

South Dakota Science and Technology Authority

**Board Meeting
March 20, 2015**



630 East Summit Street
Lead, SD 57754

Call to Order – Chairperson Casey Peterson

1A. Call Roll

Mr. Tom Adam
Dr. Ani Aprahamian
Mr. Paul Christen
Mr. Dana Dykhouse
Ms. Pat Lebrun
Mr. Casey Peterson
Mr. Ron Wheeler
Dr. Heather Wilson

1B. Introduce Guests

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**South Dakota Science and Technology Authority
Board Meeting – March 20, 2015**

Agenda Item: 02

Approve Agenda – Chairperson Casey Peterson

Attached is the SDSTA Board agenda for the March 20, 2015 meeting.

Recommended Action:

Motion to approve agenda as presented.

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AGENDA
South Dakota Science and Technology Authority
630 East Summit Street, Lead, South Dakota
Meeting of the Board of Directors
Friday, March 20, 2015 at 9:00 AM (MT)

SDSTA Mission: *To enable compelling underground research in a safe work environment and foster transformational science education.*

Title	Report	Recommendations
1. Call to Order A. Call Roll B. Introduce Guests	-- Chair Casey Peterson	<i>Informational</i>
2. Approve Agenda	-- Chair Casey Peterson	<i>Motion to approve agenda</i>
3. Approve Minutes	-- Chair Casey Peterson	<i>Motion to approve December 18, 2014 minutes</i>
4. Approve Audit Report	-- Ms. Pat Lebrun	<i>Motion to approve the Audit of Fiscal Year Ended June 30, 2014 as discussed at the December 18, 2014 board meeting</i>
5. Financial Report A. Review Financial Summaries	-- Mr. Mike Headley -- Ms. Nancy Geary	<i>Motion to accept financial report</i>
6. Report from Executive Director A. SDSTA Report B. Sanford Lab Homestake Visitor Center Plans and Underground Construction Update C. Long-Baseline Neutrino Facility Update	-- Mr. Mike Headley -- Mr. Mike Headley -- Mr. Josh Willhite -- Mr. Josh Willhite	<i>Motion to accept executive director's report</i> <i>Informational</i> <i>Informational</i> <i>Informational</i>
7. Gilt Edge Agreement Update	-- Mr. Tim Engel	<i>Informational</i>
8. 2015 Legislative Update	-- Mr. Tim Engel	<i>Informational</i>
9. Captive Insurance Discussion	-- Mr. Tim Engel	<i>Informational</i>
10. Select Nominating Committee	-- Chair Casey Peterson	<i>(Election of officers at the June mtg)</i>
11. Review of SDSTA Policies	-- Mr. Mike Headley	<i>Motion to approve new, updated and retired policies</i>
12. Executive Session to discuss personnel matters and to consult with legal counsel concerning contractual matters	-- Chair Casey Peterson	
13. Report from Executive Session	-- Chair Casey Peterson	<i>Motion to accept executive session report</i>
14. Discuss date and time of next meeting	-- Chair Casey Peterson	<i>June 30, 2015 at 8:30am (MT); Sanford Lab Homestake Visitor Center Grand Opening to follow at 11:00am (MT)</i>
15. Board Comments		
16. Adjourn	-- Chair Casey Peterson	<i>Motion to adjourn</i>

Please do not place or accept cell phone calls during this meeting. A copy of this agenda has been posted in a manner visible to the public at the entrance to the South Dakota Science and Technology Authority office located at 630 East Summit Street, Lead, South Dakota at least 24 hours prior to this meeting. Telephone: (605) 722-8650.

AGENDA
South Dakota Science and Technology Authority
630 East Summit Street, Lead, South Dakota
Meeting of the Board of Directors
Friday, March 20, 2015 at 9:00 AM (MT)

SDSTA Board Member Terms of Service, Committees and Schedule

Board Members and Terms of Service			
	Board Members	Appointed	Term Expires
1.	Thomas Adam	Re-appointed August 10, 2009	August 8, 2015
2.	Ani Aprahamian	December 10, 2009	December 9, 2015
3.	Paul Christen	January 31, 2011	August 8, 2016
4.	Dana Dykhouse, Vice-chair	Re-appointed August 1, 2014	August 14, 2020
5.	Patricia Lebrun, Secretary-Treasurer	Re-appointed August 16, 2010	August 8, 2016
6.	Casey Peterson, Chair	Re-appointed August 10, 2009	August 8, 2015
7.	Ron Wheeler, Vice-chair	Re-appointed April 10, 2014	April 9, 2020
8.	Heather Wilson, ex-officio member	SDSM&T President appointed July 1, 2014	
Committees and Members (2014)		2015 Board Schedule	
	Audit Committee Members:	March 20, 2015	9:00 am (MT)
	> Paul Christen, Pat Lebrun-Chair	June 30, 2015	8:30 am (MT)
	Nominating Committee Members:	September 17, 2015	9:00 am (MT)
	> Ani Aprahamian, Dana Dykhouse	December 17, 2015	9:00 am (MT)

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Approve Minutes – Chairperson Casey Peterson

Attached is the SDSTA Board Minutes from the meeting held on December 18, 2014.

Recommended Action:

Motion to approve Minutes as presented.

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South Dakota Science and Technology Authority Board of Directors
Meeting Minutes
Thursday, December 18, 2014
Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 9:01 AM Mountain Time (MT) on Thursday, December 18, 2014 in the 2nd Floor Vault Conference Room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE

Dr. Ani Aprahamian (by telephone)
Mr. Paul Christen
Vice Chairperson Dana Dykhouse (by telephone)
Secretary/Treasurer Patricia Lebrun
Chairperson Casey Peterson
Vice Chairperson Ron Wheeler
Dr. Heather Wilson

MEMBERS OF THE BOARD NOT IN ATTENDANCE

Mr. Thomas Adam

SDSTA STAFF

Ms. Michelle Andresen, Administrative Assistant
Mr. Tim Engel, Legal Counsel
Ms. Nancy Geary, Chief Financial Officer
Mr. Mike Headley, Executive Director
Mr. Jaret Heise, Science Liaison Director
Ms. Mandy Knight, User Support Office Manager
Ms. Leatta Mathis, Contracts Specialist
Mr. Noel A. Schroeder, Environment, Health and Safety (EHS) Director
Mr. Joshua Willhite, Engineering Director

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Dr. Kevin Lesko, Sanford Underground Research Facility Operations Head, LBNL
Mr. Torin Peterson, Baylor University student
Dr. Ben Saylor, Education and Outreach (E&O) Director, BHSU

ITEM 1. – CALL TO ORDER

Chairperson Peterson called the meeting to order at 9:01 AM (MT). Roll call was held. All members were present in person or by telephone except Mr. Adam.

Chairperson Peterson asked audience members to introduce themselves.

ITEM 2. – APPROVE AGENDA. Chairperson Peterson proposed an additional item for the agenda: “6A.3 Yates Crusher Brass Bushings.”

Chairperson Peterson asked for a motion to approve the agenda as amended

Motion by Mr. Wheeler and second by Ms. Lebrun to approve the agenda as amended. Motion passed unanimously.

ITEM 3. – APPROVE MINUTES

Chairperson Peterson asked for a motion to approve the Minutes of the September 18, 2014 meeting.

Motion by Mr. Dykhouse and second by Mr. Christen to approve the Minutes of the September 18, 2014 meeting as presented. Motion passed unanimously.

ITEM 4. – AUDIT COMMITTEE REPORT

Audit Committee Chairperson Ms. Lebrun reported that the Audit Committee Report for the Audit for Fiscal Year Ended June 30, 2014 has been finalized. Ms. Lebrun congratulated and thanked SDSTA Chief Financial Officer Ms. Nancy Geary and her staff for another clean audit report with no deficiencies noted. Mr. Christen also thanked Ms. Geary for a job well done on the financials. Chairman Peterson acknowledged Ms. Lebrun and Mr. Christen for their efforts on the Audit Committee. Chairman Peterson requested the minutes reflect receipt of the Audit Committee Report for the Audit for Fiscal Year Ended June 30, 2014 and this item be included on the March 2015 agenda for approval.

ITEM 5. – FINANCIAL REPORT

SDSTA Executive Director Mr. Mike Headley said the SDSTA funding is on track for the year and is also slightly under budget for the year. The federal budget is slightly over, which is expected due to the three pay periods in October. Mr. Headley introduced Ms. Geary, who reported the CAPEX spending is on schedule including the Sanford Lab Homestake Visitor Center and Ross Shaft rehabilitation projects spending.

In response to Chairman Peterson's question as to amounts and sources of the contributions and donations, Ms. Geary stated the majority was from the Great Plains Education Foundation, Inc. for \$500,000. The remaining balance was comprised of funds from the Deadwood Historic Preservation Commission, Outside of Deadwood Grant Fund, City of Lead, and City of Spearfish.

Ms. Geary noted that contractual service costs include a variety of costs such as ARUP rehabilitation work, Ainsworth-Benning Construction hazard mitigation work, and Dean Kurtz Construction for the Black Hills State University Underground Campus (BHUC)/Compact Accelerator System for Performing Astrophysical Research (CASPAR) underground work; Fermilab reimburses for the Arup contractual costs. Ms. Geary said Black Hills Power utility costs are higher due to a rate increase. Ms. Lebrun questioned the foreign travel costs. Ms. Geary explained the cost was related to the Davis Bahcall interns' travel from last July.

Ms. Lebrun asked what the Unallowable/Unbillable Costs line item contained. Ms. Geary said these are costs that cannot be charged directly to federal contracts such as Lewis-Burke Associates advocacy, Neutrino Day, and Mr. Wheeler's consultant contract.

Motion by Mr. Wheeler and second by Mr. Christen to accept the financial report as presented. Motion passed unanimously.

ITEM 6. – REPORT FROM EXECUTIVE DIRECTOR

Mr. Headley discussed the three Declarations of Surplus Property: #6 Winze Wire Rope, JLG T5000 Towable Lift, and Yates Crusher Brass Bushings and said SDSTA has no further use for these items.

Mr. Wheeler asked what value triggered a surplus item to require a certain number of bids. SDSTA Legal Counsel Mr. Tim Engel noted that minimum bid requirements no longer pertained after the approved revision to SDSTA Policy 3.30 Surplus Property Disposal in September.

Mr. Headley then discussed the Sanford Laboratory 2014 safety performance. The 2014 goal was six or fewer recordable injuries. The total recordable injuries to-date is four, one of which is an employee's hearing deterioration. New measures undertaken this year to provide a quieter work environment

include: replacing equipment with lower decibel drills, installing noise curtains, and using double hearing protection.

Mr. Headley discussed the implementation of Standard Operating Procedures, Job Hazard Analyses and Work Authorization processes. He advised the board of the annual Safety Perception Survey, which had great results. The Environmental, Health, and Safety Oversight Committee (EHSOC) meeting held in November focused on visiting with field staff rather than presentations by management, and was well received and resulted in the most successful meeting-to-date. SDSTA is awaiting the final report.

Mr. Headley reported on the following lab activities: Total Underground Trips Per Month, 4850L Current and Projected Laboratories, Yates Shaft-Related Progress, Filling Ross Skip Pockets, Rehabilitating the 2000L Station, and Ross Shaft Refurbishment.

SDSTA Engineering Director Mr. Joshua Willhite was introduced and presented an update on the progress of the Sanford Lab Homestake Visitor Center. The Lead Chamber of Commerce board is in the process of searching for a Visitor Center Director. The building construction is scheduled to be completed by May 1, 2015 with exhibits to be installed prior to the June 1, 2015 opening. The SDSTA board members will have an opportunity to review the draft exhibit content when finalized. Mr. Willhite closed his presentation with an update of the BHUC/CASPAR progress.

Mr. Headley introduced SDSTA Science Director Dr. Jaret Heise, who provided Science integration highlights. He said LUX has completed an extensive period of detector testing and performance optimization and the MAJORANA DEMONSTRATOR (MJD) has put forth significant characterization effort for detector strings in string-test cryostats. In addition, Dr. Heise provided highlights on the Low-Background Counting experiments as well as seven experiments including research currently being conducted by NASA Astrobiology Institute, which will be part of the next mission to Mars. Dr. Wilson asked if Xilinx has partnered with a university; Dr. Heise replied Xilinx has not.

Chairperson Peterson asked for a motion to accept the Executive Director's report.

Motion by Mr. Christen and second by Mr. Wheeler to accept the Executive Director's report. Motion passed unanimously.

ITEM 7. – GILT EDGE AGREEMENT DISCUSSION

Mr. Engel said the Gilt Edge Agreement was not ready for presentation to the board at this time.

ITEM 8. – FEDERAL AGENCIES AND EXPERIMENTS UPDATE

Sanford Underground Research Facility Operations Head Dr. Kevin Lesko reported the Fiscal Year 2015 federal budget for the Department of Energy (DOE) included the full \$15M anticipated for Sanford Lab. Dr. Lesko said the Long-Baseline Neutrino project will incorporate a strong European representation. The universal desire to have the detectors underground as soon as possible is exciting for the Sanford Underground Research Facility. He said the LUX-ZEPLIN collaboration is going well. The DOE and National Science Foundation (NSF) are formulating their long-range plans and will establish the base cost for building the experiment at roughly \$40M. Mr. Wheeler thanked Dr. Lesko for relocating the Oroville Low-Background Counter to Sanford Laboratory.

The board recessed for break at 10:44 AM and reconvened at 10:58 AM.

Mr. Dykhouse departed the meeting at 10:44 AM. Dr. Aprahamian rejoined the meeting at 11:02 AM.

ITEM 9. – EDUCATION AND OUTREACH (E&O) UPDATE

E&O Director Dr. Ben Saylor said the education team is fully staffed, which has extended outreach opportunities. Major projects included the Davis Bachall interns and a recent Black Hills area home school visit of 75 student and parents. The increased level of contact with the public is making an

important impact. Dr. Saylor said impacts are measured using surveys such as that used for the South Dakota teachers attending last summer's workshops. Ms. Lebrun suggested that the E&O Department categorize the interaction with students and teachers by the depth or duration of involvement.

The upcoming spring semester will utilize the new classrooms at Jonas Science Hall at Black Hills State University. Lastly, an educational ThinkTank conference, funded by the NSF, was held in September and included seven experts who generated new ideas for the science education program.

ITEM 10. – REVIEW OF UPDATED AND RETIRED POLICIES

Mr. Headley discussed the updated, revised and retired policy recommendations; all had been reviewed by Mr. Engel.

The following policies were recommended to be approved:

- Manual Contents Page (*updated*)
- Policy 2:1 Anti-Harassment (*updated*)
- Policy 2:2 Equal Opportunity and Affirmative Action Employer (*updated*)
- Policy 2:4 Security and Site Access (*updated*)
- Policy 2:5 Use of SDSTA Owned Electronic Equipment, Systems and Protection of Personal Privacy (updated to combine Policies 2:5, 2:7 and 2:12)
- Policy 2:6 Tobacco-Free Property (*updated*)
- Policy 2:10 Annual Review of Policies (*updated*)
- Policy 2:11 Vehicle Use (*updated*)
- Policy 2:13 Open Door (*updated*)
- Policy 2:14 Workplace Violence (*updated*)
- Policy 2:16 Confidentiality (*updated*)
- Policy 2:17 Infectious Disease/Pandemic (*updated*)
- Policy 2:18 Whistleblower (*updated*)
- Policy 2:19 Americans with Disabilities Act (*updated*)
- Policy 2:20 Electronic and Radio Communication Devices (*updated*)
- Policy 2:21 Continuity of Operations Plan (*new*)
- Policy 2:22 Succession Plan (*new*)
- Policy 4:4:5 Military Active Duty Leave Plan (*new*)

The following policies were recommended to be retired:

- Policy 2:7 No Solicitation/Distribution
- Policy 2:12 Employee Privacy

Chairperson Peterson asked if there were any questions or comments. There were none.

Motion by Mr. Wheeler and second by Mr. Christen to approve the above new, updated and retired policies as presented. Motion passed unanimously.

ITEM 11. – LOBBYIST REGISTRATION

Mr. Tim Engel said the board will need lobbyist designation on behalf of the SDSTA for the 2015 Legislative Session.

Chairman Peterson asked if there were any questions. There were none.

Mr. Wheeler thanked Dr. Wilson for her role in obtaining and fostering continued support from the Board of Regents for SDSTA.

Motion by Ms. Lebrun and second by Mr. Wheeler to designate Mr. Mike Headley, Mr. Ron Wheeler and Mr. Tim Engel as lobbyists for the SDSTA. Motion passed unanimously.

ITEM 12. – SET 2015 MEETING SCHEDULE

Chairperson Peterson asked if there were any concerns with the proposed 2015 board meeting schedule.

Initial suggested dates and times in 2015 were:

- March 19, 9:00 am (MT)
- June 18, 9:00 am (MT)
- September 17, 9:00 am (MT)
- December 17, 9:00 am (MT)

After discussion, the board agreed to change the proposed March 19 meeting date to March 20 and the proposed June 18 meeting date to coincide with the grand opening date of the Sanford Laboratory Homestake Visitor Center on June 1-2.

Dr. Aprahamian stated that her term expires on December 9, 2015. Vice Chairperson Wheeler inquired if Dr. Aprahamian was willing to be re-appointed by the Governor. She stated she would gladly accept an additional term.

The revised schedule agreed upon by the board is as follows:

- March 20, 9:00 am (MT)
- June 1-2 (exact date and time to be determined based upon Visitor Center opening date)
- September 17, 9:00 am (MT)
- December 17, 9:00 am (MT)

ITEM 13. – EXECUTIVE SESSION

Motion by Ms. Lebrun and second by Mr. Wheeler to enter into executive session to consult with legal counsel concerning legal and contractual matters. Motion passed unanimously.

The board recessed at 11:30 AM for Executive Session and reconvened at 12:24 PM.

Dr. Aprahamian departed the meeting at 12:24 PM.

ITEM 14. – REPORT FROM EXECUTIVE SESSION

Chairperson Peterson reported that the board consulted with legal counsel concerning legal and contractual matters. No action was taken.

Motion by Mr. Wheeler and second by Mr. Christen to approve the executive session report. Motion passed unanimously.

ITEM 15. – BOARD COMMENTS

Dr. Wilson provided an update on the current activities of the South Dakota School of Mines and Technology (SDSM&T) Physics faculty and the Geology Department. She and MJD researcher Cabot-Ann Christofferson discussed how SDSM&T can support the advancement of this project. Dr. Wilson stated that on May 18-20, 2015, there will be a joint-conference including researchers from the western and Midwestern areas of the U.S to engage more universities to create science collaborations. She also thanked Mr. Headley for being on the SDSM&T Steering Committee.

Ms. Lebrun said she was engaged in conversation on what could be done to enhance economic advancement in the state of South Dakota. She asked the board to promote more support for research and broader PhD programs for students in order to have a robust research environment. Ms. Lebrun said this was a great meeting.

Mr. Christen said this was a good meeting and it reminded him how far the Sanford Laboratory has come. The lab has a positive future and will be in business for long time with the current and new experiments. He said there is one challenge; a disconnect between East and West River. East River does not realize the advantages of the Sanford Lab for the state of South Dakota. He suggested the development of additional educational programs geared towards major corporations so that they may learn more about the Sanford Laboratory.

Vice Chairperson Wheeler said Sanford Laboratory's future is bright and we have the support of the Governor's office, Senators and staff. He thanked Mr. Headley and the Sanford Laboratory staff for their hard work. He wished everyone a Merry Christmas.

Mr. Headley said he is excited for all the scheduled projects in the next calendar year—such as the Sanford Lab Homestake Visitor Center, CASPAR and BHUC projects—to come to fruition. He said he appreciates the board's strong support, leadership, and time involved as a board member. Mr. Headley added that he would like to thank User Support Office Manager Ms. Mandy Knight and Administrative Assistant Michelle Andresen for all their board meeting support as well as Mr. Noel A. Schroeder for his hard work in the Environmental, Health and Safety Department. He wished everyone a Happy Holiday.

Chairperson Peterson expressed his appreciation to work with the board and Sanford Laboratory staff as it is a strong learning experience. He said he is pleased with the lab and asked the board to make sure to show how important the lab's impact truly is statewide; not just West River. He said he looks forward to the lab's long-term research. In closing, he wished everyone a Merry Christmas and a Happy New Year.

ITEM 16. – ADJOURN

Chairperson Peterson asked if anyone had any other questions or comments and then called for a motion to adjourn.

Motion by Mr. Wheeler and second by Mr. Christen to adjourn. Motion passed unanimously.

Meeting adjourned at 12:39 PM.

Approve Audit Report – Audit Committee Chairperson Ms. Pat Lebrun

Please reference your copy of the SD Department of Legislative Audit Report Fiscal Year Ended June 30, 2014 submitted in the December 18, 2014 board packet.

Recommended Action:

Motion to approve the Audit of Fiscal Year Ended June 30, 2014 as discussed at the December 18, 2014 board meeting.

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Financial Report – Mr. Mike Headley

Attached is the SDSTA Financial Summaries as of February 28, 2015.

(This is a duplicate of the summaries found in the SDSTA February Monthly Report under Agenda Item #6 in the e-Board Packet.)

Recommended Action:

Motion to accept the Financial Report as presented.

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DIVISION: ALL

BALANCE SHEET

ASSETS

AS OF
02/28/15

CURRENT ASSETS

First Interstate Checking	\$	100,049.77
First Interstate Other		32,887.63

Total in Local Checking		132,937.40
SD Treas: Indemnification		10,000,000.00
SD Treas: Mine Closure		1,362,763.38
SD Treas: Operating		1,211,165.00
SD Treas: Sanford		5,314,421.48
SD Treas: Sanford Gift #2		5,519,288.00

Total with SD Treasurer		23,407,637.86
Billed A/R		2,146,597.56
Unbilled A/R		379,172.14
Other A/R		338,027.71
Inventory - Supplies		2,569,692.22
Inventory - Warehouse		369,794.91
Other Current Assets		286,245.06

Total Current Assets		29,630,104.86

FIXED ASSETS

Land, Underground & Other		12,353,375.03
Bldgs & Infrastructure		8,881,327.62
Improvements		49,274,276.00
Computer Equipment		362,464.95
Equipment & Fixtures		9,455,471.64
Accum Depr & Amort		(8,422,135.13)

Total Fixed Assets		71,904,780.11

OTHER ASSETS

Work in Process		5,152,633.20
Equipment - Capital Lease		579,087.12

Total Other Assets		5,731,720.32

TOTAL ASSETS

\$ 107,266,605.29

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DIVISION: ALL

BALANCE SHEET

LIABILITIES & EQUITY

AS OF
02/28/15

CURRENT LIABILITIES

Accounts Payable	\$	1,194,097.16
Other Payables		28,329.06

Total Accounts Payable		1,222,426.22
Accrued Payroll Liab		1,010,134.91

Total Current Liabilities		2,232,561.13

OTHER LIABILITIES

LT Accrued EB/Lease		579,087.12

Total Other Liabilities		579,087.12

STOCKHOLDER'S EQUITY

Restricted: Indemnificati		10,000,000.00
Restricted: Sanford I.Lab		5,314,421.48
Restricted: Mine Closure		1,362,763.38
Restricted: Sanford Gift2		5,519,288.00

Total Restricted Funds		22,196,472.86
Investment in Gen FA		71,898,698.84
Unrestricted Funds		10,359,785.34

Total Equity		104,454,957.04

TOTAL LIABILITIES & EQUITY

\$	107,266,605.29
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ALL

STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/15

	YR-TO-DATE

REVENUE	
DOE Subcontracts	\$ 10,434,916.80
NSF Subcontracts	15,415.59
State Revenue	1,368,662.95
Contributions & Donations	590,000.00
Checking Interest	47.78
Interest Income	130,756.91

TOTAL REVENUE	12,539,800.03
DIRECT COSTS	
Direct Labor	4,870,552.23
ERT Labor	23,652.00
Board of Directors	3,433.62
Capital Outlay >\$5K	25,299.00
Contractual Svcs	1,755,531.01
Emergency Resp	2,346.49
Inventory	233,242.93
Supplies	440,402.94
Travel - Domestic	49,474.58
Travel - Foreign	24,216.81
Utilities	1,288,979.29
Other Direct Costs	89,640.36
Unallow/Unbill Costs	271,474.92

TOTAL DIRECT COSTS	9,078,246.18
INDIRECT COSTS	
Fringe Benefits	2,272,790.60
Overhead	2,505,407.79

TOTAL INDIRECT COSTS	4,778,198.39

GROSS PROFIT FROM OPERATIONS	(1,316,644.54)

OTHER INCOME	
Water Treatment	115,439.67
Miscellaneous Income	40,488.28

TOTAL OTHER INCOME	155,927.95
OTHER EXPENSES	
Loss(Gain) on Sale of FA	2,852.14
Reclass Incr Net Assets	(896,554.61)

TOTAL OTHER EXPENSES	(893,702.47)

NET INCOME/LOSS<>	\$ (267,014.12)
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DIVISION: ALL

COMPARATIVE BALANCE SHEET

ASSETS

	AS OF 02/28/15	AS OF 02/28/14	\$ CHANGE	% CHANGE
CURRENT ASSETS				
First Interstate Checking	\$ 100,049.77	\$ 817,833.97	\$ (717,784.20)	-87.77%
First Interstate Other	32,887.63	56,580.80	(23,693.17)	-41.87%
	-----	-----	-----	-----
Total in Local Checking	132,937.40	874,414.77	(741,477.37)	-84.80%
SD Treas: Indemnification	10,000,000.00	10,000,000.00	-	0.00%
SD Treas: Mine Closure	1,362,763.38	1,349,275.35	13,488.03	1.00%
SD Treas: Operating	1,211,165.00	225,609.00	985,556.00	436.84%
SD Treas: Sanford	5,314,421.48	3,457,007.40	1,857,414.08	53.73%
SD Treas: Sanford Gift #2	5,519,288.00	18,177,755.00	(12,658,467.00)	-69.64%
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Total with SD Treasurer	23,407,637.86	33,209,646.75	(9,802,008.89)	-29.52%
Billed A/R	2,146,597.56	1,142,222.42	1,004,375.14	87.93%
Unbilled A/R	365,454.14	355,984.95	9,469.19	2.66%
Other A/R	338,027.71	248,542.47	89,485.24	36.00%
Inventory - Supplies	2,569,692.22	2,702,464.79	(132,772.57)	-4.91%
Inventory - Warehouse	369,794.91	376,199.23	(6,404.32)	-1.70%
Other Current Assets	286,245.06	281,672.19	4,572.87	1.62%
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Total Current Assets	29,616,386.86	39,191,147.57	(9,574,760.71)	-24.43%
FIXED ASSETS				
Land, Underground & Other	12,353,375.03	12,353,375.03	-	0.00%
Bldgs & Infrastructure	8,881,327.62	8,881,327.62	-	0.00%
Improvements	49,274,276.00	43,964,388.80	5,309,887.20	12.08%
Computer Equipment	362,464.95	357,294.53	5,170.42	1.45%
Equipment & Fixtures	9,455,471.64	8,114,667.49	1,340,804.15	16.52%
Accum Depr & Amort	(8,422,135.13)	(6,752,916.70)	(1,669,218.43)	24.72%
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Total Fixed Assets	71,904,780.11	66,918,136.77	4,986,643.34	7.45%
OTHER ASSETS				
Work in Process	5,152,633.20	2,213,013.02	2,939,620.18	132.83%
Equipment - Capital Lease	579,087.12	691,945.36	(112,858.24)	-16.31%
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Total Other Assets	5,731,720.32	2,904,958.38	2,826,761.94	97.31%
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TOTAL ASSETS	\$ 107,252,887.29	\$ 109,014,242.72	\$ (1,761,355.43)	-1.62%
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DIVISION: ALL

COMPARATIVE BALANCE SHEET

LIABILITIES & EQUITY

	AS OF 02/28/15	AS OF 02/28/14	\$ CHANGE	% CHANGE
CURRENT LIABILITIES				
Accounts Payable	\$ 1,194,097.16	\$ 876,253.88	\$ 317,843.28	36.27%
Other Payables	28,329.06	7,292.61	21,036.45	288.46%
	-----	-----	-----	-----
Total Accounts Payable	1,222,426.22	883,546.49	338,879.73	38.35%
Accrued Payroll Liab	1,010,134.91	932,448.94	77,685.97	8.33%
	-----	-----	-----	-----
Total Current Liabilities	2,232,561.13	1,815,995.43	416,565.70	22.94%
OTHER LIABILITIES				
LT Accrued EB/Lease	579,087.12	691,945.36	(112,858.24)	-16.31%
	-----	-----	-----	-----
Total Other Liabilities	579,087.12	691,945.36	(112,858.24)	-16.31%
	-----	-----	-----	-----
TOTAL LIABILITES	2,811,648.25	2,507,940.79	303,707.46	12.11%
STOCKHOLDER'S EQUITY				
Restricted: Indemnificati	10,000,000.00	10,000,000.00	-	0.00%
Restricted: Sanford I.Lab	5,314,421.48	3,457,007.40	1,857,414.08	53.73%
Restricted: Lab	-	225,609.00	(225,609.00)	-100.00%
Restricted: Mine Closure	1,362,763.38	1,349,275.35	13,488.03	1.00%
Restricted: Sanford Gift2	5,519,288.00	18,177,755.00	(12,658,467.00)	-69.64%
	-----	-----	-----	-----
Total Restricted Funds	22,196,472.86	33,209,646.75	(11,013,173.89)	-33.16%
Investment in Gen FA	71,898,698.84	66,918,136.77	4,980,562.07	7.44%
Unrestricted Funds	10,346,067.34	6,378,518.41	3,967,548.93	62.20%
	-----	-----	-----	-----
TOTAL EQUITY	104,441,239.04	106,506,301.93	(2,065,062.89)	-1.94%
	=====	=====	=====	=====
TOTAL LIABILITIES & EQUITY	\$ 107,252,887.29	\$ 109,014,242.72	\$ (1,761,355.43)	-1.62%
	=====	=====	=====	=====

