South Dakota Science and Technology Authority

Board Meeting September 19, 2019



630 East Summit Street Lead, SD 57754

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Call to Order—Chairperson Casey Peterson

1A. Call Roll

Dr. Ani Aprahamian

Mr. Dana Dykhouse

Ms. Pat Lebrun

Mr. Roger Musick

Mr. Casey Peterson

Mr. Ron Wheeler

Dr. Bob Wilson

Dr. James Rankin, ex-officio member

1B. Introduce guests

1C. Public comment form (remind audience copies of form are located on sign-in table)

Procedure for Public Comment Periods

Pursuant to SDCL 1-25-1 as amended by House Bill 1172 in the 2018 Legislative Session the procedure for conducting public comment periods during meetings of the South Dakota Science and Technology Authority (SDSTA) shall be as follows:

The chair of the SDSTA shall reserve a period for public comment, limited at the chair's discretion, at each meeting.

Before the beginning of the meeting, all persons who wish to make comments during the comment period shall indicate their desire to do so on a form that will be provided by the Executive Director. The form shall indicate the person's name, city of residence and generally describe the matter or matters on which the person wishes to comment.

The amount of time allocated to each interested person who wishes to make comments will be determined at the chair's discretion at each meeting.

Comments must be limited to matters which are under the jurisdiction of the SDSTA.

All persons making public comments at meetings of the SDSTA must do so in a manner that maintains civility. Comments which contain offensive language or profanity will not be tolerated.

Agenda Item: 01

Pase intentionality

South Dakota Science and Technology Authority Agenda Item: 02 September 19, 2019 Board Meeting **Approve Agenda—Chairperson Casey Peterson** Attached is the SDSTA Board agenda for the September 19, 2019 meeting.

Pase intentionality



AGENDA

South Dakota Science and Technology Authority 630 East Summit Street, Lead, South Dakota Meeting of the Board of Directors

Thursday, September 19, 2019 at 8:00 AM (MT)

Yates Education & Outreach Conference Room

Public (Open) Session: 1-669-900-6833, Meeting ID: 605 722 4021, https://zoom.us/join

SDSTA Mission: To advance compelling underground, multidisciplinary research in a safe work environment and to inspire and educate through science, technology and engineering.

	Title	Report	Recommendations
1.	Call to order A. Call roll B. Introduce guests C. Reminder request for public comment form	Chair Casey Peterson	Informational
2.	Approve agenda	Chair Casey Peterson	Motion to approve agenda
3.	Approve minutes	Chair Casey Peterson	Motion to approve the June 20 and September 6, 2019 minutes
4.	Conflict of interest disclosure	Mr. Tim Engel	Informational
5.	Conflict of interest disclosure and waiver under SDCL CH. 3-23 A. Disclosure—Casey Peterson and Ron Wheeler	Mr. Tim Engel	
6.	Update on scoping study for potential STEM institute	Ms. Elizabeth Freer	Informational
7.	 Report from Audit Committee A. Internal Controls meeting and preaudit meeting update B. Appointment of new Audit Committee member 	Ms. Pat Lebrun Chair Casey Peterson	Informational
8.	Financial Report A. Financial statements B. SD Investment Council Letter C. FY end inventory listing D. FY end per diem listing	Mr. Mike Headley Ms. Nancy Geary	8B. Motion to approve interest earning accrual at percentage discussed for fiscal year 2019. Motion to accept report as presented Motion to authorize the Executive Director
9.	Approve Cooperative Agreement	Mr. Mike Headley	Motion to authorize the Executive Director and Legal Counsel to finalize the terms of the Cooperative Agreement with DOE, and to authorize the executive director to sign the final agreement

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 72 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

Thursday, September 19, 2019 at 8:00 AM (MT)

Yates Education & Outreach Conference Room

Public (Open) Session: 1-669-900-6833, Meeting ID: 605 722 4021, https://zoom.us/join

