT Baseline Alternative and 104 under the Single Axis Alternative.

Review of Final EIS

DOE distributed approximately 800 copies of the final EIS to the State of New Mexico, American Indian tribal governments, local governments, other

federal agencies, and the general public. The United States Environmental Protection Agency commented that selection of the Phased Containment Option as the preferred alternative should provide additional environmental protection over the life of the project. No other written comments specific to the final DARHT EIS were received. However, the U.S. Fish and Wildlife Service, in a letter to DOE dated September 12, 1995, clarified the language of its August 3, 1995 letter regarding mitigation measures to protect the nesting habitat of the Mexican spotted owl, a federally-listed threatened species. (The August 3, 1995 letter concurred with the DOE determination that operation of DARHT would not be likely to adversely affect the Mexican spotted owl, and the September 12, 1995 letter does not affect that concurrence.)

A member of the public telephoned DOE and pointed out a typographic and calculational error in the tables regarding air quality in the final EIS. An error was noted in the conversion of the three-hour standard for sulfur dioxide from parts per million to micrograms per cubic meter in calculating the percent of regulatory standard in conjunction with potential air quality impacts. The corrected calculated percent of regulatory standard is a factor of 10 higher for sulfur dioxide concentrations. For tables S-1, 3-3, and C1–8 the percent of regulatory standard in the most restrictive case increases from 2.2 to 22%; this is constant across all alternatives and does not change the overall analysis of air quality impacts. In addition, the caller pointed out a typographic error in table 5–1 regarding the calculated annual concentration of nitrogen dioxide; it should be 0.04 micrograms per cubic meter rather than 0.004. None of these changes affect the results of the environmental analysis.

DOE also identified an additional typographic error in the document. The DARHT EIS provides a comparison of costs for the reader's information; there is an inconsistency between the cost figures shown in the summary table 3– 4 and the corresponding table in the body of the analysis, table 5–19. The cost estimates in table 3–4 are correct (those in table 5–19 are from the draft EIS but inadvertently were not updated).

Decision

DOE has decided to complete and operate the DARHT facility at LANL to provide enhanced high-resolution radiography (x-ray photography) capability to perform hydrodynamic tests and dynamic experiments in support of the Department's historical mission and the near-term stewardship of the nuclear weapons stockpile. DOE will mitigate potential environmental effects by implementing an enhanced approach to containing expended test materials. This will be done by conducting tests in modular steel containment vessels to be phased in over ten years. DOE will also construct and operate a separate Vessel Cleanout Facility in conjunction with the operation of the DARHT facility. This is the Phased Containment Option of the Enhanced Containment Alternative, identified as the preferred alternative in the DARHT Final EIS.

DOE will complete construction of the DARHT facility with the intent to operate both axes of the facility. As soon as possible, DOE will resume construction of the firing site facility, complete both of the two accelerator halls (dual axes), and will resume procurement, testing and installation of equipment required for operating the DARHT firing site facility with the first axis x-ray machine. DOE will equip the first axis with an accelerator capable of achieving a nominal 20 million electron volts (MeV) of electron- beam energy, and an output x-ray dose of up to 1,650 roentgens (R). The DARHT facility will be completed to the original plans, with minor modifications if necessary to accommodate the accelerator and x-ray equipment and the use of the portable modular containment vessels.

DOE intends to eventually operate DARHT in a dual axis mode, and will procure, test and install equipment for the second axis. Based on the results of installing, testing and proving the linear accelerator equipment in the first axis, DOE may incorporate modified or improved technology for the second axis or retrofit the equipment previously installed in the first axis. As long as no substantial change to the building footprint is required, and as long as the energy output of both the first and second accelerator falls within the range analyzed in the DARHT EIS (electron beam energies of up to 30 MeV and output x-ray dose of up to 2,000 R for each accelerator), no additional NEPA review will be required for modifications to equipment for the first or second axis.

DOE will operate the DARHT facility to provide high-speed, high-resolution flash radiographs which will be used to measure or diagnose the results of tests and experiments involving high explosives and other systems. Other types of portable low- energy x-ray, electronic, optical, and photographic diagnostic equipment may be used at the facility. DARHT may be operated with one or two x-ray beams from one or both axes, either simultaneously or with a timing variation.