DIVISION: ALL

COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/15

	YEAR TO DATE	PRIOR YEAR TO DATE	\$ CHANGE	% CHANGE
REVENUE				
DOE Subcontracts	\$ 10,434,916.80	\$ 9,754,547.23	\$ 680,369.57	6.97%
NSF Subcontracts	15,415.59	167,865.48	(152,449.89)	-90.82%
State Revenue	1,368,662.95	2,002,572.13	(633,909.18)	-31.65%
Contributions & Donations	590,000.00	30,000.00	560,000.00	1866.67%
Checking Interest	47.78	37.89	9.89	26.10%
Interest Income	130,756.91	175,877.80	(45,120.89)	-25.65%
	-----	-----	-----	-----
TOTAL REVENUE	12,539,800.03	12,130,900.53	408,899.50	3.37%
DIRECT COSTS				
Direct Labor	4,870,552.23	4,788,615.64	81,936.59	1.71%
ERT Labor	23,652.00	18,187.50	5,464.50	30.05%
Board of Directors	3,433.62	4,841.51	(1,407.89)	-29.08%
Capital Outlay >\$5K	25,299.00	384,828.95	(359,529.95)	-93.43%
Contractual Svcs	1,755,531.01	1,066,711.58	688,819.43	64.57%
Emergency Resp	2,346.49	28,650.79	(26,304.30)	-91.81%
Inventory	233,242.93	227,032.69	6,210.24	2.74%
Supplies	440,402.94	620,676.18	(180,273.24)	-29.04%
Travel - Domestic	49,474.58	39,100.82	10,373.76	26.53%
Travel - Foreign	24,216.81	10,659.91	13,556.90	127.18%
Utilities	1,288,979.29	1,107,598.90	181,380.39	16.38%
Other Direct Costs	89,640.36	153,571.05	(63,930.69)	-41.63%
Unallow/Unbill Costs	271,474.92	205,255.47	66,219.45	32.26%
	-----	-----	-----	-----
TOTAL DIRECT COSTS	9,078,246.18	8,655,730.99	422,515.19	4.88%
INDIRECT COSTS				
Fringe Benefits	2,272,790.60	2,152,304.23	120,486.37	5.60%
Overhead	2,505,407.79	2,301,634.15	203,773.64	8.85%
	-----	-----	-----	-----
TOTAL INDIRECT COSTS	4,778,198.39	4,453,938.38	324,260.01	7.28%
	-----	-----	-----	-----
GROSS PROFIT	(1,316,644.54)	(978,768.84)	(337,875.70)	34.52%
OTHER INCOME				
Water Treatment	115,439.67	90,543.17	24,896.50	27.50%
Miscellaneous Income	40,488.28	86,880.46	(46,392.18)	-53.40%
	-----	-----	-----	-----
TOTAL OTHER INCOME	155,927.95	177,423.63	(21,495.68)	-12.12%
OTHER EXPENSES				
Loss(Gain) on Sale of FA	2,852.14	3,989.67	(1,137.53)	-28.51%
Reclass Incr Net Assets	(896,554.61)	(1,076,821.81)	180,267.20	-16.74%
	-----	-----	-----	-----
TOTAL OTHER EXPENSES	(893,702.47)	(1,072,832.14)	179,129.67	-16.70%
	=====	=====	=====	=====
NET INCOME/LOSS<>	\$ (267,014.12)	\$ 271,486.93	(538,501.05)	-198.35%
	=====	=====	=====	=====

South Dakota Science & Technology Authority
Available Cash
2/28/2015

Cash Total Checking/Savings	\$ 132,937.00
Cash With State Treasurer	<u>\$ 23,407,638.00</u>
Total Cash	\$ 23,540,575.00
Less: Restricted Funds	
Indemnification & Mine Closure	<u>\$ (11,362,763.00)</u>
Total Cash (Not Restricted)	\$ 12,177,812.00
Less: Total Liabilities	<u>\$ (2,811,648.00)</u>
Available Cash	<u><u>\$ 9,366,164.00</u></u>

SDS&TA Operating Budget Summary FY14/15
Actual vs Budget
February 2015 & YTD

	\$ Over/Under				\$ Over/Under				
	Feb. 2015	Budget	Budget	% of Budget	Actual YTD	YTD Budget	Budget	% of Budget	% Remaining
100%									
SDSTA (Authority) Direct Charges									
Board of Directors	\$17,998.00	\$19,184.00	\$1,186.00	93.82%	\$145,813.00	\$153,472.00	\$7,659.00	95.01%	4.99%
Executive Office	\$46,811.00	\$17,006.00	-\$29,805.00	275.26%	\$191,453.00	\$180,892.00	-\$10,561.00	105.84%	-5.84%
Communications	\$10,187.00	\$12,896.00	\$2,709.00	78.99%	\$94,323.00	\$109,702.00	\$15,379.00	85.98%	14.02%
Science Center E & O	\$0.00	\$0.00	\$0.00	0.0%	\$13,650.00	\$20,590.00	\$6,940.00	66.29%	33.71%
Science Liaison	-\$1,608.00	\$2,031.00	\$3,639.00	0.0%	\$5,653.00	\$16,248.00	\$10,595.00	34.79%	65.21%
Subtotal	\$73,388.00	\$51,117.00	-\$22,271.00	143.57%	\$450,892.00	\$480,904.00	\$30,012.00	93.76%	6.24%
Federal/State Funding - Direct Charges									
Fermi P.O. #609755 NEPA	\$3,032.00	\$4,658.00	\$1,626.00	65.09%	\$48,873.00	\$64,355.00	\$15,482.00	75.94%	24.06%
Fermi P.O. #610998HDR	\$0.00	\$0.00	\$0.00	0.0%	\$358.00	\$370.00	\$12.00	96.76%	3.24%
Fermi P.O. #613525 Staff Services	\$0.00	\$0.00	\$0.00	0.0%	\$103,050.00	\$103,054.00	\$4.00	100.00%	0.00%
Fermi P.O. #614807 Ph2 Geotech	\$0.00	\$0.00	\$0.00	0.0%	\$295,503.00	\$480,893.00	\$185,390.00	61.45%	38.55%
Fermi P.O.#618228 Staff Services	\$38,959.00	\$19,223.00	-\$19,736.00	202.67%	\$121,978.00	\$86,504.00	-\$35,474.00	141.01%	-41.01%
Fermi P.O.#618743LBNOIntern.	\$0.00	\$0.00	\$0.00	0.0%	\$43,900.00	\$50,560.00	\$6,660.00	86.83%	13.17%
Fermi P.O.#618741 Excav.Des.	\$0.00	\$224,217.00	\$224,217.00	0.0%	\$351,277.00	\$637,557.00	\$286,280.00	55.10%	44.90%
Fermi P.O.#620223 Building/Infra.	\$0.00	\$234,418.00	\$234,418.00	0.0%	\$0.00	\$234,418.00	\$234,418.00	0.00%	100.00%
LBNL LUX C#6973786	\$10,901.00	\$15,088.00	\$4,187.00	72.25%	\$96,810.00	\$113,332.00	\$16,522.00	85.42%	14.58%
LBNL Operations C#6994297	\$933,302.00	\$887,029.00	-\$46,273.00	105.22%	\$6,964,358.00	\$7,644,424.00	\$680,066.00	91.10%	8.90%
LBNL LUX/Zeplin C#7093667	\$13,811.00	\$14,789.00	\$978.00	93.39%	\$102,886.00	\$123,147.00	\$20,261.00	83.55%	16.45%
MJD (Majorana) # 5-4473	\$1,679.00	\$2,000.00	\$321.00	83.95%	\$14,919.00	\$14,000.00	-\$919.00	106.56%	-6.56%
CWR P.O. #228814 G2LZ	\$0.00	\$0.00	\$0.00	0.0%	\$956.00	\$1,100.00	\$144.00	86.91%	13.09%
CUBED - USD	\$307.00	\$500.00	\$193.00	61.4%	\$1,646.00	\$4,000.00	\$2,354.00	41.15%	58.85%
Sanf.Sci.Ed.Center - GOED Funded	\$23,599.00	\$25,000.00	\$1,401.00	94.4%	\$164,956.00	\$173,000.00	\$8,044.00	95.35%	4.65%
U. of Minn. DUGL#A003778902	\$5,884.00	\$10,000.00	\$4,116.00	58.84%	\$11,377.00	\$36,500.00	\$25,123.00	31.17%	68.83%
Subtotal	\$1,031,474.00	\$1,436,922.00	\$405,448.00	71.78%	\$8,322,847.00	\$9,767,214.00	\$1,444,367.00	85.21%	14.79%
Indirect Expenses									
Indirect Charges Personnel	\$89,246.00	\$93,314.00	\$4,068.00	95.64%	\$715,408.00	\$770,733.00	\$55,325.00	92.82%	7.18%
Indirect Charges Other	\$238,347.00	\$239,950.00	\$1,603.00	99.33%	\$2,000,124.00	\$1,932,510.00	-\$67,614.00	103.50%	-3.50%
Subtotal	\$327,593.00	\$333,264.00	\$5,671.00	98.3%	\$2,715,532.00	\$2,703,243.00	-\$12,289.00	100.45%	-0.45%
Totals	\$1,432,455.00	\$1,821,303.00	\$388,848.00	78.65%	\$11,489,271.00	\$12,951,361.00	\$1,462,090.00	88.71%	11.29%

SDSTA CAPEX Budget Summary FY14/15
Actual vs Budget
February 2015 & YTD

Budget Area	Actual Month	FY2015 Monthly Budget	\$ Over/Under Budget	% of Budget	Actual YTD	FY2015 YTD Budget	\$ Over/Under Budget	% of Budget	% Remaining
									100.00%
Operational CAPEX	\$ 905,927.47	\$ 1,131,466.00	\$ 225,538.53	80.07%	\$ 7,201,853.00	\$ 18,366,715.00	\$ 11,164,862.00	39.21%	60.79%
TOTAL CAPEX	\$ 905,927.47	\$ 1,131,466.00	\$ 225,538.53	80.07%	\$ 7,201,853.00	\$ 18,366,715.00	\$ 11,164,862.00	39.21%	60.79%

SD Science & Technology Authority
Operational CAPEX Budget
Monthly Actual vs Budget

Project #	Project Description	Feb. 2015	Budget	\$ Over/UnderBudget	% of Budget
CAP2012-13	Water/Hazard Mitigation Work	\$ -	\$ -	\$ -	0.00%
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$ 312,754.18	\$ 237,498.00	\$ (75,256.18)	131.69%
CAP2012-28	Work Decks	\$ 986.76	\$ 1,500.00	\$ 513.24	0.00%
CAP2012-32	SDSTA Personnel	\$ 187,506.88	\$ 178,626.00	\$ (8,880.88)	104.97%
CAP2013-06	Yates Shaft Improvements	\$ -	\$ -	\$ -	0.00%
CAP2014-01	Sanford Visitor Center Design & Construction	\$ 246,677.29	\$ 377,092.00	\$ 130,414.71	65.42%
CAP2014-02	Xenon Gas	\$ -	\$ -	\$ -	0.00%
CAP2014-04	Surface Lab Roof	\$ -	\$ -	\$ -	0.00%
CAP2014-05	CASPAR Experiment Development	\$ -	\$ 80,000.00	\$ 80,000.00	0.00%
CAP2014-06	BHSU Jonas Science Building Renovation	\$ -	\$ -	\$ -	0.00%
CAP2014-07	Davis Campus HVAC Augment System	\$ -	\$ -	\$ -	0.00%
CAP2014-09	CASPAR Facility Development	\$ 75,421.68	\$ 181,750.00	\$ 106,328.32	41.50%
CAP2014-11	BHSU Facility Development	\$ 22,580.68	\$ 50,000.00	\$ 27,419.32	45.16%
CAP2015-01	WTP Tank & Install	\$ -	\$ -	\$ -	0.00%
CAP2015-02	Yates Tunnel Hazard Mitigation	\$ 60,000.00	\$ 25,000.00	\$ (35,000.00)	240.00%
CAP2015-03	Yates/Ross Hoist Bldg. Masonry	\$ -	\$ -	\$ -	0.00%
CAP2015-04	Ellison Real Estate Option	\$ -	\$ -	\$ -	0.00%
	Monthly Totals	\$ 905,927.47	\$ 1,131,466.00	\$ 225,538.53	80.07%

SD Science & Technology Authority
Operational CAPEX Budget
YTD FY2015 Actual vs Budget

Project #	Project Description	Feb. YTD FY2015	FY2015 Budget	\$ Over/UnderBudget	% of Budget	% Remaining
						100%
CAP2012-13	Water/Hazard Mitigation Work	\$3,199.50	\$ 113,643.00	\$ 110,443.50	2.82%	97.18%
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$1,765,529.35	\$ 4,643,148.00	\$ 2,877,618.65	38.02%	61.98%
CAP2012-28	Work Decks	\$19,361.76	\$ 45,000.00	\$ 25,638.24	43.03%	56.97%
CAP2012-32	SDSTA Personnel	\$1,375,943.07	\$ 2,231,015.00	\$ 855,071.93	61.67%	38.33%
CAP2013-06	Yates Shaft Improvements	\$30,548.66	\$ 300,000.00	\$ 269,451.34	10.18%	89.82%
CAP2014-01	Sanford Visitor Center Design & Construction	\$2,452,529.75	\$ 4,437,425.00	\$ 1,984,895.25	55.27%	44.73%
CAP2014-02	Xenon Gas	\$6,750.00	\$ 67,145.00	\$ 60,395.00	10.05%	89.95%
CAP2014-04	Surface Lab Roof	\$44,839.26	\$ 44,785.00	\$ (54.26)	100.12%	-0.12%
CAP2014-05	CASPAR Experiment Development	\$230,367.67	\$ 969,766.00	\$ 739,398.33	23.75%	76.25%
CAP2014-06	BHSU Jonas Science Building Renovation	\$0.00	\$ 2,500,000.00	\$ 2,500,000.00	0.00%	100.00%
CAP2014-07	Davis Campus HVAC Augment System	\$10,776.50	\$ 280.00	\$ (10,496.50)	3848.75%	-3748.75%
CAP2014-09	CASPAR Facility Development	\$623,860.17	\$ 2,178,308.00	\$ 1,554,447.83	28.64%	71.36%
CAP2014-11	BHSU Facility Development	\$268,519.88	\$ 500,000.00	\$ 231,480.12	53.70%	46.30%
CAP2015-01	WTP Tank & Install	\$110,167.43	\$ 97,000.00	\$ (13,167.43)	113.57%	-13.57%
CAP2015-02	Yates Tunnel Hazard Mitigation	\$135,000.00	\$ 100,000.00	\$ (35,000.00)	135.00%	-35.00%
CAP2015-03	Yates/Ross Hoist Bldg. Masonry	\$94,200.00	\$ 94,200.00	\$ -	100.00%	0.00%
CAP2015-04	Ellison Real Estate Option	\$30,260.00	\$ 45,000.00	\$ 14,740.00	67.24%	32.76%
	Totals	\$7,201,853.00	\$ 18,366,715.00	\$ 11,164,862.00	39.21%	60.79%

BHSU Pledged Contribution
(will add \$200,000 when received)

Executive Director’s Report – Mr. Mike Headley

The Executive Director’s Report includes the following:

- 6A. SDSTA February Monthly Report (attached)
- 6B. Sanford Lab Homestake Visitor Center Plans and Underground Construction Update (presentation by Mr. Joshua Willhite)
- 6C. Long-Baseline Neutrino Facility Update (Mr. Joshua Willhite)

Recommended Action:

Motion to accept the Executive Director’s Report as presented.



South Dakota Science and Technology Authority

Monthly Report

February 2015

Mike Headley, Laboratory Director **Executive Summary**

Science

By the end of February, the Large Underground Xenon (LUX) experiment had accumulated the first 90 live days of Weakly Interacting Massive Particle (WIMP)-search data. The current 300-day search began in October 2014. Detector calibration activities continued in February. A xenon circulation pump failed and was replaced.

The MAJORANA DEMONSTRATOR (MJD) experiment prototype detector module with 7 kg of natural germanium (10 detectors assembled into 3 strings) has now accumulated more than 450 kg-days of background data since June 2014. All seven detector strings with 29 enriched germanium detectors for the first production cryostat have been assembled and completed testing in February. However, once vacuum pumping started on the cryostat in preparation for cooling, a vacuum leak was discovered. The source of the leak is under investigation, and it is likely that the detector strings will need to be removed from the cryostat to complete the repair. MJD EHS personnel from Oak Ridge National Laboratory (lead laboratory for MJD) visited Sanford Lab in February. The EHS inspection mainly focused on crane use at the Davis Campus. At the MJD Electroforming Laboratory, the last mandrel was set into its acid bath. Six of ten baths are occupied, including a research and development bath investigating a chrome-copper alloy that would be twice as hard as pure electroformed copper.

The LUX-ZEPLIN (LZ) experiment remains on track for a Department of Energy (DOE) Critical Decision One (CD-1) review on March 11-13. The Memorandum of Understanding between the South Dakota Science and Technology Authority (SDSTA) the LZ experiment collaboration was signed in early March.

Planning discussions continued with the Compact Accelerator System for Performing Astrophysical Research (CASPAR) experiment and the Black Hills State University Underground Campus (BHUC) teams in preparation for the outfitting construction start in March 2015. Safety planning documentation was developed and review.

Planning continues for the Conference on Science at the Sanford Underground Research Facility that will be hosted by South Dakota School of Mines and Technology (SDSM&T) in May 2015:

<http://meetings.undergroundphysics.org/indico/conferenceDisplay.py?confId=0>.

Underground Access

The Ross Shaft rehabilitation project had a good February considering nearly half of the month was consumed with the Deep Well pump vendor removing and replacing the failed Deep Well pump in #6 Winze. The Ross Shaft crews provided logistics support and underground access for the pump work. The Ross Shaft team did install five new steel sets and reached the 2,411-foot mark. The crews also refurbished the 2300L station.

Yates Shaft

Yates Shaft crews continued top down maintenance work in both the cage and skip compartments in February. The crews addressed 97 separate panels/pieces of the shaft including 14 poor condition timbers. The project is now 15 sets above the 2750L. The Top Down Maintenance project crews have encountered a large seam of rhyolite that requires the installation of rock bolts and steel mesh to properly support. Yates crews transported 296 loads through the shaft for science and construction efforts of which 54 were liquid nitrogen for science.

Facility Infrastructure

At the end of February, the underground water level was 5,610 feet. This equals a 29-foot rise for the month. Work was completed on March 6 to remove and replace the failed Deep Well pump. The Deep Well pump is a leased asset, and the responsible vendor performed this work with SDSTA support. A local contractor completed the repair of an exposed 90-foot long section of tunnel with utilities installed above it. This tunnel leads from the Yates Shaft to the Yates shop yard. The remainder of the tunnel will be refurbished, as funds are available.



South Dakota Science and Technology Authority

Monthly Report

February 2015

Engineering

As reported previously, the Long-Baseline Neutrino Experiment (LBNE) collaboration was dissolved in January, and the Experiment at the LBNF (ELBNF) collaboration is in place. The collaboration has been working to select new spokespeople and also a new name for the collaboration. The LBNF project team including SDSTA engineering staff are preparing for a Department of Energy (DOE) Critical Decision 1 (CD-1) "Refresh" review scheduled for early July to update the previous CD-1 (early preliminary design review) to reflect the current work scope. Facility design work continued at an accelerated pace to prepare for this review. A CD-2a/3a is planned for November 2015. This CD-2a/3a will set the cost and schedule baseline for facilities to be completed at the Sanford Underground Research Facility to enable a construction start for excavation in Lead in 2017.

Fermilab Deputy Director Joe Lykken and Chief Operating Officer Tim Meyer toured the Sanford Lab on February 19. The tour included the Davis Campus, planned LBNF site on the 4850L, and the Ross Shaft.

The Engineering team continues to support the LBNF Environmental Assessment (EA) process for National Environmental Policy Act (NEPA). The EA has been modified to reflect the current international approach to the ELBNF and has been submitted to DOE for review. To support the planned CD-1 "refresh" review, public meetings are being scheduled. The South Dakota meeting is tentatively scheduled for May 11, 2015.

Discussions continue with the South Dakota Department of Environment and Natural Resources (DENR) and the Federal Environmental Protection Agency (EPA) to establish an agreement for use of the former Gilt Edge Superfund Mine site as a repository for LBNF excavated rock. The potential amount of waste rock needing to be deposited at Gilt Edge has grown recently to accommodate the current LBNF design and a potential laboratory module on the 4850L in the future. Discussions are underway to understand what impacts this change may have on the Gilt Edge remediation design and construction plans and the associated costs.

SDSTA crews completed facility rehabilitation work near the Ross Shaft to construct space for the CASPAR experiment and Black Hills State University Underground Campus (BHUC) including shotcrete and painting of the walls and ceiling. Dean Kurtz Construction, the outfitting contractor, began to mobilize in early March.

Work continues on the new Sanford Lab Homestake Visitor Center and the exhibits. A June 1 "soft" opening is planned along with a June 30 Grand Opening. Exhibit fabrication is underway. The search remains open to secure a new Visitor Center Director, who will be employed by the Homestake Visitor Center Board of Directors.

Environment, Health and Safety

The SDSTA had zero recordable injuries in February. A potential recordable for February was discussed in the January report. This recordable injury was assigned to the 2014 statistics because the original injury occurred then.

Communications / Education and Outreach / Cultural

The Communications Department continued to make progress on content (written and video) for the exhibits at the new Sanford Lab Homestake Visitor Center. The SDSTA Communications Department is producing 40 videos for the Visitor Center exhibits. The SDSTA is working with the 3M Corporation to finalize paperwork for the \$25,000 grant that 3M announced in December for the 2015 Davis-Bahcall program. Productive discussions were held with 3M on plans to strengthen the partnership related to this grant and better support 3M's goals for this gift. Applications for the 2015 Davis-Bahcall program and the Dave Bozied and Chris Bauer internships were received and were evaluated in February. Selections are expected in early March. A Cultural Advisory Committee meeting was held at the Sanford Lab on February 19.

Finance and Contracts

For Sanford funded work, the SDSTA finished February \$22,271 over budget and is \$30,012 under budget for the 2015 state fiscal year. For DOE-funded operations, the SDSTA finished January \$59,808 over budget and is over budget \$85,736 for federal FY2015. Discussions continue with the South Dakota Legislature on funding for the Ross Shaft and with DOE on facility maintenance projects overall to prepare for the LBNF construction start.

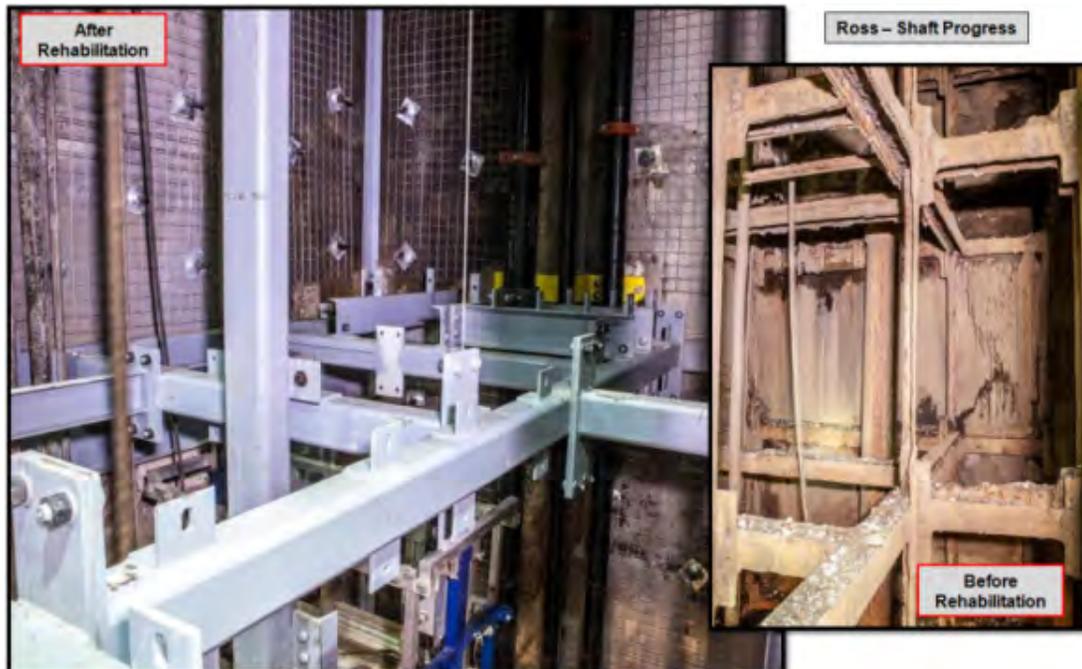
Underground Access Department
William McElroy, Director of Underground Access

Ross Shaft

In total, five steel sets were installed in February equaling 2,411 feet of refurbished shaft to date. Sets 140B to 144E are in place, which extends the project to the 2300L brow. The installation of new steel was suspended on February 17 through the end of the month as the Ross Shaft was required to support the installation of the replacement deep-well pump. The shaft was used to transport personnel and supplies from the 4850L to the 4550L during this effort. While steel construction was on hold, many other activities were addressed within the shaft including installation of all man-ways, ladders, and railings from the 1250L to the 1700L and old steel support turnbuckles to the 2450L. Engineering has the project up-to-date with performing rock-bolt pull tests, performing quality control checks on newly installed steel, and performing load tests on five of the eight hoists that service the project.

Yates Shaft

Top Down Maintenance addressed 97 separate panels/pieces of the shaft within February, which included addressing 14 T3 condition timbers. The range of sets addressed was from roughly 389 to 405. Work was completed in both the cage and skip compartments. The project is now within 15 sets of the milestone 2750L. The Top Down Maintenance project crews have encountered a large seam of rhyolite that requires bolting. The Engineering team recently inspected this area and recommends bolting continue in this area of the shaft until at least the 2750L. Transporting of loads through the shaft to support our science and construction efforts included moving a total of 296 loads, of which 54 loads were liquid nitrogen. The Yates Shaft was also involved in the replacement of the deep-well pump as the Yates was used to transport the old and new pump/motor combinations.

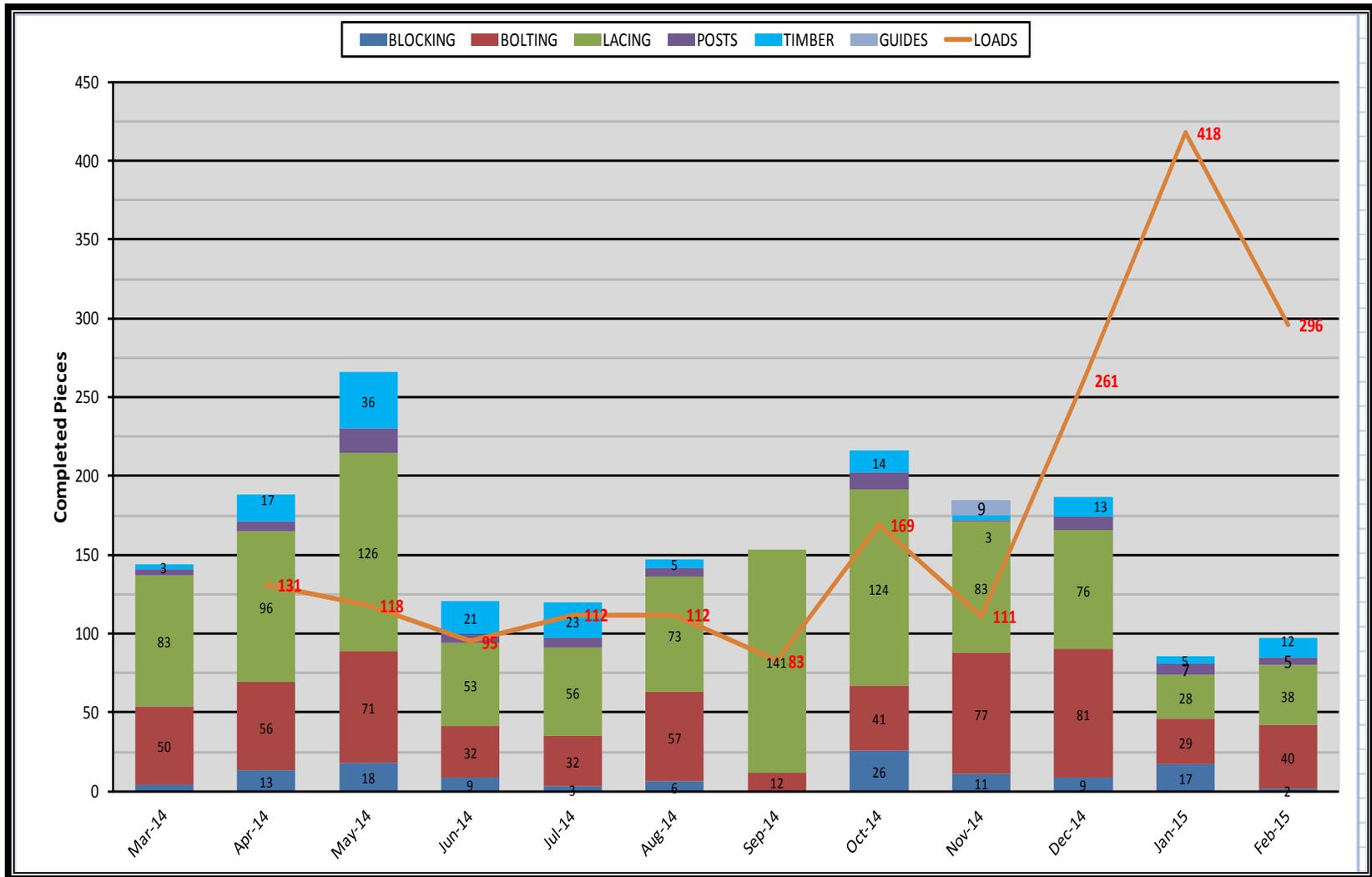


ROSS: Before and after steel removal



YATES: Top Down Maintenance, Timber Replacement

PROJECT DETAILS (FEB FY15)		SDSTA CAPEX BUDGET SUMMARY		
Title	Director	Budget	Expenses	% Spent
Underground Access Dept.	McElroy	\$ 7,085,559	\$ 2,999,854	42%
FINANCIAL STATUS				
Executed purchase for phase 3 ground control for \$125k				G
Procured the fabrication of steel sets 144 - 148 in addition to Phase 2 ladders				G
PLANNED ACTIVITIES NEXT PERIOD				
ROSS				
Resume steel installation once deep-well pump is back in operation, complete to set 149				
Complete Ross Pillar survey				
YATES				
Mobilize Dean Kurtz Construction who is responsible for CASPAR build out				
Complete Top Down Maintenance effort in skip compartment to set 419 (2750L)				
MAJOR MILESTONES				
Yates - Reach 2750 with Top Down Maintenance -skip side		Q2 of 2015		Y
Ross - Complete project to 2450		Q3 of 2015		G
Ross - Complete project to 2900 (begin Ross Pillar)		Q1 of 2016		G



**Yates Shaft – Top Down Maintenance/Material Handling Summary
February 2015**

Facility Infrastructure Department

Tim Baumgartner, Director of Facility Infrastructure

Summary

Facility Infrastructure effort in February was directed to the following areas: facility maintenance, equipment repair, preventative maintenance, electrical and cyber infrastructure. During February the facility infrastructure team continued to work extensively with the Engineering and Science Departments to focus on refining the operations and maintenance of specific subsystems including carbon monoxide (CO) monitoring, underground phones, leaky feeder (radio), power quality, building upgrades, pumping, dewatering, and hoist maintenance and repairs, shaft support, and construction projects.

Davis Campus Maintenance

The team monitored and assisted with new equipment installation and ensured the manufacturer standards were met. Electrical inspections and documentation for Surface Lab equipment are continuing. Also, residue acid from copper cleaning was transported to the surface. Yates Shaft personnel assisted with delivery of supplies to the Davis Campus and participated in evacuation drills. Air handling equipment preventive maintenance actions with Johnson Controls assistance were completed with a follow up visit to be scheduled.