	Title	Report	Recommendations
10.	MOU between SDSTA and FRA for LBNF/DUNE	Mr. Mike Headley	Motion to authorize the Executive Director and Legal Counsel to negotiate the final terms of the Memorandum of Understanding between SDSTA and FRA for LBNF/DUNE and authorize the Executive Director to sign the MOU
11.	SURF Foundation (SURFF)A. SURFF updateB. Ratification of establishment of initial board of directors	Mr. Mike Headley Mr. Brian Bonde	11B. Motion to ratify membership of initial board of directors, as presented
12.	 Report from Executive Director A. Declarations of Surplus (4)—steel rail, thermal image gun, incinolets and wood guides B. SDSTA quarterly update 	Mr. Mike Headley	See board packet
	C. LZ update	Mr. Charles Maupin	Presentation
	D. LBNF update	Mr. Joshua Willhite	Presentation
			Motion to accept executive director's report
13.	SDSTA policies and procedures	Mr. Mike Headley	Motion to approve updated Publications, Sexual Harassment Investigation and Telephone Reimbursement Policies, as presented
14.	Executive session (closed meeting)	Chair Casey Peterson	Motion to enter executive session to discuss personnel matters and to consult with legal counsel concerning contractual matters
15.	Report from executive session	Chair Casey Peterson	Motion to accept executive session report
16.	Confirm date and time of next meeting	Chair Casey Peterson	Thursday, December 12 at 9:00am (MT); – catered lunch to follow
17.	Public comments	Chair Casey Peterson	
18.	Board comments	Chair Casey Peterson	
19.	Adjourn	Chair Casey Peterson	Motion to adjourn
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Meeting of the Board of Directors Thursday, September 19, 2019

SDSTA Board Member Terms of Service, Committees and Schedule

	Board Members and Terms of Service					
	Board Members	Appointed	Term Expires			
1.	Dr. Ani Aprahamian	Re-appointed December 10, 2015	December 9, 2021			
2.	Mr. Dana Dykhouse, Vice-Chair	Re-appointed August 1, 2014	August 14, 2020			
3.	Ms. Patricia Lebrun, Secretary-	Re-appointed August 5, 2016	August 8, 2022			
	Treasurer					
4.	Mr. Roger Musick	Appointed September 19, 2018	August 21, 2022			
5.	Mr. Casey Peterson, Chair	Re-appointed August 25, 2015	August 8, 2021			
6.	Mr. Ron Wheeler, Vice-Chair	Re-appointed April 10, 2014	April 9, 2020			
7.	Dr. Robert Wilson	August 24, 2015	August 8, 2021			
8.	Dr. James Rankin, ex-officio member	SDSM&T President as of Jan 8, 2018	}			
	Committees and Members (2019-2020)					
	Audit Committee Members	Nominating Committee Members				
	(Sep): tbd	(Jun):				
	Pat Lebrun-Chair	Dana Dykhouse				
	Dana Dykhouse	Roger Musick				
	Casey Peterson, ex-officio					
	2	019 Board Schedule				
	February 21, 2019	9:30 am (MT)	Special Telephonic			
	Thursday, March 21 2019	8:00 am (MT)	E&O Bldg			
	Thursday, June 20, 2019	8:00 am (MT)	E&O Bldg			
	September 6, 2019	8:00 am (MT)	Special Telephonic			
	Thursday, September 19, 2019	8:00 am (MT)	E&O Bldg			
	Thursday, December 12, 2019	9:00 am (MT)	E&O Bldg, lunch			

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South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Approve Minutes—Chairperson Casey Peterson

Attached are the following SDSTA Board Minutes:

- June 20, 2019 annual meeting
- September 6, 2019 telephonic special meeting

Agenda Item: 03

Pase intentionally

South Dakota Science and Technology Authority Board of Directors Meeting Minutes Thursday, June 20, 2019 Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 8:04 AM Mountain Time (MT) on Thursday, June 20, 2019, in the Education and Outreach (E&O) Building Conference Room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE

Vice Chairperson Dana Dykhouse (by phone)

Secretary/Treasurer Patricia Lebrun (in person)

Mr. Roger Musick (in person)

Chairperson Casey Peterson (in person)

Dr. James Rankin, ex-officio (by phone)

Vice Chairperson Ron Wheeler (in person)

Dr. Robert Wilson (by phone)

MEMBERS OF THE BOARD ABSENT

Dr. Ani Aprahamian

SDSTA STAFF

Mr. Tim Baumgartner, Facility Infrastructure Director

Mr. Tim Engel, Legal Counsel

Ms. Nancy Geary, Chief Financial Officer

Mr. Pat Hasson, Waste Water Treatment Plant (WWTP) Operator

Mr. Mike Headley, Executive Director

Mr. David Johnson, WWTP Operator

Ms. Mandy Knight, Administrative Services Manager

Mr. Ken Noren, WWTP Foreman

Mr. KC Russell, Cultural Diversity Coordinator

Mr. John Scheetz, Environmental Manager

Ms. Constance Walter, Communications Director

Ms. Natasha Wheeler, Administrative Assistant

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Mr. Brian Bonde, Advanced Certified Fundraising, LLC President

