


**DISPOSITION PLAN**  
**for the**  
**BATES LINEAR ACCELERATOR CENTER**

**May 2005**

**Lead Program Office:**  
Office of Nuclear Physics, SC-26  
Office of Science  
Department of Energy



**Signatures:**



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Susan Heston  
Technical Advisor - Environmental Project  
Argonne Site Office

**Date:** 5-26-2005

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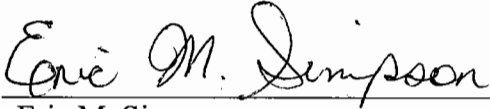
James C. Hawkins  
Program Manager  
Office of Nuclear Physics, Office of Science

**Date:** \_\_\_\_\_

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Jehanne Simon-Gillo  
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Eric M. Simpson  
Contracting Officer  
Chicago Operations Office

**Date:** 5-26-2005

**Disposition Plan  
For The  
Bates Linear Accelerator Center**

Office of Nuclear Physics  
Office of Science

**1. PURPOSE**

In 1998 the Nuclear Science Advisory Committee Review of the Medium Energy Nuclear Physics program presented a 6-year plan for terminating the operations of the Bates Linear Accelerator based on completing the Bates Large Acceptance Spectrometer Toroid (BLAST) experiments. In anticipation of the upcoming completion of the BLAST experiments this summer, the Office of Nuclear Physics (NP) is moving forward with planning for the disposition of the Bates facilities, accelerator, and other major equipment (to be referred here after as the Bates Center). This disposition plan describes the preferred NP plan for terminating U.S. Department of Energy (DOE) responsibility for the Bates Center. It also describes the alternative disposition scenarios considered.

**2. BACKGROUND**

The Bates Center is located in Danvers, Massachusetts. The land is owned by MIT, but most of the major buildings/facilities and infrastructure, and most of the major equipment are owned by DOE. Construction began in 1966 with the first 100 MeV accelerated beam coming on-line in 1971. Full energy operation occurred in 1974. Following this, a 180 degree scattering facility and the South Hall Experimental Area were added with DOE funds to further enhance the application for the facility. In 1982, the recirculator loop was added and 11 years later the South Hall Ring was commissioned for operations.

The Atomic Energy Commission (AEC) through its Energy Research Program Office (ER) provided funding and oversight for construction and operation of the Bates Center through a contract with the Massachusetts Institute of Technology (MIT). Since 1994, the operation of the Bates Center has been funded by the DOE, successor to the AEC, through a cooperative agreement<sup>1</sup> between the Office of Science (SC) (formerly ER), and the Laboratory for Nuclear Science (LNS), which is affiliated with MIT. The cooperative agreement, which has been renewed in approximately 3 year intervals, is administered by the Office of Acquisition and Assistance of the SC Chicago Office (CH-ACQ).

MIT operates the Bates Center as a national user-based facility and has over 200 users from over 50 institutions worldwide in its user base. Innovative detectors have been constructed and tested at the facility – SAMPLE, OOPS, ELSSY, and BLAST. Each of these experimental detectors is large and complex. Outside agencies, both

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<sup>1</sup> Cooperative Agreement No. DE-FC02-94ER40818

domestic and international, as well as universities have contributed to the construction of these detectors.

The Bates facilities have a replacement plant value of \$50.4 million per the DOE Facilities Information Management System (9 buildings) and the accelerator/equipment is valued at approximately \$60 million (~2,750 items) of which \$46 million (~1,000 items) is considered DOE-owned. A February 2005 appraisal commissioned by the General Services Administration (GSA), Property Disposal Division, estimated the Fair Market Value of only the above ground buildings (using a Sales Comparison Approach and excluding the value of the underlying land) at \$3.98 million and estimated the Special Use Value (depreciated value) at \$10.51 million. Most of the structures present at the Bates facility are of standard construction typical for these types of research facilities, office structures, and other supporting structures. None of the facilities are considered historical.

During FY 2005, a number of preparatory and initial D&D activities have been underway, including disassembly and removal of the SAMPLE experiment, the OOPS detector, and the ELSSY spectrometer. These activities are planned to be completed by late FY 2005/early FY 2006.