Surface Facility Maintenance Building and Grounds

The SDSTA completed all seven (7) day, thirty (30) day, and annual (360) day preventative maintenance activities. Pressure vessel testing and documentation has begun, repairs made to Boart jackleg, assistance to the dewatering contractor with replacement of 500 horsepower deep well pump, and work continues with the Yates tunnel rehabilitation, Storm water inspections and road repairs continue along with snow removal/sanding efforts.

Waste Water Treatment Plant (WWTP)

At the end of February, the water level in the underground pool was at 5,610 feet. The total loss for the month was 29 feet. Pumping adjustments were made as a result of the deep well pump failure and low-flow conditions are being monitored. The Deep well pump replacement is near completion. The team continues to support the MAJORANA DEMONSTRATOR (MJD) experiment with neutralizing chemical by-products of their process. All preventative maintenance duties were performed. Facility-wide cleanup and disposal of abandoned in place equipment continues.

Transportation and Mobile Equipment

The team performed vehicle preventative maintenance actions and repairs to fleet and site vehicles. Also, the team maintained underground locomotives and support equipment and completed maintenance on the skid steer loaders, air compressors, and snow removal equipment.

Electrical and Cyber Infrastructure

During February, the SDSTA performed shaft pump preventative maintenance. The team continues to support the Ross Shaft rehabilitation project with the relocation of power cables in the shaft as the new steel is installed. The team continues to work reviewing and modifying the underground communications infrastructure to ensure each level has functional copper-based phones and FEMCO (i.e. twisted pair) phones at each underground facility level; cable replacement continues below the 1250L. A utility support system is being installed on the 4850L to provide support for power, communications, and water. Also, infrastructure is being installed on the 4850L at the future Compact Accelerator System for Performing Astrophysical Research (CASPAR)/ Black Hills State University Underground Campus (BHUC) areas for construction power and communications. Locations for additional power and fiber installations for the Deep Underground Gravity Laboratory (DUGL) sites have been identified on the 4850L, 4100L, 2000L, and other levels.

Dewatering

The dewatering team is currently focusing on high pressure water systems and shaft rehabilitation support, check valve installation and 1250L pump room upgrades continue, and grating over sumps in the chiller area near the 5000L pump room were cleaned and replaced. Also, Standard Operating Procedures (SOPs) and Job Hazard Analyses (JHAs) continue to be developed.

Engineering Department
Joshua Willhite, Director of Engineering

Long-Baseline Neutrino Facility (LBNF)

On January 28, 2015 the Long-Baseline Neutrino Experiment (LBNE) collaboration officially dissolved and transferred all responsibilities to a new collaboration currently referred to as ELBNF (experiment at the Long Baseline Neutrino Facility). A naming competition has narrowed from an initial list of approximately 110 names to 10, with recommendations planned to be provided to the new institutional board in early March. As described last month, the facility will remain as LBNF; only the experiment is expected to adopt the new name.

Arup, USA has continued to develop a 30% preliminary design deliverable for a 10 kT + 30 kT LBNF design through February, with a deadline to submit the report and drawings on March 11, followed by cost and schedule estimates on April 1. These will be the basis of the Fermilab Director's Review in late May and the Critical Decision-One (CD-1) Department of Energy (DOE) review in July. Arup will be directed to submit a similar design, cost, and schedule for a revised scope described below immediately following the report deliverable.

A workshop held February 2-4 at Brookhaven National Laboratory was planned to focus on risk analysis of the LBNF design. This workshop quickly transitioned to a discussion focused on identifying changes to the facility layout. The focus was on providing 40 kT of total experiment in (4) 10 kT detectors of common design. Previous focus had been on an initial 10 kT followed by 30 kT, with no emphasis on common design. The SDSTA Engineering team developed and evaluated cost, schedule, and key performance parameters of five different approaches through February. As of the end of February, the apparent selection consists of two caverns, each of which houses two 10 kT detectors. A deadline of March 11 has been given to the interim Experiment Facility Interface Group (iEFIG) for agreeing to an approach. This deadline is intended to support presenting the preferred option at the July CD-1 "Refresh" review in addition to the base scope of 10+30 that has been in the design process since early January.

The Engineering team continues to support the LBNF Environmental Assessment (EA) process for National Environmental Policy Act NEPA. The EA was modified slightly to capture the possibility of an increase in scope for an internationalized effort, and is currently under review by the DOE. In preparation for a July CD-1 "Refresh" review, public meetings are being scheduled for May at Fermilab and Sanford Lab. Note that this has shifted back from last month's report.

Discussions continue with the South Dakota Department of Environment and Natural Resources (DENR) and the Federal Environmental Protection Agency (EPA) to establish an agreement for use of the former Gilt Edge Superfund Mine site as a repository for LBNF excavated rock. Despite significant progress in February, this agreement is still being refined. The potential to extend LBNF excavation over time to "flatten" the cost profile has introduced new considerations that must be factored into this agreement.

CASPAR (Compact Accelerator System for Performing Astrophysical Research)

The SDSTA Hazard Mitigation Crew completed the rehabilitation of the space for CASPAR and the BHUC, including ground support and shotcrete. Shotcrete application began November 26, and concluded the first week of February. A revised painting process was defined and implemented in February, consisting of three layers of material. Painting was completed in early March. This resulted in a delay of Dean Kurtz Construction outfitting, which will now begin March 11 and is expected to conclude in early August.

In support of both the CASPAR and BHSU Underground Campus, a new water supply is required to supply both the cooling system and the fire sprinkler system. The only source currently available at the 4850L is through the Yates Shaft, so this new pipe must originate there. A plan was finalized in February for this water supply, to include a new sump at the 4100L in the Yates. The Hazard Mitigation Crew has mobilized to this location and will develop this sump in March.

Sanford Lab Homestake Visitor Center

All structural steel was installed by the end of February, as well as a significant portion of the exterior framing. Framing is expected to complete in the first two weeks of March, followed closely by exterior sheeting, allowing for utility installation, insulation, and drywall.

Exhibit design continues to progress with several iterations of content making steady progress through February. Despite progress, the schedule for exhibit development is lagging. To help address this situation while also

focusing significant effort on LBNF development, SDSTA Project Controls Specialist Pam Hamilton will manage the exhibit scope to its completion. Much of the exhibit cannot be fabricated until “as built” dimensions of drywall can be taken, so a site visit will be scheduled in late March to obtain these measurements. The schedule for the visitor center continues to reflect an opening day of June 1, 2015.

Other

An existing tunnel connecting from the surface near the Yates Machine Shop to the Yates Shaft had significant degradation over the past several years. This tunnel is not necessary for access, but does house the primary fiber optic connection for the facility. Above the tunnel are a number of critical water and gas lines. To avoid failure leading to utility damage, a project was initiated to address this degradation. The construction of this project began in late January with the removal of timber support and installation of partial steel culvert sections. The area between the rock and these culvert sections was filled with concrete in February to provide support to the ground above the tunnel. This project is complete until more funding can be obtained. The primary area of concern has been addressed.

The “deep well” dewatering pump deployed down the #6 Winze failed in November. The Engineering team took an active role in coordinating and managing repair efforts, which began in February and concluded on March 6. This pump failed after only ~9 months of operation due to chemical incompatibility between the impeller metallurgy and the water. The replacement pump addresses this incompatibility. Additionally, the SDSTA has entered into discussions with the supplier to determine whether a more favorable lease agreement (i.e. lower cost) is possible.

Environment, Health and Safety (EHS) Department

Noel A. Schroeder, EHS Director

Environmental Summary

Environmental Communication

The second draft of the Long Baseline Neutrino Facility (LBNF) Environmental Assessment (EA) was submitted to the Department of Energy (DOE). DOE comments are expected to be received in mid-to-late March.

Environmental Compliance

Water

Waste Water Discharge Summary through March 2, 2015:

- *Total water discharged through outfall 001 since June 5, 2008: 4,721,554,106 gallons*
- *Total Underground water treated since June 5, 2008: 2,792,368,032 gallons*
- *Total Tailing water treated since June 5, 2008: 2,062,365,662 gallons*
- *Total water discharged to sewer since June 5, 2008: 99,146,641 gallons*

There continues to be no news in regard to the renewal for the National Pollution Discharge Elimination System (NPDES) Permit SD0000043. SDSTA has been legally operating (discharging underground water and Barrick's tailing water) under this expired, existing permit.

The January Discharge Monitoring Report (DMR) was completed in the month of February. There were no violations. The DMR was electronically filed utilizing the NetDMR reporting tool.

The Davis Campus wash water was sampled for coliform/bacteria in February. Sampling indicated there were no bacteria in the Davis Campus wash water supply.

Water flows in Whitewood Creek for the 2015 first quarter Whole Effluent Toxicity (WET) test could not safely be taken due to ice buildup. The Department of Environment and Natural Resources (DENR) was contacted and agreed to our request that flows be estimated using historical March flow data.

Air

Data continues to be collected for stationary internal combustion engines.

Solid Waste

Recyclables (paper, cardboard, metals, plastic) continue to be collected, picked up by a local vendor (Pacific Steel) and money received for these items.

The Job Hazard Analysis (JHA) was reviewed and edited for the painting of the Black Hills State University Underground Campus (BHUC) and Compact Accelerator System for Performing Astrophysical Research (CASPAR) lab spaces. Materials were supplied for paint waste management (drums, steel buckets, and labels). Waste and spill control training was provided to the contractor.

The Tier II report was completed and submitted to the South Dakota SARA Title III Coordinator, Lawrence County Emergency Management Office, and the City of Lead Fire Department.

National Environmental Protection Act (NEPA)

The Noise Section of the EA continues to be examined closely since it is likely to attract the most public attention along with the truck haul to Gilt Edge Superfund Mine Site. The Noise Tables were modified to reflect nighttime operation of the crusher and conveyance.

There was numerous communications with the state and Environmental Protection Agency (EPA) in an attempt to resolve the financial liability of the LBNF project in regard to redesigning the Gilt Edge Remedial Action Plan. Currently, the state and EPA are trying to determine how best to use the 750,000 tons of LBNF rock at the Gilt Edge Site. This in turn will determine their redesign costs and possible additional costs in anticipation of the rock disposal.

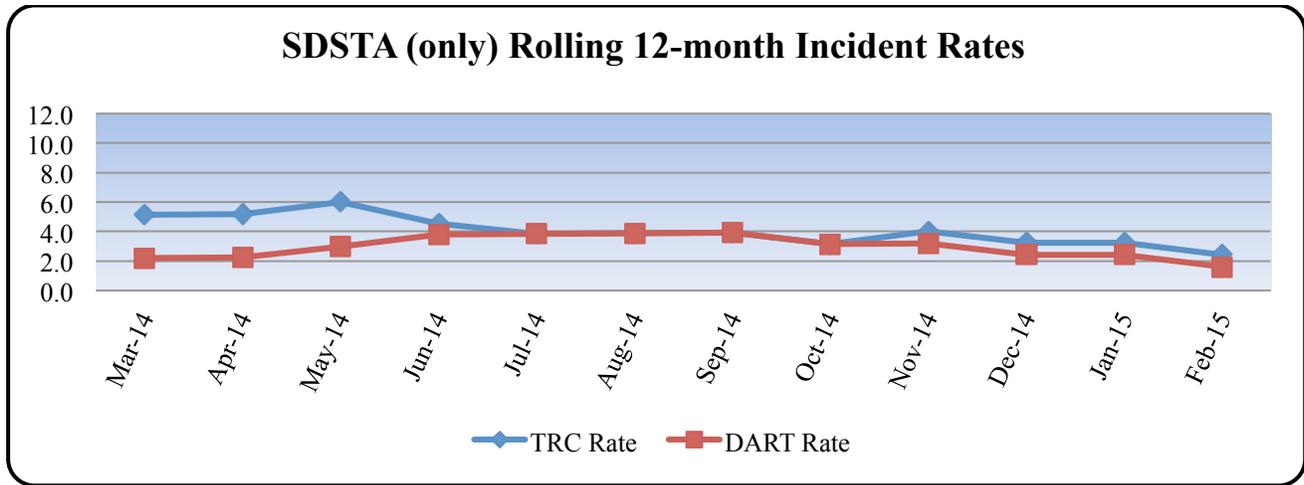
The DOE Berkeley Site Office submitted a Categorical Exclusion worksheet for review. This worksheet was revised based on several factors including modification to the Sanford Surface Laboratory, new underground

injection of fluids and project description. The South Dakota State Historical Preservation Office (SHPO) was contacted concerning the proposed construction of a small surface building in the Lead Historic District. The SHPO toured the site and indicated the building would present no adverse to the Historic District and requested a form be completed outlining the buildings information (construction materials, location, etc.).

Environmental Support Tasks

The Waste Water Treatment Plant (WWTP) Standard Operating Procedures (SOPs) were finalized and signed. It was decided that the SOPs would be managed by the WWTP office for inclusion into the SOP database. An additional safety walk-through of the WWTP was completed. An SOP was written for sampling of the backwash to sewer for WWTP Operators.

Health and Safety Summary



TRC = more than first aid treatment was given.

DART = more than first aid treatment was given AND restrictions were job limiting or the employee could not work (subset of a TRC).

February 2015 DARTS/TRC:

- February 3: TRC - Contractor slipped and twisted knee when stepping off equipment

February 2015 First Aid Cases:

- February 5: Contractor’s facial skin contact with concrete splash which resulted in burn spots; triple antibiotic ointment applied

February 2015 Category 1 or 2 Events:

- No events to report

February 2015 Category 3 Events:

- No events to report

February 2015 Items of Interest:

1. Provided Annual Refresher Training (ART) on the topic of Personal Protection Equipment (PPE) for Operations personnel
2. Conducted Action Closure meeting; closed 40 action items and 7 Environment, Health and Safety Oversight Committee (EHSOC) action items
3. Provided guide services to Deep Underground Gravity Lab (DUGL) researchers
4. Submitted Risk Assessment Underground 2014 Summary
5. Conducted monthly Safety Committee meeting. Safety Sweep completed of the Yates Men’s Dry, Ramp and Tunnel; work orders and action items submitted
6. Conducted air sampling for underground paint /epoxy process
7. Reviewed and approved incoming chemicals for use onsite
8. Conducted monthly fire extinguisher and AED inspections

9. Participated in multi-county emergency drill at Lawrence County 911 Center
10. Participated in presentation of Industrial Hygiene and Mining Personal Protective Equipment to Lead/Deadwood Elementary School
11. Reviewed and approved incoming chemicals for use onsite
12. Performed Hazardous Waste Training for underground painters
13. Performed hearing protection attenuation checks on Yates Shaft and Hazard Mitigation crews
14. Paint Samples for the underground projects were sent to Lawrence Berkeley National Laboratory for analysis.
15. Agenda and training have been developed for the Hazardous Waste Operations and Emergency Response (Hazwoper) Training on March 16, 2015
16. Completed monthly underground inspections (4850L Refuge Chamber, 1700L, 2000L, 4500L to 4850L 17 Ledge ramp, 4550L #6 Winze hoist room, 4850L #6 Winze area, 1250L & 2450L)

Science Department

Jaret Heise, Science Director

There are a number of Sanford Lab Science presentations planned for upcoming conferences and workshops: Low Radioactivity Techniques (March in Seattle), South Dakota Academy of Science Physics Symposium (April in Oacoma, also 100th anniversary), IX International Conference on Interconnections between Particle Physics and Cosmology, PPC2015 (June in Deadwood). Planning continues for the Conference on Science at the Sanford Underground Research Facility that will be hosted by SDSM&T in May.

In February, SDSTA personnel assisted with calibrations of the oxygen sensors at the MJD Electroforming laboratory at the 4850L Ross Campus. Further testing of the alarms is planned for early March, including modification of trigger thresholds to be consistent with other laboratories.

A facility services contractor visited the Davis Campus to address several items, including the chilled water system that serves both Davis Campus laboratories and the dehumidifier, as well as programming for the dehumidifier and one of the clean space thermostats. One of the chiller compressors needs to be replaced and preparations for that work have started; due to shared systems both chiller compressors will likely need to be replaced.

Both facility- and experiment-owned pressure vessels were identified at various laboratories and added to a comprehensive inventory for upcoming inspections by a third-party expert.

Site-specific training materials were updated for two spaces employed by researchers, namely the Sawmill (surface) and the Davis Campus. Updates for the Davis Campus mainly focused on clarifications (e.g., cleanliness protocols, soldering, radiation safety) and reflecting recently updated policy language (e.g., personal protective equipment); a new quiz was also developed. There are plans to update the site-specific training for the two remaining laboratories: the Surface Laboratory and the MJD Electroforming laboratory at the 4850L Ross Campus. Davis Campus as-built alarm system documents were prepared by SDSTA engineers and placed at key areas throughout the underground laboratories.

Discussions continued regarding fire extinguishers at the Davis Campus. Cleaner versions of some extinguishers are being considered for common areas near sensitive equipment.

Regular Davis Campus evacuation drills/discussions continued through February, with a focus on fire and smoke scenarios.

Large Underground Xenon – LUX

Through February, LUX has accumulated more than 90 live days of Weakly Interacting Massive Particle (WIMP)-search data since Fall 2014. February calibration activities included cesium, tritium, and krypton. Dedicated krypton data sets were collected in order to investigate charge build-up on the detector walls and to understand the electric-field profile following a period of anode downtime. Use of the neutron generator is still planned for mid-March. LUX continues to project the completion of Run 4 (~300 live days) around March 2016.

The diaphragm on one of the xenon circulation pumps developed a small weak spot, which triggered an alarm and shut down the circulation before a leak occurred. The circulation pump was replaced and the diaphragms on a backup circulation pump were replaced to swap it in. However, different pumps have slightly different operating parameters, and several monitoring alarms resulted. Sanford Lab supported unplanned access on three occasions in February in order to deal with these circulation system issues. Extensive xenon sampling confirmed that no significant contamination occurred, and electron lifetime values above 700 μ s were re-established by the end of the month.

One circulation pump is now in transit to the manufacturer for a refurbishment and a new pump has been ordered as an additional backup. Furthermore, a new regulator was installed to increase the pressure in the inter-diaphragm space of the circulation pumps, which should lead to longer diaphragm life. In more routine maintenance, two pumps used to maintain vacuum in the outer detector volume were replaced following a JHA that was reviewed and approved by Sanford Lab in February.

Maintenance was performed on a number of systems. Troubleshooting on the data acquisition system resulted in a reduction of spurious noise being generated on several channels in the LUX signal digitizers. A bug in the monitoring software that left some alarms disabled was discovered and fixed and investigations continue to

determine the cause of high rates in two photomultiplier tubes. Further upgrades to the gas system were completed in February and additional work on the gas system electronics is planned for March.

Training was conducted for researchers on the high-voltage grids, thermosyphon, xenon sampling and tritium injection systems. In February, four individuals from LUX participated in Laboratory Guide training.

The LUX onsite effort has remained fairly consistent for the past year. In February, the average crew consisted of five people for a combined total of 754 hours.

MAJORANA DEMONSTRATOR – MJD

Having been installed in the shield since June 2014, the Prototype Module with 7 kg of natural germanium (10 detectors assembled into 3 strings) has now accumulated more than 450 kg-days of background data. As reported last month, all seven strings for Module 1 have been assembled. After an extensive period of testing (including multiple periods staffing two shifts per day), all seven strings (29 enriched detectors) had been installed inside the cryostat by the end of February. However, once pumping started on the cryostat in preparation for cooling a leak between the thermosyphon gas volume and the cryostat vacuum space prevented further progress. The source of the leak is under investigation and it is likely that the detector strings will need to be removed from the cryostat to complete the repair.

Testing continued for the Module 1 calibration system, with the system exercised over 100 times during the commissioning process. An additional thorium-sealed button source is also being purchased (the model is already listed on the SDSTA Nuclear Regulatory Commission [NRC] license). While the thorium line source was deployed in the calibration track surrounding the Prototype Cryostat calibration, an unknown liquid was noted on the outer tube holding the source. Calibration activities for the Prototype Cryostat are on hold until the source of the liquid is better understood.

The first half of the lead (Pb) bricks for the Module 1 monolith shielding was installed last month, with full completion awaiting custom copper parts that will be needed between the Pb portion of the shield and the cross arm. In February, the structure that will be used to support the top layer of the neutron shield (high-density polyethylene or HDPE) was mechanically attached to the base overfloor. The outer HDPE shielding will consist of multiple panels stacked up to a total thickness of 30 cm; the inner 2 layers consist of borated HDPE. The innermost and outermost layers are clad with a thin sheet of aluminum as a fire protection precaution.

EHS personnel from Oak Ridge National Laboratory (lead laboratory for MJD) visited Sanford Lab in February. Inspection mainly focused on crane use at the Davis Campus. MJD is in the process of updating their hoisting and rigging procedures, including the development of lift plans for specific tasks.

MJD liquid nitrogen consumption at the Davis Campus remains relatively high, and SDSTA Operations personnel continue to assist in performing dewar swaps on some weekends.

At the Electroforming Laboratory, the last mandrel was set into its acid bath in February. Six of ten baths are occupied, including a research and development bath investigating a chrome-copper alloy that would be twice as hard as pure electroformed copper. There is interest from non-MAJORANA groups for custom parts made from underground electroformed copper, and the first community mandrel was set in February, supported using cost-recovery billing.

MJD surface activities in February included parylene-coating of copper parts using the cleanroom at the Surface Laboratory as well as transport preparations for some of the top HDPE panels.

MAJORANA continued with a significant presence through February, with an average of 11 people combining for a total of 1944 hours.

Low-Background Counting

Center for Ultra-Low Background Experiments in the Dakotas – CUBED: In early February, the low-background counter shield was disassembled in order to address detector issues identified in December. A questionable splice in the detector signal cables was flagged, and borrowing expertise from the BLBF and MAJORANA groups, the detector preamplifier (and associated signal cables) was replaced. The *in situ* repair appears to have been successful, and the shield was re-assembled by the end of month to be followed by calibrations in March.

Berkeley Low-Background Counting Facility – BLBF: Production counting of community samples continued through February. A local machine shop fabricated a new shield lid system for the second low-background counter that will be installed in the Black Hills State University Underground Campus (BHUC) later in 2015.

Other Current Research Activities

Physics: Preparations are essentially complete for the LUX-ZEPLIN (LZ) Department of Energy (DOE) Critical Decision-One (CD-1) review that will be held at Lawrence Berkeley National Laboratory (LBNL) March 11-13. In particular, the Memorandum of Understanding (MOU) agreement with SDSTA was finalized and signed in early March.

Representatives from the Compact Accelerator System for Performing Astrophysical Research (CASPAR) group were onsite in February and early March to attend meetings with SDSTA engineers and the laboratory outfitting contractor. CASPAR personnel have also started the training to become Laboratory Guides. Requirements for surface staging space were also discussed, including options at the Surface Laboratory or the Sawmill. In terms of implementation documentation, the CASPAR General Services Agreement was signed in February and progress was made on the Experiment Planning Statement and the Hazard Assessment documents.

In February, discussions with BHUC representatives and users concentrated on the shotcrete coatings for the laboratory space. Based on reports in the literature, a high-solid macropoxy polyamide product was chosen to attenuate radon emanation from the rock walls and shotcrete. The BHUC group also started iterating on acceptable (and practical) cleanliness protocols for the various laboratory spaces.

Members of the Deep Underground Gravity Laboratory (DUGL) group are planning to return to Sanford Lab mid-March to resume installation of seismometers underground. The goal for this next trip is to re-occupy two original DUGL sites on the 2000L as well as to set up a new site on that level. In addition, SDSTA personnel are preparing a site on the 4850L at 17 Ledge, and the group expects to be able to move in there in March. The locations at 17 Ledge and the 2000L are of particular interest because they significantly increase the spatial extent of the array.

There were no interactions in February with the South Dakota School of Mines and Technology (SDSM&T) team interested in underground radon-plateout studies or the NuDot liquid scintillator R&D group.

Geology: Researchers from LBNL’s Earth Science Division visited Sanford Lab in February to assess potential sites for their studies, and to that end areas on the 4850L (near 17 Ledge) and the 4100L were inspected (the group needs sufficient vertical stress so shallower areas were not considered). Based on this visit, the group is interested in exploring options on the 4100L that would access the Yates Amphibolite rock formation and that would be located away from the development of future physics caverns. A possible layout would include five vertical drill holes, each approximately 20-meters long with the majority used for monitoring. The group is also interested in collaborating with faculty from SDSM&T and the University of Wisconsin – Madison.

Biology: There were no biology researchers onsite in February, but SDSTA personnel assisted in re-starting one of the NASA Astrobiology computers on the 4850L. Collaborators from Black Hills State University are planning a visit in early March to ensure the equipment is working properly.

Engineering: Initial equipment from Xilinx, Inc. arrived in early March. Tests will be performed on the surface prior to being moved underground to a location near the 4850L Davis Campus.

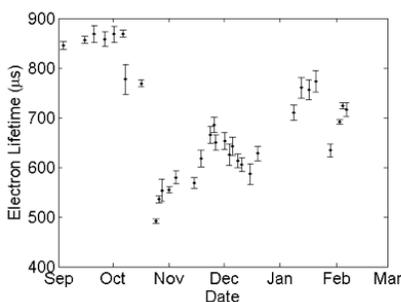


Fig. 1 LUX xenon purity as a function of time.



Fig. 2 SDSTA electrician assisting with pump work.



Fig. 3 LBNL, SDSM&T geologists on 4850L for site-selection.

Education and Outreach Department

Ben Sayler, Director of Education and Outreach
KC Russell, Cultural and Diversity Coordinator

Education Offerings / Programs

K-12 Educators and Students

Onsite Programs

Education and Outreach (E&O) Deputy Director Peggy Norris and Science Education Specialist Tom Campbell hosted three Lead-Deadwood High School science teachers for an underground tour on February 25. After visiting the Davis Campus, the group walked to the site of the Black Hills State University (BHSU) Underground Campus (BHUC) and also the Temporary Clean Room, exploring Homestake geology in the drifts along the way. The tour was part of an ongoing partnership between Lead-Deadwood High School and the Sanford Lab to include more connections to Sanford Lab science in the K-12 curriculum across all of the sciences.

Offsite Programs

Science Education Specialist Julie Dahl, Science, Technology, Engineering, and Mathematics (STEM) Education Specialist Bree Reynolds and Peggy attended the annual South Dakota Science Teachers Association Conference in Huron February 5-7. A Sanford Lab information table was supplemented by talks and workshops. Julie and Bree facilitated a workshop about educational ties to Sanford Lab science and engineering. Peggy gave a workshop on classroom activities developed by SciGirls as well as a talk about the Dakotas K-12 STEM Initiative to deliver STEM content to classrooms through technology.

Afterschool programs for elementary students in Lead-Deadwood (*StopNGrow*) and Spearfish (*Kids' Zone*) continued in February with activities developed and taught by Bree. For this month's program at Lead-Deadwood Elementary School, SDSTA Experiment Health and Safety Manager Chuck Lichtenwalner joined Bree, bringing samples of personal protective equipment and monitoring instruments to talk about safety at the Sanford Lab.

SciGirls of the Black Hills meetings were held in January at Rapid Valley Elementary School (Rapid City) with Bree and at Belle Fourche Middle School with Peggy. Between the two sites, eighteen girls attended. The February activity was to engineer a water filter using media from the Waste Water Treatment Plant and use it to filter mine water.

Sanford Lab staff continued to participate in the judging of area science fairs with two in February. Peggy and Tom judged high school projects in physics and earth science, respectively, at the Northeast Regional Fair held at Newcastle High School in Newcastle, WY. E&O Director Ben Sayler, Julie and SDSTA Consultant Jim Whitlock judged projects for Spearfish Middle School at a fair held at BHSU.

The annual Sturgis Brown High School Career Fair was held on February 18, and Peggy represented Sanford Lab. In addition to four grades from Sturgis Brown, students from Douglas and Lead-Deadwood, two busloads each, participated.

Tom visited teachers at Little Wound High School in Kyle, to continue planning for programs to be presented to students this spring. The first classroom visits - scheduled for late February - were postponed until March due to weather and school schedules.

Ben and Julie helped to organize and launch the first meeting of teachers taking part in the National Science Foundation (NSF)-funded Computer Science Education initiative. Nine teachers from five schools attended, and 300 students have registered for the new high school course to be pilot tested next school year. Teachers expressed noteworthy interest in making connections for their students that involve Sanford Lab science and engineering.

University

Onsite Programs

Ten undergraduates from the South Dakota School of Mines & Technology (SDSM&T) Women in Science and Engineering program were joined by two graduate students in a tour of the 4850L on February 3. The group, which was comprised primarily of engineering students this time, toured the Davis Campus. They also toured

some of the other drifts with Oren Loken, exploring the infrastructure behind the facility and the experiments, including the water purification and air handling systems.

Cultural Activities

The Cultural Advisory Committee met on February 19 for their annual review of Sanford Lab E&O, communications, cultural and diversity activities. Most of the E&O group attended the meeting. Reports on calendar year 2014's diversity-related activities were presented to the Committee by the E&O group and SDSTA Cultural & Diversity Liaison KC Russell. This input to the committee is attached as an appendix. Final recommendations by the Committee are anticipated soon.

Public Activities

Sanford Lab, coordinated by the E&O group, partnered with the Homestake Opera House to present a staged reading of the play 'Background' by Lauren Gunderson. The play is the story of an early cosmologist who predicted the presence of background radiation from the birth of the universe twenty years before it was discovered and who, forgotten, was passed over for the Nobel Prize. The evening started with a reception. Mark Hanhardt introduced the play with a science talk. Communications Director Connie Walter was a cast member, which also included a meteorologist from a local television studio. The event received publicity that can be seen at <http://www.blackhillsfox.com/home/headlines/Science-drama-reading-at-Homestake-Opera-House-294118361.html>. This event was supported by an NSF grant to the Center for Science and the Performing Arts, led by Brian Schwartz, of the Graduate School of the City University of New York.

A musical composition inspired by the Large Underground Xenon experiment (LUX) at the Sanford Lab debuted at BHSU in February. "LUX" composed by Dr. Symeon Waseen, assistant professor of music at BHSU, pays homage to the search for dark matter through the LUX detector.

Table 1. Estimated Audience Served – February 2015

Group	Students					Educators			Community		
	K-5	6-8	9-12	Undergrad	Graduate	K-12 Teachers	Univ. Faculty	Informal	Parents	Sanford Lab Staff	General Public
ON-SITE											
SDSMT Women in Science and Engineering				10	2						
Lead-Deadwood Science Department						3					
Subtotal	0	0	0	10	2	3	0	0	0	0	0
OFF-SITE											
Afterschool Group / Spearfish	65							3			
Afterschool Group / Deadwood	32							3			
SciGirls / Belle Fourche		8				1					
SciGirls / Rapid City	10					1					
Career Fair / Sturgis			40								
High School Science Fair / Newcastle, WY			17								
Middle School Science Fair / Spearfish		30									
SD Science Teachers Conference / Huron						50					
Computer Science Course Planning / Rapid City						9					
Geology Seminar Class / Spearfish				12							
Science+Art Event / Lead											60
LUX-Inspired music / Spearfish		4	4	12							35
Subtotal	107	42	61	24	0	61	0	6	0	0	95
VIDEOCONFERENCE											
Subtotal	0	0	0	0	0	0	0	0	0	0	0
Grand Total	107	42	61	34	2	64	0	6	0	0	95
Grand Total: 411 students, educators and members of the general public, of which 20 were students or teachers engaged in programs specifically designed to interest or support more girls in STEM.											