Ms. Julie Dahl, Education and Outreach (E&O) Science Education Specialist (BHSU)

Ms. Elizabeth Freer, dialogue LLC Principal and Owner

Ms. Gina Gibson, Sanford Underground Research Facility Artist-in-Residence (BHSU)

Mr. Cody Honeywell, Legal Counsel Intern (May Adam, Gerdes & Thompson LLP)

Ms. Donna Job, Sanford Lab Homestake Visitor Center Executive Director

Dr. Peggy Norris, E&O Deputy Director (BHSU)

Mr. Alex Portal, Black Hills Pioneer Journalist

Ms. Debra Wolf, E&O Director (BHSU)

ITEM 1. CALL TO ORDER

Chairperson Casey Peterson called the annual board meeting for the fiscal year ended June 30, 2019 to order at 8:04 AM (MT). Roll call was held. Chairperson Peterson, Ms. Pat Lebrun, Mr. Roger Musick

and Mr. Ron Wheeler were present in person. Mr. Dana Dykhouse and Dr. Bob Wilson joined by phone. Dr. Ani Aprahamian was absent.

Chairperson Peterson then asked audience members to introduce themselves.

He said if anyone from the audience had any questions they would like the board to address, to please complete the public comment form located at the sign-in table and time will be given at the end of the agenda to discuss.

ITEM 2. APPROVE AGENDA

Chairperson Peterson asked if there were any modifications to the agenda. Hearing none, Chairperson Peterson asked for a motion to approve the agenda.

Motion by Mr. Wheeler and seconded by Mr. Musick to approve the agenda as presented. Motion passed unanimously.

ITEM 3. APPROVE MINUTES

Chairperson Peterson asked for any comments on the March 21, 2019 Minutes. There were none.

Motion by Mr. Musick and seconded by Mr. Wheeler to approve the Minutes of the March 21, 2019 meeting as presented. Motion passed unanimously.

ITEM 4. GENERAL CONFLICT OF INTEREST DISCLOSURE

SDSTA Legal Counsel Mr. Tim Engel invited members of the board to disclose anything that might be construed to be a conflict of interest relative to their role on the board.

No conflicts of interest were disclosed.

ITEM 5. DISCLOSURES AND WAIVER UNDER SDCL CH. 3-23

Mr. Engel said in regard to disclosures and waivers under SDCL Ch. 3-23, he polled the board members prior to the meeting and there were none. No further action was required.

ITEM 6. REPORT FROM THE NOMINATING COMMITTEE

Mr. Dykhouse said this year's nominating committee was made up of Mr. Musick and himself, and they met on May 23, 2019 for the purpose of nominating the slate of officers for the 2019-2020 board year. They agreed Chairperson Casey Peterson, Vice Chairperson Dana Dykhouse, Vice Chairperson Ron Wheeler and Secretary/Treasurer Patricia Lebrun, the current slate of officers, should serve another year. The nominating committee spoke with each officer individually and they all agreed to continue in their current roles. Mr. Dykhouse recommended the current slate of officers continue to serve for the 2019-2020 board year.

ITEM 7. ELECTION OF OFFICERS

Chairperson Peterson asked the board if anyone intended to offer additional nominations and there were none. According to the procedure adopted in 2008, Chairperson Peterson called for a motion to elect the slate recommended by the nominating committee, effective as of the conclusion of the June 20, 2019 board meeting.

Motion by Mr. Wheeler and seconded by Mr. Musick to elect Casey Peterson as Chairperson, Dana Dykhouse as Vice Chairperson, Ron Wheeler as Vice Chairperson Patricia Lebrun as Secretary/Treasurer, to take office at the end of the June 20, 2019 board meeting. Motion passed unanimously.

Before Item No. 8 was introduced, SDSTA WWTP Foreman Ken Noren, WWTP Operators David Johnson and Pat Hasson, Environmental Manager John Scheetz and Facility Infrastructure Director Tim Baumgartner assembled for a photo and recognition for receiving the South Dakota Department of Environment and Natural Resources certificate for Excellence in Operation and Maintenance of a Waste Water Treatment Facility. This is the eleventh year in a row the SDSTA WWTP team has received this award. The board congratulated the team.