DOE plans to conduct some dynamic experiments using plutonium. Dynamic experiments with plutonium will always be conducted in speciallydesigned double- walled containment vessels. DOE will maintain the capability to stage, maintain, and clean out plutonium containment vessels at LANL. The Vessel Cleanout Facility will not be used for this purpose.

DARHT will have the following uses and potential uses:

- —To study the implosion of mock nuclear weapons primaries. This information would be used to assist the DOE with its stockpile stewardship and management mission in order to ensure the continued safety and reliability of nuclear weapons in the enduring stockpile, and to further a basic scientific understanding of the behavior of nuclear weapons.
- —To conduct dynamic experiments with plutonium in order to obtain more information regarding the physical and chemical properties of plutonium. All such experiments will be conducted in specially-designed, double-walled steel containment vessels.
- —To continue to assist other nations in evaluating the condition, safety and reliability of their existing nuclear weapons under current international agreements, and any future agreements.
- —To assess the condition, safety and performance reliability of other nuclear weapons, such as those that might be designed by a non-friendly nation or a terrorist and obtained by the United States.
- —To continue to assist the Department of Defense with evaluations of conventional weapons and other military equipment.
- —To continue to study explosivesdriven materials and high-velocity impact phenomena for non-weapons applications and other uses of interest to industry.
- —To pursue other applications of the radiography or accelerator technology and other equipment developed for high-resolution radiography.

In 1991, President Bush stated that the United States would not design new nuclear weapons in the foreseeable future. However, in the event that this nation decides, as a matter of policy, that new nuclear weapons should be developed, or in the event that retrofit components need to be developed for existing nuclear weapons, DARHT could be used to assist in the development of weapons or weapons components. Any decision to develop new nuclear weapons would be made by the President subject to the review and approval of Congress. Neither DARHT nor any other facility operated by DOE will be used for this purpose unless such a Presidential determination is made.

The completed DARHT facility will be operated with a 2,500 foot (950 meter) radius exclusion zone as a safety feature to provide protection to personnel and structures while testing takes place. The completed DARHT facility will include the alreadyconstructed earthen berm on the northern side of the facility to serve as a radiation protection measure. Explosives or special nuclear materials will not be stored, handled or processed inside the DARHT firing site building.

As soon as the first axis of the DARHT facility becomes operational, DOE will phase out operation of the PHERMEX facility over approximately four years and, at the end of that time, will decommission and decontaminate the PHERMEX facility unless an alternative use is identified for the structure or facility equipment. Activities needed to decommission and decontaminate the structure, or to convert it to another use, may be subject to further NEPA review or other environmental review.

DOE will use a modular containment vessel system to contain the materials released from tests and experimentsmaterials such as depleted uranium, beryllium, lead, copper, and other materials that would otherwise be released to the general environment. As discussed previously, DOE has always in the past, and will continue in the future, to conduct dynamic experiments with plutonium in special doublewalled containment vessels. However, these vessels are not appropriate for tests not involving plutonium. They are limited to high explosive charges of 44 pounds (20 kilograms); a containment system for non-plutonium tests must accommodate much larger charges (see below). The existing vessels also impose substantial limitations on experiment configurations and diagnostic capabilities. Therefore, DOE will undertake a development program to design, test, and build containment vessels specifically for tests that do not use plutonium. This modular system will allow the containment vessel to be modified to meet size and configuration needs for a given test. Containment of tests not involving plutonium will be phased into DOE's long-term hydrodynamic testing program at LANL according to the following plan, with

the first phase starting when the first axis of DARHT becomes operational. The first three phases will involve tests that use up to 110 pounds (50 kilograms) of high explosives.

- -Phase 1—Demonstration (years 1 through 5). DOE will put into place at DARHT a prototype vessel system and portable cleanout unit as part of a process to reduce the material released to the open air over this 5year period. (Based upon the analyses in the DARHT EIS, DOE expects that such a reduction would be at least 5% compared to the releases expected from the testing program if containment were not used.) During this period, DOE will design and build an additional vessel system, incorporating experience gained during this phase. Based on the final vessel design, DOE will design and start construction of the Vessel Cleanout Facility.
- Phase 2—Containment (years 6 through 10). Over the second 5-year period DOE will put into place a 5vessel containment system which will be used to further reduce the material released over this 5-year period.
 (Based upon the analyses in the DARHT EIS, DOE expects that this reduction would be at least 40%.) DOE will start to operate the Vessel Cleanout Facility.
- —Phase 3—Enhanced Containment (years 11 through 30). Based on DOE's experience gained from the first two phases, the modular containment vessels will be continually improved. DOE will use the vessel system to further reduce the material released over the next 20-year period. (Based upon the analyses in the DARHT EIS, DOE expects that this reduction would be at least 75%.)
- -Phase 4—440-lb (200-kg) Containment Option. If justified by the development effort and operating experience after Phase 1, DOE may develop and use a vessel to contain material from tests and experiments larger than 110 pounds (50 kilograms). These could include tests of up to 440 pounds (200 kilograms) of high explosives, thus allowing DOE to contain a greater percentage of material. Phase 4 may be implemented at any time after Phase 1.