Sanford Science Education Center – Update for Cultural Advisory Committee Jan 2014 – Feb 2015

OVERVIEW

The Sanford Science Education Center (SSEC) became a reality in 2014. The SDSTA has invested funds into construction projects at BHSU (remodeling of Jonas Hall) and in Lead (Sanford Lab Homestake Visitor Center), and a strategic plan for the center was finalized in March 2014 with input from its three major partners (BHSU, SDSTA/SURF and the Lead Area Chamber of Commerce). A copy of the strategic plan is in Appendix A.

Two new staff members were added this year. Bree Reynolds started in May; her expertise is in life science and educational pedagogy, with years of experience teaching in a reservation school in Washington state. She successfully defended her PhD dissertation in science education in February 2015. Tom Campbell is a former Homestake geologist with expertise in earth and space science education. He joined the staff in September.

In September, as we entered the final year of our five-year NSF planning grant, the group hosted an Education Think Tank. Facilitated by Inverness Research, the external evaluator for the planning grant, the think tank included seven experts in science education with experience in a variety of settings; the LIGO project, Fermilab, and the Pacific Science Center among others. Further planning efforts based on recommendations from the think tank are discussed later.

2014 PROGRAMS

I. Overall Statistics – Calendar Year 2014

Audience	Total # of Events	Total Audience #	South Dakota*		American Indian**		Female**	
			Events	Total	Events	Total	Events	Total
Grand Total	125	6,160	213	5,291	7	143	53	704
Students by grade- Total	75	2,767	104	2,367	3	88	25	536
preK - 2	5	319	13	319	0	0	1	30
3-5	22	758	28	643	1	2	12	191
6-8	20	808	24	708	0	0	10	299
9-12	19	615	23	527	2	86	0	0
Undergrad	9	205	12	118	0	0	2	16
Graduate	0	62	4	52	0	0	0	0
Educators - Total	20	684	69	495	3	51	27	167
K-12	9	313	45	206	1	43	18	52
Informal	1	36	9	22	0	0	5	12
Faculty	10	335	15	267	2	8	4	103
General Public	30	2,709	40	2,429	1	4	1	1

* Programs reaching audiences of South Dakota residents

** Programs specifically targeted towards those underrepresented groups

II. 2014 Programs serving American Indian students and teachers

Event	Location	Duration	Presenter(s)	Format
GEAR-UP Career Fair	SDSMT	3 hours	D. Molash, KC Russell	Exhibit Table
GEAR-UP Videoconference	SDSMT	2 hours	M. Hanhardt, D. Molash, KC Russell, P. Norris	KC & Peggy onsite at SDSMT; David & Mark underground at Davis
Astrobiology partnership with Sinte Gleske University	SGU	Ongoing	B. Reynolds (with Dana Gehring, SGU)	NASA Grant for travel and development of a curriculum unit for SGU biology courses
Indian Education Summit	Pierre	2 days	T. Campbell, J. Dahl, KC Russell, P. Norris, B. Reynolds	Exhibit Table plus two workshops (Peggy & Bree)
Lakota Nations Education Conference	Rapid City	1 day	P. Norris	General Talk plus workshop
Planning Meeting	Takini	1 day	KC Russell, B. Reynolds	Trip to meet school staff and discuss partnerships

III. 2014 Summer Institutes serving South Dakota Educators

Topic	Location	Duration	Audience	Number	Presenters
Underground STEM	Sanford Lab	5 day	Elementary to Middle School	14	J. Dahl, B. Reynolds
Underground STEM	Sanford Lab	5 day	Middle to High School	24	P. Norris, B. Reynolds

IV. 2014 Programs serving Girls in STEM

Event	Location	Duration	Presenter(s)	Format
SciGirls of the Black Hills	Girls, Inc	2 hours (monthly); Jan-Mar	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
	Spearfish	3.5 hours (monthly) Jan - May	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
	Rapid Valley	2 hours (monthly) Jan - Dec	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
	West Middle, RC	2 hours (monthly) Mar	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
	Belle Fourche	3 hours (monthly) Oct	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
SciGirls Training Sessions	Brookings	1 day	P. Norris	Full Day Train the Trainer
	Savannah, GA	1 day	P. Norris	Full Day Train the Trainer
	National AAPT Meeting	0.5 day	P. Norris	Half Day Training Workshop
	SD Science Teachers Assn	2 hour	P. Norris	Training Workshop (x2)
	ND Science Teachers Assn	2 hours	P. Norris	Training Workshop (x2)
Girl Scouts – Dakota Horizons	Spooky Science – Rapid City	5 hours	P. Norris + SDSMT/BHSU undergrads	Workshop plus activity table
	Science Sleepover – Rapid City	3 hours	P. Norris	Air Quality activities
Women in Science Days	Rapid City	1 day	J. Dahl	
	Sioux Falls	1 day	P. Norris	Radiation
	Pierre	1 day	Snowed out	
	Yankton	1 day	P. Norris, B. Reynolds	Nucleosynthesis
SDSMT WISE Group	Lead	7 hours	P. Norris	Underground tour
Diversity Summit	Rapid City	1 day	P. Norris (presentation)	Report on SciGirls seed grant from EPSCoR Diversity Task Force
NGC*	National Meeting	3 days	P. Norris	Represented GPGC**

* National Girls Collaborative

** Great Plains Girls Collaborative

PLANNED PROGRAMS - 2015

I. 2015 Plans for serving American Indian students and teachers

Institution	Partnership	Location	Organizer	Format
Sinte Gleska University	Astrobiology		B. Reynolds / D. Gehring	Travel to visit NASA labs in California (Mar 16-20) with SGU students
	Physical Science	SGU	P. Norris	Workshops for chemistry and environmental classes (Mar 31)
	Astrobiology	BHSU	B. Reynolds / C. Anderson	2-day astrobiology workshop (May 26-27)
	Education	Sanford Lab	P. Norris	Job shadowing for NASA Star Scholar (pre-service teacher) (June)
SDSMT	AISES Group	Rapid City	P. Norris	Exhibit table at regional AISES meeting (Mar 12-14)
Todd County MS	8 th grade	Mission	P. Norris	Talks to 8 th grade science students and technology assessment for future videoconference (Apr 1)
Discussions in progress (no specific programs/dates set):				
Takini Middle School		Takini	B. Reynolds	?? (no science teacher); GEAR-UP has taken over teaching science
Little Wound High School		Kyle	T. Campbell	½ day science workshops for all grades?
Eagle Butte Schools		Eagle Butte	P. Norris	Contact made at LNEC; need to follow up

II. 2015 Summer Institutes serving South Dakota Educators

Topic	Location	Duration	Audience	Organizer
Underground STEM*	Sanford Lab	5 day	Grades 5-8	Julie Dahl
Life and Environmental Science	Sanford Lab	2.5 day	Grades 7-12	Bree Reynolds
Earth and Space Science	Sanford Lab	2.5 day	Grades 7-12	Tom Campbell
Nuclear Science^{&}	SDSU	5 day	Grades 6 - 12	Peggy Norris

* follow-up to 2014 workshop

[&] pending funding from NCLB Title IIA (Dept of Education)

III. 2015 Programs serving Girls in STEM

Event	Location	Duration	Presenter(s)	Format
SciGirls of the Black Hills	Rapid Valley	2 hours (monthly)	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
	Belle Fourche	3 hours (monthly)	J. Dahl, B. Mount, P. Norris	Video + hands-on activities
SciGirls Training Sessions	SD Science Teachers Assn	2 hour	P. Norris	Training Workshop (x2)
	Fargo, ND (Prairie Public)	7 hours	P. Norris	National Training Workshop
Women in Science Days	Rapid City	1 day	B. Reynolds	Presentation (tba)
	Pierre	1 day	B. Reynolds	Presentation (tba)
	Yankton	1 day	P. Norris	Presentation (tba)
SDSMT WISE Group	Lead	7 hours	P. Norris	Underground tour (x3)

PRIORITIES

The consensus of the experts invited to the Education Think tank was that the staff of the SSEC would be well served to identify a few ‘flagship’ programs that would be the Sanford Lab / SSEC hallmarks, and to use that to prioritize the requests that we receive for programs. Taking their advice, SSEC staff have been putting processes in place to assess new program requests as to whether they fall into one of three categories: flagship, support or pilot/good neighbor. We have designated our flagship programs as the following:

Audience	Program	Examples
K-12	Hosting Field Trips, Including hands-on activities with Lab focus	- SSEC spring field trip program - Lead Education Field Trips
	Visits to rural classrooms and tribal schools	- Crow Creek and Lower Brule Science Days
	Educator Opportunities	- Professional Development - Teacher in Residence
	Vidoconferencing and access to data from Lab	- Dakotas K-12 STEM Series
University	Student Opportunities	- Davis-Bahcall - Student Internships - Hosting university field trips
	Curriculum Module Development	- SGU / NASA Astrobiology - BHSU Geology Course
General Public	Neutrino Day (led by Communications)	
	Science and the Arts	- Staged reading of science play
	Portal to the Public (pending funding)	

We are seeking to strengthen these flagship programs as we continue our planning for 2015. At the K-12 level, hosting field trips remains a priority because it introduces students to the unique environment of the Sanford Lab. We recognize that we need to increase our presence in rural and tribal schools, especially in this time of teacher shortages in the STEM areas and education budget cuts that may have affected district field trip budgets. The use of videoconferencing in connecting students and teachers with scientists and engineers can also bridge distances. For these programs, our goal is to inspire students in upper elementary and middle school to consider STEM careers, and to help prepare high school students to enter STEM careers.

At the university level, the Davis-Bahcall Scholars program and student internships remain our flagship programs. In addition, Peggy Norris has begun monthly underground trips for student groups from local universities. Tom Campbell has begun to work with BHSU faculty member Abigail Domagall to strengthen Sanford Lab connections in the geology curriculum at BHSU, and Bree Reynolds is working with the Biology Department at Sinte Gleska University, members of the NASA-funded Sanford Lab astrobiology collaboration and faculty at BHSU to include astrobiology in SGU biology curriculum.

For the general public, the Sanford Lab flagship continues to be Neutrino Day, which involves all the resources of the Lab including all SSEC staff. In addition, we have continued a small effort in communicating science through the performing arts, organizing approximately one event a year, in collaboration with the Center for Science and the Performing Arts at the City University of New York.

For K-12, examples of support roles that the SSEC plays include judging science fairs, participating in career fairs, Women in Science days, and education conferences. At the university level, supporting university clubs such as AISES (American Indian Students in Engineering and Science) and WISE (Women in Science and Engineering) is important. In addition, the SSEC is working with BHSU and other campuses to organize a Conference for Undergraduate Women in Physics to be held in Spearfish and Lead in January 2016. At the level of the general public, we support science festivals such as the annual festival in Sioux Falls.

Examples of pilot and good neighbor programs are partnerships – new in 2014 – to bring science into afterschool programs in Spearfish and Lead for elementary students, SciGirls clubs for upper elementary and middle school girls, and the STEM Research Course at Lead-Deadwood High School. At the university level, we work with the BHSU science department to aid in implementation of outreach programs. For the general public, we give presentations to groups such as Road Scholars.

FUNDING

I. Current Funding

Beginning in June 2014, an MOU between the Governor's Office and the SDSTA designated funding for three years to complement the current federal NSF grant supporting the SSEC, to enable a broader reach throughout the state of South Dakota. The additional money has enabled the addition of staff for the center.

A small supplement was also received to the current NSF planning grant.

Ben Saylor is co-PI on an NSF computer science grant with BHSU that will strengthen career and technical programs in several area high schools. Sanford Lab connections will be made within the projects students can choose to work on during the course. This project has a special emphasis on reaching underserved audiences and is entitled *Expanding Pathways into Computer Science*.

Bree Reynolds received a NASA grant to work with Sinte Gleska University on connecting astrobiology into the biology curriculum. This grant primarily funds equipment for SGU but also includes a travel award for Bree and SGU faculty member Dana Gehring to lead a small group of SGU students to visit NASA facilities in California.

II. Recent Proposals

Three proposals were submitted this fall to the National Science Foundation; all three are still under review:

The team, led by Ben Sayler, submitted a proposal to the Division of Physics to continue funding for an additional five years for targeted programs. These included three tracks: i) extensive outreach to a small number of partner schools on reservations, working with educators in these schools to strengthen the science curriculum, ii) strengthening of the Sanford Lab intern program by providing training for mentors, and iii) becoming a Portal to the Public partner, providing training for scientists on communication to the general public and providing opportunities to interact with the public at the Sanford Lab Homestake Visitor Center.

Peggy Norris submitted a proposal to NSF's *Innovative Technology Experiences for Students and Teachers (ITEST)* program in collaboration with institutions in North Dakota and Wyoming entitled 'The Dakota Territory STEM Collaborative: Utilizing Technology to Inspire and Nurture Future STEM Professionals'. This proposal expands the Dakotas K-12 STEM Series, a pilot set of videoconferences between research centers and classroom that began in 2014 and will continue this spring.

Rachel Headley submitted a proposal to NSF's *Advancement of Informal Science Learning* program to pilot programming for families using the Sanford Lab Homestake Visitor Center.

Black Hills State and Sanford Lab successfully submitted a joint proposal to the American Physical Society to host a Conference for Undergraduate Women in Physics in January 2016. We will be one of nine regional sites around the country hosting one of these very popular conferences, and the first one to be held in this region.

In addition, Peggy Norris submitted two smaller proposals for 2015 which are still under review:

- 1) A minigrant proposal to the American Physical Society Office of Public Outreach, for development of a web portal for students and the public interested in learning more about dark matter; and
- 2) A Board of Regents No Child Left Behind Title II-A proposal to fund a teacher institute on the topic of nuclear science. The workshop will emphasize basic nuclear science, its applications, careers and ties to the science of Sanford Lab.

DIVERSITY WITHIN FLAGSHIP PROGRAMS

Following are statistics on the demographics for the Dave Bozied / Chris Bauer Internships and the Davis-Bahcall Scholars programs. Both programs have entering their seventh year, and an effort has been made to track the students as they continue through their college career track and on to employment or advanced degrees.

Program	Total # of students	Male		Female		American Indian		Asian-American		Hispanic		African American	
		#	%	#	%	#	%	#	%	#	%	#	%
Davis-Bahcall 2014	10	4	40	6	60	0	0	1	10	1	10	0	0
Davis-Bahcall 2009-2014	88	52	58	36	42	3	3	4	5	2	2	1	1
Interns 2014	5	4	80	1	20	1	20	0	0	0	0	0	0
Interns 2009-2014	25	15	60	10	40	1	4	0	0	0	0	0	0

TRACKING OF STUDENTS

Surveys and social media have been used to track the progress of the Davis-Bahcall Scholars and Sanford Lab interns through their undergraduate years and beyond. To date, forty-two Davis-Bahcall Scholars and xx Sanford Lab Interns have been known to graduate. We have lost track of 20-30% of these. Of the remainder, The following tables list their current status.

The external evaluators for the NSF Planning Grant, Inverness Research, were recently asked to interview alumni of the Davis-Bahcall program. A draft report is available upon request, and is being used in planning the 2015 program.

Graduate/Professional Schools Attending

Student*	University	State	Major
DB3	USD	South Dakota	Nursing
DB8	Univ. of Washington	Washington	MD/PhD
DB11/SL6	SDSU	South Dakota	Mathematics
DB12/SL12	Rochester Institute of Technology	New York	Astrophysics
SS1	Cornell University	New York	Agricultural Research
SS6	Univ. of Michigan	Michigan	Molecular Biology
SS10	Univ. of Minnesota	Minnesota	Physics/Astronomy
SS12	USD	South Dakota	Medical
SS15	Creighton	Nebraska	Physics
SS17	University Center, Sioux Falls	South Dakota	Nursing
SS26	Univ. of Colorado Boulder	Colorado	Physics
SL3	Norwegian Univ of Science and Technology (NTNU)	Norway	Petroleum Engineering

* DB – Davis-Bahcall Scholar SS – Summer Science Scholar SL – Sanford Lab Intern

Full-time workforce

Student	State	Type of Job
DB1	Iowa	Engineering
DB4/SL4	Montana	Sales Engineer
DB7	Florida	Engineering
DB9	Michigan	Engineering
DB16	South Dakota	High School science teacher
SS4	Nebraska	Consulting
SS5	Massachusetts	Medical Technician
SS7	South Dakota	Medical Technician
SS11	Minnesota	Engineering
SS13	Wyoming	Engineering
SS18	Wyoming	Engineering
SS25	South Dakota	Process Engineer
SL1	California	Geological Engineer
SL2	California	Mission Specialist
SL7	South Dakota	Site Safety Specialist/Superintendent
SL12	Nebraska	Administrative Assistant
SL17	South Dakota	Research Assistant
SL20	South Dakota	Road Trip Intern (Tourism Assn)

* DB – Davis-Bahcall Scholar SS – Summer Science Scholar SL – Sanford Lab Intern

Communications Department

Constance Walter, Communications Director

Sanford Lab Homestake Visitor Center Exhibits

Several sections of the exhibits have been finalized and will be going to Formations soon, the experiment fabricator (Geology Kick Plate and the Global Reach, Core Wonder, and Cage panels).

Communications Director Connie Walter, Multimedia Specialist Matt Kapust and intern Adam Gomez continue to interview personnel for the video portion of the exhibit. To date, several interviews have been conducted for the science videos and included the following scientists: Kevin Lesko, John Wilkerson, Rick Gaitskell, Dan McKinsey, Steve Elliot, Vince Guisepppe, Harry Nelson and Simon Fiorucci. Several other interviews have been conducted for career videos and included Cynthia McCormick, Bryce Pietzyk, Anne-Marie Suriano, Julie Dahl, Jason Rosdahl and others.

Connie accompanied RBH during interviews (11) for the Cage Audio Experience. The company had an excellent experience, as did the many employees who were interviewed.

Neutrino Day Planning

Speakers have all been confirmed: Keynote, Ray Jayawardhana, author of “Neutrino Hunters”; Harry Nelson, co-principal investigator with LUX-LZ; John Wilkerson, principal investigator for MAJORANA (will discuss Ray Davis’s work and John’s experience working with him).

Other activities: Videoconference with scientists from Fermilab who are involved in the LBNF experiment; several children’s activities and displays.

Fundraising: So far, \$6,000 has been raised. We are also working with SDPB and the John T. Vucurevitch Foundation on an additional \$6,000 grant to cover costs for our keynote speaker and others.

New partners/sponsors this year: South Dakota School of Mines and Technology, Fermilab.

National Environmental Policy Act

Discussions began regarding public meetings for the Environmental Assessment. Connie is working with the Department of Energy and Fermilab. The meetings are expected to take place in May 2015.

Community/Presentations

Connie gave a presentation to Black Hills Central Reservations about the Visitor Center.

Connie became a member of the Deadwood-Lead Economic Development Corporation.

Media/Site Visits

Matt was a guide and photographer for the recent Fermilab tour at Sanford Lab. Matt also served as a guide for RBH for Yates cage and hoist room video (this will be used in the Cage Audio Experience).

Graphics, video and website

Matt will install Go-Pro cameras in the CASPAR and BHSU Underground Campus caverns to document the outfitting process.

Matt prepped exhibit photography and images for exhibits. Connie continues to work with C&G and SDSTA Project Controls Analyst Pam Hamilton to finalize edits on all panels.

Adam is editing video for the exhibit. To this point, three videos are completed and 11 career videos have been rough edited.

Photography highlights in February

- Feb. 4: Ross Shaft construction progress
- Feb. 5: MAJORANA string assembly with John Wilkerson
- Feb. 12: Black Hills State University Underground Campus
- Feb. 19: Fermilab tour
- Feb. 20: RBH visit to film cage experience
- Feb. 23: MAJORANA detector strings
- Feb. 24: Visitor Center Construction progress

To view albums in the Sanford Lab Photo Gallery go to: <http://pics.sanfordlab.org/f216003594>

Miscellaneous

The Communications Department continues to develop stories for Deep Thoughts; update the website; perform general web maintenance; and provide photographs to the media, science collaborations and educational institutions, and other laboratory departments.

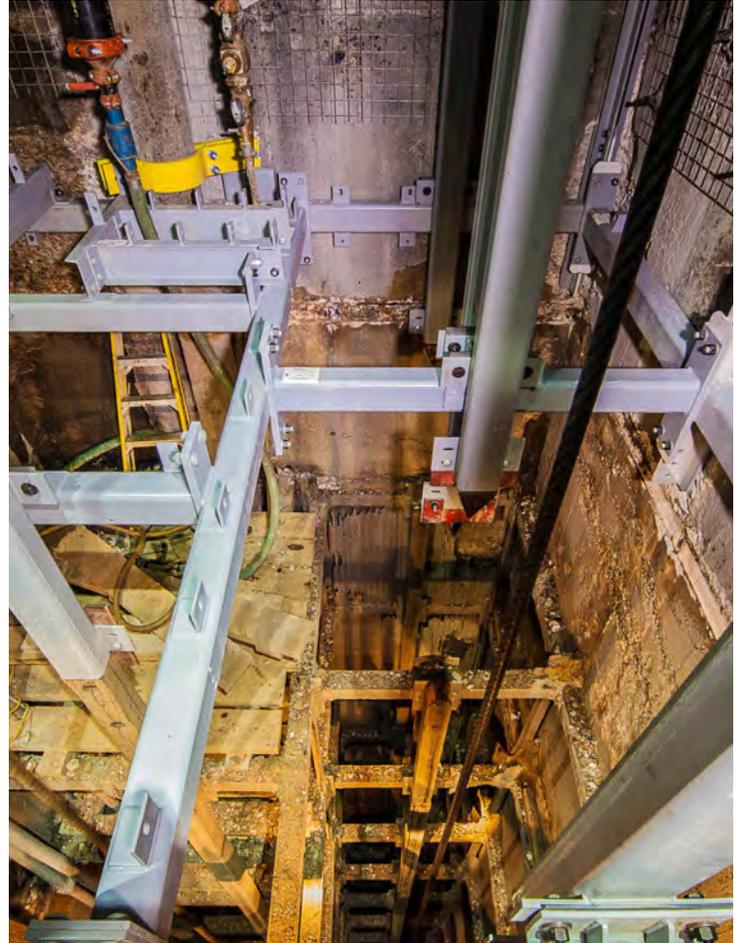
Upcoming projects

- Work continues on the Visitor Center Exhibits/videos
 - Up to 40 videos—writing scripts for each interview, scheduling interviews and shooting b-roll
 - Cage Audio Experience
 - Editing final layouts of panels/photos/artifacts
- Planning for public meetings (ELBNF) is ongoing. Meetings are expected to be held the week of May 11 in Lead, S.D. Public meetings at Fermilab the week of May 4—Connie plans to attend.
- Time-lapse videos for CASPAR and BHSU UC outfitting videos.
- Dr. Michael Cherry, who worked with Ray Davis, will be onsite April 16, 2015
- Harper's Magazine is sending a photographer to get images for its story about dark matter and the history of science at Homestake and Sanford Lab.
- Planning for Neutrino Day
- NPR's Science Friday will be onsite in April or May
- Presentation at Matthews Opera House in May
- Grand opening for Visitor Center (June 30)
- Neutrino Day (July 11)
- Presentation with Spearfish Kiwanis club
- Strategic Planning/Identity Standards—Consultant has been identified.

News coverage

In addition to news, magazine and science articles, KDSJ regularly interviews Constance to find out what is happening at Sanford Lab.

- Mar. 05: [The Majorana mysteries](#) by Constance Walter, Sanford Underground Research Facility/Fermilab Today
- Feb. 28: [Sanford Lab Set to Make History with New Experiment](#) by NC1, Alyssa Terry
- Feb. 26: [Homestake Visitors Center construction on track](#) by Tom Griffith, Rapid City Journal
- Feb. 25: [Science drama reading at Homestake Opera House](#) by Staff Writers, KEVN
- Feb. 17: [10 unusual detector materials](#) by Troy Rummeler, Symmetry Magazine
- Feb. 04: [SD Mines gets \\$1.1 Million for underground physics research](#) by Pioneer Staff Reports, Black Hills Pioneer
- Jan. 30: [Going with the flow](#) by Constance Walter, Black Hills Pioneer



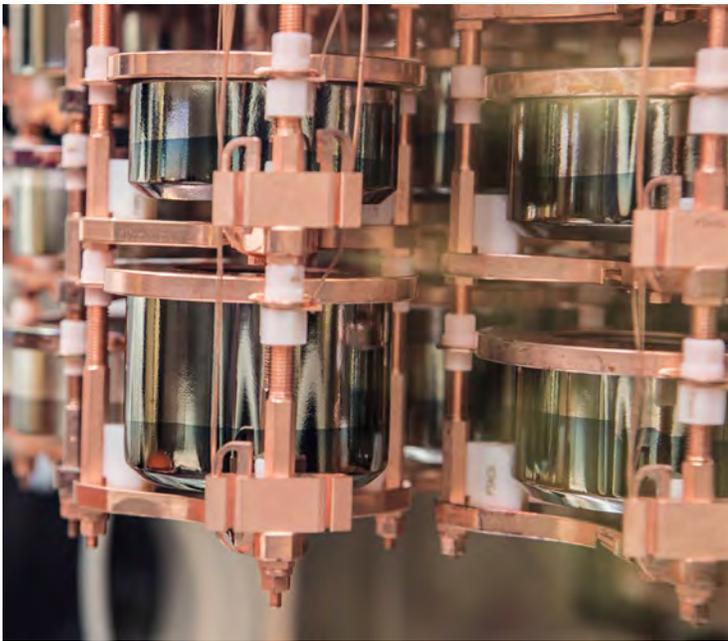
Top left: Painting begins in the CASPAR experiment cavern.

Top right: Installation of new steel in the Ross Shaft continues. The photo shows the work area where the new steel meets the old.

Center: The Black Hills State Underground Campus coated in shotcrete is ready for painting.

Bottom right: Wall supports and roofing is installed at the Sanford Lab Homestake Visitor Center construction site.





Top: MAJORANA Researcher Matt Green test fits a cryostat full of seven detector strings.

Center left: Germanium detectors are assembled in stacks or strings.

Center right: A researcher handles tiny copper parts and wires that must remain completely clean. Detector string assembly takes place inside a particle-free glovebox.

Bottom: Sanford Underground Research Facility Operations Head Kevin Lesko tightens electrical connections on the CUBED low-back-ground detector.

Business Services Department
Sharon Hemmingson, Business Services Manager

Contracts and Procurement

Long-Baseline Neutrino Facility (LBNF): A master contract was executed with Arup, USA for LBNF Building and Infrastructure Design, along with a task order authorizing preliminary design to the 60% phase. Upon receipt of a purchase order from Fermilab, Arup's Excavation Preliminary Design task order was revised to add a waste rock handling system design and trade study to 30% design. Approval was requested and received for KC Russell's planned travel to deliver the National Environmental Policy Act (NEPA) Programmatic Agreement/Environmental Assessment to Tribal governments.

LUX-ZEPLIN (LZ): A budget request and statement of work for the six-month period beginning April 1, 2015 was submitted to Lawrence Berkeley National Laboratory (LBNL) on behalf of SDSTA Engineer David Taylor.

Compact Accelerator System for Performing Astrophysical Research (CASPAR): A modification was issued to South Dakota School of Mines and Technology naming a new Principal Investigator for CASPAR and extending the project term.

Sanford Science Education Center: Black Hills State University confirmed that it has expended in excess of \$1.5 million of its own funds for the remodel of the Jonas Science Building, which was required before the \$2.5 million Sanford funding commitment takes effect. SDSTA staff recently toured the facility to observe progress. The Sanford Science Education Center offices will be ready for occupation in late May, and the outer exhibit hall space and signage are in the design phase and will be completed later this summer.

A request for proposals (RFP) was issued to engage a Strategic Planning Consultant. Four firms responded, and through the selection process two were invited to deliver presentations onsite. The contract was awarded to the selected firm, Sage Project Consultants, LLC of Sioux Falls.

Equal Opportunity and Affirmative Action procedures were revised to reflect requirements and updated guidance to ensure compliance with Executive Order No. 11246, Section 503 of the Rehabilitation Act, and Section 4212 of the Vietnam Era Veterans Readjustment Assistance Act (VEVRAA).

Request For Proposals (RFPs) and Contracts Status Report – February 2015			
Contractor / Vendor	Type	Project	Amount
Dean Kurtz Construction #2013-45	CO#11	Additional Ferber Engineering surveying and layout services for Ross Campus	\$1,275.52 (CAP)
South Dakota School of Mines & Technology #2013-27	Mod 03	Dr. Frank Strieder named new CASPAR PI, term extended to 3.31.2016	n/a (CAP)
Ainsworth Benning Construction #2013-40	CO#9	Add labor and equipment rates for painting of CASPAR and BHSU clean rooms	\$20,000 (SAN/DOE)
Ainsworth Benning Construction #2013-40	CO#8	Add Yates shaft Infrastructure Tech position and rate to HM Crew supplement contract	\$110,000 (DOE)
Revey Associates #2015-03	Contract	Controlled Blast Methods consultation	\$6,000 (SAN)
Sage Project Consultants, LLC #2015-02	RFP, Contract*	Strategic Planning Consultant	\$25,000 (SAN)* *In progress
Arup USA #2013-07	Master	LBNF Building and Infrastructure Design	\$0
Arup USA #2013-07	TO	Building and Infrastructure Preliminary Design to 60%	\$2,029,763 (FNAL)
Arup USA #2013-01	Mod 01 to Master	LBNF Excavation Design (changed invoice dates, limits across projects)	\$0
Arup USA #2013-01	TO Rev	Adds waste rock handling system design, trade study	\$85,732 (FNAL)

Purchase Orders (POs): 161 POs were issued in February totaling **\$365,366.71**.

Warehouse Inventory: Warehouse inventory on February 28, 2015 totaled **\$253,517.01**. *(This total includes \$38,000 of ground control materials that arrived February 28 and were charged out March 2).*

Information Technology (IT)

IT responded to 36 work orders in February, with 65 completed year-to-date.

A new SQL server was purchased, installed, and set up. Software and license keys were obtained for Adobe and Visio upgrades, and an upgrade was purchased for ManagerPlus.

The transition from Microsoft Office 2007 to Office 2013 and Office 365 cloud services is underway. Following a pilot study with a small group of PC users, full installation and training for remaining PC users took place February 24 and 26 with another session scheduled for March 3 and 5. A separate Mac training will follow.

Daily manifest records were added to the Digital Displays.

A conceptual diagram was provided to Engineering to assist the design subcontractor with infrastructure planning for the LBNF Liquid Argon Detector facilities.

Phone work was completed, including verifying every extension in voicemail to include a hang-up command and verifying voltage on cards at the Ross phone cabinet.

IT continues to review Meru Wireless, Xymon Network, and VPN Remote Access logs daily, and establish new VPN and DocuShare accounts for individuals and user groups as needed.