### **3. MAJOR APPLICABLE CONDITIONS AFFECTING DISPOSITION**

#### **Cooperative Agreement**

Under the terms of the cooperative agreement, Special Provision B2b(3) states that the Government is granted reasonable use and occupancy of the land upon which the Bates Center is erected. Special Provision B2b(6) states:

If DOE determines that the Bates Center or any portion thereof will be of no further use to the Government, and so notifies MIT in writing, MIT may purchase the Bates Center from the Government at fair market value or other fair price and upon such terms as may be mutually agreed upon.

Special Provision B2b(7) gives the Government

...the right to abandon in place or destroy at any time, any and all Government property whether real or personal, including the Bates Center, or a portion thereof. In such an event, the Government shall not be subject to any obligation to restore or rehabilitate the pertinent premises, except to decontamination and/or removal of radioactivity or radioactive items, to bring the premises to safe level as defined in DOE Order 5400.5 and other applicable U.S. Environmental Protection Agency (EPA), state and local regulations, and subject to the availability of appropriated funds. The Department may abandon a portion of the Bates Center only if the portion so abandoned continues to be usable as an effective research facility.

Within the agreement, DOE has reserved the right, following consultation with MIT/Bates, to procure the services of any other entity to undertake any required decontamination or removal.

### **Environmental, Safety and Health (ES&H) Considerations**

The ES&H considerations evolve primarily around the activated products associated with the Bates Center. Operation of the accelerator system has activated walls and floors (mostly fixed and to varying depths) and machine components. Activation is believed to be limited to the:

- Linear accelerator (including the recirculation system and the switchyard building areas)
- North beam dump area off of the north hall.
- South beam dump and the south hall ring off of the south hall.

Decontamination will require removing or fixing surface activation. Until decontamination is completed, radiological conditions will necessitate continued environmental monitoring and surveillance (see Stewardship, below). In addition, limitations on personnel access into areas of concern will be required until radiation levels meet unrestricted access standards. The DOE dose standard is 100 mrem per year to members of the public (DOE O 5400.1); the State standard is 10 mrem above background (105 CMR 120.291).

Because radiation levels are considered low and there has been no evidence of unacceptable releases to the environment (based in part on surface water monitoring required by the State), no major concerns are expected from the regulators or local community.

As reported in March 2005 by MIT, recent radiation measurements were lower than previously anticipated. For example, measurements in the Beam Switchyard, long recognized as the area of highest contamination potential, showed maximum readings in the range of a few mR/hour, with limited potential contamination to be removed as controlled material (expected to be less than half the beam hardware in this area and less than 2% of the construction material). Moreover, by the time decontamination is initiated, MIT estimates that the amount of contaminated material will have decayed to at least one-tenth of early planning estimates. Even the South Hall beam dump had levels below 2 mR/hr (previously thought to be as high as 10 to 20 mR/hr) and the levels are continuing to reduce. As work continues, radiological planning will be performed to ensure personnel and environmental protection, and safe effective operation.

Massachusetts is a Nuclear Regulatory Commission agreement state under §274(b) of the Atomic Energy Act, and therefore has responsibility and authority for regulation of nuclear materials. The State of Massachusetts' Radiation Control Program also covers accelerators and other radiation-producing machines [see, 105 CMR 120.020 Registration of Radiation Machine Facilities and Services.] MIT through LNS is registered as the operator of the Bates accelerator.

In 1992, the Community Environmental Response Facilitation Act (CERFA) amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERFA requires that a covenant be attached to the deed in a real property transaction warranting that all remedial action necessary to protect human health and the environment from hazardous substances remaining on the property was taken, and any additional remedial action found to be necessary after the date of property transfer would be conducted by the United States. However, this covenant would not be necessary in the case of the transfer of ownership to MIT, as the law does not apply to any situation in which the person or entity to whom the real property is transferred is a potentially responsible party (PRP) with respect to this property. [CERCLA Section 120(h)(3)(B)]. MIT, as operator and landlord, is a PRP. CERFA also prescribes that the “contract” associated with an ownership transfer must identify the type and quantity of any hazardous substance listed in 40 CFR 302.4 for which more than the reportable quantities was stored for one year or more on the site (CERCLA section 120h(1), and EPA regulations at 40 CFR 373.3). While it is not clear that this requirement would apply to a real estate transfer not involving a “contract” or land, the Bates Center disposition would seem to fall within the intent of the provision. Moreover, compliance should not be difficult, inasmuch as the information need only be that which is readily accessible in DOE records.