DOE will design, construct, and operate the Vessel Cleanout Facility to support use of the portable modular containment vessels. DOE analyzed two alternative locations for this facility in the DARHT EIS. DOE's intention is to locate and construct the Vessel Cleanout Facility at the southernmost location

analyzed, because that location is closest to the DARHT facility and closest to existing utility lines. However, if during the detailed design stage DOE determines that it would be more beneficial (from the standpoint of operating conditions or environmental protection) to construct or operate the cleanout facility at the northernmost location, DOE may construct and operate the Vessel Cleanout Facility there without performing additional NEPA review. DOE will improve an existing firebreak (dirt) road to provide access to the Vessel Cleanout Facility at either of the two locations. Road improvements will be located to avoid adverse impact to cultural resource sites, if any, in the vicinity. If, after designs are completed, neither location analyzed in the DARHT EIS proves to be suitable, a decision to locate the Vessel Cleanout Facility somewhere else may be subject to further NEPA review.

The modular containment vessel intended for non-plutonium tests has not previously been used by DOE, and the operation of this system is not wellestablished. Although DOE expects a highly effective vessel design to be achievable, if technological problems were to be encountered in fabricating or using the vessel system, or if for some other reason the vessels cannot be deployed according to the phased schedule, DOE will conduct testing operations at DARHT in such a way as to continue to reduce, to the extent practicable, the amount of materials released to the environment. Such a reduction may be achieved by other methods, including (but not limited to) altering the number of experiments or tests, and picking up the expended materials.

Some non-plutonium tests or experiments of the type anticipated for DARHT cannot be conducted inside containment vessels due to diagnostic equipment limitations or the type of diagnostic information needed. Although DOE will eventually conduct most tests and experiments inside containment vessels, DOE may conduct any given test or experiment that does not involve plutonium in an open-air configuration, so long as the above percentages of material containment are met.

Other Decision Factors

In addition to environmental factors, DOE considered costs, timing, technology, national security, and infrastructure availability. DOE considered classified information, including the information and analyses in the classified supplement to the DARHT EIS, in making its decision. The environmental impacts identified in the classified supplement, specifically those relating to human health, were not in and of themselves classified, and were therefore also included in the environmental analyses in the unclassified portion of the DARHT EIS. However, the specific details of the operations that would produce those impacts are classified, and are presented only in the classified supplement. The factors discussed here include information from the classified as well as the unclassified portions of the DARHT EIS.

Cost

Because DOE must be fiscally prudent, DOE considered construction and operating costs. DOE estimates that the total capital cost for construction and equipment would vary considerably among alternatives. The capital cost for the Phased Containment Option would be the highest and that for the No Action Alternative would be the lowest. Over the predicted 30 year life of the facility, the Phased Containment Option has the lowest estimated total cost of all containment options when considering capital cost plus annual operating costs. The total capital construction and equipment cost for the Phased Containment Option would be about \$187 million; on the average, operating costs would be about \$9.8 million per year. For comparison, DOE estimates the approximate total capital costs and operating costs, respectively, for other alternatives at \$181 million and \$10.4 million for the Building Containment Option; \$176 million and \$10.4 million for the Vessel Containment Option: \$167 million and \$6.5 million for the Upgrade PHERMEX Alternative; \$145 million and \$6.5 million for either the DARHT Baseline Alternative or the Plutonium Exclusion Alternative; \$97 million and \$5.4 million for the Single Axis Alternative; and \$49 million and \$4.2 million for the No Action Alternative. As documented in the draft DARHT EIS, DOE originally calculated project capital costs based on installing 16 MeV linear accelerators. DOE estimates that the additional cost to install 20 MeV accelerators would be about \$8 million per machine.