ITEM 8. APPROVAL OF SDSTA MAINTENANCE SUPPORT FACILITY CONTRACT

Mr. Headley said Sanford Lab is making progress toward construction on the maintenance support facility and has received funding from former Governor Daugaard and Governor Noem. Requests for Proposals (RFPs) were sent out and three companies responded with bids. Dean Kurtz Construction was favored unanimously by the review team. Mr. Headley noted Dean Kurtz Construction's exceptional commitment to safety, and recommended the board authorize him to sign the contract for the first phase of the project—a \$411,000 budget for the demolition of existing buildings and preconstruction of the maintenance support facility. He also said the rest of the contract budget will be reviewed and presented for approval by the board at a future meeting.

Motion by Mr. Wheeler and seconded by Ms. Lebrun to approve the Maintenance Support Facility contract between SDSTA and Dean Kurtz Construction and to authorize the SDSTA Executive Director to sign the contract. Motion passed unanimously.

ITEM 9. APPROVAL OF FY2020 OFFICE OF RISK MANAGEMENT INTERGOVERNMENTAL AGREEMENT

Mr. Headley said the agreement between the South Dakota Office of Risk Management and SDSTA is updated annually and this year's significant changes are updates to codes and standards to be upheld by SDSTA. He said all parties have reviewed the agreement and are ready to sign the updated agreement. He also noted, in response to Chairperson Peterson's question about leased space, that although safety standards in the leased space are dictated by Fermilab and Department of Energy (DOE), their standards and SDSTA's standards are very similar so as to avoid confusion for users and staff.

Motion by Mr. Musick and seconded by Mr. Dykhouse to approve FY2020 Intergovernmental Agreement between the Bureau of Administration, Office of Risk Management of the State of SD and SDSTA and to authorize the SDSTA Executive Director to sign the agreement. Motion passed unanimously.

ITEM 10. APPROVAL OF MIKE HEADLEY'S SERVICE ON SNOLABI BOARD OF DIRECTORS

Mr. Engel explained that Mr. Headley was invited to join the SNOLAB board of directors, adding that SNOLAB is an underground lab in Sudbury, Ontario, Canada. The position is voluntary and SNOLAB will pay Mr. Headley's expenses. The Chairperson and legal counsel discussed conflicts of interest previously, when the offer was first made, and Mr. Headley has agreed to mitigate those by disclosing the conflict and recusing himself from votes as necessary. Insurance issues have also been resolved, with SNOLAB providing primary D&O coverage, and SDSTA directors' and officers' liability insurance providing secondary coverage. Mr. Wheeler said that having Mr. Headley serve on SNOLAB's board raises the esteem of SDSTA's Executive Director and allows SDSTA to network and see what else is going on in similar organizations. Dr. Wilson asked if Mr. Headley's role would necessitate reciprocity; the board agreed it would not be an issue at this time—Mr. Wheeler reminded the board that all members are appointed by the governor. He also said Mr. Headley can resign from SNOLAB's board without board approval, and Mr. Headley noted the position is a three-year term.

Motion by Mr. Musick and seconded by Mr. Wheeler to approve Mike Headley's service on the SNOLAB Institute as a member of the Board of Directors. Motion passed unanimously.

ITEM 11. UPDATE ON IMPLEMENTATION OF SURF FOUNDATION

Mr. Bonde with Advanced Certified Fundraising, LLC said the SURF Foundation will serve to renovate the Yates Education and Outreach (E&O) Building, endow the E&O program, develop a Science, Technology, Engineering and Math (STEM) institute, support new and existing SURF education programs, and support special projects such as Sanford Lab Homestake Visitor Center, other initiatives and ongoing operational support. He said creation of the foundation includes a South Dakota Corporation, an initial board of directors and bylaws, an IRS Employer Identification Number and an IRS 501(c)(3) approved status. He added the Foundation would be a 509(a)(3) supporting organization. Mr. Bonde set out milestones to include the following: SD Articles of Incorporation in June, a tax ID number, an initial board, governance documents, a 501(c)(3) application, and an initial staff search in July, the hiring of a foundation director and foundation office setup in August, the onboarding of staff, prospect identification, and strategic planning and branding in September, development of foundation materials, campaign design and case of support concepts in October, foundation roll-out, campaign objectives and project costs set in November, and a campaign design, case statement, and feasibility study interviewees identified in December of 2019.