User Support Office (USO)

For the month of February, logistical and administrative support were provided for the following:

- February 3: CASPAR Meeting
- February 6: Sanford Lab 'After the Holidays' Party
- February 18: Headley and Fermilab Management Meeting (*offsite, Pierre*)
- February 19: Fermilab Management Visit and Underground Tour; Cultural Advisory Committee Annual Meeting
- February 27-March 1: MJD Collaboration Meeting
- March 2: General Safety Basics Class
- March 2-3: Benefits Open Enrollment Meeting

Preparation and planning continue for upcoming meetings and events to be held at Sanford Lab:

- March 16: Annual Hazwoper Training
- March 17-19: NCAB Meeting (Willhite)
- March 20: SDSTA Board of Directors Quarterly Meeting
- March 27: Sanford Lab All-Hands Meeting

Monthly reports for LBNL and SDSTA were compiled, edited and distributed. Month-end reception registers were forwarded to the FBI/Homeland Security/SD Fusion Center. User Support Manager Mandy Knight and EHS Director Noel A. Schroeder participated in a second training session on February 26 using Visual Compliance to help fully understand the features of the system. (The SD Board of Regents office is implementing new processes at the SD universities on export controls and Sanford Lab has the opportunity to utilize this system to screen visitors before they arrive onsite through the online database system).

Monthly Researcher hours were tracked and Science training records processed. Monthly invoices were coded for the Finance Department. Organization charts and telephone lists were updated. Safety messages and other important news continue to be updated on a daily basis on digital displays located at the Davis Campus and the Administration Building reception area.

Mandy continues to assist the Communications Department with updating content on the Sanford Laboratory website as well as copyediting. DocuShare collections continue to be organized and archived as needed.

Work also continues on updating SDSTA policies and procedures; SDSTA attorney Tim Engel has reviewed Section 3 of the manual. These policies and procedures have been finalized and will be submitted for approval at the March 20 Board meeting.

Finance and Human Resources Department
Nancy Geary, Chief Financial Officer and Department Manager

Included in the Financial Report are the following:

- DOE SDSTA FY2015 SPA Curve as of February 2015
- Balance Sheet as of February 28, 2015
- Comprehensive Statement of Income February 2015
- Comparative Balance Sheet – February 2015 vs. February 2014
- Comparative Statement of Income – February 2015 vs. February 2014
- Available Cash as of February 2015
- Operating Budget Summary
- CAPEX Budget Summary
- February 2015 and YTD CAPEX Budget – actual vs. budget
- SDSTA Staffing Plan by Funding Source as of February 2015

Department of Energy (DOE) SDSTA FY2015 Scheduled Performed Actual (SPA) Curve

This graph represents an analysis of the DOE Subcontract No. 6994297 Operations scheduled funding compared to actual. The report shows funding through September 2015 along with information related to Funded-to-Date dollars, Scheduled dollars, Performed dollars, and Actual dollars by month. Actual dollars represent actual invoices for the months sent to Lawrence Berkeley National Laboratory (LBNL) for reimbursement. For February, the invoices totaled \$1,165,095, which is higher than the anticipated reimbursements of \$1,105,287 by \$59,808. Since the inception of this subcontract in February 2012, the actual expenses are at \$41,022,209 which is lower than the budget of \$41,407,899 by \$385,690. As for FY2015, we are slightly over budget by \$85,736.

Balance Sheet Items

Cash in Local Checking – Total on hand at February 28, 2015 was \$132,937; down from last month by \$19,421. Funds on hand were necessary to pay employee medical/life/vision insurance all due March 1, 2015.

Cash with State Treasurer – Total balance of \$23,407,638. This has decreased from last month by \$1,113,961 as this amount was drawn down during February.

Billed Accounts Receivable (A/R) – Billed A/R represents any open invoices based on contracts from sources such as LBNL, other smaller contracts from other universities, and Barrick/Homestake Mining Company. Total is at \$2,146,598; up from last month by \$25,231. Included in the balance are open invoices to LBNL for \$1,777,707; representing invoices for the Large Underground Xenon (LUX) subcontract, LUX-ZEPLIN (LZ) engineering support, and invoices for the Operations Subcontract No. 6994297. Additional open invoices include \$281,923 from Fermilab, \$82,585 from various other smaller university subcontracts, as well as open invoices from Barrick equaling \$4,382.

Unbilled A/R – Balance of \$379,172. Unbilled A/R represents items that have not been billed on various contracts. The payroll from pay end date February 27, 2015 (paid to employees March 6, 2015) was not billed in February on various contracts. This amount will be invoiced in March. February's balance has increased by \$16,285.

Other A/R – Current balance of \$338,028. This balance represents any Interest Receivable and Miscellaneous Accounts Receivable. The balance increased by \$14,750 which represents the increase in the interest accrual for the month.

Inventory/Supplies – Balance at \$2,569,692 for fixed assets being stored but not in service. This balance is unchanged from January.

Inventory Warehouse/Personal Protective Equipment (PPE) – Current balance of \$369,795. This balance represents the warehouse inventory that was purchased by SDSTA prior to federal funding and xenon gas inventory for experiment use. This balance is unchanged from February.

Other Current Assets – This listing on the balance sheet represents the balances of both prepaid insurance – \$196,244 and prepaid other – \$90,001. Total balance of \$286,245 is down from last month by \$5,393. This decrease represents the monthly insurance expenses along with the change in prepaid items for February. Monthly insurance expenses were stable at \$40,931 including worker's compensation.

Fixed Assets – Total of \$71,904,780 (net of depreciation through February 28, 2015). Fixed assets increased for the capitalization of a 660 gallon pressure tank - \$6,081. Including depreciation through February, the net decrease for fixed assets is \$135,548 for the month.

Other Assets/Work in Progress – This balance represents the current progress being made using Sanford/ SDSTA Funds and State funding to support the budgeted projects on the CAPEX budget less any items that are being capitalized within the Fixed Asset designation. Current balance has increased by \$598,866 to \$5,152,633. The balance represents the current year's project costs (not including personnel) funded by these sources.

Other Assets/Capital Lease – This balance of \$579,087 represents the deep pump system capital lease. The lease through AmWest, Inc. was renegotiated to include transference of property to us at the end of the lease term in January 2018. The rental payments are being directly charged to the LBNL federal subcontract. Per the subcontract, the pumping system will become the property of the federal government at the end of the lease period. The equipment will be fully expensed over the period of the lease at which time it will be removed (along with the lease liability) from the SDSTA's balance sheet. The lease payment from November was credited and we are currently not making lease payments on the pump. The leased pump failed in early November and has been replaced as of March 6, 2015. In March, we will resume lease payments.

Total Assets – Total of \$107,266,605. This is down from last month by \$619,191; which represents the net activity as listed above.

Accounts Payable – Our Accounts Payable balance of \$1,222,426 (including Accounts Payable and Accounts Payable Accrual) at the end of the month compared to last month has decreased by \$248,216. This decrease is primarily due to owing less to an engineering subcontractor for the Long-Baseline Neutrino Facility.

Accrued Payroll Liabilities – Current balance of \$1,010,135 is down by \$6,873 from last month. This represents the net change between earned vacation and vacation taken and other changes in other employee benefit related liabilities. Also included is the current payroll accrual for labor and employee benefits related to labor performed in February but not paid until March 6, 2015.

Long Term Accrued Employee Benefit/Lease – This balance of \$579,087 denotes the liability associated with the capital lease for the deep pump system from AmWest, Inc. This balance is unchanged from the prior month. Pump lease payments were on hold in February, but should be resumed since the new pump was installed.

Total Liabilities – Total Liabilities decreased by \$255,089 (from \$3,066,737 to \$2,811,648), which reflects the net activity listed above.

Total Equity – Decrease to \$104,454,957 from the previous month \$104,819,059.

Total Liabilities & Equity – Decrease to \$107,266,605 from the previous month of \$107,885,796.

Statement of Income Items

On the SDSTA's Statement of Income, the DOE Subcontracts are consolidated into one line item on the report. Included in this amount are various subcontracts from LBNL, Fermi National Accelerator Laboratory (FNAL), as well as a small contract for the MAJORANA project with the University of North Carolina. Total revenue for this fiscal year through February 2015 is \$10,434,917 (increase from January of \$1,254,605).

National Science Foundation (NSF) Subcontracts – Total revenue through February 2015 from NSF funding is \$15,416. The balance represents revenue from a small subaward through Case Western Reserve University as well as an award through the University of Minnesota. There was a small increase of \$6,958 this month from National Science Foundation (NSF) funding.

State Revenue – Year-to-date revenue from the State of South Dakota includes \$294,104 received from Governor's Office of Economic Development to assist with the costs of administering the Sanford Science Education Center in partnership with Black Hills State University. The SDSTA also has received the full \$1M pledged by the State to assist with the construction costs of the Sanford Lab Homestake Visitor Center. Additional funding has been received from Black Hills State University (BHSU) in the amount of \$70,501 for clean room-related expenses for their underground campus. The balance also includes a small amount of funding from the University of South Dakota state research funds for the Center for Ultra-Low Background Experiments in the Dakotas (CUBED). The increase to State Revenue for the month is \$70,884 with a total for the year of \$1,368,663.

Contributions & Donations – Fund raising activities includes the receipt of \$500,000 in July from the Great Plains Education Foundation in support of the education efforts at Sanford Underground Research Facility. The Great Plains Education Foundation pledged another \$500,000 over the next four years to be used towards education programs associated with the Sanford Underground Research Facility. Additional donations include \$15,000 received from the City of Lead and \$25,000 from Deadwood Historical Commission to assist with the Sanford Lab Homestake Visitor Center costs. Another \$50,000 was received from Black Hills Power Inc. for development costs related to underground research facilities. Furthermore, Black Hills Power has pledged an additional \$200,000 for the future. Year-to-date contributions total \$590,000.

Interest income recorded for the current fiscal year on State Funds is at \$130,757. This represents interest accruing at 0.75% on the cash held by the state on behalf of the SDSTA.

Direct Costs are then listed on the Statement of Income. The categories are listed to reflect the format used when invoicing on federal contracts. The classifications for Unallowable Costs and Indirect Costs are listed as well on this report to follow the federal contracting format. Direct Costs/Unallowable Costs are at \$9,078,246 for the year. Indirect Costs including fringe benefits are at \$4,778,198. Other Income through the month of February is at \$155,928 which represents miscellaneous income and a small amount for water treated for Barrick.

Finally, Net Loss for the year is at \$267,014.

Comparative Balance Sheet

Significant differences include Total in Local Checking which is lower by \$741,477 from this time last year. Last year's balance included payments on Accounts Receivable late in the month after requesting funds from the State accounts. Total Cash with State Treasurer, is also lower by \$9,802,009 from this time last year as funds were expended over the 12-month period. Billed A/R is higher than this time last year by \$1,004,375 primarily due to increases in the total unpaid receivables from both LBNL and Fermilab. Other notable differences exist for changes in Fixed Assets. Fixed Assets increased by \$4,986,643 primarily due to year-end capitalization of improvements in progress for year-end closing. The category of Work in Progress has increased from this time last year by \$2,939,620 represented by the increase in activity in our CAPEX projects year to date. In summary, Total Assets have decreased by \$1,761,355. Total Liabilities have increased by \$303,707 over last year at this same time, primarily due to increased accounts payable for open invoices to various contractors. Total Equity has decreased by \$2,065,063 from last year at this same time primarily due to drawing down funds from the State. Yet, Investments in General Fixed Assets has increased by \$4,980,562 for the capitalization of items from fiscal year 2014.

Comparative Profit/Loss

Total Revenue for year-to-date February 2015 compared to year-to-date February 2014 has increased by \$408,900. DOE subcontract revenue has increased, but State Revenue has decreased due to receiving \$2,000,000 from the State Legislature in the last fiscal year, but only \$1,368,663 from the State this year. Additionally, this year's revenue includes contributions of \$590,000 from the Great Plains Education Foundation and various other contributors listed above, while only \$30,000 was contributed last year. Interest Income is slightly lower for year-to-date February 2015 due to a lower cash balance with the State compared to last year. Direct Costs and Indirect Costs for year to date February 2015 compared to this time last year show a small combined increase (5.7% increase), primarily due to increased contractual services related to the Sanford Lab Homestake Visitor Center construction. Additional notable increases include costs for utilities as well as indirect miscellaneous contractual related to masonry and roof repairs. Other Income is slightly down when comparing the two time frames, but this decrease is immaterial. We currently are recording a Net Loss for year-to-date February 2015 compared to Net Gain for year to date February 2014 resulting in a difference of (\$538,501).

Available Cash

This report reflects our available cash after noting the restricted cash balances in the Indemnification and Mine Closure accounts. The Sanford Gift No. 2 account is no longer designated as “restricted” in the same sense as the Indemnification and Mine Closure accounts due to the signing of the Fourth Amendment to the Homestake Gift Agreement. After our liabilities are noted, \$9,366,164 is available to be used for a limited scope of SDSTA expenses (Board, Administration, Communication, Education & Outreach, and Science Liaison expenses not covered by the current DOE funding), for current contracts concerning the various capital expenditure projects

including the Ross Shaft Rehabilitation, and towards the specific educational projects listed in the Fourth Amendment.

Operating Budget Analysis

This report is separated into three sections: SDSTA-funded activities, Federal & State funded activities, and Indirect expenses that benefit various activities. A few activities are over budget for the month including the SDSTA Executive Office, engineering staff services associated with Fermilab, and the LBNL Operations C#6994297. Yet, total operating expenses are \$388,848 under budget for January 2015. Two Fermi purchase orders (#618741 and #620223) contribute to us being under budget, as expenses have not been posted since the contractor has not issued invoices for February services. These will most likely post in March. Year-to-date figures are almost all under budget for a total under run of \$1,462,090.

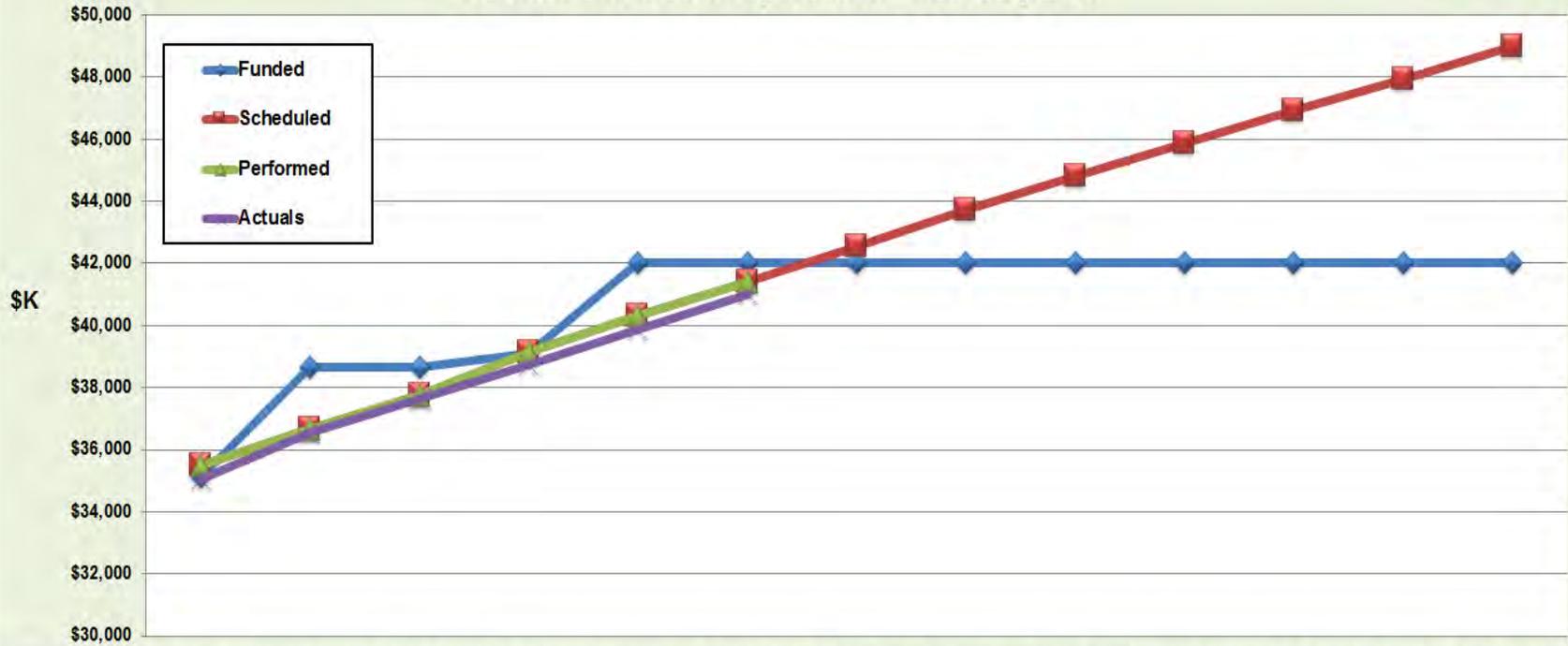
Capital Expenditure Budget Analysis

Our current capital expenditure projects have been condensed and are listed from CAP2012-13 - CAP2015-04 with various breaks in the numbering sequence. Total project dollars are at \$18,366,715, which represents the approved budget from the June 2014 Board meeting together with the additional budget of \$561,000 approved at the September 2014 Board meeting. All projects will be funded by the balance of Sanford Funds as directed by the Fourth Amendment to the Homestake Gift Agreement, \$2,000,000 of Future Funds for both the Sanford Lab Homestake Visitor Center Design & Construction and the BHSU Jonas Science Building Renovation, funding from private fund raising activities, and SDSTA funds including interest. In February 2015 we spent \$905,927 on our CAPEX projects out of the budgeted \$1,131,466. Year-to-date, we have expended \$7,201,853 on this list of projects.

Human Resources

We currently have 124 full time employees and 18 temporary staff, primarily Emergency Response Team members. Positions have been posted for both a Hoist Operator and a Hoist Operator Trainee. These positions should hopefully be filled in March.

TOTAL SURF SDSTA Operations - February 2015



	CTD	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
Funded	\$ 35,133	\$ 38,669	\$ 38,669	\$ 39,119	\$ 42,013	\$ 42,013	\$ 42,013	\$ 42,013	\$ 42,013	\$ 42,013	\$ 42,013	\$ 42,013	\$ 42,013
Scheduled	\$ 35,501	\$ 36,676	\$ 37,776	\$ 39,133	\$ 40,302	\$ 41,408	\$ 42,530	\$ 43,714	\$ 44,802	\$ 45,857	\$ 46,938	\$ 47,947	\$ 49,007
Performed	\$ 35,501	\$ 36,676	\$ 37,776	\$ 39,133	\$ 40,302	\$ 41,408							
Actuals	\$ 35,031	\$ 36,559	\$ 37,641	\$ 38,729	\$ 39,858	\$ 41,023							

DIVISION: ALL

BALANCE SHEET

ASSETS

AS OF
02/28/15

CURRENT ASSETS

First Interstate Checking	\$	100,049.77
First Interstate Other		32,887.63

Total in Local Checking		132,937.40
SD Treas: Indemnification		10,000,000.00
SD Treas: Mine Closure		1,362,763.38
SD Treas: Operating		1,211,165.00
SD Treas: Sanford		5,314,421.48
SD Treas: Sanford Gift #2		5,519,288.00

Total with SD Treasurer		23,407,637.86
Billed A/R		2,146,597.56
Unbilled A/R		379,172.14
Other A/R		338,027.71
Inventory - Supplies		2,569,692.22
Inventory - Warehouse		369,794.91
Other Current Assets		286,245.06

Total Current Assets		29,630,104.86

FIXED ASSETS

Land, Underground & Other	12,353,375.03
Bldgs & Infrastructure	8,881,327.62
Improvements	49,274,276.00
Computer Equipment	362,464.95
Equipment & Fixtures	9,455,471.64
Accum Depr & Amort	(8,422,135.13)

Total Fixed Assets	71,904,780.11

OTHER ASSETS

Work in Process	5,152,633.20
Equipment - Capital Lease	579,087.12

Total Other Assets	5,731,720.32

TOTAL ASSETS

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\$ 107,266,605.29

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DIVISION: ALL

BALANCE SHEET

LIABILITIES & EQUITY

AS OF
02/28/15

CURRENT LIABILITIES		
Accounts Payable	\$	1,194,097.16
Other Payables		28,329.06

Total Accounts Payable		1,222,426.22
Accrued Payroll Liab		1,010,134.91

Total Current Liabilities		2,232,561.13
OTHER LIABILITIES		
LT Accrued EB/Lease		579,087.12

Total Other Liabilities		579,087.12
STOCKHOLDER'S EQUITY		
Restricted: Indemnificati		10,000,000.00
Restricted: Sanford I.Lab		5,314,421.48
Restricted: Mine Closure		1,362,763.38
Restricted: Sanford Gift2		5,519,288.00

Total Restricted Funds		22,196,472.86
Investment in Gen FA		71,898,698.84
Unrestricted Funds		10,359,785.34

Total Equity		104,454,957.04
TOTAL LIABILITIES & EQUITY		
	\$	=====
		107,266,605.29
		=====

ALL

STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/15

	YR-TO-DATE

REVENUE	
DOE Subcontracts	\$ 10,434,916.80
NSF Subcontracts	15,415.59
State Revenue	1,368,662.95
Contributions & Donations	590,000.00
Checking Interest	47.78
Interest Income	130,756.91

TOTAL REVENUE	12,539,800.03
DIRECT COSTS	
Direct Labor	4,870,552.23
ERT Labor	23,652.00
Board of Directors	3,433.62
Capital Outlay >\$5K	25,299.00
Contractual Svcs	1,755,531.01
Emergency Resp	2,346.49
Inventory	233,242.93
Supplies	440,402.94
Travel - Domestic	49,474.58
Travel - Foreign	24,216.81
Utilities	1,288,979.29
Other Direct Costs	89,640.36
Unallow/Unbill Costs	271,474.92

TOTAL DIRECT COSTS	9,078,246.18
INDIRECT COSTS	
Fringe Benefits	2,272,790.60
Overhead	2,505,407.79

TOTAL INDIRECT COSTS	4,778,198.39

GROSS PROFIT FROM OPERATIONS	(1,316,644.54)

OTHER INCOME	
Water Treatment	115,439.67
Miscellaneous Income	40,488.28

TOTAL OTHER INCOME	155,927.95
OTHER EXPENSES	
Loss(Gain) on Sale of FA	2,852.14
Reclass Incr Net Assets	(896,554.61)

TOTAL OTHER EXPENSES	(893,702.47)

NET INCOME/LOSS<>	\$ (267,014.12)
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DIVISION: ALL

COMPARATIVE BALANCE SHEET

ASSETS

	AS OF 02/28/15	AS OF 02/28/14	\$ CHANGE	% CHANGE
CURRENT ASSETS				
First Interstate Checking	\$ 100,049.77	\$ 817,833.97	\$ (717,784.20)	-87.77%
First Interstate Other	32,887.63	56,580.80	(23,693.17)	-41.87%
	-----	-----	-----	-----
Total in Local Checking	132,937.40	874,414.77	(741,477.37)	-84.80%
SD Treas: Indemnification	10,000,000.00	10,000,000.00	-	0.00%
SD Treas: Mine Closure	1,362,763.38	1,349,275.35	13,488.03	1.00%
SD Treas: Operating	1,211,165.00	225,609.00	985,556.00	436.84%
SD Treas: Sanford	5,314,421.48	3,457,007.40	1,857,414.08	53.73%
SD Treas: Sanford Gift #2	5,519,288.00	18,177,755.00	(12,658,467.00)	-69.64%
	-----	-----	-----	-----
Total with SD Treasurer	23,407,637.86	33,209,646.75	(9,802,008.89)	-29.52%
Billed A/R	2,146,597.56	1,142,222.42	1,004,375.14	87.93%
Unbilled A/R	365,454.14	355,984.95	9,469.19	2.66%
Other A/R	338,027.71	248,542.47	89,485.24	36.00%
Inventory - Supplies	2,569,692.22	2,702,464.79	(132,772.57)	-4.91%
Inventory - Warehouse	369,794.91	376,199.23	(6,404.32)	-1.70%
Other Current Assets	286,245.06	281,672.19	4,572.87	1.62%
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Total Current Assets	29,616,386.86	39,191,147.57	(9,574,760.71)	-24.43%
FIXED ASSETS				
Land, Underground & Other	12,353,375.03	12,353,375.03	-	0.00%
Bldgs & Infrastructure	8,881,327.62	8,881,327.62	-	0.00%
Improvements	49,274,276.00	43,964,388.80	5,309,887.20	12.08%
Computer Equipment	362,464.95	357,294.53	5,170.42	1.45%
Equipment & Fixtures	9,455,471.64	8,114,667.49	1,340,804.15	16.52%
Accum Depr & Amort	(8,422,135.13)	(6,752,916.70)	(1,669,218.43)	24.72%
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Total Fixed Assets	71,904,780.11	66,918,136.77	4,986,643.34	7.45%
OTHER ASSETS				
Work in Process	5,152,633.20	2,213,013.02	2,939,620.18	132.83%
Equipment - Capital Lease	579,087.12	691,945.36	(112,858.24)	-16.31%
	-----	-----	-----	-----
Total Other Assets	5,731,720.32	2,904,958.38	2,826,761.94	97.31%
	=====	=====	=====	=====
TOTAL ASSETS	\$ 107,252,887.29	\$ 109,014,242.72	\$ (1,761,355.43)	-1.62%
	=====	=====	=====	=====

DIVISION: ALL

COMPARATIVE BALANCE SHEET

LIABILITIES & EQUITY

	AS OF 02/28/15	AS OF 02/28/14	\$ CHANGE	% CHANGE
CURRENT LIABILITIES				
Accounts Payable	\$ 1,194,097.16	\$ 876,253.88	\$ 317,843.28	36.27%
Other Payables	28,329.06	7,292.61	21,036.45	288.46%
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Total Accounts Payable	1,222,426.22	883,546.49	338,879.73	38.35%
Accrued Payroll Liab	1,010,134.91	932,448.94	77,685.97	8.33%
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Total Current Liabilities	2,232,561.13	1,815,995.43	416,565.70	22.94%
OTHER LIABILITIES				
LT Accrued EB/Lease	579,087.12	691,945.36	(112,858.24)	-16.31%
	-----	-----	-----	-----
Total Other Liabilities	579,087.12	691,945.36	(112,858.24)	-16.31%
	-----	-----	-----	-----
TOTAL LIABILITES	2,811,648.25	2,507,940.79	303,707.46	12.11%
STOCKHOLDER'S EQUITY				
Restricted: Indemnificati	10,000,000.00	10,000,000.00	-	0.00%
Restricted: Sanford I.Lab	5,314,421.48	3,457,007.40	1,857,414.08	53.73%
Restricted: Lab	-	225,609.00	(225,609.00)	-100.00%
Restricted: Mine Closure	1,362,763.38	1,349,275.35	13,488.03	1.00%
Restricted: Sanford Gift2	5,519,288.00	18,177,755.00	(12,658,467.00)	-69.64%
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Total Restricted Funds	22,196,472.86	33,209,646.75	(11,013,173.89)	-33.16%
Investment in Gen FA	71,898,698.84	66,918,136.77	4,980,562.07	7.44%
Unrestricted Funds	10,346,067.34	6,378,518.41	3,967,548.93	62.20%
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TOTAL EQUITY	104,441,239.04	106,506,301.93	(2,065,062.89)	-1.94%
	=====	=====	=====	=====
TOTAL LIABILITIES & EQUITY	\$ 107,252,887.29	\$ 109,014,242.72	\$ (1,761,355.43)	-1.62%
	=====	=====	=====	=====

DIVISION: ALL

COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/15

	YEAR TO DATE	PRIOR YEAR TO DATE	\$ CHANGE	% CHANGE
REVENUE				
DOE Subcontracts	\$ 10,434,916.80	\$ 9,754,547.23	\$ 680,369.57	6.97%
NSF Subcontracts	15,415.59	167,865.48	(152,449.89)	-90.82%
State Revenue	1,368,662.95	2,002,572.13	(633,909.18)	-31.65%
Contributions & Donations	590,000.00	30,000.00	560,000.00	1866.67%
Checking Interest	47.78	37.89	9.89	26.10%
Interest Income	130,756.91	175,877.80	(45,120.89)	-25.65%
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TOTAL REVENUE	12,539,800.03	12,130,900.53	408,899.50	3.37%
DIRECT COSTS				
Direct Labor	4,870,552.23	4,788,615.64	81,936.59	1.71%
ERT Labor	23,652.00	18,187.50	5,464.50	30.05%
Board of Directors	3,433.62	4,841.51	(1,407.89)	-29.08%
Capital Outlay >\$5K	25,299.00	384,828.95	(359,529.95)	-93.43%
Contractual Svcs	1,755,531.01	1,066,711.58	688,819.43	64.57%
Emergency Resp	2,346.49	28,650.79	(26,304.30)	-91.81%
Inventory	233,242.93	227,032.69	6,210.24	2.74%
Supplies	440,402.94	620,676.18	(180,273.24)	-29.04%
Travel - Domestic	49,474.58	39,100.82	10,373.76	26.53%
Travel - Foreign	24,216.81	10,659.91	13,556.90	127.18%
Utilities	1,288,979.29	1,107,598.90	181,380.39	16.38%
Other Direct Costs	89,640.36	153,571.05	(63,930.69)	-41.63%
Unallow/Unbill Costs	271,474.92	205,255.47	66,219.45	32.26%
	-----	-----	-----	-----
TOTAL DIRECT COSTS	9,078,246.18	8,655,730.99	422,515.19	4.88%
INDIRECT COSTS				
Fringe Benefits	2,272,790.60	2,152,304.23	120,486.37	5.60%
Overhead	2,505,407.79	2,301,634.15	203,773.64	8.85%
	-----	-----	-----	-----
TOTAL INDIRECT COSTS	4,778,198.39	4,453,938.38	324,260.01	7.28%
	-----	-----	-----	-----
GROSS PROFIT	(1,316,644.54)	(978,768.84)	(337,875.70)	34.52%
OTHER INCOME				
Water Treatment	115,439.67	90,543.17	24,896.50	27.50%
Miscellaneous Income	40,488.28	86,880.46	(46,392.18)	-53.40%
	-----	-----	-----	-----
TOTAL OTHER INCOME	155,927.95	177,423.63	(21,495.68)	-12.12%
OTHER EXPENSES				
Loss(Gain) on Sale of FA	2,852.14	3,989.67	(1,137.53)	-28.51%
Reclass Incr Net Assets	(896,554.61)	(1,076,821.81)	180,267.20	-16.74%
	-----	-----	-----	-----
TOTAL OTHER EXPENSES	(893,702.47)	(1,072,832.14)	179,129.67	-16.70%
	=====	=====	=====	=====
NET INCOME/LOSS<>	\$ (267,014.12)	\$ 271,486.93	(538,501.05)	-198.35%
	=====	=====	=====	=====