Timing

Because DOE needs to begin establishing baseline conditions of weapons in the enduring stockpile as soon as possible, DOE considered when it could achieve that level of enhanced capability provided by a single axis, and then considered if it could achieve the full enhanced multiple-view capability as well. PHERMEX and FXR are now in use, so under the No Action Alternative the existing (non-enhanced) capability is currently available and multiple-view capability would never be available. Under the DARHT Baseline Alternative and all other alternatives except the Upgrade PHERMEX Alternative, the first axis would be ready 38 months after construction resumes; for the DARHT Baseline Alternative and all other alternatives except as noted, the second axis would be available in 66 months (an additional 28 months). Under the Building Containment Option, dual axis capability would be ready in 77 months without interim single axis capability due to the additional time to construct the containment building. (Under this option, no tests would be conducted until the containment building was operational.) Under the Single Axis Alternative, a multiple-axis capability would never be available. Under the Upgrade PHERMEX Alternative, the existing operating capability would be lost for 51 months due to construction, and the second axis would be ready 71 months after construction began.

DOE considered whether it would be prudent to wait for development of the technology and design of an even more advanced multiple-view hydrodynamic testing capability instead of pursuing DARHT. Although DOE has conceptualized the next generation of advanced hydrodynamic testing capability, potential technologies for such a facility have not yet been selected, developed or proven. DOE would incur additional risk to its ability to ensure the safety and reliability of the nuclear weapons stockpile if, instead of obtaining a known enhanced capability in the near-term, it waited the several years necessary to identify and develop an advanced technology

DOE also considered whether it would be prudent to wait until it has made the programmatic decisions expected to follow the completion of the Stockpile Stewardship and Management Programmatic EIS [60 FR 31291] or the LANL Sitewide EIS [60 FR 25697] now under preparation. The DARHT EIS notes that the actions needed to improve DOE's capability to conduct hydrodynamic tests and dynamic experiments are included within the stockpile stewardship mission defined by the President and Congress. The DOE proposal to provide enhanced highresolution multiple-view radiographic capability responds to Presidential and Congressional direction. For the reasons noted below, DOE finds that this decision to acquire enhanced capability will not prejudice its future decisions regarding stockpile stewardship and management, or regarding providing an

environmentally-sound operating envelope for LANL.

DOE will continue with its ongoing hydrodynamic testing program, and will need the enhanced capability provided by DARHT to implement that program, regardless of any other decisions to be made regarding stockpile stewardship and management. Thus, the courses of action analyzed in the DARHT EIS, and the action decided upon in this ROD, are justified independently of the stockpile stewardship and management program, and will not prejudice any ultimate decision on the program, nor will they be influenced by the expected programmatic decisions. The LANL Sitewide EIS will assist with decisions on how to operate LANL in an environmentally-sound manner; this ROD will not prejudice any decisions expected to result from the LANL Sitewide EIS. Accordingly, DOE finds that it would not be consistent with the nation's need to obtain enhanced radiographic hydrodynamic capability as quickly as possible if the Department delayed its decisions on DARHT until after completion of the other two EISs, nor would the Department benefit programmatically from such a delay.

Technology

DOE could achieve enhanced highresolution radiographic capability under any of the alternatives analyzed in the DARHT EIS except the No Action Alternative. While still operating adequately at this time, the existing equipment at PHERMEX is approaching the end of its design life and DOE is concerned that it will become increasingly difficult and expensive to continue to maintain the aging accelerator over time. Under the Single Axis Alternative, DOE could not achieve the three-dimensional or sequential capability that could be achieved with dual axis capability, thus defeating a key component of the purpose and need for the project.

The three options under the Enhanced Containment Alternative would impede the image quality somewhat, but not to an unacceptable level. Containment also decreases testing efficiency in that it would take more time to prepare and execute a new test and would not allow for overhead diagnostics.