In 2020, Mr. Bonde's milestones included the scale of giving and naming opportunities, a feasibility study questionnaire and the finalization of interviewees in January, conducting the study and donor cultivation in February, and the completion of the study with work beginning on the capital campaign in March. Mr. Headley said that funds from the SURF budget are available to hire the foundation director, and board members will overlap between the SURF Foundation and SDSTA to maintain an alignment of objectives.

ITEM 12. UPDATE ON SCOPING STUDY FOR POTENTIAL STEM INSTITUTE

Ms. Freer of dialogue LLC said scoping study work was initiated in mid-March 2019, including the identification of over 30 institutes for potential candidates to include in the study. She said in April there were introductory meetings with the City of Lead and Lead-Deadwood schools, 10 institutes were chosen and reviewed, five institutes were chosen by the task force as finalists to be visited and cost estimates with potential itineraries were developed for site visits. The short list of institutes to be studied were chosen by an averaged relevance score, and in May, a draft was created for the "STEM Institute Study Overview". Points of contacts were identified, and introductory emails were sent out. There were informative calls with the leadership of Kavli Institute in Santa Barbara and the Perimeter Institute, and there was a site visit to Science Museum Minnesota's IDEAL Center. In June, informative calls were held with the leadership of the Mathematical Science Research Institute, a site visit was scheduled for Perimeter from September 4-6 and findings to date were compiled into a report format. The Bayview Science Institute was contacted, and contacting the Aspen Center for Physics is underway. In the coming months, Ms. Freer said site visits will be scheduled and confirmed for Mathematical Sciences Research Institute and Perimeter Institute, DESY will be studied and contacted, site visits will be completed, and findings will be compiled into report format. She said an interim board report should be expected in September, and a final board report and presentation is scheduled for December 2019. She explained the timeline has been extended due to scheduling conflicts with other institutions, but that does not affect budget costs and project completion is not time-sensitive.

ITEM 13. AUDIT COMMITTEE

ITEM 13A. ANNUAL APPOINTMENT OF MEMBERS

Chairperson Peterson said he would like the standing members of the audit committee to serve again, Ms. Lebrun and Mr. Dykhouse, with support from Chairperson Peterson. No disagreements were voiced, and Chairperson Peterson expressed his gratitude to the audit committee.

ITEM 13B. ANNUAL REVIEW OF AUDIT CHARTER

Ms. Lebrun said the audit charter is reviewed every year and the audit committee will meet early in September, prior to the board meeting. The audit charter will be reviewed, and an audit schedule will be set for the current fiscal year.

ITEM 14. FINANCIAL REPORT

ITEM 14A. UPDATE ON INTERNAL CONTROL AUDIT

Ms. Geary said the RFP for an internal control audit went out this week and RFP deadlines have been set. The prospective bidder questions are due on July 9, and responses will be posted on the SDSTA website by end-of-business July 12. She said a contract is expected to be awarded by August 30, with the audit beginning October 1. Mr. Headley added, the deadline for completion by auditors has not been set. Ms. Lebrun said both local and national companies have been contacted to submit RFPs. Ms. Lebrun asked for a list of RFP recipients and Mr. Headley said he would forward the list to the board.

ITEM 14B. FINANCIAL SUMMARIES

Ms. Geary said SDSTA is still under budget for the month of May for the SURF services contract with Fermilab, but a list of items has been identified for procurement. She said there are still 140,000 liters of xenon yet to be delivered, and the July 1 interest due on the procurement loans has been recorded. Ms. Geary noted that asset category of the balance sheet for improvement costs are less than the prior year because the Compact Accelerator System Performing Astrophysical Research (CASPAR) experiment development costs have been written off, and funds notated as "special session" are related to the maintenance support facility project.

Motion by Mr. Wheeler and seconded by Mr. Musick to accept the financial report as presented. Motion passed unanimously.

ITEM 14C. FY2020 BUDGET

While the overall FY2020 budget is lower than FY2019, Ms. Geary said there are increases in a few notable areas of the FY2020 budget, including an increase to the board of directors category for the STEM study, to the executive office for a new director of the SURF Foundation and to the Science E&O for the Davis-Bahcall scholarship program. She said the summary report includes nine months for the new cooperative agreement with DOE and three months remaining on the current Fermilab contract. A number of other experiment contracts are included on the summary report. The budget overall totals \$26,313,091 for all funding sources. She said this amount is lower than last year's budget due to the expected conclusion of the Ross Shaft rehabilitation contract as well as LZ moving into operations mode. Ms. Geary said there are three items on the CAPEX budget sheet, including ground monitoring at the Sanford Lab Homestake Visitor Center, the LZ Xenon Gas/Foundation interest, and the Maintenance Support Facility construction. Mr. Headley said an additional \$2.5 million will need to be added to the budget for the Maintenance Support Facility construction via a Letter of Agreement in Item 14D.