South Dakota Science & Technology Authority
Available Cash
2/28/2015

Cash Total Checking/Savings	\$ 132,937.00
Cash With State Treasurer	<u>\$ 23,407,638.00</u>
Total Cash	\$ 23,540,575.00
Less: Restricted Funds	
Indemnification & Mine Closure	<u>\$ (11,362,763.00)</u>
Total Cash (Not Restricted)	\$ 12,177,812.00
Less: Total Liabilities	<u>\$ (2,811,648.00)</u>
Available Cash	<u><u>\$ 9,366,164.00</u></u>

SDS&TA Operating Budget Summary FY14/15
Actual vs Budget
February 2015 & YTD

	\$ Over/Under				\$ Over/Under				
	Feb. 2015	Budget	Budget	% of Budget	Actual YTD	YTD Budget	Budget	% of Budget	% Remaining
100%									
SDSTA (Authority) Direct Charges									
Board of Directors	\$17,998.00	\$19,184.00	\$1,186.00	93.82%	\$145,813.00	\$153,472.00	\$7,659.00	95.01%	4.99%
Executive Office	\$46,811.00	\$17,006.00	-\$29,805.00	275.26%	\$191,453.00	\$180,892.00	-\$10,561.00	105.84%	-5.84%
Communications	\$10,187.00	\$12,896.00	\$2,709.00	78.99%	\$94,323.00	\$109,702.00	\$15,379.00	85.98%	14.02%
Science Center E & O	\$0.00	\$0.00	\$0.00	0.0%	\$13,650.00	\$20,590.00	\$6,940.00	66.29%	33.71%
Science Liaison	-\$1,608.00	\$2,031.00	\$3,639.00	0.0%	\$5,653.00	\$16,248.00	\$10,595.00	34.79%	65.21%
Subtotal	\$73,388.00	\$51,117.00	-\$22,271.00	143.57%	\$450,892.00	\$480,904.00	\$30,012.00	93.76%	6.24%
Federal/State Funding - Direct Charges									
Fermi P.O. #609755 NEPA	\$3,032.00	\$4,658.00	\$1,626.00	65.09%	\$48,873.00	\$64,355.00	\$15,482.00	75.94%	24.06%
Fermi P.O. #610998HDR	\$0.00	\$0.00	\$0.00	0.0%	\$358.00	\$370.00	\$12.00	96.76%	3.24%
Fermi P.O. #613525 Staff Services	\$0.00	\$0.00	\$0.00	0.0%	\$103,050.00	\$103,054.00	\$4.00	100.00%	0.00%
Fermi P.O. #614807 Ph2 Geotech	\$0.00	\$0.00	\$0.00	0.0%	\$295,503.00	\$480,893.00	\$185,390.00	61.45%	38.55%
Fermi P.O.#618228 Staff Services	\$38,959.00	\$19,223.00	-\$19,736.00	202.67%	\$121,978.00	\$86,504.00	-\$35,474.00	141.01%	-41.01%
Fermi P.O.#618743LBNOIntern.	\$0.00	\$0.00	\$0.00	0.0%	\$43,900.00	\$50,560.00	\$6,660.00	86.83%	13.17%
Fermi P.O.#618741 Excav.Des.	\$0.00	\$224,217.00	\$224,217.00	0.0%	\$351,277.00	\$637,557.00	\$286,280.00	55.10%	44.90%
Fermi P.O.#620223 Building/Infra.	\$0.00	\$234,418.00	\$234,418.00	0.0%	\$0.00	\$234,418.00	\$234,418.00	0.00%	100.00%
LBNL LUX C#6973786	\$10,901.00	\$15,088.00	\$4,187.00	72.25%	\$96,810.00	\$113,332.00	\$16,522.00	85.42%	14.58%
LBNL Operations C#6994297	\$933,302.00	\$887,029.00	-\$46,273.00	105.22%	\$6,964,358.00	\$7,644,424.00	\$680,066.00	91.10%	8.90%
LBNL LUX/Zeplin C#7093667	\$13,811.00	\$14,789.00	\$978.00	93.39%	\$102,886.00	\$123,147.00	\$20,261.00	83.55%	16.45%
MJD (Majorana) # 5-4473	\$1,679.00	\$2,000.00	\$321.00	83.95%	\$14,919.00	\$14,000.00	-\$919.00	106.56%	-6.56%
CWR P.O. #228814 G2LZ	\$0.00	\$0.00	\$0.00	0.0%	\$956.00	\$1,100.00	\$144.00	86.91%	13.09%
CUBED - USD	\$307.00	\$500.00	\$193.00	61.4%	\$1,646.00	\$4,000.00	\$2,354.00	41.15%	58.85%
Sanf.Sci.Ed.Center - GOED Funded	\$23,599.00	\$25,000.00	\$1,401.00	94.4%	\$164,956.00	\$173,000.00	\$8,044.00	95.35%	4.65%
U. of Minn. DUGL#A003778902	\$5,884.00	\$10,000.00	\$4,116.00	58.84%	\$11,377.00	\$36,500.00	\$25,123.00	31.17%	68.83%
Subtotal	\$1,031,474.00	\$1,436,922.00	\$405,448.00	71.78%	\$8,322,847.00	\$9,767,214.00	\$1,444,367.00	85.21%	14.79%
Indirect Expenses									
Indirect Charges Personnel	\$89,246.00	\$93,314.00	\$4,068.00	95.64%	\$715,408.00	\$770,733.00	\$55,325.00	92.82%	7.18%
Indirect Charges Other	\$238,347.00	\$239,950.00	\$1,603.00	99.33%	\$2,000,124.00	\$1,932,510.00	-\$67,614.00	103.50%	-3.50%
Subtotal	\$327,593.00	\$333,264.00	\$5,671.00	98.3%	\$2,715,532.00	\$2,703,243.00	-\$12,289.00	100.45%	-0.45%
Totals	\$1,432,455.00	\$1,821,303.00	\$388,848.00	78.65%	\$11,489,271.00	\$12,951,361.00	\$1,462,090.00	88.71%	11.29%

SDSTA CAPEX Budget Summary FY14/15
Actual vs Budget
February 2015 & YTD

Budget Area	Actual Month	FY2015 Monthly Budget	\$ Over/Under Budget	% of Budget	Actual YTD	FY2015 YTD Budget	\$ Over/Under Budget	% of Budget	% Remaining
									100.00%
Operational CAPEX	\$ 905,927.47	\$ 1,131,466.00	\$ 225,538.53	80.07%	\$ 7,201,853.00	\$ 18,366,715.00	\$ 11,164,862.00	39.21%	60.79%
TOTAL CAPEX	\$ 905,927.47	\$ 1,131,466.00	\$ 225,538.53	80.07%	\$ 7,201,853.00	\$ 18,366,715.00	\$ 11,164,862.00	39.21%	60.79%

SD Science & Technology Authority
Operational CAPEX Budget
Monthly Actual vs Budget

Project #	Project Description	Feb. 2015	Budget	\$ Over/UnderBudget	% of Budget
CAP2012-13	Water/Hazard Mitigation Work	\$ -	\$ -	\$ -	0.00%
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$ 312,754.18	\$ 237,498.00	\$ (75,256.18)	131.69%
CAP2012-28	Work Decks	\$ 986.76	\$ 1,500.00	\$ 513.24	0.00%
CAP2012-32	SDSTA Personnel	\$ 187,506.88	\$ 178,626.00	\$ (8,880.88)	104.97%
CAP2013-06	Yates Shaft Improvements	\$ -	\$ -	\$ -	0.00%
CAP2014-01	Sanford Visitor Center Design & Construction	\$ 246,677.29	\$ 377,092.00	\$ 130,414.71	65.42%
CAP2014-02	Xenon Gas	\$ -	\$ -	\$ -	0.00%
CAP2014-04	Surface Lab Roof	\$ -	\$ -	\$ -	0.00%
CAP2014-05	CASPAR Experiment Development	\$ -	\$ 80,000.00	\$ 80,000.00	0.00%
CAP2014-06	BHSU Jonas Science Building Renovation	\$ -	\$ -	\$ -	0.00%
CAP2014-07	Davis Campus HVAC Augment System	\$ -	\$ -	\$ -	0.00%
CAP2014-09	CASPAR Facility Development	\$ 75,421.68	\$ 181,750.00	\$ 106,328.32	41.50%
CAP2014-11	BHSU Facility Development	\$ 22,580.68	\$ 50,000.00	\$ 27,419.32	45.16%
CAP2015-01	WTP Tank & Install	\$ -	\$ -	\$ -	0.00%
CAP2015-02	Yates Tunnel Hazard Mitigation	\$ 60,000.00	\$ 25,000.00	\$ (35,000.00)	240.00%
CAP2015-03	Yates/Ross Hoist Bldg. Masonry	\$ -	\$ -	\$ -	0.00%
CAP2015-04	Ellison Real Estate Option	\$ -	\$ -	\$ -	0.00%
	Monthly Totals	\$ 905,927.47	\$ 1,131,466.00	\$ 225,538.53	80.07%

SD Science & Technology Authority
Operational CAPEX Budget
YTD FY2015 Actual vs Budget

Project #	Project Description	Feb. YTD FY2015	FY2015 Budget	\$ Over/UnderBudget	% of Budget	% Remaining
						100%
CAP2012-13	Water/Hazard Mitigation Work	\$3,199.50	\$ 113,643.00	\$ 110,443.50	2.82%	97.18%
CAP2012-27	Ross Shaft Furnishings Repl.M&S	\$1,765,529.35	\$ 4,643,148.00	\$ 2,877,618.65	38.02%	61.98%
CAP2012-28	Work Decks	\$19,361.76	\$ 45,000.00	\$ 25,638.24	43.03%	56.97%
CAP2012-32	SDSTA Personnel	\$1,375,943.07	\$ 2,231,015.00	\$ 855,071.93	61.67%	38.33%
CAP2013-06	Yates Shaft Improvements	\$30,548.66	\$ 300,000.00	\$ 269,451.34	10.18%	89.82%
CAP2014-01	Sanford Visitor Center Design & Construction	\$2,452,529.75	\$ 4,437,425.00	\$ 1,984,895.25	55.27%	44.73%
CAP2014-02	Xenon Gas	\$6,750.00	\$ 67,145.00	\$ 60,395.00	10.05%	89.95%
CAP2014-04	Surface Lab Roof	\$44,839.26	\$ 44,785.00	\$ (54.26)	100.12%	-0.12%
CAP2014-05	CASPAR Experiment Development	\$230,367.67	\$ 969,766.00	\$ 739,398.33	23.75%	76.25%
CAP2014-06	BHSU Jonas Science Building Renovation	\$0.00	\$ 2,500,000.00	\$ 2,500,000.00	0.00%	100.00%
CAP2014-07	Davis Campus HVAC Augment System	\$10,776.50	\$ 280.00	\$ (10,496.50)	3848.75%	-3748.75%
CAP2014-09	CASPAR Facility Development	\$623,860.17	\$ 2,178,308.00	\$ 1,554,447.83	28.64%	71.36%
CAP2014-11	BHSU Facility Development	\$268,519.88	\$ 500,000.00	\$ 231,480.12	53.70%	46.30%
CAP2015-01	WTP Tank & Install	\$110,167.43	\$ 97,000.00	\$ (13,167.43)	113.57%	-13.57%
CAP2015-02	Yates Tunnel Hazard Mitigation	\$135,000.00	\$ 100,000.00	\$ (35,000.00)	135.00%	-35.00%
CAP2015-03	Yates/Ross Hoist Bldg. Masonry	\$94,200.00	\$ 94,200.00	\$ -	100.00%	0.00%
CAP2015-04	Ellison Real Estate Option	\$30,260.00	\$ 45,000.00	\$ 14,740.00	67.24%	32.76%
	Totals	\$7,201,853.00	\$ 18,366,715.00	\$ 11,164,862.00	39.21%	60.79%

BHSU Pledged Contribution
(will add \$200,000 when received)

Source/WBS	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
SDSTA	2.40											
Administration	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Communication	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
DOE OPERATIONS	77.60	77.60	77.60	75.60	75.60	75.60	76.10	76.10	76.10	76.10	76.10	76.10
Administration	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
EHS	9.00	9.00	9.00	8.00	8.00	8.00	8.50	8.50	8.50	8.50	8.50	8.50
Engineering	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Science	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65
Operations												
Management	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ross Shaft	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
Yates Shaft	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Hoist Operations	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Hoist Maintenance	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
Ventilation	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Hazard Mitigation	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Water Treatment	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20
Dewatering	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Electrical Power Distribution	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Cyberinfrastructure	2.25	2.25	2.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Buildings and Grounds	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
Equipment Maintenance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Davis Campus	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
SDSTA CAPEX	28.25	28.25	28.25	28.25	28.25	30.25						
GEN 2 LZ	1.33											
LBNE DESIGN	1.65											
LBNE NEPA	0.50	0.50	0.50	0.50	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00
LUX OPERATIONS	0.60											
INDIRECT	13.10											
Grand Total	125.43	125.43	125.43	123.43	123.43	125.43						

**SDSTA Staffing Plan by Funding Source
February 2015**

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Gilt Edge Agreement Discussion – Mr. Tim Engel

Recommended Action:
Informational

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Legislative Update – Mr. Tim Engel

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Captive Insurance Discussion – Mr. Tim Engel

Recommended Action:
Informational

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Review of New and Updated Policies - Mr. Mike Headley / Mr. Tim Engel

10A. Attached are policies recommended for approval:

- Manual Contents Page (*updated*)
- Policy 3:1 Accounting and Audit Policy (*updated and incorporated policies 3:1:1, 3:1:2, 3:1:3, 3:1:4, 3:3, 3:18, 3:19 and 3:25*)
- Policy 3:2 Receiving State Contract Money and Reporting Bank Statement to the State Policy (*updated*)
- Policy 3:8 Salary and Hourly Payroll Policy (*retitled and incorporated policies 3:8:1, 3:10, 3:11 and 3:11:1*)
- Policy 3:20 Alcohol Policy (*retitled and updated*)
- Policy 3:22 Guests Policy (*retitled and incorporated policy 3:23*)
- Policy 3:24 Telephone Policy (*retitled and incorporated policy 3:24:1*)
- Policy 3:26 Management and Control of Certain Funds Policy (*updated*)
- Policy 3:27 Conflict of Interest Policy (*updated "SDSTA" only*)
- Policy 3:29 Public Information Policy (*updated "SDSTA" only*)
- Policy 3:32 Federal Awards: Cost Principles for State & Local Governments Policy (*retitled and updated*)
- Policy 3:33 Personal Protective Equipment Reimbursement Policy (*updated "SDSTA" only*)
- Policy 4:1 Personnel Benefits Policy (*updated*)

10B. Attached are policies recommended for retirement:

- Policy 3:1:1 Interest Earned
- Policy 3:1:2 Capitalization Policy for Capital Assets
- Policy 3:1:3 Use of Net Assets
- Policy 3:1:4 Definition of Operating Revenues and Expenses
- Policy 3:3 Petty Cash
- Policy 3:4 Invoice and Receipt Policy
- Policy 3:5 Check Writing and ACH Transfer
- Policy 3:5:1 Check and Cash Deposits
- Policy 3:6 Vendor ACH
- Policy 3:7 Monthly Account Reconciliation
- Policy 3.8.1 Overtime Pay
- Policy 3:9 Quarterly and Yearly Employer Tax Report (*new Procedure 3:8B; retire policy*)
- Policy 3:10 Effort Report
- Policy 3:11 Time Sheet – Hourly Employees
- Policy 3:11:1 Inconvenience – Call-Out Pay
- Policy 3:18 Credit Card Use
- Policy 3:19 Reimbursement and Incidental-Related Expenses
- Policy 3:23 Event and Record Keeping
- Policy 3:24:1 Cell Phone
- Policy 3:25 Fixed Asset Inventory

Recommended Action:

Motion to approve updated policies, new policies and retired policies as listed above.

Review of New and Updated Policies - Mr. Mike Headley / Mr. Tim Engel

10C. FYI - Attached are new and updated procedures (no action required)

- Procedure 2:2A Equal Opportunity and Affirmative Action Procedure (*new*)
- Procedure 3:1A Accounting and Audit Procedures (*new*)
- Procedure 3:8A Salary and Hourly Payroll Procedure (*new*)
- Procedure 3:8B Employer Tax Reporting Procedure (*new*)
- Procedure 3:33A PPE Reimbursement Procedure (*updated*)

Legal Counsel has reviewed the above listed policies and procedure

Recommended Action:

Procedures informational only. No action required

10A. Attached are policies recommended for approval:

- Manual Contents Page (*updated*)
- Policy 3:1 Accounting and Audit Policy (*updated and incorporated policies 3:1:1, 3:1:2, 3:1:3, 3:1:4, 3:3, 3:18, 3:19 and 3:25*)
- Policy 3:2 Receiving State Contract Money and Reporting Bank Statement to the State Policy (*updated*)
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- Policy 3:27 Conflict of Interest Policy (*updated "SDSTA" only*)
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- Policy 3:33 Personal Protective Equipment Reimbursement Policy (*updated "SDSTA" only*)
- Policy 4:1 Personnel Benefits Policy (*updated*)



South Dakota Science & Technology Authority

Policies and Procedures Manual

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Section 1: GOVERNANCE

- 1:1 Authorization
- 1:2 Policies and Procedures

Section 2: ADMINISTRATION

- 2:1 Anti-Harassment
- 2:2 Equal Opportunity and Affirmative Action Employer
 - [2:2A Equal Opportunity and Affirmative Action Procedure](#)
-(New March 20, 2015)

- 2:3 Drug & Alcohol Testing
 - 2.3A Drug & Alcohol Testing Procedure
(Updated May 15, 2014)
- 2:4 Security & Site Access
- 2:5 Use of SDSTA-Owned Electronic Equipment, Systems and Protection of Personal Privacy Policy
 - 2.5A Use of SDSTA-Owned Electronic Equipment, Systems and Protection of Personal Privacy Procedure
(New November 18, 2014)
- 2:6 Tobacco-Free Property
 - 2.6A Tobacco-Free Property Procedure
(New November 18, 2014)
- 2:7 *Policy Retired-December 18, 2014 (No Solicitation/Distribution)*
- 2:8 Permit Certification Logs
- 2:9 *Policy Retired-June 25, 2013 (Board Meeting Minutes to State Auditor)*
- 2:10 Annual Review of Policies
- 2:11 Vehicle Use
 - 2.11A Vehicle Use Procedure
(Updated December 18, 2014)
- 2:12 *Policy Retired-December 18, 2014 (Employee Privacy)*
- 2:13 Open Door
- 2:14 Workplace Violence
 - 2.14A Workplace Violence Procedure
(New November 18, 2014)
- 2:15 Absenteeism and Tardiness
 - 2.15A Absenteeism and Tardiness Procedures
(New September 2, 2014)
- 2:16 Confidentiality
- 2:17 Infectious Disease/Pandemic
- 2:18 Whistleblower
- 2:19 Americans with Disabilities Act (ADA)
- 2:20 Electronic and Radio Communication Devices
- 2:21 Continuity of Operations Plan
- 2:22 Succession Plan

Section 3: FINANCE ~~AND BUSINESS~~

- 3:1 Accounting and Audit [ProceduresPolicy](#)
 - 3:1:1 [Policy Retired-March 20, 2015 \(Interest Earned\)](#)



South Dakota Science & Technology Authority

Policies and Procedures Manual

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- 3:1:2 [Policy Retired-March 20, 2015 \(Capitalization Policy for Capital Assets\)](#)
- 3:1:3 [Policy Retired-March 20, 2015 \(Use of Net Assets\)](#)
- 3:1:4 [Policy Retired-March 20, 2015 \(Definition of Operating Revenues and Expenses\)](#)
- 3:1A [Accounting and Audit Procedure \(New March 20, 2015\)](#)
- 3:2 Receiving State Contract Money and Reporting Bank Statements to the State [Policy](#)

- 3:3 [Policy Retired-March 20, 2015 \(Petty Cash\)](#)
- 3:4 [Policy Retired-March 20, 2015 \(Invoice and Receipt Policy\)](#)
- 3:5 [Policy Retired-March 20, 2015 \(Check Writing and ACH Transfer\)](#)
- 3:5:1 [Policy Retired-March 20, 2015—\(Check and Cash Deposits\)](#)
- 3:6 [Policy Retired-March 20, 2015 \(Vendor ACH\)](#)
- 3:7 [Policy Retired-March 20, 2015 \(Monthly Account Reconciliation Statement\)](#)
- 3:8 Salary and [Hourly Payroll Procedures Policy](#)
- 3:8A [Salary and Hourly Payroll Procedure](#)
-(New March 20, 2015)

- 3:8:1 [Policy Retired-March 20, 2015\(—Overtime Pay\)](#)
- 3:8B [Employer Tax Reporting Procedure](#)
-(New March 20, 2015)

- 3:9 [Policy Retired-March 20, 2015 \(Quarterly and Yearly Employer Tax Report\)](#)
- 3:10 [Policy Retired-March 20, 2015 \(Effort Report – Salaried Employees\)](#)
- 3:11 [Policy Retired-March 20, 2015 \(Time Sheet – Hourly Employees\)](#)
- 3:11:1 [Policy Retired-March 20, 2015 \(Inconvenience – Call-Out Pay\)](#)
- 3:12 Travel Approval and Reimbursement - Employees
- 3.12A Travel Approval and Reimbursement Procedures – Employees
-(New September 9, 2014)

- 3:12:1 [Policy Retired-September 18, 2014 \(Travel by Executive Director\)](#)
- 3:12:2 [Policy Retired-September 18, 2014 \(Transportation\)](#)
- 3:12:3 [Policy Retired-September 18, 2014 \(Lodging\)](#)
- 3:12:4 [Policy Retired-September 18, 2014 \(Meals\)](#)
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South Dakota Science & Technology Authority
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SUBJECT: Accounting and Audit ~~Policy~~Procedures

NUMBER: 3:1

It is the policy of the South Dakota Science and Technology Authority (SDSTA) that all financial transactions be documented, approved, and recorded properly in the financial accounting system on a consistent and timely basis in accordance with Generally Accepted Accounting Principles (GAAP) and applicable Cost Accounting applicable federal, state and local regulations Standards.

A. Accounting and audit procedures have been developed to ensure internal controls, cash management, and compliance with other necessary financial and accounting requirements of applicable federal, state and local rules.

1. An independent audit of financial records shall be conducted annually.
2. The Chief Financial Officer (CFO) shall direct and monitor adherence to generally accepted accounting principles to ensure compliance with all applicable laws and regulations.
3. The SDSTA Audit Committee Charter, as updated, mandates the Audit Committee as the pro-active steward for oversight of the financial reporting and disclosure process for SDSTA.

A.B. Operating Revenues and Expenses – The SDSTA proprietary fund shall distinguish between operating and non-operating revenues and expenses.

1. Operating revenues and expenses shall consist of:
 - a. Charges for the use of the underground facility,
 - b. Reimbursement of the costs of operations from Homestake Mining Company and other entities, and
 - c. The costs of providing those services and facilities, including depreciation and excluding interest cost.
2. All other revenues and expenses shall be reported as non-operating.

~~B.~~

C. Interest Earned – Monies earned by the SDSTA from investments made through the State Investment Council, pursuant to legislation approved by the South Dakota State Legislature, will be budgeted at the Board's discretion.

D. Use of Net Assets – Subject to the provisions of the Property Donation Agreement and the Gift Agreement, the SDSTA will first use restricted net assets when an expense is incurred for purposes for which both restricted and unrestricted net assets are available.

SOURCE: ~~March 20, 2015~~September 2004- April 7, 2005; October 2005 (This revision date supersedes all previous versions).

3:1 Accounting and Audit ~~Procedures~~Policy

E. Capital Assets – The SDSTA will capitalize all expenditures for assets with a life of greater than one year and a cost of \$5,000 or more. They will be depreciated over their estimated useful life on a straight line basis. An accurate account of all furniture and equipment shall be maintained. The CFO shall conduct an annual inventory and report any changes to the Executive Director and Board of Directors.

E.F. Invoice and Receipts – All invoices/receipts shall be paid on or by the 15th of each month by paper check, Automated Clearing House (ACH) through online bill pay, or wire transfer. Payment of invoices/receipts will follow guidelines established in 3:1A Accounting and Audit Procedures.

G. Petty Cash Fund – Cash disbursements are limited to \$50 per occurrence for items not included on travel expense reimbursement forms or for items not available from the office supplies inventory. The petty cash fund shall not exceed \$50 and a log will be maintained.

H. Credit Card Usage – Credit cards issued to the SDSTA Executive Director and Procurement Specialist are limited to use for SDSTA-related business and travel expenses and shall not be used for any personal travel-related or other expenses of an employee.

1. Charges may be made against the card by employees upon prior approval of the Executive Director, the Sanford Laboratory Director, or the CFO.

2. Charges exceeding \$5,000 must be approved in advance by the Executive Director, Sanford Laboratory Director, or the CFO.

F.I. Reimbursement of Incidental Expenses – SDSTA employees and Board members shall be reimbursed for incidental expenses related to SDSTA business and is-
~~NORMAL REIMBURSEMENT POLICIES SHALL BE FOLLOWED.~~ Reimbursement is limited to \$500 per occurrence.

**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Receiving State Contract Money and Reporting Bank Statements to the State

NUMBER: 3:2

~~The Authority will prepare a voucher and email it to the State Treasurer's office and to the Bureau of Finance and Management (BFM).~~

~~The Authority will mail the signed original voucher to the State Treasurer's Office.~~

~~The BFM will load the document onto the State's accounting system.~~

The South Dakota Science and Technology Authority (SDSTA) will request the transfer of funds from the State Treasurer's Office to the SDSTA's local bank account as necessary. ~~will transfer the money from the State funds to the Authority's account.~~

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~~The Authority will keep copies of these transactions.~~

The AuthoritySDSTA will provide quarterly bank statements from the Authority's SDSTA's local bank account to the South Dakota State Auditor and to the South Dakota State Treasurer as required by consistent with South Dakota Codified Law 4-4-3.

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SOURCE: ~~March 20, 2015~~September 2004, April 2005, October 2005, November 17, 2006 (This revision date supersedes all previous versions).

3:2 Receiving State Contract Money and Reporting Bank Statements to the State Policy

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**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Salary and Hourly Payroll Procedures Policy

NUMBER: 3:8

~~ESTABLISHMENT OF SALARIES AND HOURLY WAGES:~~

Salaries and hourly wage rates for South Dakota Science and Technology Authority (SDSTA) employees shall be fixed by the Executive Director ~~within written guidelines established and reviewed~~ by the Compensation Personnel Committee of the Board of Directors.

- A. ~~Salaried employees shall submit time/effort reports at the end of each pay period, and will receive paychecks in the same amount each payday, except for instances when rounding calculations may cause amounts to vary slightly. There will be no deductions in pay for days during which fewer than eight (8) hours were worked.~~
- B. Full-time, part-time and temporary hourly employees shall complete and sign a time sheet, which also serves as an effort report as needed, at the end of each pay period.
 - 1. ~~All employees other than full-time salaried~~ Hourly employees who work in excess of forty (40) hours per week are eligible for overtime pay computed at time and one-half of the employee's regular hourly rate.
 - 2. Hourly employees are guaranteed a minimum of three (3) hours straight-time pay for inconvenience – call-out pay. The call-out provision will apply only when the work required was not arranged in advance with the employee.

Payroll records and employee time cards shall be retained per 3:31 Record Retention Policy.

~~A.—Salaried Employees:~~

~~Paychecks for salaried employees will be the same amount each payday; however, there may be instances when rounding in calculations causes the amounts to vary slightly. Salaried employees are required to submit effort reports at the end of each pay period.~~

~~To calculate salary per pay period, take the annual salary and divide that amount by 26 pay periods.~~

~~Example: ————— \$45,000 / 26 = \$1,730.77 per pay period.~~

~~B.—Hourly Employees:~~

~~Paychecks for hourly employees will vary from paycheck to paycheck, as the number of working hours and overtime in each pay period fluctuates.~~

~~Example: ————— \$11.00 / Hour x 80 hours = \$880~~

SOURCE: ~~DATE NAME CHANGE~~ September 2004; April 2005; August 2006; November 17, 2006; December 17, 2009; June 23, 2011; March 20, 2015 (This revision date supersedes all previous versions).

3:8 Salary and Hourly Payroll Procedures Policy

~~C. Payroll Process~~

~~Each pay period will cover the two weeks, beginning with a Saturday and ending on a Friday.~~

~~On the Monday following the end of each pay period, hourly and salaried employees turn in timesheets and effort reports to be reviewed for accuracy and signed by a supervisor.~~

~~The timesheets and effort reports are then given to the designated Authority employee for the calculation of payroll with deductions for FICA, Medicare and Withholding Taxes, and retirement.~~

~~The payroll calculation is then reviewed for accuracy and approved by the Executive Director or Chief Financial Officer.~~

~~The payroll amounts are entered into the online banking systems for payment to employees on the Friday following the end of each pay period. If a payday falls on a holiday the business day prior to the holiday will be the pay date.~~

~~The deductions for FICA, Medicare, and Withholding are entered into the online banking system each pay period for the Form 941 payroll taxes. Once the online banking procedures have been entered, the transactions are reviewed and approved online by a supervisor/manager.~~

~~All transactions for checks and direct deposit are recorded in the Authority's accounting system.~~

~~The Authority's checking account is reconciled upon receipt of monthly bank statements from the Authority's bank.~~

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Non-Reimbursement of Alcohol Policy

NUMBER: 3:20

The South Dakota Science and Technology Authority (SDSTA) will not pay or reimburse employees or other individuals for alcoholic beverages. ~~nor reimburse individuals through travel or expense requests or through the petty cash fund.~~

SOURCE: ~~April 7, 2005~~ March 20, 2015 (This revision date supersedes all previous versions).
3:20 Non-Reimbursement of Alcohol Policy

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South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: ~~Guests~~ Event Expenditure Policy

NUMBER: 3:22

The Executive Director ~~will~~ shall pre-approve and oversee expenditures associated with on-site and off-site events, ~~and the Authority will pay for meals and specifically related incidental expenses (example: a dinner at a workshop which includes the meal and a small charge for a charter bus trip to an off-site location for the dinner) for spouses and guests of Authority employees, of Board members, and of consultants or others with an interest in the Authority's business, hosted by the Authority South Dakota Science and Technology Authority (SDSTA).~~ _____ (or

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~~by others charging a fee) where it is customary and proper that these individuals be in attendance, whether locally or when traveling. This would not include paying for transportation such as airfare or for lodging.~~

~~The Executive Director oversees expenditures associated with these events.~~

A list of attendees, their relationship to SDSTA business, and the purpose of the event shall be prepared and approved by the Executive Director or his designate.

SOURCE: DATE April 7, 2005 March 20, 2015 (This revision date supersedes all previous versions).
3:22 Guests Event Expenditure Policy

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**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Telephone Reimbursement ~~Telephone Policy~~

NUMBER: 3:24

The South Dakota Science and Technology Authority (SDSTA) will compensate the Executive Director for cell phone charges associated with SDSTA business, as deemed reasonable and necessary by the Board.