National Security

DOE needs to achieve high-resolution, high-speed multiple-axis radiographic hydrodynamic capability as soon as possible to ensure the greatest degree of confidence in the continued safety and reliability of the nuclear weapons stockpile. DOE needs to be able to use this type of capability to perform

contained dynamic experiments with plutonium in support of its nuclear weapons stockpile stewardship and management mission. The existing hydrodynamic facilities at PHERMEX and FXR cannot provide the needed level of confidence to support our national security goals. Under the Single Axis Alternative, DOE could not obtain the three-dimensional or rapid-timesequenced images needed to provide the maximum amount of diagnostic information to meet national security goals. Under the Plutonium Exclusion Alternative, DOE could not use the enhanced capability to diagnose the effects of dynamic experiments involving plutonium, which would not meet national security goals. Under the Upgrade PHERMEX Ålternative, DOE would lose the ability to perform any hydrodynamic testing at LANL, and the capability to perform dynamic experiments with plutonium for 51 months, which would encumber national security goals.

Infrastructure

DOE needs to be able to use an enhanced radiographic capability for dynamic experiments involving plutonium. These experiments will always be conducted in special doublewalled steel containment vessels. Special facilities are needed to fabricate plutonium shapes; store and handle plutonium; perform plutonium chemistry diagnostics; process material for experiments and for storage; and to ensure worker safety and security. The large, heavy, double-walled containment vessels that would be used for dynamic experiments with plutonium would be difficult to handle or to transport over long distances. While LANL already has the requisite plutonium storage and handling infrastructure at its Plutonium Facility and other facilities, no other DOE site currently has a plutonium storage and handling capability sufficient to support dynamic experiments with plutonium. DOE has determined that it would be unreasonably costly (up to about \$10,000 per square foot) to construct new plutonium handling and storage facilities at another site when adequate operating technical facilities are already in place and in use at LANL. In addition, LANL already has an infrastructure in place to support the ongoing (non-plutonium) testing program at PHERMEX.

Balancing Decision Factors

In order to be able to continue to ensure the safety and reliability of the existing stockpile, DOE needs to obtain an enhanced capability to perform hydrodynamic tests and dynamic experiments, and to obtain that capability as soon as possible. DOE cannot afford to wait for development of future advanced technologies, but instead must make use of known technology.

Because DOE needs to be able to perform contained dynamic experiments with plutonium, DOE needs to have a plutonium handling capability to support the dynamic experiments; this support infrastructure is already in place at LANL and it would be too costly (several hundred million dollars) to replicate these facilities at another site solely to support an enhanced radiographic capability. Similarly, the safe transport of containment vessels that have been used for dynamic experiments with plutonium from another site to LANL would be prohibitively expensive. For these reasons, DOE needs to provide an enhanced radiographic capability at LANI

DOE has concluded that the existing radiography equipment at PHERMEX (the No Action Alternative) does not meet the Department's need for enhanced high-resolution multiple-view radiographic capability. Enlarging the existing PHERMEX facility or constructing a second axis at PHERMEX would require DOE to forego its hydrodynamic capability at LANL for 51 months. DOE finds that a 51-month loss of its ability to conduct hydrodynamic tests and dynamic experiments at LANL is an unacceptable situation. Therefore DOE decided not to upgrade the existing PHERMEX facility to achieve enhanced single or dual axis radiographic capability (the Upgrade PHERMEX Alternative).

DOE needs to obtain high-resolution multiple-view radiographic capability to obtain the best information about nuclear weapons primaries. To equip only one axis of the dual axis DARHT facility would not allow DOE to obtain three-dimensional or time-sequenced information. Although there would be a cost reduction of about one-third if DOE did not equip the second axis, there would be very little difference in environmental impact, and national security goals would not be met. Therefore, DOE decided against installing accelerator equipment in only one axis of the DARHT facility (the Single Axis Alternative).

DOE needs to obtain high-resolution radiographic capability to conduct, among other things, contained dynamic experiments with plutonium. It would be inconsistent with national security goals to go to the expense of obtaining the high-resolution radiographic

equipment planned for DARHT and to not use it for dynamic experiments with plutonium. In the event that DOE decided to operate DARHT without conducting plutonium experiments, DOE would have to maintain PHERMEX into the indefinite future to provide a capability to conduct plutonium experiments without taking advantage of DARHT's enhanced capability. This would neither be cost-effective nor meet national security goals. Accordingly, DOE decided against the option of completing DARHT but limiting the use of the facility to exclude the use of plutonium while maintaining PHERMEX indefinitely (the Plutonium) Exclusion Alternative).

