INFORMATIONAL ITEM: MSU-Northern – Update BioFuels Research Project

THAT

MSU-Northern is proceeding with building modifications and installation of biofuels research equipment, funded through federal grants, under the auspices of MSU's General Spending Authority, authorized by the 60th and 61st Legislatures for Capital Improvements to Campus Facilities.

EXPLANATION

- 1. MSU-Northern received a \$2.2 million grant from the Montana Dept of Labor (competitive, national WIRED grant in 2006) to pursue bio-fuels training. The grant funded three technical positions, advanced performance test equipment and instrumentation, test engines, and "certification-like" test equipment.
- 2. Subsequently, in 2010, MSU-Northern received a federal appropriation of \$2.25 million to enhance and expand bio-fuels research including additional equipment, equipment installation, personnel and basic facilities modifications.
- 3. MSU-Northern plans to modify the previous Auto Diagnostics building to house this new research equipment, including the dyno and cert-like equipment. This building originally constructed in the 1950's became available for adaptive re-use after the completion of the Advanced Technology Center building project.
- 4. Building modifications will include repairs and finishes, a new vestibule, new restrooms, a pit for the dynamometer and a modified roof structure to accommodate the required height for equipment. Significant electrical/mechanical modifications will accompany the new equipment installation.
- 5. The bio-fuels research program/equipment will include items such as cameras for 24/7 visual monitoring, automatic grain handling equipment, 2500 gal mobile fuel handling equipment, 5 ton/day oil pressing equipment, a 100 gal research training bio-diesel processor and a state-of-the-art heavy duty diesel engine performance testing lab with 750kw capacity.
- 6. BOR Information Item 147-2011-R5010 permitted MSUN to pursue the building modifications for an expected total of \$780,000.
- 7. However, two circumstances combine to require a total contract obligation for ~\$1.33 million: first, the bids received for the proposed work are significantly higher than the architect's estimate; and, second, the installation of several pieces of the research equipment have been rolled into the construction cost (to assure proper coordination and alignment), adding ~\$250,000 to the construction cost (which was originally anticipated to be borne by the grant, but outside the construction contract).
- 8. MSU-Northern assures that no new or additional state funds will be requested for operations and maintenance of this existing facility as a result of this project.
- 9. This project will be completed under Montana State University's General Spending Authority, authorized by the 60th & 61st Legislatures (HB004) for Capital Improvements to Campus Facilities. This project will be included on MSU's General Spending Authority TRACKER and reported to the Board of Regents as required under Regents policy 1003.7, Procedures 2(a) Legislative Authority.