Additional SDSTA employees may be compensated for cell phone charges associated with SDSTA business, as deemed necessary by the Executive Director.

~~Because the Authority does not have a telephone credit card, t~~The Authority-SDSTA will accept charges for collect calls from ~~Authority-SDSTA~~ employees on the rare occasion this would be necessary.

SOURCE: DATE AND NAME ~~June 25, 2013~~ March 20, 2015 (This revision date supersedes all previous versions).
3:24 Telephone Reimbursement Policy

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**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Management and Control of Certain Funds Policy

NUMBER: 3:26

- A. ~~This~~ This policy is adopted by the South Dakota Science and Technology Authority (SDSTA) to comply with the terms of the “Property Donation Agreement between and among Homestake Mining Company of California, the State of South Dakota and the South Dakota Science and Technology Authority”, dated April 14, 2006 (the “Agreement”). -In the event of a conflict between the terms of this policy and the Agreement, except as otherwise required by applicable law, the terms of the Agreement shall govern the maintenance of the Funds. -Capitalized terms used but not defined in this Policy shall be used and construed as defined in the Agreement.
- B. All monies appropriated to and held by the ~~Authority-SDSTA~~, other than those that are held at a commercial bank or banks for the immediate cash flow needs of the ~~Authority-SDSTA~~, shall be invested by the South Dakota Investment Council in the state pooled fund account for benefit of the ~~AuthoritySDSTA~~. -The ~~Authority SDSTA~~ requests and directs the Bureau of Finance and Management to account for and credit interest earned to the ~~Authority-SDSTA~~ as provided by SDCL 4-5-30.
- C. Monies held at a commercial bank or banks shall be actively managed to meet cash flow requirements and will be held to a minimum in order to maximize Investment Council interest earnings.
- D. The ~~Authority-SDSTA~~ hereby establishes the following Funds (the “Funds”) within the monies invested with the Investment Council:
1. Closure Fund.
 2. Indemnification Fund.
 3. General Operating Fund.
- E. The ~~Authority-SDSTA~~ shall maintain separate accounts for each of the Funds, although the Funds may be maintained by the Investment Council together within the pooled fund account.
- F. The initial deposits into the Closure Fund shall be \$800,000 appropriated by the South Dakota Legislature plus \$200,000 delivered to the ~~Authority-SDSTA~~ by Homestake. -The ~~Authority-SDSTA~~ will maintain an unencumbered balance of \$1,000,000 in the Closure Fund, reduced only by any sums expended by the ~~Authority-SDSTA~~ for closure, reclamation, restoration, remediation and subsequent monitoring of the Assets as required by any Governmental Authority pursuant to any Environmental, Health and Safety Law. -Interest earned on the principal of the Closure Fund shall remain in and become a part of the Closure Fund. -In the event the balance of the Closure Fund decreases below \$1,000,000 for any other reason, the ~~Authority-SDSTA~~ shall promptly restore it to a minimum balance of \$1,000,000.

SOURCE: [May 3, 2006](#); [August 21, 2008](#)[March 20, 2015](#) (This revision date supersedes all previous versions).
3:26 Management and Control of Certain Funds Policy

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- G. The initial deposit into the Indemnification Fund shall be \$10,000,000 appropriated by the South Dakota Legislature. -The ~~Authority-SDSTA~~ will maintain an unencumbered balance of \$10,000,000 in the Indemnification Fund reduced only by any sums actually spent by the ~~Authority-SDSTA~~ for indemnification of the Homestake Indemnified Parties.- In the event the balance of the Indemnification Fund decreases below \$10,000,000 for any other reason, the ~~Authority-SDSTA~~ shall promptly restore the amount of any decrease to the Indemnification Fund. Interest earned on the principal of the Indemnification Fund shall be transferred to the General Operating Fund not less often than annually.
- H. The General Operating Fund shall consist of all other accounts and monies established by and appropriated to the ~~Authority-SDSTA~~ and other investments in which the ~~Authority-SDSTA~~ is authorized to invest its funds pursuant to applicable law. -The General Operating Fund shall be used only for activities related to general operating costs, rehabilitation, development and operation of the Assets for the purposes established by the ~~Authority-SDSTA~~ and consistent with the Agreement, including solicitation of scientific, research and development projects to use the Assets.
- I. The Chief Financial Officer shall prepare semi-annual certifications showing the balance in each of the Closure Fund, the Indemnification Fund and the General Operating Fund, and shall make them available for public inspection.

SOURCE: [May 3, 2006](#); [August 21, 2008](#)[March 20, 2015](#) (This revision date supersedes all previous versions).
3:26 Management and Control of Certain Funds Policy

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**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Conflict of Interest Policy

NUMBER: 3:27

Article I

Purpose

The purpose of the conflict of interest policy is to protect the [South Dakota Science and Technology's \(SDSTA's\) Authority's](#) interest when it is contemplating entering into a transaction or arrangement that might benefit the private interest of a Board Member, officer or employee. A financial interest is not necessarily a conflict of interest. Under Article III, Section 2 of this policy, a person who has a financial interest may have a conflict of interest only if the Board of Directors decides that a conflict of interest exists.

This policy is intended to supplement but not replace any applicable state and federal laws governing conflicts of interest, which are applicable to the [AuthoritySDSTA](#).

Article II

Definitions

- A. Interested Person: Any officer, employee, Director or member of a committee with powers delegated from the Board of Directors, who has a direct or indirect financial interest, as defined below, is an Interested Person.
- B. Financial Interest: A person has a Financial Interest if the person has, directly or indirectly, through business (including membership in a partnership or limited liability company or ownership of stock in a corporation), investment or a member of the person's immediate family:
 - 1. An ownership or investment interest in any entity with which the [AuthoritySDSTA](#) has a transaction or arrangement;
 - 2. A compensation arrangement with the [SDSTA Authority](#) or with any entity or individual with which the [SDSTA Authority](#) has a transaction or arrangement; or
 - 3. A potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which the [SDSTA Authority](#) is negotiating a transaction or arrangement.
- C. Compensation: Compensation includes direct and indirect remuneration as well as gifts or favors that are not insubstantial.

Article III

Procedures

- A. Duty to Disclose: In connection with any actual or possible conflict of interest, an Interested Person must disclose the existence of the financial interest and be given the opportunity to disclose all material facts to the Board of Directors considering the proposed transaction or arrangement.

SOURCE: [Adopted February 7, 2007; August 21, 2008 March 20, 2015](#) (This revision date supersedes all previous versions).

3:27 Conflict of Interest Policy

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- B. Determining Whether a Conflict of Interest Exists: After disclosure of the Financial Interest and all material facts, and after any discussion with the Interested Person, the person shall leave the Board of Directors meeting while the determination of a conflict of interest is discussed and voted upon. The remaining members of the Board of Directors shall decide if a conflict of interest exists.
- C. Procedures for Addressing the Conflict of Interest:
 - 1. An Interested Person may make a presentation at the Board of Directors meeting, but after the presentation, the person shall leave the meeting during the discussion of, and the vote on, the transaction or arrangement involving the possible conflict of interest.
 - 2. The Chairperson shall, if appropriate, appoint a disinterested person or committee to investigate alternatives to the proposed transaction or arrangement.
 - 3. After exercising due diligence, the Board of Directors shall determine whether the [Authority SDSTA](#) can obtain with reasonable efforts a more advantageous transaction or arrangement from a person or entity that would not give rise to a conflict of interest.
 - 4. If a more advantageous transaction or arrangement is not reasonably possible under circumstances not producing a conflict of interest, the Board of Directors shall determine by a majority vote of the disinterested Directors whether the transaction or arrangement is in the [Authority's SDSTA's](#) best interest, for its own benefit, and whether it is fair and reasonable. In conformity with the above determination, it shall make its decision as to whether to enter into the transaction or arrangement.
- D. Violations of the Conflicts of Interest Policy
 - 1. If the Board of Directors has reasonable cause to believe a person has failed to disclose actual or possible conflicts of interest, it shall inform the person of the basis for such belief and afford the member an opportunity to explain the alleged failure to disclose.
 - 2. If, after hearing the person's response and after making further investigation as warranted by the circumstances, the Board of Directors determines the person has failed to disclose an actual or possible conflict of interest, it shall take appropriate disciplinary and corrective action.

Article IV

Contracts Supported by Federal Funds

- A. Participation in Award or Administration: Anything in this Policy to the contrary notwithstanding, no employee, officer, Board Member or agent of the [Authority SDSTA](#) shall participate in the selection, or in the award or administration of, a contract supported by federal funds if disqualified pursuant to the terms of this Article IV.
- B. Disqualification: A person is disqualified if the person, any member of his immediate family or a business partner, associate or co-owner of the person has a financial or other interest in the firm selected for the award. A person is not disqualified if his direct or indirect interest in the firm is insubstantial, such as in the case of ownership

SOURCE: [Adopted February 7, 2007; August 21, 2008 March 20, 2015](#) (This revision date supersedes all previous versions).
 3:27 Conflict of Interest Policy

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of an insubstantial amount of stock in a publicly-traded corporation. The Board of Directors may determine whether other interests are insubstantial on a case-by-case basis.

- C. No Gratuities: Neither the [Authority-SDSTA](#) nor any employee, officer or Board Member shall accept any gratuity, favor of anything of monetary value from a contractor, potential contractor or parties to sub-agreements. This Policy does not prohibit the acceptance of gifts of nominal intrinsic value, such as business meals.

Article V

Records of Proceedings

The minutes of the Board of Directors and all committees with Board-delegated powers shall contain:

- A. The names of the persons who disclosed or otherwise were found to have a Financial Interest in connection with an actual or possible conflict of interest, the nature of the Financial Interest, any action taken to determine whether a conflict of interest was present, and the Board's decision as to whether a conflict of interest in fact existed.
- B. The names of the persons who were present for discussions and votes relating to the transaction or arrangement, the content of the discussion, including any alternatives to the proposed transaction or arrangement, and a record of any votes taken in connection with the proceedings.

Article VI

Compensation

- A. Board of Directors: A member of the Board of Directors who receives compensation, directly or indirectly, from the [Authority-SDSTA](#) for services is precluded from voting on matters pertaining to that member's compensation.
- B. Committees: A voting member of any committee whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the [SDSTA Authority](#) for services is precluded from voting on matters pertaining to that member's compensation.
- C. Information Concerning Compensation: No member of the Board of Directors or voting member of any committee whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the [SDSTA Authority](#), either individually or collectively, is prohibited from providing information to any committee regarding compensation.

Article VII

Annual Statements

Each Director, principal officer and member of a committee with Board-delegated powers shall annually sign a statement which affirms such person:

- A. Has received a copy of the Conflict of Interest Policy;
- B. Has read and understands the policy, and
- C. Has agreed to comply with the policy.

SOURCE: [Adopted February 7, 2007; August 21, 2008](#) [March 20, 2015](#) (This revision date supersedes all previous versions).

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Public Information Policy

NUMBER: 3:29

The Executive Director shall be the media spokesperson for the [South Dakota Science and Technology Authority \(SDSTA\)](#) and the Sanford Underground Research Facility; however, the Executive Director may delegate staff, on a case-by-case basis, to communicate with the media.

Press releases and other public releases of information must first be approved by the Executive Director. Releases of information on major issues also will be submitted, in advance of release, to the chair ~~personman~~ of the [Authority-SDSTA](#) Board of Directors and to the Office of the Governor.

All press releases sent to the media will be sent simultaneously to:

- The members of the [SDSTA](#) Board of Directors.
- The Office of the Governor.
- The [Authority-SDSTA](#) and the Sanford Underground Research Facility staff.
- The South Dakota Congressional Delegation, and
- Other constituencies, as determined by the Executive Director.

A Communications Director will be present, when possible, whenever the media interviews [Authority-SDSTA](#) or Sanford Underground Research Facility staff.

South Dakota ~~e~~Open ~~m~~Meedings and ~~e~~Open ~~R~~Records ~~l~~Laws will be followed.

Privacy and confidentiality regarding personnel and contractual matters will be maintained, and proprietary information will be protected.

Questions from the general public, the media or other constituencies will be answered accurately and as quickly as possible.

**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Federal Awards Costs Allocation Policy: Cost Principles for State & Local Governments

NUMBER: 3:32

The South Dakota Science and Technology Authority (SDSTA), as a recipient of federal awards, Costs (expenses) shall be allocated costs (expenses) to federal awards using the cost principles of 2 CFR 225 (formerly OMB Circular A-87).

Direct and indirect costs will be segregated based on the cost principles set forth in 2 CFR Part 225, Appendix A to Part 225 – General Principles for Determining Allowable Costs and Appendix B to Part 225 – Selected Items of Cost, shall be used to segregate allowable direct costs, indirect or Facilities and Administration (F&A) costs, and unallowable costs. (OMB Circular A-87 Attachment B). Unallowable costs will be segregated from the federal award per the cost principles (OMB Circular A-87 Attachment B).

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SOURCE: March 20, 2015 Adopted December 15, 2014 (This revision date supersedes all previous versions).
3:32 Federal Awards Costs Allocation :-Cost Principles for State & Local Governments Policy
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**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Personal Protective Equipment Reimbursement Policy

NUMBER: 3:33

The South Dakota Science and Technology Authority (~~SDSTA~~^{the "Authority"}) will reimburse the purchase of Personal Protective Equipment (PPE) on an individual basis to ~~SDSTA~~^{Authority} employees that specifically require PPE to perform their work.

Per state fiscal year (July 1 – June 30) authorized employees will have access to a budgeted amount for PPE reimbursement. -PPE reimbursement will be approved by the appropriate supervisor in accordance with the approved budget.

The ~~SDSTA~~^{Authority} will also provide specialty PPE to be used in projects that involve metal and electrical work. -Employees ~~should~~^{must} confirm with their supervisor if an item is allowable for reimbursement prior to making any purchase. ~~-Not all situations will be covered.~~

The ~~SDSTA~~^{Authority} will provide reimbursement for other additional PPE required for working in the clean room and other areas in the underground laboratory. -Specialized or duplicate tools or PPE should be purchased through the respective department's budget. -This reimbursement will not be included in the established budgeted amount for general PPE as outlined above.

SOURCE: ~~June 25, 2013~~^{March 20, 2015} (This revision date supersedes all previous versions).
3:33 Personal Protective Equipment Reimbursement Policy

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South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Personnel Benefits

NUMBER: 4:1

The following is an overview of the benefits available to eligible [South Dakota Science and Technology Authority \(SDSTA\)](#) employees. Vacation leave and sick leave are described in greater detail in policy 4:4 Leave. Eligibility for benefits is discussed in Policy 4:5 Classification of Employees.

- A. Life and AD&D Insurance: Both employer-paid life and accidental death & dismemberment (AD&D) insurances are provided for each employee, with a \$50,000 benefit. Employees may purchase additional coverage at their own expense.
- B. Long Term Disability: Employer-paid long term disability insurance is provided for each employee. Following a ninety (90) day waiting period, the monthly benefit consists of sixty percent (60%) of the first \$15,000 of monthly predisability earnings. For details concerning available coverage, the employee should contact the Human Resource Administrator.
- C. Health Insurance: Employer-paid health insurance is provided for each employee. Employees may purchase dependent coverage [through SDSTA's group plan at their own expense.](#) [Based upon funding, the SDSTA may elect to help subsidize the cost of dependent coverage.](#) The coverage [and premiums available varies vary](#) from year to year. For details concerning available coverage [and premiums](#), the employee should contact the Human Resource Administrator.
- D. Dental: Employer-paid dental insurance is provided for each employee. Employees may purchase dependent coverage at their own expense. The coverage available varies from year to year. For details concerning available coverage, the employee should contact the Human Resource Administrator.
- E. Vision: Employer-paid vision care is provided for each employee. Employees may purchase dependent coverage at their own expense. The coverage available varies from year to year. For details concerning available coverage, the employee should contact the Human Resource Administrator.
- F. Medical Expense and Dependent Care Flexible Spending Accounts: Employees may make pre-tax contributions towards a flexible spending account used to pay for qualified medical expenses not covered by an insurance plan and dependent care expenses. For details concerning available coverage and limits, the employee should contact the Human Resource Administrator.

SOURCE: ~~September 2004, August 2006; August 21, 2008; February 20, 2009~~ [March 20, 2015](#) (This revision date supersedes all previous versions).
4:1 Personnel Benefits Policy

G. Paid Holidays:—Holidays -- Ten (10) days per year plus any administrative holidays proclaimed by the Governor of South Dakota or the President of the United States:

- New Years Day
- Dr. Martin Luther King, Jr. Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Native American Day
- Veterans Day
- Thanksgiving
- Christmas

See additional details in Policy 4.3 Holidays.

H. Longevity Pay:—An employee is eligible for longevity pay after seven (7) years of service. See additional details in Policy 4:4:4 Longevity Pay.

I. Retirement:

1. South Dakota Retirement System (SDRS):—Benefits are provided through the SDRS after three (3) years of credited service.—The [Authority SDSTA](#) matches six percent (6%) of employee's contribution each month.—Additional information is available at <http://www.sdrs.sd.gov/>.
2. SDRS Supplemental Retirement Plan:—Employees may make additional pre-tax contributions through the SDRS Supplemental Retirement Plan.—These contributions are unmatched by the [Authority SDSTA](#).—For details concerning this plan, the employee should contact the Human Resource Administrator.
3. Special Pay Plan:—The [Authority SDSTA](#) is a participating unit of the Special Pay Plan, which provides eligible employees with two types of tax-efficient savings options, as well as additional retirement benefits.—Under the Special Pay Plan, eligible members' lump-sum termination payouts are permanently exempt from Social Security taxes and, in addition, are free from federal income taxation until they are withdrawn from the plan.—A participant has the option to invest the funds and any earnings will grow tax deferred until they are distributed from the plan.—Withdrawals may be in the form of a single, lump-sum payment or as additional monthly retirement benefits.—Additional information is available at <http://www.sdrs.sd.gov/spp/>.

J. Social Security:—As mandated by law.

K. Training:—Training is provided or made available as determined by the Executive Director for professional development, work-related training, safety training and computer training.

L. Workers' Compensation:—As required by law. All injuries must be reported immediately and a first report of injury must be completed and signed within three (3) days of the injury.—If injured, an employee should report it to his or her supervisor immediately.

An employee's insurance will terminate on his/her last day of work.—Continuation of Benefits may be available under Title X of the ~~COBRA~~ (Consolidated Omnibus Budget Reconciliation Act ([COBRA](#)) Law of 1985 upon termination.—The employee will need to contact the Human Resource Administrator if continued coverage is desired.

Employees should refer to the insurance summary plan description that was provided at the benefit enrollment meeting for details of each insurance plan or contact the Human Resource Administrator. Eligibility for specific benefits under the Authority's SDSTA's insurance program is governed at all times by the complete terms of the respective group insurance policy. The Authority's SDSTA's benefit programs are subject to change without notice.

SOURCE: ~~September 2004, August 2006; August 21, 2008; February 20, 2009~~ March 20, 2015 9 (This revision date supersedes all previous versions).
4:1 Personnel Benefits Policy

10B. Attached are policies recommended for retirement:

- Policy 3:1:1 Interest Earned
- Policy 3:1:2 Capitalization Policy for Capital Assets
- Policy 3:1:3 Use of Net Assets
- Policy 3:1:4 Definition of Operating Revenues and Expenses
- Policy 3:3 Petty Cash
- Policy 3:4 Invoice and Receipt Policy
- Policy 3:5 Check Writing and ACH Transfer
- Policy 3:5:1 Check and Cash Deposits
- Policy 3:6 Vendor ACH
- Policy 3:7 Monthly Account Reconciliation
- Policy 3.8.1 Overtime Pay
- Policy 3:9 Quarterly and Yearly Employer Tax Report (*new Procedure 3:8B; retire policy*)
- Policy 3:10 Effort Report
- Policy 3:11 Time Sheet – Hourly Employees
- Policy 3:11:1 Inconvenience – Call-Out Pay
- Policy 3:18 Credit Card Use
- Policy 3:19 Reimbursement and Incidental-Related Expenses
- Policy 3:23 Event and Record Keeping
- Policy 3:24:1 Cell Phone
- Policy 3:25 Fixed Asset Inventory

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Interest Earned

NUMBER: 3:1:1

Monies earned by the Authority from investments made through the State Investment Council, pursuant to legislation approved by the South Dakota State Legislature, will be budgeted at the Board's discretion.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Capitalization Policy for Capital Assets

NUMBER: 3:1:2

The Authority will capitalize all expenditures for assets with a life of greater than one year and a cost of \$5,000 or more. They will be depreciated over their estimated useful life on a straight line basis.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Use of Net Assets

NUMBER: 3:1:3

Subject to the provisions of the Property Donation Agreement and the Gift Agreement, the Authority will first use restricted net assets, prior to the use of unrestricted net assets, when an expense is incurred for purposes for which both restricted and unrestricted net assets are available.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Definition of Operating Revenues and Expenses

NUMBER: 3:1:4

The Authority's proprietary fund distinguishes between operating and non-operating revenues and expenses. Operating revenues and expenses of the Authority consist of charges for the use of the underground facility (when placed in service), reimbursement of the costs of operations from Homestake Mining Company and other entities, and the costs of providing those services and facilities, including depreciation and excluding interest cost. All other revenues and expenses are reported as non-operating.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Petty Cash

NUMBER: 3:3

Petty cash disbursements are to be made for items, which would not appear on travel expenses reimbursement forms, or for items available from the office supplies inventory. All petty cash slips shall be dated, explain the purpose of the expenditure, and be signed by the person who received the funds. All disbursements greater than \$1 must be accompanied by a sales receipt.

The petty cash fund shall not exceed \$50.

Cash disbursements are limited to \$50 per occurrence.

A log will be maintained.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Invoice and Receipt Policy

NUMBER: 3:4

When an invoice, receipt or purchase order is received it is date stamped by the employee designated as the Originator, included in the "Monthly Bills to Be Paid" file, and added to the list of bills and budgetary coding to be approved.

The policy is to pay bills on or by the 15th of each month.

The list, and all related invoices and documents, are submitted for approval by the Executive Director. The Originator may not be an authorized signatory. Once the invoices and related documents are reviewed by the Executive Director or Chief Financial Officer and the list of bills is approved by signature of the Executive Director or Chief Financial Officer, the invoices, related documents and the list are ready to be processed for payment by the Accountant.

Every invoice/receipt will be paid via a paper check or through online banking.

Paper and electronic files are kept for the SDSTA's records. The invoices and the signed list of bills are filed together.

Payroll is approved by the Executive Director's or Chief Financial Officer's signature on the payroll listing prepared by the Accountant and is filed every two weeks.

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Check Writing and ACH Transfer

NUMBER: 3:5

A. CHECK WRITING:

Once an invoice approval list is completed and signed by the Executive Director or the Chief Financial Officer, a paper check is written by the bookkeeper or by an individual who has signature authority. The check is then signed by the Chief Financial Officer or the Executive Director. A Board member who has signature authority and whose signature is on file with the bank holding the account may sign the check if the Executive Director or Chief Financial Officer had previously signed the invoice approval list containing reference to that check.

B. ACH TRANSFER OR ONLINE BILL PAY

For payment to be made through ACH or online bill pay the invoice approval procedure is followed. The ACH transfer is activated and an online bank draft or other online bill pay procedure is then approved online by the Chief Financial Officer or the Executive Director, authorized Board member or authorized personnel.

Paper and electronic files are kept for the Authority's records.

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Check and Cash Deposits

NUMBER: 3:5:1

The Executive Director will designate an employee to be the originator. The originator will open the mail and photocopy the cash or check item. When cash or checks are delivered in person, the employee who receives it immediately takes it to the originator. The originator will log the source, amount and date received and then the item will be forwarded to the bookkeeper who then prepares a bank deposit slip. The bookkeeper will stamp any and all checks with a "For Deposit Only" stamp and return the checks and/or cash, along with a completed deposit slip, to the originator. The originator verifies the deposit slip is completed accurately and takes it to the bank holding the Authority's account.

In addition, the originator will write pre-numbered duplicate receipts for all cash and checks received and will make certain that when cash is involved the original receipt is given to the individual paying the cash. The duplicate will be filed.

**South Dakota Science & Technology Authority
Policies and Procedures Manual**

SUBJECT: Vendor ACH

NUMBER: 3:6

A vendor may authorize the Authority to deposit payments directly into the vendor's preferred depository.

A vendor authorizing such an Automated Clearing House (network) ACH transfer will submit details as to its bank and account number to the Authority, which will then provide that information to the Authority's local bank.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Monthly Account Reconciliation Statement

NUMBER: 3:7

After the Authority's monthly bank account reconciliation statement for funds held in the Authority's bank account(s) is completed by the designated employee, it is reviewed by another designated employee.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Overtime Pay

NUMBER: 3:8:1

- A. All employees other than salaried full-time employees who work more than forty (40) hours in a work week are eligible for overtime compensation. Hours worked in excess of forty (40) hours per work week are computed at time and one-half of the employee's regular rate. Employees and Supervisors are expected to adjust hours worked during the work week whenever possible to avoid an overtime liability. For example:

The employee on a Monday through Friday schedule who worked ten (10) hours on Monday, eight (8) hours each on Tuesday, Wednesday and Thursday, would work six (6) hours on Friday and be given two hours of comp time on that same Friday. If the employee had worked forty (40) hours during the week and was instructed to work overtime on Friday, the employee would be paid time and one half for the overtime worked.

- B. To calculate hours worked for overtime pay, begin counting hours with the first hour worked. When forty (40) hours actually worked is reached, hourly employees will be paid time and one-half for hours over forty (40). In computing overtime hours, holiday hours (except as noted otherwise) annual leave, military leave, and any other leave time will not be considered as hours worked for overtime purposes.
- C. Sufficient military and court and jury leave will be allowed only to bring hours paid in the week up to the number of hours the employee is normally scheduled to work. Employees may, at the discretion of the Executive Director, be required to report to work during hours outside of the military or court and jury leave. Employees who are on military leave or court and jury leave will be paid the leave hours at straight time irrespective of other hours worked during the week. The leave time will not be counted as hours worked. Holiday hours will not count as hours worked for purposes of computing overtime unless specifically approved by the Executive Director. Criteria used for approval will be availability of employees to work, the type of work performed, budget restrictions and whether the work is scheduled or is an emergency situation. A combination of hours worked, leave time and holiday pay should not exceed forty (40) hours per week unless prior approval for overtime was obtained. Overtime hours worked will not be carried over into a different workweek and given as time off.

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Quarterly and Yearly Employer Tax Report

NUMBER: 3:9

A. FORM 940:

1. Federal Unemployment Taxes (FUTA) Form:

a. *ONCE YEARLY*

The Authority's accounting firm or accounting staff will provide this report to the Authority. The Executive Director reviews, verifies and signs the report, which is sent along with a check for the amount due for the entire year unless earlier deposits were made.

B. Form 941:

1. Payroll taxes need to be paid:

a. *EACH PAY PERIOD*

The Authority's accounting firm or accounting staff will provide the Authority the information regarding the payroll tax amounts to be deposited each pay period. The Authority will use the online EFTPS phone response system if payment is required.

b. *QUARTERLY*

The Authority's accounting firm or accounting staff will provide the Quarterly 941 form to the Authority, which will use the online EFTPS phone response system, if payment is required.

The report is to be reviewed, verified and signed by the Executive Director and mailed to the IRS each quarter.

C. South Dakota Unemployment Taxes (SUTA) Form:

1. SUTA needs to be paid:

a. *QUARTERLY*

The Authority's accounting firm or accounting staff will print a report that will be very similar to the actual report that is sent in. Data from this report are transferred to the paper SUTA Report or filed online. The Executive Director will review, verify and sign this report, and it will be sent with a check for the amount due each quarter to the Unemployment Insurance Division of South Dakota.

Paper copies of all of the above are kept in the Authority files.

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Effort Report – Salaried Employees

NUMBER: 3:10

Salaried employees are required to submit effort reports at the end of each pay period.

A spreadsheet and/or database record will be maintained for each salaried employee's vacation and sick leave accrual and for effort reports as necessary. This information will be maintained in each employee's individual file.

There will be no deductions in pay for days during which fewer than eight (8) hours were worked.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Time Sheet – Hourly Employees

NUMBER: 3:11

Hourly employees (full-time, part-time and temporary) are required to complete and sign a time sheet at the end of each pay period.

The time sheet will be reviewed by the Supervisor. If accurate, it will be approved by signature of the Supervisor. If not, the timesheet will be returned to the employee for correction.

Signed time sheets will be referred to in compiling employee leave records as well as payroll records. The time sheet also serves as the effort report as necessary.

The time sheets will be kept in each employee's individual file.

A spreadsheet and/or database record will be maintained for each employee's hours worked along with vacation and sick leave accrual.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Inconvenience – Call-Out Pay

NUMBER: 3:11:1

Hourly employees called in to work other than their regular shift will be guaranteed a minimum of three (3) hours straight-time pay. The call-out provision will apply when employees are called in to work on their day off, or are called back to work after leaving their regularly scheduled shift. The call-out provision will apply only when the work required was not arranged in advance with the employee. Employees who are held over at the end of a regularly scheduled shift will be paid at the applicable rate of pay for the additional time which they work.

SOURCE: Policy retired March 20, 2015.

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South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Credit Card Use

NUMBER: 3:18

Two credit cards have been issued to the Authority upon the signature of the Sanford Laboratory Director and the Procurement Specialist. The credit cards are limited to use by the Authority for Authority related business and travel expenses. These two credit cards shall not be used for any personal travel related or other expenses of an employee.

Charges may be made against the card by employees, upon prior approval of the Executive Director, the Sanford Laboratory Director, or the Chief Financial Officer.

Any charge exceeding \$5,000 must be approved in advance by the Executive Director, the Sanford Laboratory Director, or the Chief Financial Officer.

The monthly invoice is to be reviewed by the Chief Financial Officer. The Accountant is to assign each charge to a budget category and include the total amount due on the list of items to be paid per Policy 3:4 Invoice and Receipt Procedures. Supporting documentation must accompany the credit card statement.

Payment follows established invoice payment procedures per Policy 3:4 Invoice and Receipt Procedures.

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Reimbursement of Incidental Related Expenses

NUMBER: 3:19

Employees and Board members may be reimbursed for incidental expenses related to Authority business, such as film, recording tape, after-hours shipping and mailing etc., when requesting money from the petty cash fund is not feasible. This is limited to \$500 per occurrence. Normal reimbursement policies will be followed.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Event and Meal Record Keeping

NUMBER: 3:23

The purpose of an event, meal, etc. paid for by the Authority and the names of those in attendance and how they relate to Authority business (as much as is logical and practical) will be recorded and will be kept with the bill or invoice.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Cell Phone

NUMBER: 3:24:1

The Executive Director will be compensated as the Board deems reasonable and necessary for cell phone charges associated with Authority business.

Additional Authority employees, as deemed necessary by the Laboratory Director, may be compensated for cell phone charges associated with Authority business.

POLICY RETIRED

South Dakota Science & Technology Authority
Policies and Procedures Manual

SUBJECT: Fixed Asset Inventory

NUMBER: 3:25

The Authority shall maintain an accurate account of all furniture and equipment. An annual inventory shall be made as close as possible to the last week of June each year, and the property files checked and updated, if necessary. As items are purchased (or donated) their date of purchase, source of purchase, cost, serial numbers, etc. shall be noted.