DOE initially preferred the DARHT Baseline Alternative. However, after examining the environmental impacts identified in the DARHT EIS, and the public and agency comments on the draft DARHT EIS, DOE recognized that achieving an enhanced level of containment provides an opportunity to increase the quality of DOE's environmental stewardship by decreasing contamination from expended test materials (the Enhanced Containment Alternative). Therefore DOE has decided against implementing the DARHT Baseline Alternative by itself, even though providing an enhanced level of containment is more expensive. From a programmatic standpoint, the immediate use of vessel or building containment could have serious design or operating limitations. Phasing a program of vessel containment over ten years would allow DOE to take advantage of the environmental mitigation effect of enhanced vessel containment while still allowing the DARHT facility to be completed relatively quickly to meet national security needs as soon as possible.

Under the Building Containment Option, the concrete containment structure would have to be very large in comparison to the firing site to contain the overpressure from an explosive test; DOE would forego the capability for experiments or tests using large amounts of high explosives or other specific types of large-scale tests because of the structural limitations of the building. Also, this option would place serious constraints on DOE's ability to conduct dynamic experiments with plutonium because of the difficulty in moving the large, double-walled steel containment vessels needed for plutonium experiments in and out of the containment building.

The DARHT EIS analysis of the Vessel Containment Option assumed that the DARHT facility would operate from the

outset with most tests and experiments conducted inside modular single-walled steel containment vessels. If this limitation were imposed, the number of tests that could be conducted early in the operating life of the facility would be significantly reduced. Although some conceptual work has been done, DOE has not yet designed the modular vessels. DOE would have to perfect a prototype vessel before fabricating all the vessels needed. The use of modular vessels depends on construction and operation of the Vessel Cleanout Facility; the design for this building could not be finalized until after the prototype vessels were perfected in order to determine the specific details of cleanout equipment and techniques. DOE estimates that it would take approximately 10 years beyond the available date of the DARHT facility to complete these activities and be able to conduct a full schedule of contained tests. DOE finds that a delay of five or ten years to implement the modular vessel containment system before operating the DARHT facility would be unacceptable and would not meet the Department's need to obtain the use of DARHT's capability as soon as possible.

By phasing the implementation of the vessel prototyping program, within about 10 years DOE could achieve the same environmental protection results as could be obtained under the Vessel Containment Option without delaying or adversely affecting its ability to operate DARHT. Therefore, DOE developed the Phased Containment Option. Under this option, for the first 10 years environmental mitigation would be greater than would occur under the DARHT Baseline Alternative but less than would occur under the Vessel Containment Option; after that point, environmental mitigation would be the same for the Phased Containment Option and the Vessel Containment Option. Accordingly, DOE has decided to implement the Phased Containment Option rather than delay operation of DARHT, as would have been the case under the Vessel Containment Option.

For some tests, DOE cannot meet programmatic objectives if vessel containment is used. Therefore, on a case-by case basis, DOE may opt to conduct certain types of non-plutonium tests as uncontained, such as those using a very large explosive charge (larger than the containment vessel rating); those requiring complex diagnostics (such as certain optics or laser tests) that cannot be achieved using a containment vessel; those requiring measurement of material movement beyond the confines of the vessel; or those using a very small explosives charge or small amounts of hazardous materials in which use of the vessel would not be practical, costeffective, or environmentally significant. After the phased containment program is fully implemented, DOE expects to reduce by at least 75% the emissions from test assemblies made from beryllium, depleted uranium, or Resource Conservation and Recovery Act characteristic metals. For any experiment that is contained, DOE expects that at least 99% by mass of these materials would be retained inside the vessel.

Mitigation Measures

Through the environmental impact analysis process, and in conjunction with consultations with affected American Indian tribes and with the U.S. Fish and Wildlife Service, DOE developed several mitigation measures to protect soils, water, wildlife, biotic, and cultural resources. Some mitigation measures would apply during construction activities, and some for the duration of the project. DOE has agreed to an ongoing consultation process with affected American Indian tribes to ensure protection of cultural resources and sites of cultural, historic or religious importance to the tribes. DOE will take special precautions to protect the Mexican spotted owl, a federally-listed threatened species, and in consultation with the U.S. Fish and Wildlife Service, will prepare a laboratory-wide habitat management plan for all threatened and endangered species occurring throughout LANL in order to determine long-range mitigation actions to protect the habitats for these species. The habitat management plan will be completed within 3 years from the date of this decision, and will be updated as necessary. DOE will implement the mitigation measures discussed in section 5.11 of volume 1 of the DARHT EIS. In accordance with 10 CFR 1021.331, DOE is preparing a Mitigation Action Plan that will identify specific actions needed to implement these mitigation measures, and provide schedules for completion. These mitigation measures represent all practicable means to avoid or minimize harm from the alternative selected.

