

**MEMORANDUM OF AGREEMENT**

**Between**  
**Montana Department of Environmental Quality**  
**And**  
**Department of Corrections**  
**Pine Hills Youth Facility Upgrade Building Systems**  
**A & E 2012-15-01-01**

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. 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 program uses state special funds 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.

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 Pine Hills Youth Correctional facility. 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 SBECF expenditures of \$500,000 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.

A listing of costs and a Repayment Schedule are included for this agreement in Attachment A. These costs are based on construction bids. Costs also assume that regular payments for principal and interest are made annually according to an amortization table in Attachment B. If construction costs differ, or if annual payments change because of early repayment, a new amortization table will be prepared.

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 Attachment A-Project Costs and Attachment B 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 this case a grant from MDU of \$55,662 was received. 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 Attachment A.

The Agency shall contact DEQ if there are any concerns about its ability to achieve savings from the project. DEQ shall review the potential problem and determine whether Attachment A. should be modified.

The Agency shall begin paying the annual payment as indicated in Attachment A. 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 Attachment A in subsequent fiscal years until the total repayment indicated in Attachment A 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. Details on the accounting process and codes used are included in Attachment C.

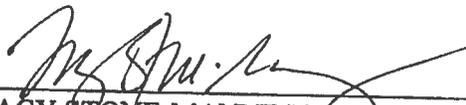
The Department and the Agency recognize that the actual cost of the project could change the amount of the agreement, early principal payments could change the length and total amount to be repaid, and accounting guidelines could change. Modifications to this agreement that result in

lower project costs, a lower amount to be repaid, or changes in accounting guidelines can be made through a memo from DEQ with revised attachments A, B, or C. Any modifications to this agreement that result in higher costs to the agency must be made through an amendment that is signed by both parties.

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 2016.**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

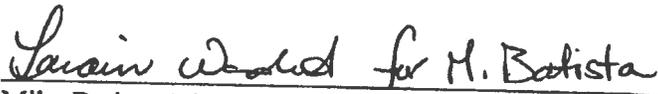
9.25.14  
Date

  
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TRACY STONE-MANNING, Director

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

**Department of Corrections**

9-19-14  
Date

  
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Mike Batista, Director

5 S. Last Chance Gulch  
P.O. Box 201301  
Helena, Montana 59620-1301

**Attachment A**

**State Buildings Energy Conservation Program Costs**

Energy Analysis Cost	0
SBCEP Funds for Construction	\$500,000
Total Project Interest	\$128,249
Total Amount to be Repaid	\$628,249
Annual Payment	\$41,883
Term of Repayment	15 years
1 <sup>ST</sup> Year Payment is Due	2016; August 2016

**Attachment B  
Amortization Table**

EPPB 14-07  
A&E 2012-15-01-01  
DOC-Pine Hills Youth Facility Upgrade

Compound Period: Annual

Nominal Annual Rate: 3.000 %

**CASH FLOW DATA**

Event	Date	Amount	Number	Period	End Date
1 Loan	08/01/2015	500,000	1		
2 Payment	08/01/2016	41,883	15	Annual	08/01/2030

**AMORTIZATION SCHEDULE - Normal Amortization**

	Date	Payment	Interest	Principal	Balance
Loan	08/01/2015				500,000
1	08/01/2016	41,883	15,000	26,883	473,117
2	08/01/2017	41,883	14,194	27,689	445,428
3	08/01/2018	41,883	13,363	28,520	416,908
4	08/01/2019	41,883	12,507	29,376	387,532
5	08/01/2020	41,883	11,626	30,257	357,275
6	08/01/2021	41,883	10,718	31,165	326,110
7	08/01/2022	41,883	9,783	32,100	294,010
8	08/01/2023	41,883	8,820	33,063	260,947
9	08/01/2024	41,883	7,828	34,055	226,892
10	08/01/2025	41,883	6,807	35,076	191,816
11	08/01/2026	41,883	5,754	36,129	155,687
12	08/01/2027	41,883	4,671	37,212	118,475
13	08/01/2028	41,883	3,554	38,329	80,146
14	08/01/2029	41,883	2,404	39,479	40,667
15	08/01/2030	41,883	1,216	40,667	0
<b>Grand Totals</b>		<b>628,245</b>	<b>128,245</b>	<b>500,000</b>	

Last interest amount decreased by 4 due to rounding.

**Attachment C**

### **Adjustments to Agency Budgets**

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.