The Chief Financial Officer is responsible for conducting an annual inventory and shall report any changes to the Executive Director and Board of Directors.

10C. FYI - Attached are new and updated procedures (no action required)

- Procedure 2:2A Equal Opportunity and Affirmative Action Procedure (*new*)
- Procedure 3:1A Accounting and Audit Procedures (*new*)
- Procedure 3:8A Salary and Hourly Payroll Procedure (*new*)
- Procedure 3:8B Employer Tax Reporting Procedure (*new*)
- Procedure 3:33A PPE Reimbursement Procedure (*updated*)



South Dakota Science & Technology Authority

Policies and Procedures Manual

SUBJECT: Equal Opportunity and Affirmative Action Procedures

NUMBER: 2:2A

The South Dakota Science and Technology Authority (“SDSTA”) is an equal opportunity employer and takes affirmative action as called for by applicable laws and Executive Orders to employ and to advance in employment all persons regardless of their status as individuals with disabilities or protected veterans and bases all employment decisions only on valid job requirements.

The practices and procedures set forth herein comprise the SDSTA’s written Affirmative Action Program for Veterans and Individuals with Disabilities (“AAP”). The SDSTA Human Resources Administrator is responsible for designing, implementing and annually reviewing the SDSTA’s AAP. Additional copies of this AAP are available in the Employee Handbook or upon request.

A. PERSONS PROTECTED AGAINST DISCRIMINATION

The Vietnam Era Veterans’ Readjustment Assistance Act of 1974, as amended, 38 U.S.C. 4212, (VEVRAA) prohibits discrimination against protected veterans, including pre-Jobs for Veterans Act (“JVA”) veterans. Disabled veterans, recently separated veterans, active duty wartime or campaign badge veterans, and Armed Forces Service Medal (AFSM) veterans are protected veterans under VEVRAA.

Section 503 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 793) prohibits discrimination against individuals with disabilities.

Terms used in this subsection A are defined as follows:

1. Veteran – person who served in the active military, naval, or air service of the U.S., and who was discharged or released therefrom under conditions other than dishonorable.
2. Disabled veteran – defined as (1) a veteran of the U.S. military, ground, naval or air service who is entitled to compensation (or who, but for the receipt of military retired pay, would be entitled to compensation) under laws administered by the Secretary of Veteran Affairs, or (2) a person discharged or released from active duty because of a service-connected disability.
3. Armed Forces Service Medal (AFSM) veteran – one who, while serving on active duty in the U.S. military, ground, naval or air service, participated in a U.S. military operation for which an AFSM was awarded pursuant to Executive Order 12985 (61 FR 1209).
4. Recently separated veteran – veteran separated during the three-year period beginning on the date of such veteran’s discharge or release from active duty in the U.S. military, ground, naval or air service.
5. Other protected veteran – a person who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized, under the laws administered by the Department of Defense.
6. Qualified disabled veteran – a disabled veteran who has the ability to perform the essential functions of the employment position with or without reasonable accommodation.

**SOURCE: February 23, 2015 (This revision date supersedes all previous versions).
2:2A Equal Opportunity and Affirmative Action Procedures**

7. Individual with a Disability – defined as any person who, generally, (1) has a physical or mental impairment that substantially limits one or more of such person’s major life activities; (2) has a record of such impairment or (3) is regarded as having such impairment. An individual with disability is “substantially limited” if he or she is unable to perform a major life activity that the average person in the general population can perform, or is significantly restricted as to the condition, manner, or duration under which a person can perform a particular major life activity as compared to the condition, manner, or duration under which the average person could perform that same activity.
8. Qualified individual with a disability – an individual with a disability as defined above who meets the requisite skill, experience, education, and other job-related requirements of the employment position such individual holds or desires, and who is capable of performing the essential functions of the position, with or without reasonable accommodation.
9. Physical or mental impairment – defined as (1) any physiological disorder, or condition, cosmetic disfigurement, or anatomical loss affecting one or more body systems such as neurological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitourinary, immune, circulatory, hemic, lymphatic, skin, and endocrine; or (2) any mental or psychological disorder, such as an intellectual disability (formerly termed mental retardation), organic brain syndrome, emotional or mental illness, and specific learning disabilities.
10. Major life activities include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, sitting, reaching, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, interacting with others, and working.

B. PERSONNEL POLICIES AND PRACTICES

Employment policies, practices and procedures include careful, thorough and systematic consideration of the skills and qualifications of applicants and employees for decisions regarding hiring, promotion, participation in training opportunities and other personnel actions.

Procedures and practices are systematically reviewed to ensure:

- Job descriptions accurately reflect job functions and the physical, mental and emotional capacity to perform assigned tasks competently, and in a manner that does not unreasonably threaten safety, health or property, including participation in emergency procedures applicable to their work location;
- Information requested on job applications and other pre-employment forms is job-related;
- Selection methods are job-related and consistent with business necessity;
- Qualified individuals are treated in a nondiscriminatory manner when hiring, promotion, transfer, and termination actions occur;
- Instruction to SDSTA personnel and management on proper interview techniques includes EEO/AA training;
- Personnel decisions are made on the basis of an individual’s capacity to perform his/her duties and responsibilities and the reasonableness of any necessary job accommodation;
- Consistency with applicable and current legal requirements;
- Administration without regard to an employee’s or applicant’s status as a disabled veteran or individual with a disability;
- Policy and compliance information is posted on company bulletin boards at strategic locations throughout the property;

- Applicants and employees may voluntarily self-identify, discuss their status as a protected veteran or individual with a disability, or request an accommodation by contacting their supervisor or the Human Resources Administrator;
- Modifications to existing or the development of new procedures identified as necessary to ensure equal employment opportunity/affirmative action are implemented in the Affirmative Action Program (AAP);
- Employees and applicants will not be subject to harassment because of disability or their status as a protected veteran; and
- Employees and applicants are aware of the SDSTA's policy prohibiting retaliation because they have objected to discrimination, engaged or may engage in filing a complaint, assisted in a review, investigation, or hearing or have otherwise sought to obtain their legal rights under any federal, state, or local EEO law regarding individuals with disabilities or protected veterans.

C. RECRUITMENT

Employment opportunities are advertised on the [Sanford Lab website](#), in local newspapers, and/or with the South Dakota Department of Labor network. All printed employment advertisements state that “The SDSTA is an Equal Opportunity/Affirmative Action employer committed to the development of a diverse workforce. Applicants are invited to self-identify as an individual with a disability or as a protected veteran. Forms are available on the [Sanford Lab website](#) or upon request from Human Resources.

In accordance with the Americans with Disabilities Act (“ADA”), the SDSTA neither requires medical examinations nor makes inquiries as to whether an applicant is an individual with a disability or as to the nature or severity of such disability prior to an employment offer. However, the regulations allow, and SDSTA may make, pre-employment inquiries regarding the ability of an applicant to perform job-related functions.

The SDSTA administers pre-placement health reviews following an offer of employment. Such health reviews are classification-specific, and are designed to ensure that qualifications are job-related, consistent with business necessity, ensure safe performance of the job, comply with regulatory requirements, limits health risk to staff, and minimize the SDSTA's exposure to liability. Fitness for Duty evaluations are conducted to assure work safety.

D. REASONABLE ACCOMMODATION

Every effort is made to provide reasonable accommodations to otherwise qualified applicants and employees who are disabled or become disabled, and who need assistance to perform the essential functions of their position unless doing so would result in undue hardship.

Terms used in this subsection D are defined as follows:

1. “Reasonable accommodation” generally means any change in the work environment or in the way things are customarily done that enables an individual with a disability or disabled veteran to enjoy equal employment opportunities, including (1) modifications or adjustments to a job application process that enable a qualified applicant who is an individual with a disability or protected veteran to be considered for the position such applicant desires; (2) modifications or adjustments to the work environment, or to the manner or circumstances under which the position held or desired is customarily performed, that enable a qualified individual with a disability or qualified disabled veteran to perform the essential functions of that position; or (3) modifications or adjustments that enable a covered entity's employee with a disability or who is a disabled veteran to enjoy equal benefits and privileges of employment as are enjoyed by its other similarly situated employees without disabilities or who are not disabled veterans.

2. "Undue hardship" is defined as an action requiring significant difficulty or expense to be incurred when considered in light of a number of factors, including the nature and cost of the accommodation in relation to the size, resources, nature, and structure of the employer's operation. Undue hardship refers not only to financial difficulty, but to reasonable accommodations that are unduly extensive, substantial, or disruptive, or those that would fundamentally alter the nature or operation of the business, including the impact on the ability of other employees to perform their duties and the impact on the facility's ability to conduct business.

Generally, the individual with a disability or disabled veteran must inform the employer that an accommodation is needed. Applicants and employees are invited to self-identify their status as an individual with a disability, as defined in Section 503 of the Rehabilitation Act of 1973, as amended, and/or as a protected veteran under the equal employment opportunity provisions of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, if they wish to benefit under this AAP. Forms are available on the [Sanford Lab website](#) or upon request from Human Resources. The applicant or employee is responsible for providing medical documentation to assist in understanding the nature of the employee's functional limitations. When necessary, the SDSTA may require that the employee be examined by an SDSTA-appointed health care provider.

The SDSTA shall keep all information on self-identification confidential, maintain a data analysis file, and shall provide self-identification information to Office of Federal Contract Compliance Programs (OFCCP) upon request.

E. DISCRIMINATION, HARASSMENT AND RETALIATION PROHIBITED

Discrimination, harassment or retaliation because of an employee's disability or status as a protected veteran is prohibited. Employees and applicants of the SDSTA who believe they have been subjected to discrimination, harassment, or retaliation because of disability or their status as a protected veteran may file a complaint as outlined in SDSTA Policy 2:1. All complaints will be investigated and the appropriate corrective action prescribed for substantiated charges.

F. ENFORCEMENT AND COMPLIANCE

Individuals who believe that they have been treated unfairly, have a complaint of harassment or offensive behavior, have been denied equal opportunity or discriminated against are encouraged to immediately notify their supervisor, a higher-level supervisor, the Human Resources Administrator, or the Executive Director before filing a complaint with an external agency such as the Office of Civil Rights (OCR) or Equal Employment Opportunity Commission (EEOC).

All complaints will be investigated. Appropriate corrective action will take place immediately if the investigation supports the charge or violation of policy, and may include disciplinary action up to and including termination. Information will be kept as confidential as possible; however, the SDSTA cannot guarantee complete confidentiality as certain information may have to be revealed to conduct an effective investigation.

G. SUBCONTRACTORS

The SDSTA will flow down all applicable requirements to subcontractors.



South Dakota Science & Technology Authority

Policies and Procedures Manual

SUBJECT: Accounting and Audit Procedures

NUMBER: 3:1A

Accounting and audit procedures have been developed by the South Dakota Science and Technology Authority (SDSTA) to insure internal controls, cash management, and compliance with other necessary financial and accounting requirements of applicable federal, state and local regulations.

A. Internal Controls

The SDSTA has established and maintains a system of accounting and audit procedures which define basic duties and responsibilities, safeguard SDSTA assets, and identify and correct any errors and irregularities in the financial records on a timely basis.

The Chief Financial Officer (CFO) shall direct and monitor adherence to generally accepted accounting principles to ensure compliance with all applicable laws and regulations.

The Audit Committee, as mandated by the SDSTA Audit Committee Charter is the pro-active steward for oversight of the financial reporting and disclosure process for SDSTA. Audit Committee members are appointed annually to fulfill the responsibilities and duties detailed in the Charter.

B. SDSTA Funds

1. SDSTA Policy 3:26 Management and Control of Certain Funds authorizes the establishment of the Closure Fund, the Indemnification Fund and the General Operating Fund.
 - a. The Closure Fund maintains an unencumbered balance of \$1,000,000, reduced only by any sums expended by the SDSTA for closure, reclamation, restoration, remediation and subsequent monitoring of the Assets as required by any Governmental Authority pursuant to any Environmental, Health and Safety Law. Interest earned on the principal of the Closure Fund shall remain in and become a part of the Closure Fund. In the event the balance of the Closure Fund decreases below \$1,000,000 for any other reason, the SDSTA shall promptly restore it to a minimum balance of \$1,000,000.
 - b. The Indemnification Fund maintains an unencumbered balance of \$10,000,000, reduced only by any sums actually spent by the SDSTA for indemnification of the Homestake Indemnified Parties. In the event the balance of the Indemnification Fund decreases below \$10,000,000 for any other reason, the Authority shall promptly restore the amount of any decrease to the Indemnification Fund. Interest earned on the principal of the Indemnification Fund shall be transferred to the General Operating Fund not less often than annually.

- c. The General Operating Fund consists of all other accounts and monies established by and appropriated to the SDSTA and other investments in which the SDSTA is authorized to invest its funds.

General Operating funds may be used for activities related to general operating costs, rehabilitation, development and operation of the Assets for the purposes established by the SDSTA and consistent with the Agreement, including solicitation of scientific, research and development projects to use the Assets, as defined in the "Property Donation Agreement between and among Homestake Mining Company of California, the State of South Dakota and the South Dakota Science and Technology Authority, dated April 14, 2006" (PDA).

- d. The CFO shall prepare semi-annual certifications showing the balance in each of the Closure, Indemnification and General Operating Funds and shall make them available for public inspection.

2. Check and Cash Deposits

The CFO or Executive Director will designate an employee to be the originator. The originator will open the mail and photocopy the cash or check item. When cash or checks are delivered in person, the employee who receives it immediately takes it to the originator. The originator will log the source, amount and date received and then the item will be forwarded to the bookkeeper who then prepares a bank deposit slip. The bookkeeper will stamp any and all checks with a "For Deposit Only" stamp and return the checks and/or cash, along with a completed deposit slip, to the originator. The originator verifies the deposit slip is completed accurately and takes it to the bank holding the SDSTA's account.

In addition, the originator will write pre-numbered duplicate receipts for all cash and checks received and will make certain that when cash is involved the original receipt is given to the individual paying the cash. Duplicate receipts are filed in the CFO's office.

3. The SDSTA will request the transfer of funds from the State Treasurer's Office to the SDSTA's local bank account as necessary. Quarterly bank statements for SDSTA's local bank account will be provided to the South Dakota State Auditor and the South Dakota State Treasurer consistent with SDCL 4-4-3.
 - a. SDSTA will prepare a voucher and email it to the State Treasurer's office and to the Bureau of Finance and Management (BFM).
 - b. The SDSTA will mail the signed original voucher to the State Treasurer's office.
 - c. The BFM will load the document onto the State's accounting system.
 - d. The SDSTA will keep copies of these transactions.
4. Reconciliation – A designated employee shall complete a monthly bank account reconciliation statement for funds held in the SDSTA's bank account(s). Once completed, each bank reconciliation is reviewed by another designated employee.

- C. The SDSTA's proprietary fund distinguishes between operating and non-operating revenues and expenses.
1. Operating revenues and expenses of the SDSTA consist of charges for the use of the underground facility (when placed in service), reimbursement of the costs of operations from Homestake Mining Company and other entities, and the costs of providing those services and facilities, including depreciation and excluding interest cost.
 2. All other revenues and expenses are reported as non-operating.
- D. Asset Capitalization – The SDSTA will capitalize all expenditures for assets with a life of greater than one year and a cost of \$5,000 or more. They will be depreciated over their estimated useful life on a straight line basis.
- E. Fixed Asset Inventory – The SDSTA shall maintain an accurate account of all furniture and equipment. As items are purchased (or donated), their date of purchase, source of purchase, cost or fair market value, serial numbers, warranty period, etc. shall be noted. An annual inventory shall be made as close as possible to the last week of June each year, and the property files checked and updated, if necessary.
- F. Budgeting – It is the responsibility of the CFO to oversee the budget process. The CFO will offer general guidance and define the goals of the SDSTA.
1. Monies earned by the SDSTA from investments made through the State Investment Council, pursuant to legislation approved by the South Dakota State Legislature, will be budgeted at the Board's discretion.
 2. Department budgets will be developed with the assistance of Project Controls and Department Directors.
- G. Financial Statements
1. The Deltek Accounting System is the foundation of the SDSTA's official accounting records.
 2. The CFO shall prepare monthly financial statements, including:
 - a balance sheet and a statement of income and expenses;
 - a budget-to-actual report for all accounts included in the annual operating budget; and
 - a cash flow statement.
 3. The monthly statements will be finalized by the 10th business day of the following month.
 4. The monthly statements shall be reviewed by the Executive Director prior to distribution to the SDSTA Board of Directors.
- H. Indirect Rate Analysis -- An indirect rate analysis is prepared annually. Upon acceptance by Lawrence Berkeley National Laboratory (LBNL) for the federally funded subcontract, the rate will be used for charging subcontracts.
- I. Petty Cash – The Petty Cash Fund may be used for reimbursement for purchased items not included on travel expense reimbursement forms or not available from the

office supplies inventory. All petty cash slips shall be dated, state the purpose of the expenditure, and be signed by the person receiving the funds. Disbursements greater than \$1 must be accompanied by a sales receipt. Petty cash disbursements are limited to \$50 per occurrence. A log is maintained by the CFO. The fund will be reconciled monthly and replenished by the CFO as needed.

J. Invoice and Receipt Procedures

When an invoice or receipt is received it is date stamped by the employee designated as the Originator, included in the 'Monthly Bills to Be Paid' file, and added to the list of bills and budgetary coding to be approved.

The list, and all related invoices and documents, are submitted for approval by the Executive Director or CFO. The Originator may not be an authorized signatory. Once the invoices and related documents are reviewed by the Executive Director or CFO and the list of bills is approved by signature of the Executive Director or CFO, the invoices, related documents and the list are ready to be processed for payment by the Accountant.

Approved invoices are paid by paper check, Automated Clearing House (ACH) through online bill pay, or wire transfer.

1. Once an invoice approval list is completed and signed by the Executive Director or the Chief Financial Officer, a paper check is written by the bookkeeper or by an individual who has signature authority. The check is then signed by the Chief Financial Officer or the Executive Director. A Board member who has signature authority and whose signature is on file with the bank holding the account may sign the check if the Executive Director or Chief Financial Officer had previously signed the invoice approval list containing reference to that check.
2. ACH or Online Bill Pay – For payment to be made through ACH or online bill pay the invoice approval procedure is followed. The ACH transfer is activated and an online bank draft or other online bill pay procedure is then approved online by the Chief Financial Officer or the Executive Director, authorized Board member or authorized personnel.
3. Vendor – A vendor may authorize the SDSTA to deposit payments directly into the vendor's preferred depository.
4. Reimbursement of Incidental Expenses – Reimbursement for incidental expenses in excess of \$50 related to SDSTA business, such as film, recording tape, after-hours shipping and mailing, etc., shall be by submitting the reimbursement form prescribed by the SDSTA together with the required documentation of expenses incurred. Reimbursement is limited to \$500 per occurrence. Under no circumstances will the SDSTA reimburse for alcoholic beverages.
5. Credit Card Payments – The monthly invoices for the two SDSTA credit cards are viewed by the CFO. The person within in the Finance Department designated as the Accountant will assign each charge to a budget category and include the total amount due on the list of items to be paid as outlined in Section J. Supporting documentation must accompany the credit card statement.

6. Paper and electronic files are kept as official SDSTA records following Records Retention Policy 3:31. The invoices and the signed list of bills are filed together.

K. Annual audit of financial records

An independent audit of all financial records shall be conducted annually.

The results of the annual audit report shall be provided to the SDSTA Board of Directors.

L. Reporting Compliance or Ethical Issues

SDSTA employees have a responsibility to report suspected fraudulent or other dishonest acts to their supervisor, Human Resources Administrator, Executive Director, or the SDSTA Board of Directors.

Employees can ask questions or raise concerns about suspected or actual compliance or business ethics issues with their supervisor, manager, Human Resources Administrator, the Executive Director, or by calling the SDSTA Ethics Hotline (605-722-8650 extension 314).

Employees raising questions and/or concerns in good faith are protected against retaliation.



South Dakota Science & Technology Authority Policies and Procedures Manual

SUBJECT: Salary and Hourly Payroll Procedures

NUMBER: 3:8A

Salaries and hourly wage rates for South Dakota Science and Technology Authority (SDSTA) employees shall be fixed by the Executive Director and reviewed by the Personnel Committee of the Board of Directors.

Procedures have been established to administer the payroll and time reporting functions of the SDSTA efficiently, effectively and in accordance with generally accepted accounting principles, SDSTA policies, and applicable laws and regulations.

A. Salaried Employees:

Salaried employees are required to submit effort reports at the end of each pay period.

To calculate salary per pay period, take the annual salary and divide that amount by 26 pay periods.

Example: $\$45,000 / 26 = \$1,730.77$ per pay period

SDSTA salaried employees are exempt from overtime per the Fair Labor Standards Act (FLSA) criteria. There will be no deductions in pay for days during which fewer than eight (8) hours were worked.

B. Hourly Employees:

Paychecks for hourly employees will vary from paycheck to paycheck, as the number of working hours and overtime in each pay period fluctuates.

Example: $\$11.00 / \text{Hour} \times 80 \text{ hours} = \880

C. Overtime Pay:

All employees other than salaried full-time employees who work more than forty (40) hours in a work week are eligible for overtime compensation. Hours worked in excess of forty (40) hours per work week are computed at time and one-half of the employee's regular hourly rate. Employees and Supervisors are expected to adjust hours worked during the work week whenever possible to avoid an overtime liability.

For example: The employee on a Monday through Friday schedule who worked ten (10) hours on Monday, eight (8) hours each on Tuesday, Wednesday and Thursday, would work six (6) hours on Friday and be given two hours of comp time on that same Friday. If the employee had worked forty (40) hours during the week and was instructed to work overtime on Friday, the employee would be paid time and one half for the overtime worked.

To calculate hours worked for overtime pay, begin counting hours with the first hour worked. When forty (40) hours actually worked is reached, hourly employees will be

paid time and one-half for hours over forty (40). In computing overtime hours, holiday hours (except as noted otherwise) annual leave, military leave, and any other leave time will not be considered as hours worked for overtime purposes.

Sufficient military and court and jury leave will be allowed only to bring hours paid in the week up to the number of hours the employee is normally scheduled to work. Employees may, at the discretion of the Executive Director, be required to report to work during hours outside of the military or court and jury leave. Employees who are on military leave or court and jury leave will be paid the leave hours at straight time irrespective of other hours worked during the week. The leave time will not be counted as hours worked. Holiday hours will not count as hours worked for purposes of computing overtime unless specifically approved by the Executive Director. Criteria used for approval will be availability of employees to work, the type of work performed, budget restrictions and whether the work is scheduled or is an emergency situation. A combination of hours worked, leave time and holiday pay should not exceed forty (40) hours per week unless prior approval for overtime was obtained. Overtime hours worked will not be carried over into a different workweek and given as time off.

D. Inconvenience – Call-Out Pay

Hourly employees called in to work other than their regular shift will be guaranteed a minimum of three (3) hours straight-time pay. The call-out provision will apply when employees are called in to work on their day off, or are called back to work after leaving their regularly scheduled shift. The call-out provision will apply only when the work required was not arranged in advance with the employee. Employees who are held over at the end of a regularly scheduled shift will be paid at the applicable rate of pay for the additional time which they work. i.e. Hours worked in excess of forty (40) hours as a result of the call-out shall be paid at the overtime rate of time and one-half the employee's regular hourly rate of pay.

E. Payroll Process

Each pay period will cover two weeks, beginning with a Saturday and ending on a Friday.

On the Monday following the end of each pay period, hourly and salaried employees turn in timesheets and effort reports to be reviewed for accuracy and, if accurate, are signed by a supervisor. If the time sheet is not accurate, it will be returned to the employee for correction.

The timesheets and effort reports are then given to the designated SDSTA employee for the calculation of payroll with deductions for FICA, Medicare and Withholding Taxes, and retirement.

A spreadsheet and/or database record will be maintained for each salaried employee's vacation and sick leave accrual and for effort reports as necessary. This information will be maintained in each salary employee's individual file.

Signed time sheets will be referred to in compiling hourly employee leave records as well as payroll records. Hours worked will be maintained on a spreadsheet and/or

database record, along with vacation and sick leave accrual. This information will be maintained in each hourly employee's individual file.

The payroll calculation is then reviewed for accuracy and approved by the Executive Director or Chief Financial Officer (CFO).

The payroll amounts are entered into the online banking systems for payment to employees on the Friday following the end of each pay period. If a payday falls on a holiday the business day prior to the holiday will be the pay date.

The deductions for FICA, Medicare, and Withholding are entered into the online banking system each pay period for the Form 941 payroll taxes. Once entered, the transactions are reviewed and approved online by a supervisor/manager.

All transactions for checks and direct deposit are recorded in the SDSTA's accounting system.

Payroll documents shall be retained per SDSTA's Record Retention Policy 3:31.

Payroll is approved by the Executive Director's or CFO's signature on the payroll listing prepared by the Accountant and is filed every two weeks.



South Dakota Science & Technology Authority Policies and Procedures Manual

SUBJECT: Employer Tax Reporting Procedures

NUMBER: 3:8B

The South Dakota Science and Technology Authority (SDSTA) has established the following procedures to report and to pay applicable state and federal taxes.

A. Federal Unemployment Taxes (FUTA) Form 940: The SDSTA is exempt from paying Federal Unemployment Taxes.

B. Employer's Federal Tax Return Form 941:

The SDSTA accounting staff enter employee's deductions for FICA, Medicare, and Withholding taxes into the online banking system each pay period. Employee's withholding amounts and the employer's portion of Social Security and Medicare taxes are reported on Form 941. The frequency of payments to the IRS is determined by the amount of taxes reported the previous year.

1. Payroll taxes need to be paid:

a. *EACH PAY PERIOD*

The SDSTA's accounting firm or accounting staff will provide the Authority the information regarding the payroll tax amounts to be deposited each pay period. The SDSTA will use the online EFTPS phone response system if payment is required.

b. *QUARTERLY*

The SDSTA's accounting firm or accounting staff will provide the Quarterly 941 form to the SDSTA, which will use the online EFTPS phone response system, if payment is required.

The report is to be reviewed, verified and signed by the CFO or the Executive Director and mailed to the IRS each quarter.

C. South Dakota Unemployment Taxes (SUTA) Form:

South Dakota's unemployment insurance program is financed by employers through payroll taxes which, in addition to federal unemployment taxes paid directly to the federal government, help finance the various South Dakota Department of Labor and Regulation programs such as placement, labor market information and training of workers to meet industry needs in addition to paying the administrative costs of the state unemployment insurance program.

1. SUTA needs to be paid:

a. *QUARTERLY*

The SDSTA's accounting firm or accounting staff will print a report that will be very similar to the actual report that is sent in. Data from this report are transferred to the paper SUTA Report or filed online. The CFO or Executive Director will review, verify and sign this report, and it will be sent with a check

for the amount due each quarter to the Unemployment Insurance Division of South Dakota.

Paper copies of all of the above are kept in the SDSTA Finance Department files.



South Dakota Science & Technology Authority Policies and Procedures Manual

SUBJECT: Personal Protective Equipment Reimbursement Procedure

NUMBER: 3:33A

The South Dakota Science and Technology Authority (SDSTA) will reimburse the purchase of Personal Protective Equipment (PPE) on an individual basis to SDSTA employees that specifically require PPE to perform their work. Per state fiscal year (July 1-June 30), each employee will have access up to \$300 in total reimbursement. Prior approval by their supervisor is required for any type of PPE purchase.

A. General PPE:

1. Non-warehouse items allowable for reimbursement include:
 - a. Hard-toe Shoes
 - b. Rain Suits
 - c. Reflective Clothing
 - d. Fire Retardant (FR) Clothing (an additional \$200 for SDSTA Electricians only)
 - e. Prescription Safety Glasses (costs that are not covered by the SDSTA's safety glass program)
2. Warehouse items that will be provided include:
 - a. Safety Gloves
 - b. Hard Hats
 - c. Hard Hat Bands
 - d. Standard Eye Protection
 - e. Ear Protection
 - f. Respirators (replacement cartridges)
 - g. Fall Arrest Systems
 - h. Arm Guards
 - i. Hot Work Coverings

If an employee chooses to purchase any stocked warehouse item(s) elsewhere, each item purchased must be approved by the Environment, Health and Safety Department for ANSI compliance before use. This amount will be deducted from the \$300 per employee budget.

B. Specialty PPE:

The SDSTA will also provide specialty PPE to be used in projects that involve metal and electrical work. The employee should confirm with their supervisor if an item is allowable for reimbursement prior to making any purchase.

FR clothing for electricians is required; therefore an additional \$200 is available for the purchase of FR clothing. If other Operations personnel elect to wear FR clothing instead of the already provided hot work coats, they must use their \$300 allocation for such purchases.

C. Underground Clean Laboratory Space PPE:

**SOURCE: January 29, 2015 (This revision date supersedes all previous versions).
3:33A Personal Protective Equipment Reimbursement Procedure**

The SDSTA will provide reimbursement for clean hard-toe shoes required for working in clean room areas in the underground laboratory. The SDSTA will provide all other PPE required. Additional PPE or specialized or duplicate tools should be purchased through the respective department's budget. This reimbursement will not be included in the \$300 budget described in Section A.

D. Procedure for PPE Reimbursement:

1. Complete a Purchase Order (green sheet) form and submit to the supervisor for approval in advance of purchasing any PPE items.
2. Upon supervisor approval, purchase the item(s) and submit a completed/signed SDSTA expense report to the supervisor for reimbursement. Blank expense forms can be found at the following link in DocuShare: <https://docs.sanfordlab.org/docushare/dsweb/View/Collection-15601> ("SDSTA Expense Report"). The original merchant receipt must detail the individual item(s) purchased (i.e. the generic reference "clothing" will not be accepted) and must be attached to the completed expense report.
3. Reimbursement takes approximately one month to complete from the submittal date. Applicable sales tax will be included in the reimbursement.

Executive Session – Chairperson Casey Peterson

Recommended Action:

Motion to enter into executive session to discuss personnel matters and to consult with legal counsel concerning contractual and legal matters.

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Report from Executive Session – Chairperson Casey Peterson

Recommended Action:

Motion to accept report from Executive Session.

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Date and time of next meeting – Chairperson Casey Peterson

2015 SDSTA Board of Directors meeting schedule:

- Friday, March 20, 2015 at 9:00 am (MT)
- **Tuesday, June 30, 2015 at 8:30 am (MT) – (followed by the Sanford Lab Homestake Visitor Center Grand Opening at 11am)**
- Thursday, September 17, 2015 at 9:00 am (MT)
- Thursday, December 17, 2015 at 9:00 am (MT)

Meeting location:

SDSTA

630 E. Summit Street, Lead SD 57754

Administration Building/2nd Floor Vault

Please contact Mandy Knight if you have any questions.

Direct Line: 605.722.4022

Cell: 605.641.0475

Recommended Action:

Motion to approved suggested dates and times as listed above.

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Board Comments – Chairperson Casey Peterson