The National Environmental Policy Act (NEPA) and the DOE NEPA Rule (10 CFR Part 1021) require DOE to consider the environmental impacts of its actions in decision-making. A categorical exclusion signed 11/01/04 exists for the initial activities covering activities associated with the preparation of the accelerator complex for extended shutdown of a year or more ("mothballing") and initial deactivation/decommissioning activities. An Environmental Evaluation Notification Form (EENF) (CH F 560) will be needed for the post initial-cleanup actions. These actions are expected to fall within several categorical exclusions<sup>2</sup> regardless of whether the preferred or backup disposition alternative (as discussed later) is taken. A final, formal determination will be made by the NEPA Compliance Officer. The NEPA process must be completed prior to initiation of any action that could have an environmental impact or limit reasonable alternatives.

### **Facility Maintenance and Operations**

Currently, DOE funds MIT to operate and maintain the Bates Center. However, the Bates Center is being terminated as a DOE-supported accelerator and user facility. MIT has submitted two proposals to DOE involving potential uses of parts of the Bates Center. These MIT proposals include support from DOE for research activities only. MIT would assume all operations and maintenance responsibilities as they pursue new scientific initiatives with DOE and others.

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<sup>2</sup> Categories of Actions where prior DOE experience has shown that there is not a potential for significant environmental impacts, and do not require preparation of an Environmental Assessment or Environmental Impact Statement.

### **Long-Term Stewardship**

Existing radiological conditions will necessitate environmental monitoring and surveillance responsibilities around the beam dumps. MIT has analyzed the groundwater flow and established three locations where it is monitoring radioactivity of surface water (the facility registration does not require groundwater monitoring). Analysis of the surface water on a quarterly basis has not shown any activity above background.

The assignment of stewardship responsibilities is part of the negotiation with MIT. Based on negotiations to date, it is expected that MIT will accept these responsibilities, indemnifying and holding the government harmless of any future liabilities/responsibilities, in exchange for the property and reasonable additional compensation.

### **Safeguards and Security**

In accordance with the cooperative agreement, MIT will continue to be responsible for the safeguarding of Government-furnished property, and radioactive materials management. Should these radioactive sources and nuclear materials become excess to the Bates Center needs for current and future Government-funded initiatives, MIT/Bates must notify the Contracting Officer, who will arrange for disposition in accordance with DOE and GSA requirements.

### **Possible Future Use of Facility**

In late 2004, early 2005, MIT submitted proposals for two new initiatives, a Research and Engineering (R&E) Center initiative for NP's consideration and a Center for Accelerator Science and Technology (CAST) initiative that requested support from several Office of Science programs.

Under the R&E proposal, DOE would propose to transfer ownership of the Bates Center facilities to MIT, but would remove the accelerator and associated equipment, and excess personal property. Under the CAST proposal, DOE would propose to transfer ownership of the Bates facilities, including the "related personal property" (e.g., accelerator) to MIT. The remaining (excess) Government-owned personal property would be removed, or disposed, after being decontaminated if necessary. Note that under both scenarios, Government-owned personal property would remain the property of DOE, with any excess redistributed to meet other NP program needs or disposed in accordance with the government's policies and procedures.

Both proposals underwent a mail review by a panel of scientists. On the basis of this review and budgetary constraints, the CAST proposal was declined in favor of other scientific priorities. However, NP proposes to support the R&E proposal beginning in FY2006. Final approval of the R&E proposal is contingent on an agreement with MIT regarding the appropriate level of funding for R&E and an agreement on the disposition of the Bates Center. The R&E initiative as proposed would have to be performed at the Bates Center since the type of activities proposed have infrastructure requirements (i.e., large space, overhead cranes, etc.) not available elsewhere to MIT, such as on MIT's main campus.

