COLUMBIA -- Low-level radiation at a University of Missouri art museum has campus officials asking a federal agency for more time as well as guidance for cleaning up the contaminated former chemistry building.

Radioactive levels in Pickard Hall are minuscule -- roughly the amount of exposure a person would receive from naturally occurring radiation in food and drinks. But Nuclear Regulatory Commission rules require the university to "decommission" the historic building on Francis Quadrangle, home of the Museum of Art and Archaeology and the art history department, until the clean-up is complete.

Unlike other campus buildings, the museum's rare collections can't easily be relocated, said Peter Ashbrook, the school's environmental health and safety director. The university wants the NRC to extend its cleanup timeline.

"If this were a simple office building, it would be relatively straightforward," Ashbrook said Thursday night at a campus public hearing convened by the federal agency.

Pickard Hall was built in 1892 and is on the National Register of Historic Places. By the early part of the 20th century, chemistry professor Herman Schlundt was extracting radioactive materials from natural ores. That's believed to be the source of the radiation still in the building. Ashbrook said the university has been aware of the contamination in the building for decades, but more stringent cleanup rules went into effect in 2005.

The university alerted the NRC in November 2009 that naturally occurring radioactive material was found in Pickard Hall in excess of federal standards. Campus environmental inspectors have removed radioactive material from the basement and attic of the museum building, but contamination remains in pipes and air ducts.

Ashbrook's office removed contaminated soil from a nearby steam tunnel and from dirt near the building's gutters. Signs in the basement and attic warn visitors to contact the environmental health office before entering, and employees must wear monitors that measure their radiation exposure.
Nuclear Regulatory Commission guidelines call for contaminated buildings to be cleaned within two years of identifying the problem. Missouri already has received one delay from the NRC.

The agency expects to rule on the university's request by March 2012.
University asks for radiation cleanup time

COLUMBIA, Mo., June 23 (UPI) — The University of Missouri says it wants a federal agency to give it more time to figure out how to deal with radiation found in a historic campus building.

The University's Environmental Health and Safety office has removed some radiation from the basement and attic of Pickard Hall, but contamination still exists in pipes and ductwork behind walls, EHS Director Peter Ashbrook said.

Getting the radiation out of Pickard won't be a simple task, as the building on the university's Francis Quadrangle houses the Museum of Art and Archaeology and is on the National Register of Historic Places, he said.

"To relocate a museum is not a trivial undertaking," Ashbrook told The Columbia Daily Tribune. "There are artifacts there that are priceless and must be handled carefully. You can't just hire movers off the street to move this stuff."

The university has asked the Nuclear Regulatory Commission to extend the cleanup timeline indefinitely.

The NRC normally requires buildings where naturally occurring radioactive material is found to be cleaned within two years.

Built in 1892, Pickard Hall previously served as MU's chemistry building and is where noted chemistry Professor Herman Schlundt extracted radioactive materials from natural ores for research purposes in the early 1900s, thought to be the source of the radiation found in the building today.

The NRC said it "believes the building is safe for use by the staff, students and public" and would review MU's request for a timeline extension.
COLUMBIA MISSOURIAN

Nuclear Regulatory Commission seeks public comment on Pickard Hall radiation

By Suet Lee
June 23, 2011 | 9:05 p.m. CDT

COLUMBIA — The Nuclear Regulatory Commission encouraged public comments on MU’s request for an indefinite extension to clean up radioactive material in Pickard Hall, which houses the Museum of Art and Archaeology.

A public hearing was held Thursday evening in MU’s Jesse Wrench Auditorium to address the details of radiation in Pickard Hall. Peter Ashbrook, MU’s Environmental Health and Safety director, said the university has known about the radiation for decades.

On Nov. 17, 2009, the commission received information about radiation in the building that exceeded acceptable limits. The university has requested an extension for cleanup processes because of limited funds and the fact that the building is on the National Register of Historic Places.

The radiation was found in a few different locations, such as in the walls, the ground and the attic and underneath floorboards, said Christine Lipa, the branch chief of Materials Control for the Independent Spent Fuel Storage Installation and Decommissioning Branch.

Although the commission deemed the dose of radiation stemming from the Nov. 17 inspections unharmful, the commission thought it was important to take the public’s comments and questions into consideration.
The commission is still reviewing MU's request. The review process will take a year from March 21, when the university first sent in the request for an extension. The commission will accept comments for review until July 5.
COLUMBIA MISSOURIAN

Public hearing planned for Pickard Hall radiation cleanup

By Suet Lee
June 23, 2011 | 4:19 p.m. CDT

COLUMBIA — MU has requested an indefinite extension from the federal Nuclear Regulatory Commission to clean up radioactive material in Pickard Hall.