ITEM 14D. DISCUSS LETTER OF AGREEMENT

Mr. Headley said SDSTA has a draft letter agreement from the SD Governor's Office of Economic Development for \$2.5 million, with the same terms as the \$4 million agreement accepted a few months ago and asked that the new agreement be approved. Mr. Headley also thanked Governor Noem for her strong commitment to Sanford Lab as well as Senior Policy Advisor Mr. Aaron Scheibe for his support.

Motion by Mr. Musick and seconded by Mr. Wheeler to accept the Letter of Agreement between the State of South Dakota, Governor's Office of Economic Development and SDSTA agreement, and to authorize the Executive Director to sign the Agreement. Motion passed unanimously.

Motion by Mr. Wheeler and seconded by Ms. Lebrun to approve FY2020 budget as modified with the addition of \$2,500,000.00 provided under the Letter of Agreement dated June 20, 2019 (Item 14D). Motion passed unanimously.

ITEM 15. REPORT FROM EXECUTIVE DIRECTOR

ITEM 15A. DECLARATIONS OF SURPLUS (4)

Mr. Headley began his report by describing four declarations of surplus he approved. The surplus items included three Flygt pumps, a Delta Optical Comparator and miscellaneous shotcrete items.

ITEM 15B. SDSTA QUARTERLY UPDATE

Mr. Headley introduced Ms. Gina Gibson, a multimedia artist and professor of digital communication at Black Hills State University (BHSU). In late spring, she approached SDSTA to request serving as an artist-in-residence, and a Memorandum of Understanding has been signed for a one-year term. Ms. Gibson explained she will spend time over the course of the year taking photos and at the end of her residency, she would have an art show and provide a talk at the 2020 Neutrino Day. She will also participate in the Deep Talks series this coming year, and has coordinated with BHSU to give talks on campus. She explained she was inspired by her participation in an exhibition held at Sanford Lab six years ago called, *Into the Dark, Artists Exploring Dark Matter*.

Mr. Headley reported SDSTA has gone 13 months with no reportable injuries and both total recordable case (TRC) and days away restricted transferred (DART) scores are currently at zero—the best possible score. He also reviewed the Environmental, Safety and Health (ESH) program's current improvement activities, including five completed ESH Manual chapter updates, new or rewritten, four chapters currently under review and five chapters being drafted, as well as training modules, work packages, JHAs and Standard Operating Procedures currently in development, review and/or revision.

Mr. Headley noted lab updates include strong federal funding with a FY2020 House budget including \$171 million for LBNF/DUNE and \$25 million for SURF, continued LBNF pre-excavation work with DOE IPR planned for July, continued LZ installation scheduled to conclude by the end of 2019 and LZ xenon delivery tracked for delivery by the end of 2019, and approved FY2020 rates from the June 18 SD Authority Captive Insurance Company annual meeting.

In regard to cultural activities, SDSTA E&O staff attended the Tiospaye program NERDS ceremony at South Dakota School of Mines and Technology (SDSM&T), and SDSTA hosted SD Gaining Early Awareness and Readiness for Undergraduates Program (GEAR UP) students the week of June 17-20. The Davis-Bahcall scholars program and internships have started and Neutrino Day planning is well underway for the event on July 13.

ITEM 15C. E&O UPDATE AND DAVIS-BAHCALL SCHOLAR INTRODUCTIONS

Ms. Wolf introduced the E&O update with "Why" the program is important and said every student deserves high-quality, engaging, relevant, equitable and rigorous science learning opportunities. She said the number of students reached increased over last year through curriculum units, classroom presentations, field trips and other activities. She explained new curriculum units are ready to be introduced this fall, including *Ghost Particles* and *Too Much/Too Little*, and *Move It!* And *Seismic Science* are units currently under development. Ms. Wolf said *Ghost Particles* is designed for 5th and 6th grade students to learn about magnitude (the size of things), *Too Much/Too Little* is designed for upper-elementary aged students to learn about engineering design related to water, and *Move It!* is designed for early-elementary aged students to learn about forces (pushes and pulls). She added, there are currently 13 curriculum units in place and three more soon-to-be-launched, including four units for grades K-12, four units for grades 6-8, five units for grades 3-5, and three units for grades 9-12. Ms. Wolf said current E&O work also includes support for teachers, including Just-in-Time support, online courses, SDMath/SDSci Teacher leadership Cohort, and week-long professional development.