#### 4. DISPOSITION ALTERNATIVES CONSIDERED

In March 2003, the Office of Nuclear Physics (NP) contracted with Argonne National Laboratory (ANL) to develop a preliminary, high level plan (cost and schedule) to decommission the Bates facility. ANL was asked to address 3 options in the plan:

**Option 1) Transfer Facility and Equipment to MIT:** This option involved the transfer of ownership of all Bates facilities, as is, to MIT, and allowed continued MIT possession of all Government-owned equipment and components needed for DOE-funded initiatives.

**Option 2) Equipment Removal / Buildings Remain:** This option involved the removal and decontamination of activated equipment and components from the Bates facilities; disposition of Government-owned equipment and components; and decontamination of the Bates facilities for unrestricted use, and allowed the decontaminated Bates facilities to be abandoned or transferred for MIT's future use.

**Option 3) Brown/Greenfield:** This option involved the removal and decontamination (and/or disposal) of all equipment and components from the Bates facilities; the decontamination, demolition and removal of all Bates facilities; and the release of the site for unrestricted use.

In addition, DOE also considered two other disposition options for the buildings (not including the personal property which is discussed later). Special Provision B2c of the cooperative agreement allows:

**Option 4)** Sale of the Bates facilities and/or removal of the facilities from the site;

**Option 5)** Transfer of property title to another Federal Agency or to an eligible third party

#### **Evaluation of Alternatives:**

Options 3, 4 and 5 were considered not to be in the Government's best interest. Option 3 involves restoring the site to its pre-facility condition. This would involve the Government to not only decontaminate, but also demolish all existing structures, above ground and below ground, at a significant incremental cost. As the Cooperative Agreement does not require demolition of the structures, and filling the tunnels, this alternative cannot be cost-effectively justified. Under Option 4, selling and relocating the structures cannot be done cost-effectively either, as the majority of them are of permanent construction. Under Option 5, DOE did pursue with the General Services Administration (GSA) the possibility of transferring ownership to another Federal Agency. GSA screened the Bates property for possible interest. The screening yielded no viable opportunities<sup>3</sup>.

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<sup>3</sup> The Boston National Historical Park (BNHP) expressed interest in the warehouses to store artifacts. However, since BNHP did not express interest in the responsibilities associated with the activation issues associated with the buildings and accelerator, DOE would need the warehouses to perform the necessary decontamination activities of both.

Options 1 and 2 are considered the only viable alternatives; with Option 1 considered the preferred option as discussed below.

**Preferred Alternative (Option 1: Transfer Facility and Equipment to MIT)**

Transferring ownership of the real property and related personal property is considered the Government's most cost-effective option as it would minimize the potential liability and cost to DOE. For example, MIT taking ownership of the related real property (e.g. accelerator) "as is" by the end of FY05 would eliminate DOE's obligation under the cooperative agreement to decontaminate and remove the accelerator, as would be required under Option 2. MIT would assume responsibility for any future demolition work as well.

An even more important advantage to the Government of this option is that it puts a firm ceiling on DOE future liability. An essential element of Option 1 is a release and indemnification by MIT to cover any future liabilities associated with past or future operation of the Bates Center, including any claims resulting from the handling, transport, and disposal of radioactive waste generated by decontamination of the premises. DOE-owned radioactive waste would become MIT radioactive waste; moreover, MIT would cover any liability DOE might have as a potentially responsible party under the Comprehensive Environmental Response, Compensation and Liability Act from a release, or threat of a release, of radioactivity from the site or any waste disposal site.

This option became viable only recently. During negotiations in May 2005, MIT proposed to accept ownership of the Bates facilities and related personal property this fiscal year (including the accelerator). This would allow MIT to pursue other research options with other sources of funding, such as in the medical field. Even if no use for the accelerator can be found, MIT as owner has the flexibility to allow the accelerator to sit in a safe condition to allow radioactivity to decay, thereby reducing decontamination and removal costs. MIT's current proposal seeks compensation in the amount of \$6.3 million. The amount is estimated to enable them to cleanup the property over a period of time, with a reasonable contingency to cover any unanticipated clean-up cost and the release/indemnification of the Government regarding any future liability. This amount is less than that estimated by NP to perform the work proposed in Option 2 below.

