



**MEMORANDUM OF AGREEMENT**

**Between  
Montana Department of Environmental Quality  
And  
Department of Corrections**

**Montana State Prison  
Renovate Low Side Support  
Rothe and Low E Support**

**A&E # 29-12-01**

**RECEIVED**

JUL 03 2012

DEQ  
Planning Division

This Memorandum of Agreement (**MOA**) is made and entered into between the Montana Department of Environmental Quality, hereinafter referred to as DEQ, and the **Department of Corrections**, hereinafter referred to as the Agency.

**Background**

The State Buildings Energy Conservation Program (SBECP) reduces operating costs in state facilities by identifying and funding cost-effective energy and water efficiency improvements. This program uses state special funds and federal funds granted to the state under the American Recovery and Reinvestment Act (ARRA) of 2009 specifically allocated to the program. DEQ in some cases augments the program funds with utility funding to complete the evaluation and implementation of efficiency improvements. The resulting cost savings are used, in turn, to pay back the funds for reinvestment in other energy and water efficiency projects. All projects are designed so that cost savings resulting from the investments will be sufficient to repay the investments; in most cases, savings will continue well after the investment has been repaid. This MOA replaces the previous MOA for the project in its entirety.

DEQ, through established contracting policies and procedures, contracts with private engineering firms to perform comprehensive energy analyses of state facilities and may also engage the services of utility companies to complete audits of less complex state facilities or may use DEQ engineering staff to complete the audits. DEQ reviews the studies and recommends cost effective energy improvements for implementation.

Estimated energy and water cost savings are projected utility savings based on engineering models using average weather condition, anticipated occupancy, building operation parameters, and current fuel rates. These estimated savings are the source of funds for repaying the investment in the project and are captured by dividing the agency's utility budget into two portions, the amount of the budget that is still needed for utility costs, and the amount of the budget that is no longer needed for utility costs because of efficiency savings that is then used to repay the project costs. DEQ will bill the agency once a year to recover the project costs and deposit funds collected into the Energy Conservation Repayment Account. Savings are based on utility costs at the time an energy analysis is completed and on the known building use at the time of the energy analysis. The utility costs and savings estimates may be adjusted if there are additional energy consuming measures installed at the time of the project or if building use changes in a way that increases energy use.

**Purpose**

The purpose of this MOA is to reduce energy use and lower the utility costs for the Agency by implementing a project based on a completed energy analysis of the **Rothe and Low E**

**Support.** This project consists of installing new boilers and Direct Digital Controls for Rothe. New lighting, Domestic Hot Water heaters, added heat recovery to new kitchen ventilation and wall and roof insulation will also be installed on the Low side. The Agency desires to participate in the program, and has determined that cost-effective energy savings could be achieved with the project. Project costs include the cost of the energy analysis, the SBECF expenditures for the construction of the project, and 3% interest calculated on an annual percentage rate. State law requires that energy cost savings be placed in the Energy Conservation Repayment Account until the cost of the project is repaid.

**Table 1**

Energy Analysis Cost	\$12,000
SBECF Funds for Construction	\$477,230
Interest	\$104,739
Prepaid FY 11	-\$150,000
Total Amount to be Repaid	\$443,969
Annual Payment	\$24,665
Term of Repayment	18
1 <sup>ST</sup> Year Payment is Due	8/1/2012

\* Prepayment of \$150,000 in FY 11 results in lower annual payment and shorter term than on original MOA.

See Attachment A for Repayment Schedule.

Following installation of the project, DEQ shall collect and evaluate energy use data to determine whether energy improvements are performing as expected. If they are not, DEQ and the Agency may modify Table 1 and Attachment A (Repayment Schedule).

DEQ uses State Buildings Energy Conservation Program funds to leverage utility contributions wherever feasible by negotiating cost-share arrangements with the utility. Typically a utility cost-share allows additional improvements that would otherwise not be possible. In these cases, DEQ will include energy savings from the investment of utility funds in calculating the benefits to the project but will not require that utility contributions be repaid and therefore will not include them in the project costs in Table 1.

The Agency shall contact DEQ with concerns about its ability to achieve savings from the project as soon as a potential problem is identified. DEQ shall review the potential problem and determine whether Table 1 should be modified. Modifications to Table 1 or Attachment A must be made as an amendment of this MOA and must be signed by both parties.

The Agency shall begin paying the annual payment as indicated in Table 1. If the Agency does not recognize a full year of savings due to the completion date of the project, DEQ shall determine, and the Agency shall pay, a partial payment based on the percentage of annual savings recognized. The Agency shall disburse the annual payment as requested by DEQ. The Agency shall pay the annual payment indicated in Table 1 in subsequent fiscal years until the total repayment indicated in Table 1 has been repaid. A partial payment may be requested in the final year of the repayment term, in accordance with the established Repayment Schedule

contained in Attachment A.