The commission scheduled a public hearing from 6 to 8 p.m. Thursday in Jesse Wrench Auditorium in Memorial Union to discuss the extension.
MU scores funds for biomedical innovations

By Janese Silvey

The University of Missouri has snagged a prestigious $5 million grant partnership that aims to help biomedical engineers on campus commercialize inventions that should ultimately improve health care.

The money is from the Wallace H. Coulter Foundation's Translational Partnership Award Program, and MU is one of about 15 universities to be given the award. "This is major recognition of the University of Missouri that we are a major research university," spokeswoman Mary Jo Banken said.

The Coulter Foundation is providing $666,667 a year for five years, with MU providing $333,333 in matching funds. Campus funding is coming from departments involved with the project, with support from the Office of Research.

Leading the effort are Jinglu Tan, chairman of biological engineering; Bill Caldwell, director of the Ellis Fischel Cancer Center and a pathology and anatomical sciences professor; and Chris Fender, director of the MU Office of Technology Management and Industry Relations. The three, along with entrepreneurs and venture capitalists, will serve on a board that will award the funding to MU faculty members.

Tan envisions awards of about $100,000 being given to several researchers every year to help them get their inventions to the marketplace — a process that historically has been missing from university research.

"The university is in the business of discovering new knowledge, but a lot of times, there are a lot of steps between new knowledge and products that can be actually used," Tan said. "We want to take the next steps, so to speak, to go beyond what we normally do and take knowledge and discoveries and use them in products, therapies and drugs that benefit patients."

Although some discoveries could lead to local startup companies, other inventions or new medications could be sold to existing companies through technology transfer agreements, Tan said.

He hopes the new funding allows research to be commercialized in the next five years.
"We’d like to achieve some tangible milestones and see some real results in terms of products being marketed,” Tan said. “We hope to be able to see a number of successful ventures or enterprises.”

Reach Janese Silvey at 573-815-1705 or e-mail jsilvey@columbiatribune.com.
College price calculators may not paint complete picture
BY TIM BARKER • tbarker@post-dispatch.com > 314-340-8350
Posted: 06/23/2011 7:36 AM

When the annual college search season gets under way this fall, parents and students will have a new tool at their disposal.

By the end of October, the nation's colleges and universities will be offering net price calculators on their websites, providing an easier way to compare attendance costs from one school to the next. At least, that's the goal of the federal law requiring the calculators.

Most higher education experts like the idea behind the new rule, which should give students and families a better idea of college costs much earlier in the game. But they also see potential for problems with the fledgling rule.

Among the biggest issues is the balancing of simplicity versus accuracy.

The calculator works by collecting information through a series of on-screen questions about the student's financial and academic background. The more questions it asks, the more accurate the results. But there is a fear that students may be scared away if the questions are too complex or numerous.

There also are concerns about using year-old financial information that doesn't take tuition and other price increases into account. And the possibility that some schools could use the devices as misleading marketing tools.

"Institutions can game these a little bit to work in their favor, as long as they comply with specific regulations. There's lots of wiggle room," said Richard Hesel, an education consultant with Baltimore-based Art & Science Group.

By law, the calculators are supposed to add up a laundry list of college costs — including tuition, fees, books, housing and food — and then subtract grants and scholarships a student is likely to receive. What's left is the net price.

That's just the sort of thing that could have come in handy for Brianna Petersen of Monett, Mo., who will be heading to the University of Missouri-Columbia in the fall. She chose Mizzou from a pool of four schools, with price being one of her biggest concerns. While it was easy to nail down the basics — tuition and room and board — she said it was much more difficult to figure out various fees and how much she would get from scholarship and financial aid.
Taking away some of the murkiness was the fact that she has helped her older brother navigate his way to Missouri State University. So she was prepared for some of the sticker shock.

"For kids who don't have an older sibling in school, it would be a complete slap in the face," Petersen said.

It's still unclear, though, whether Petersen would have had an easier time in the era of net price calculators.

A lot of that uncertainty comes from the fact that schools have a great deal of leeway in how they approach the calculators.

Some will choose the simplest approach and use a template provided by the federal government. But most seem unwilling to do so and are building their own, or paying someone else to do it. The simple federal template, they say, doesn't collect enough data to be accurate.

"If you look at the template, it just doesn't seem to be detailed enough to suit our needs," said Chris Hall, vice president for admissions and financial aid at McKendree University in Lebanon.