**Backup Alternative (Option 2: Equipment Removal / Buildings Remain)**

Option 2 would be DOE's disposition alternative should DOE and MIT fail to resolve all details essential to a signed agreement. The estimate prepared by ANL in FY2003 and a subsequent report prepared by Areva under contract to MIT, estimated the removal of all of the equipment and decontamination of the facility at approximately \$12.1 million. However, since MIT prefers to perform the R&E initiative at the Bates Center and the Government concurs, all of the DOE equipment will not be removed as some is needed for this new initiative. Using the ANL and subsequent report, the cost to clean-up the Bates Center, adjusted for a reduced scope of work, has been estimated at \$7 to \$9 million. After clean-up activities are

complete, DOE plans to transfer the remaining real property and related personal property to MIT.

This option is not preferred as it would result in more equipment and facilities being removed and decontaminated, respectively, than the preferred option, with a correspondingly higher cost compared to the amount requested by MIT under Option 1 described above. Significantly, Option 2 also would not release DOE from potential liability in connection with the handling, transport, and disposal of radioactive waste generated as a result of the decontamination of the premises.

**Next Steps**

To get to a final agreement, the negotiation team is drafting a modification to the cooperative agreement based on MIT’s latest proposal. A signed agreement is plan for by October 2005. The composition of the negotiation team is presented in Table 1.

<b>MIT/Bates Negotiation Team</b>	
<b>DOE Team Member</b>	<b>Role</b>
Vicki Prouty, Chicago Office Assistant Chief Counsel	Co-Chair
Eric Simpson, Chicago Contracting Officer	Co-Chair
Brad Tippens, SC-26.1	NP Program
James Hawkins, SC-26.2	NP Program [Alternate]
<b>Participating Non-members</b>	
Dennis Kovar, SC Associate Director for Nuclear Physics, SC-26	HQ Program Sponsor
Jehanne Simon-Gillo, SC Facility & Project Management Division Director, Acting SC-26.2	HQ Program Sponsor
Susan Heston, Argonne Site Office, Senior Physical Scientist	Technical Advisor
Gloria Baldwin, CH Real Estate Specialist	Technical Advisor
Mary Cervantes, CH Personal Property Administrator	Technical Advisor
Mike Hill, Contract Specialist, CH Acquisitions and Assistance Division	Technical Advisor
Paul Neeson [Subject Matter Expert (SME) radiation safety], Argonne Site Office	Technical Advisor
<b>MIT Team Member</b>	<b>Role</b>
Robert Silbey, Dean of Science	Chair
Jamie Keith	Senior Counsel
Paul Powell	Contracting Officer
Richard Milner	Bates Director
<b>Participating Non-members</b>	
Gerry Fallon [SME, Radiation Safety Officer]	Technical Advisor
Frank Massey [SME, Radiation Safety]	Technical Advisor

**Table 1:** MIT/Bates Negotiating Team Membership.

**5. COST AND SCHEDULE**

Since a signed agreement does not exist, NP has included in its budget submission a total of \$11 million over a five year period (Ref Table 2). This amount is sufficient to address the more costly Option 2 scope of work in the event it becomes necessary.

The schedule to accomplish the work under Option 1 is entirely up to MIT. However, NP proposes to fulfill any compensation obligations as quickly as possible. Under

Option 2, the time required by DOE to perform the scope of work is contingent on the amount of excess equipment remaining once all of the personal property has been dispersed and on the available funds in a given year. However, the schedule will not extend beyond FY2010.

Activity (\$ in Millions)	FY2006	FY2007	FY2008	FY2009	FY2010	Totals
Decon./Demo (Option 2)	\$3.0	\$2.0	\$2.0	\$2.0	\$2.0	\$11.0

**Table 2:** Proposed funding levels within Nuclear Physics Budget

## 6. PERFORMANCE OF THE DISPOSITION

### **Both Preferred (Option 1) and Backup (Option 2) Alternatives**

Regardless of whether Option 1 or Option 2 is approved, some actions are required to be taken for both.