Ms. Wolf said that E&O focuses on supporting K-12, but also continues to explore academic support post-secondary. She said, seven interns are working at SDSTA this summer and eight Davis-Bahcall scholars have been participating in lectures and tours. They will also be participating with Neutrino Day on July 13 and giving presentations about their experiences on July 14. Ms. Wolf expressed her gratitude to the board for supporting E&O and its programs and invited the Davis-Bahcall scholars to introduce themselves. The scholars includ: Grayson Nelson (Box Elder), Maycee Wieczorek (Piedmont), Abbie Woodard (Spearfish), Sam Schleich (Alexandria), Amy Pham (Sioux Falls), Ann Madson (Sioux Falls), Nolan Maher (Bismarck, ND) and Curtis Peterson (Parade).

Motion by Mr. Wheeler and seconded by Mr. Musick to accept executive director's report as presented. Motion passed unanimously.

Dr. Rankin left the meeting at 9:28 AM.

ITEM 16. SDSTA POLICIES AND PROCEDURES

ITEM 16A. ANNUAL REVIEW OF P&P

Mr. Headley said a new policy has been created to prohibit the possession of firearms on site, unless the bearer's job description necessitates carrying a firearm. He said, at this time, no one on site should carry a gun. Mr. Engel added, the policy also covers other weapons such as certain knives, crossbows and explosives; the policy includes the rationale for its adoption; the accidental discharge of a gun, for example, could be especially hazardous in an underground lab environment.

Mr. Headley also introduced a new policy for SDSTA to use a third party for any sexual harassment investigations. Mr. Engel noted that the State of South Dakota has adopted a similar policy, and it covers not only allegations of harassment, but also retaliatory adverse employment actions and provisions for proper procedures of accusations against the executive director or legal counsel.

Motion by Mr. Musick and seconded by Ms. Lebrun to approve the Firearms, Explosives and Other Weapons Policy and Sexual Harassment Investigation Policy as presented. Motion passed unanimously.

ITEM 16B. ANNUAL STATEMENTS AFFIRMING COMPLIANCE WITH FINANCIAL CONFLICT OF INTEREST POLICY

Chairperson Peterson reminded the board to review and to each sign the financial conflict of interest statement by the end of the meeting.

ITEM 17. EXECUTIVE SESSION

Motion by Mr. Wheeler and seconded by Mr. Musick to enter into executive session to discuss personnel matters and to consult with legal counsel concerning legal and contractual matters. Motion passed unanimously.

Mr. Dykhouse left the meeting following the executive session.

The board recessed at 9:48 AM for a short break followed by executive session. They reconvened in open session at 10:46 AM.

ITEM 18. REPORT FROM EXECUTIVE SESSION

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

Motion by Mr. Musick and seconded by Mr. Wheeler to approve the executive session report. Motion passed unanimously.

ITEM 19. CONFIRM DATE AND TIME OF NEXT MEETING

Chairperson Peterson asked if anyone had concerns with the board meeting scheduled for Thursday, September 19 at 8:00 AM (MT). No objections were made.

ITEM 20. PUBLIC COMMENTS

Chairperson Peterson announced he did not receive any public comment request forms. There were no questions from the audience.

ITEM 21. BOARD COMMENTS

Dr. Wilson thanked the board for supporting the stability of the SDSTA.

Mr. Wheeler said it was a good meeting and the progress is always good to see. He said he is impressed with the strides made by the E&O team and the Sanford Lab safety record. He also thanked the staff.

Mr. Musick remarked it was good meeting and said he is always amazed with how well the SDSTA keeps the board informed between board meetings.

Mr. Engel thanked Ms. Knight for administrative assistance with an upcoming meeting.

Mr. Headley thanked the team and said he is proud of the work happening here. He also noted the ESH Advisory Committee reviewed the site several weeks ago and were impressed. He thanked the team, Ms. Knight and Ms. Wheeler for helping with the meeting, the board for another fiscal year of service, and Mr. Engel for the hours he puts in working with SDSTA and its partners.

Ms. Lebrun said it is reassuring to attend board meetings and see progress continuing. She thanked everyone who makes it work.