Conclusion

In accordance with the provisions of NEPA, its implementing regulations, and DOE's NEPA regulations, and consistent with the U.S. District Court Order of May 5, 1995, I have considered the information contained within the final DARHT EIS, including the classified supplement to that EIS, and the public comments received in response to the draft DARHT EIS. Being fully apprised of the environmental consequences of the proposal and its several alternatives, as well as the cost considerations and other decision factors described above, I have concluded the following:

- -Completing and operating the DARHT facility at LANL would meet the need of the Department and this nation to obtain as soon as possible an enhanced capability to perform highresolution, multiple-image radiography to diagnose hydrodynamic tests and dynamic experiments.
- -Conducting most tests and experiments inside modular steel containment vessels will reduce the potential for contamination from dispersal of materials from the explosive-driven tests.
- —Phasing in the implementation of the modular vessel system over a ten-year period will allow DOE to gain the benefit of operating the DARHT facility as quickly as possible.
- —The incrementally higher impacts during the phase-in period do not pose an unacceptable risk to public health and welfare, or to the environment.

I have therefore determined that DOE will implement the Phased Containment Option of the Enhanced Containment Alternative, identified as the preferred alternative in the DARHT EIS. As part of this action, DOE will take additional mitigation measures, specified herein, including those to protect the habitat of threatened or endangered species, and to protect cultural resource sites and other locations of interest to affected American Indian tribes. These actions will allow DOE to meet its responsibility to ensure the safety and reliability of the nuclear weapons stockpile, while meeting its additional responsibility for environmental stewardship of the lands and resources entrusted to its care.

Issued at Washington, D.C. October 10, 1995.

Victor H. Reis,

Assistant Secretary for Defense Programs. [FR Doc. 95–25596 Filed 10–13–95; 8:45 am] BILLING CODE 6450–01–P

Notice of Restricted Eligibility Support of Advanced Coal Research at U.S. Colleges and Universities

AGENCY: Department of Energy (DOE), Pittsburgh Energy Technology Center (PETC).

ACTION: Notice of restricted eligibility.

SUMMARY: The Department of Energy announces that it intends to conduct a competitive program solicitation and award financial assistance (grants) in support of advanced coal research to U. S. Colleges and Universities. These grants will be awarded to a limited number of proposals selected on the basis of scientific merit and subject to the availability of funds.

FOR FURTHER INFORMATION CONTACT: Ms. Mary S. Price, U. S. Department of Energy, Pittsburgh Energy Technology Center, P. O. Box 10940 (MS 921–143), Pittsburgh, PA 15236–0940, AC (412) 892–6179. The solicitation will be made available on DOE's PETC World Wide Web Server Internet System (http:// www.petc.doe.gov/business). If recipients are unable to access the Internet System, the solicitation will be available on a 3¹/₂" diskette, doublesided/high density, upon receipt of written request via facsimile (FAX) at (412) 892–6216.

SUPPLEMENTARY INFORMATION: Through Program Solicitation DE-PS22-96PC96200, the DOE is interested in applications from U.S. Colleges and Universities (and university-affiliated research centers submitting applications through their respective university) for research and advanced concepts related to coal science that have the potential to improve our fundamental scientific and technical understanding of the chemical and physical processes in coal conversion and utilization. The Department of Energy, pursuant to 10 CFR 600.7(b)(1), intends to award on a restricted eligibility basis.

Eligibility

Applications under this solicitation may be submitted in response to the requirements of the (1) University Coal Research (UCR) Core Program, (2) Joint University/Industry Coal Program, or (3) Historically Black Colleges and Universities (HBCU)/Non-Historically Black Colleges and Universities Partnership Program.

Applications must address coal research in one of the seven technical topics: (1) Coal Science; (2) Coal Surface Science; (3) Reaction Chemistry; (4) Advanced Process Concepts; (5) Engineering Fundamentals and Thermodynamics; (6) Environmental Science; or (7) Minimization of Environmental Impact.

Details on the UCR Core Program, the Joint University/Industry Coal Research Program, and the Historically Black Colleges and Universities/Non-Historically Black Colleges and Universities Partnership Program eligibility requirements, budget