**Real Property and Related Personal Property:** Discussions with the SC-CH Certified Realty Specialists have identified a number of prerequisites to transfer or abandon the real property and related personal property, including:

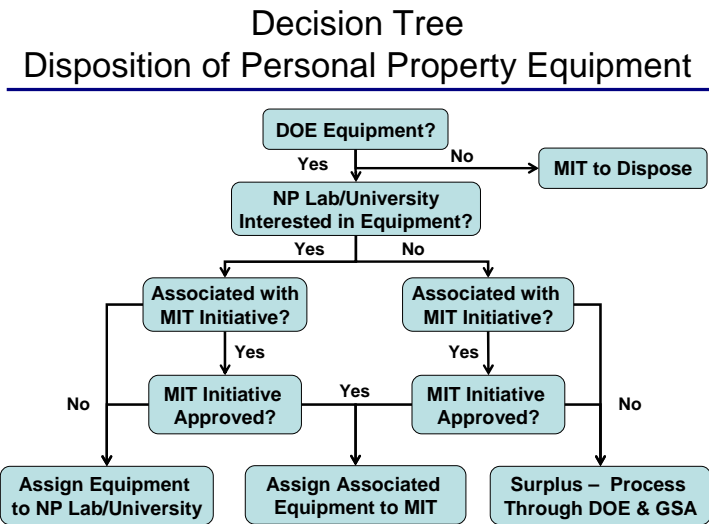
- Letter from site (MIT) requesting transfer
- Disposition Plan
- Environmental/radiological Survey
- GSA Appraisal Report for building value
- Summary of Benefits and Burdens
- Memo to the Office of Engineering and Construction Management (OECM) on approval to abandon improvements.
- Supplemental Agreement to transfer ownership
- MIT agreement to indemnify the Government against any long term stewardship responsibilities and future liabilities whatsoever.

When real property is disposed, there is also a prerequisite to coordination with GSA and HUD. However in this case, this is not required. Section 161g of the Atomic Energy Act of 1954, as amended [42 U.S.C. 2201(g)], authorizes DOE to “sell, lease, grant, and dispose of such real and personal property as provided in this Act.” The particular circumstances of the Bates Center, specifically, its origin as a Section 31 Contract “for research, development and demonstration work with commercial organizations,” enables DOE to use its independent authority under section 161(g) to dispose of the property, without regard to the provisions of the Federal Property and Administrative Services Act of 1949. Section 161g is applicable, even though the most current agreement with MIT is a cooperative agreement for work with an educational institution.

This Disposition Plan is prepared to satisfy the second item above, and the GSA appraisal has been conducted. The other documents will be prepared on the schedule necessary to assure legal transfer of the property in accordance with DOE authority and Government policy.

**Personal Property:** To address the disposition of the personal property, a complete list of both DOE owned and non-DOE owned property (Real and Personal) was prepared and confirmed by both parties. Once the DOE owned equipment was identified, decisions were made for each item to determine the applicable disposal requirements. The decision logic is depicted in Figure 1.

The options for disposing the equipment will be to a) assign the equipment to MIT, a NP laboratory, or university, or b) declared the equipment as excess and screen it for possible reuse through the DOE Energy Asset Disposal System (EADS) and then through the GSA’s Federal Disposal System (FEDS). That equipment that is not requested by any government organization will be scrapped.



**Figure 1:** Decision Tree for the Disposition of Personal Property Equipment.

The process for allocation/ disposal of personal property is as follows:

- **Personal Property Equipment Requested by MIT, NP Laboratories, and Universities**

MIT, NP laboratories and universities were given the opportunity to review the Government-owned equipment for relevance to Government-funded initiatives. Each organization requesting equipment must provide a written justification. That justification will be reviewed internally by NP or externally via a mail review if deemed appropriate (e.g., if the receiving organization is proposing to use the equipment within a new scientific initiative). Once NP accepts the justification, the requesting institution is directed to send its request to the Chicago Office Personal Property Administrator for processing in accordance with DOE requirements and relocated. Equipment approved for use by MIT will not be physically relocated.