McKendree is among many local schools working with outside vendors to develop custom calculators that will collect a host of financial and academic information. They want to identify students who might be eligible for extra financial aid or scholarships — including those based on class standing, grade point average and college admission test scores.

McKendree, for example, offers a $1,000 legacy scholarship to students who have siblings, parents or grandparents who went to the school. Southeast Missouri State wants to identify students who will qualify for its generous merit-based Governor's Scholarship covering room and board and up to 30 hours of tuition. And the University of Missouri-St. Louis wants to reflect the lower tuition paid by students who live in 22 nearby Illinois counties.

In some ways, the calculators threaten to change the way students evaluate prospective schools. The way it works now, students don't get a firm idea of cost until they get their financial aid award letters in the spring. Essentially, they learn the price only after deciding to buy.

Admissions and financial aid officials say they're happy to see students get better information earlier. But there's a downside, particularly in the case of students who might be eligible for more aid or lower tuition than can be reflected in a calculator.

"We may look a lot more expensive than we really are," said Alan Byrd, admissions director at UMSL.

What's missing is the direct student-to-school contact that allows an institution a chance to take a closer look at individual needs.

At Washington University, for example, financial aid award letters are sent out in March, giving students a month to work with the school's counselors. It's not uncommon for aid packages to be
adjusted once special circumstances — a parent losing a job, for example — are taken into
account, said Bill Witbrodt, director of Student Financial Services.

Those are the sorts of things that might not be reflected in the numbers spit out by a calculator.

"Our challenge is to present the net price calculator in a way that lets folks know we haven't
taken those things into consideration," Witbrodt said.

Creating even more hand-wringing is the likelihood that some schools will end up using the
calculators as marketing tools — some less honestly than others.

Federal rules offer a short list of things that must be included on every calculator, with net price
being the most important. Outside of that, schools are relatively free to do what they please with
the tools.

"There's no standard as to how the information is displayed or how it is characterized," said
Mark Kantrowitz, publisher of FintAid.org. "It may lead to confusion."

A recent study by the Institute for College Access & Success found examples of some early
adopter schools designing calculators that put "net price" in small print, while highlighting a
much lower "net cost" — factoring in thousands of dollars in loans and work study.

That's just the sort of practice that student advocates are hoping to avoid.

"We want to make sure colleges don't draw attention to a figure that misrepresents how
affordable they are," said Diane Cheng, a research associate with the institute.

It's unclear whether that can be resolved without revisions to the law — something many experts
believe will happen sooner rather than later. They argue that a more uniform approach to the
calculators would help students make accurate side-by-side comparisons of schools.

In the meantime, everyone is watching and wondering what sort of impact calculators will have
on applications and college decisions.

Like many of his peers, Jim Brooks doubts price will be given much more weight on
students' college checklists. The financial aid director at the University of Missouri-
Columbia is optimistic that other factors — including a school's reputation and the quality
of its programs — will continue to play key roles.

"I would hope price won't be the only thing families look at," he said.
MU graduate students pair with teachers to improve science education

By Ellen Thommesen
June 23, 2011 | 9:09 p.m. CDT

COLUMBIA — Columbia Public Schools' fourth- and fifth-grade teachers will adopt a National Science Foundation initiative in August to teach science in conjunction with MU graduate students. Funding cuts ended a district program in which science specialists taught related subjects to those students.

GK-12 is a fellowship program that sends graduate students into elementary school classrooms to improve their communication and teaching skills and promote science education for students in kindergarten through 12th grade.

Candace Galen, a biological sciences professor at MU; Anna Waldron, director of MU's Office of Science Outreach; and Peter Stiepleman, assistant superintendent of elementary education for Columbia Public Schools, stepped in with the new idea for improving science education.

MU's GK-12 project, "ShowMe Nature: From Elements to Ecosystems," will pair eight MU graduate researchers from the Interdisciplinary Plant Group and the Conservation Biology Program with district students to jump-start science education for fourth- and fifth-graders.

U.S.-based research published in the February 2011 American Society for Quality Higher Education Brief indicated that elementary school is a critical age when students either
maintain an interest in science or turn away from it, a fact that holds true for girls especially.

Research from the brief also showed that particular factors motivate students to pursue an activity or career when it comes to science education. Students need to feel that the experience is authentic and relates to their real-world understanding and that they are competent in the activities they do.

One way Galen hopes to tackle these factors is by having a hands-on, exciting science experience implemented into lesson plans.

“Science isn’t something you read about in a textbook,” Galen said, “It’s very active and creative.”

Students will write their own grant proposals for science materials in their classrooms. Graduate students will find out what science projects the students would like to do and then help them write proposals for new equipment.