Energy savings will be captured through the biennial budgeting process. The following adjustments will be made to the agency's budgets in the biennia following the project's completion until the total repayment is made:

- 1. State Accounting Code 69205-Principal Payment-SBECF, and Code 69206-Interest Expense-SBECF, will be added to the budget templates.
- 2. The amount of the annual payment indicated in Table 1 will be split to Code 69205-Principal Payment-SBECF and Code 69206-Interest Expense-SBECF based on the Attachment A Repayment Schedule.
- 3. The utility budget (State Accounting Codes 62601 or 62603) will be decreased by an equal amount.

The Agency shall disburse to DEQ the annual payment each fiscal year at DEQ's request. DEQ shall deposit the amounts disbursed by the Agency into the Energy Conservation Repayment Account.

Accounting instructions for the MOA are governed by Generally Accepted Accounting Principles (GAAP) and Montana Operations Manual (MOM), Chapter 345. If accounting treatment changes because of changes to GAAP or MOM, the parties shall communicate those changes via written inter-agency memorandum or email rather than modification to this MOA.

This Memorandum of Agreement shall remain in effect until the Agency has reimbursed DEQ for the Total Repayment indicated in Table 1. **The first year of billing will be FY 13.**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

7/19/12  
Date

  
RICHARD H. OPPER, Director

1520 Sixth Avenue  
P. O. Box 200901  
Helena, MT 59620-0901

**DEPARTMENT OF CORRECTIONS**

6/27/12  
Date

  
MIKE FERRITER, Director

5 South Last Chance Gulch  
Helena, MT 59620



# ATTACHMENT A REPAYMENT SCHEDULE

Payment on 6/30/2011 of \$150,000 prior EPPB 10-34 Amendment 1  
to first payment in 2012 Corrections Rothe and Low E

Enter values	
Repayment amount	\$ 339,230
Annual interest rate	3.00 %
Repayment period in years	18
Number of payments per year	1
Start date of repayment	08/01/11
Optional extra payments	\$ -

Repayment summary	
Scheduled payment	\$24,665
Scheduled number of payments	18
Actual number of payments	18
Total early payments	\$ -
Total interest	\$ 104,739

Lender name: State Building Energy Conservation Program

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Principal Balance	Cumulative Interest
1	8/1/2012	\$339,230	\$24,665	\$0	\$24,665	\$14,488	\$10,177	\$324,742	\$10,177
2	8/1/2013	\$324,742	\$24,665	\$0	\$24,665	\$14,923	\$9,742	\$309,819	\$19,919
3	8/1/2014	\$309,819	\$24,665	\$0	\$24,665	\$15,370	\$9,295	\$294,449	\$29,214
4	8/1/2015	\$294,449	\$24,665	\$0	\$24,665	\$15,832	\$8,833	\$278,617	\$38,047
5	8/1/2016	\$278,617	\$24,665	\$0	\$24,665	\$16,306	\$8,359	\$262,311	\$46,406
6	8/1/2017	\$262,311	\$24,665	\$0	\$24,665	\$16,796	\$7,869	\$245,515	\$54,275
7	8/1/2018	\$245,515	\$24,665	\$0	\$24,665	\$17,300	\$7,365	\$228,216	\$61,641
8	8/1/2019	\$228,216	\$24,665	\$0	\$24,665	\$17,818	\$6,846	\$210,397	\$68,487
9	8/1/2020	\$210,397	\$24,665	\$0	\$24,665	\$18,353	\$6,312	\$192,044	\$74,799
10	8/1/2021	\$192,044	\$24,665	\$0	\$24,665	\$18,904	\$5,761	\$173,141	\$80,560
11	8/1/2022	\$173,141	\$24,665	\$0	\$24,665	\$19,471	\$5,194	\$153,670	\$85,754
12	8/1/2023	\$153,670	\$24,665	\$0	\$24,665	\$20,055	\$4,610	\$133,615	\$90,365
13	8/1/2024	\$133,615	\$24,665	\$0	\$24,665	\$20,657	\$4,008	\$112,958	\$94,373
14	8/1/2025	\$112,958	\$24,665	\$0	\$24,665	\$21,276	\$3,389	\$91,682	\$97,762
15	8/1/2026	\$91,682	\$24,665	\$0	\$24,665	\$21,915	\$2,750	\$69,768	\$100,512
16	8/1/2027	\$69,768	\$24,665	\$0	\$24,665	\$22,572	\$2,093	\$47,196	\$102,605
17	8/1/2028	\$47,196	\$24,665	\$0	\$24,665	\$23,249	\$1,416	\$23,947	\$104,021
18	8/1/2029	\$23,947	\$24,665	\$0	\$24,665	\$23,947	\$718	\$0	\$104,739