- **Equipment Screened through DOE and GSA**

As equipment not of interest to NP's laboratories or universities and not associated with an MIT initiative is identified, it is being screened through DOE and GSA. The process requires initial screening through DOE's EADS, which takes approximately 45 to 60 days. Following DOE screening, the balance of equipment will be screened through GSA's FEDS. The FEDS screening process takes approximately 180 days. The receiving organization is responsible for the costs incurred for shipping and handling. Any equipment not requested will have to be disposed. How this is accomplished depends on the quantity of equipment remaining and its radiological condition. The best method of disposal will be determined shortly after the screening process is complete and an acquisition approach can be evaluated and documented.

**Performing Preferred Alternative (Option 1: Transfer Facility and Equipment to MIT)**

In performance of disposition activities under Option 1, because ownership of the real property and related personal property would be transferred this fiscal year, MIT will have the full responsibility to perform the decontamination and ultimate disposition responsibilities of the Bates Center real property and related personal property in accordance with regulatory requirements.

**Performing Backup Alternative (Option 2: Equipment Removal / Buildings Remain)**

There are two options available to DOE to clean up the Bates Center under Option 2 prior to abandoning the facilities or MIT accepting ownership.

- 1) Have MIT manage and perform the decontamination work as a DOE project
- 2) Issue a request for proposal to compete the decontamination of the Bates Center among qualified contractors.

Of these two options, DOE would invoke its right under the cooperative agreement to solicit a contractor to perform the decontamination. However, certain FY06 activities would need to be completed before DOE would be able to prepare a Statement of Work, and issue a request for proposals. DOE would continue to utilize MIT/Bates personnel in FY2006 to assist DOE with distributing the DOE-owned personal property to other NP laboratories and universities, and through GSA to other government agencies. MIT/Bates personnel have the knowledge of the equipment, facilities, and other existing conditions needed to plan and carry out the near-term work activities (i.e. confirming and validating the equipment list, dismantling and shipping equipment, and disposing of known waste).

These near term activities would enable DOE to define the extent of excess equipment to be scrapped and the actions necessary to abandon the Bates Center in a condition meeting radiation standards. At that time, DOE would be able to initiate the solicitation process, in anticipation of the competitive award of a contract to

perform the remaining work. The type of contract to be awarded would be analyzed within a DOE acquisition plan.

## 7. MANAGEMENT STRUCTURE AND APPROACH

Under both Options 1 and 2, DOE will need to structure the management of the necessary activities to ensure all work is performed in a safe and environmentally friendly manner, and to protect the interests of the Government. Under Option 1 where MIT is responsible for cleanup activities of the real property and related personal property, the structure will be such to ensure appropriate management of the disposition of Government-owned personal property only.

If clean-up activities are performed under Option 2, the degree to which this project must comply with DOE's project management requirements will depend on the estimated total project cost to accomplish the scope of work. That scope of work is defined as the costs associated with addressing the radiological and other hazards in accordance with the terms of the cooperative agreement. Cost to transfer Government-owned personal property equipment is the responsibility of the receiving program/organization, not of MIT, and should be the responsibility of the receiving program. Therefore, these transfer costs would not be included in the estimate for this cleanup activity. However, an appropriate level of coordination/planning activities will be captured in the total project costs.

As with most activities, the management structure will evolve as the activities precede through the various stages, i.e. from development of the equipment list, reviewing the list, approval of the MIT initiatives, defining the scope of cleanup, etc. The composition of the current integrated management team is as presented in Table 3.

Team Member	Responsibility
Susan Heston, Argonne Site Office	DOE Environmental Project Advisor
Eric Simpson, Chicago	Contracting Officer
Michael Hill, Chicago	Contract Specialist
Brad Tippens, SC-26.1	DOE Office of Nuclear Physics Program Lead
James Hawkins, SC-26.2	DOE Office of Nuclear Physics Project Lead
Peter Siebach, Chicago	DOE NEPA/ ES&H
Paul Neeson, Argonne Site Office	DOE Radiological
Gloria Baldwin, Chicago	DOE Real Property
Mary Cervantes, Chicago	DOE Personal Property

**Table 3:** Current membership and associated responsibilities of the Integrated Project Team