For example, if a student wants to have a weather station, the graduate student will ask why they want that tool, what equipment they’ll need, where a good place for the station would be and more, Galen explained.

“Writing proposals becomes a science experience,” Galen said.

She said students will gain writing experience, work with math during designing and use creativity when competing with other classrooms for grants.

New portable video streaming technology will allow the graduate fellows to virtually transport their elementary school classes into their research labs throughout the program. Galen said this is a way to engage students in real-life scientific research and introduce them to the scientific process.

“Really, the only goal is to improve the science education transfer to fourth- and fifth-graders and to teachers,” said Jeremy Gibson, an MU graduate student in biological sciences who will be participating in the program in the fall.
Gibson said the project will also focus on turning elementary school teachers into scientists instead of just conveyors of science.

Galen said this will be an eye-opening process for teachers. They will discover with their students that science is a process and a way of investigating the natural world.

"Helping our highly qualified teachers become comfortable with teaching the science curriculum while at the same time helping graduate students learn to discuss and teach their research interests to general audiences was exactly the win-win we were looking for," Stiepleman said.

Stiepleman and Galen both said they feel this experience will benefit all who are involved.

"The teachers are very excited," Stiepleman said. "The grant includes a stipend and opportunities to travel as well because in an effort to treat them as professionals, we want to them to experience the scientific process in the field."

This means Columbia Public Schools teachers have the chance to travel and learn side by side with graduate students.

"You can be a scientist, too," Gibson said. "It starts with asking a question. It's that simple."

Gibson has previous experience with science outreach for children and has a passion for teaching.

"I'm just looking forward to working with fourth- and fifth-graders again," Gibson said. "I think they're so much fun."

Gibson said he wants students to be able to ask questions and know they can answer them by gathering evidence or conducting experiments and finding scientific answers.

Another important aspect of the experience is giving graduate students the opportunity to improve their communication skills regarding their work. Teaching and communicating complicated science concepts is especially challenging with children.
“The whole idea is to help students learn and get excited about science, and the grad students doing well means they are communicating well,” Galen said.

The project is still in its planning stage, but the people involved are excited.

"My kids have heard a lot about this project, and when I found out it would be funded, I told my family, and my daughter burst into tears," Galen said. "She was saying, 'It's such a cool program, and I'm going to be in sixth grade, and I can't do it.' So I told her she could help out whenever she wanted."

The first trial begins in the fall, and financing through a $1 million grant from the National Science Foundation and a matched grant from MU will help the program continue for at least three years.

“We're kind of the guinea pigs,” Gibson said. “I think it will be a good experience to get a handle on what teachers are looking for, what the teachers’ administration is looking for and what we're looking for.

“This is priceless experience to have.”
Missouri T-shirt raises over $200K for Joplin tornado relief

Days after a devastating tornado ravaged the town of Joplin, Mo., last month, the University of Missouri announced that as part of its plan to help, the school would sell shirts with all proceeds going to the relief efforts.

The shirts read "One State. One Spirit. One Mizzou" and were immediately put on sale on the school’s web site and at bookstores.

And in the month since the shirts went on sale, Missouri has raised over $225,000, according to Mike DeArmond of the Kansas City Star.

DeArmond writes that the school has sold more than 20,000 shirts at $14.95 each and that, as a whole, the school has raised more than $1 million for Joplin relief efforts.

The shirts are still for sale.
Mizzou T-shirt aid for Joplin tops $225,000

By Mike DeArmond - Posted on 23 June 2011

I'll start off with a personal thank you to all those who have given aid to Joplin, where I went to junior high and high school, in the wake of the tornado that just ripped the heart out of the south part of the city.

And a special thanks to the University of Missouri - yes, I am the beat writer for Mizzou, but this isn't about coverage - for its "One State. One Spirit. One Mizzou." campaign.

That effort has now raised more than $225,000 for the Joplin relief effort, having sold more than 20,000 T-shirts bearing at $14.95 a pop.

The thanks doesn't stop at the school but extends to the good folk who bought those shirts.

I was in Columbia on Wednesday night attending a grandson's swimming meet - Turner won first place in three individual events and blue ribbons on two relays says this proud Grand Dad - and noticed several people wearing their One Spirit shirts.

The shirts, by the way, are still selling at MUTigers.com and in Columbia at the Tiger Team Store and University Bookstore.

All together, MU reports it has raised more than $1 million in relief efforts for Joplin.

Thank you doesn't seem enough.

It is something I take personally, given that my Mom was in a closet in her house just two blocks south of what is just about total devastation when the tornado hit.