Chairperson Peterson thanked Mr. Headley, Ms. Knight, Ms. Wheeler, E&O and the WWTP team. He also recognized the Sanford Lab safety record and its improvement over the years.

ITEM 22. ADJOURN

Chairperson Peterson called for a motion to adjourn.

Motion by Mr. Musick and seconded by Mr. Wheeler to adjourn. Motion passed unanimously.

Meeting adjourned at 10:46 AM.

South Dakota Science and Technology Authority Board of Directors Special Telephonic Meeting Minutes Friday, September 6, 2019 Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 8:00 a.m. Mountain Time (MT) on Friday, September 6, 2019, via teleconference. Listening posts for the public were established at the office of the SDSTA at 630 E. Summit Street, Lead, South Dakota, and at the Dolly-Reed Treehouse Conference Room 226, 711 East Wells Avenue, Pierre, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE BY TELEPHONE

Vice-Chairperson Dana Dykhouse Secretary/Treasurer Patricia Lebrun Mr. Roger Musick Chairperson Casey Peterson Vice-Chairperson Ron Wheeler Dr. Robert Wilson

MEMBERS OF THE BOARD ABSENT

Dr. Ani Aprahamian

Dr. James Rankin, ex-officio member

SDSTA STAFF IN ATTENDANCE

Mr. Tim Engel, Legal Counsel (by phone)

Mr. Mike Headley, Executive Director (by phone)

Ms. Mandy Knight, Administrative Services Manager

Ms. Natasha Wheeler, Administrative Assistant

GUESTS IN ATTENDANCE

No guests were present.

ITEM 1. CALL TO ORDER

Chair Peterson called the meeting to order at 8:00 a.m. (MT). Chair Peterson declared a quorum was present, consisting of board members Mr. Dykhouse, Ms. Lebrun, Mr. Musick, Chairperson Peterson, Mr. Wheeler and Dr. Wilson. Dr. Aprahamian and ex-officio member Dr. Rankin were absent.

Chair Peterson asked participants at the listening posts in Pierre and Lead to identify themselves. There was no response at the Pierre listening post. Ms. Knight and Ms. Wheeler were present at the Lead office, and SDSTA Legal Counsel Mr. Tim Engel and Executive Director Mike Headley joined by phone.

ITEM 2. APPROVE AGENDA

Chair Peterson asked for a motion to approve the agenda.

Motion by Mr. Wheeler and second by Mr. Musick to approve the agenda as presented. By roll call vote, the motion passed unanimously.

ITEM 3. GENERAL CONFLICT OF INTEREST DISCLOSURE

Mr. Engel said it has been a recommendation of the Board of Internal Control that a general conflicts of interest disclosure be included on public board agendas. He opened the floor for any member of the board, who feels they have anything that might be construed to be a conflict of interest, to disclose it.

No conflicts of interest were disclosed.

ITEM 4. DISCUSSION OF SUPPLEMENTAL AGREEMENT N. 3 TO TEMPORARY CONSTRUCTION EASEMENT

Mr. Headley said a few years ago the SDSTA entered into a temporary construction easement with the Department of Energy (DOE) to support the Long-Baseline Neutrino Facility (LBNF) construction project and define areas of shared use where LBNF infrastructure will be installed. Originally, the LBNF plan was to run a new power supply from the Ross substation to the Ross Hoist building on an existing overhead trestle. Recently, the Kiewit-Alberici Joint Venture (KAJV) construction team recommended to route the power supply and fiber conduits underground to result in a cost savings to the project and better protect the wires. Mr. Headley said the existing easement does not include the area where the project needs to run the underground power cables. The change of Supplemental Agreement No. 3, located on the last page of the easement, increases additional area between the Ross substation and the Ross Hoist building. He said KAJV would like to start work immediately, resulting in today's special meeting. Mr. Headley asked for any comments or questions and there were none.

Motion by Mr. Wheeler and second by Ms. Lebrun to approve the Temporary Construction Easement – Supplemental Agreement No. 3 with the DOE/LBNF Project as presented and authorize Chairperson Peterson to sign the Agreement. By roll call vote, the motion passed unanimously.

ITEM 5. PUBLIC COMMENTS

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

ITEM 6. ADJOURN

Chair Peterson reminded board members the next regularly scheduled board meeting will be held on Thursday, September 19 at 8:00 a.m. (MT) in the Education and Outreach Building and called for a motion to adjourn.

Motion by Ms. Lebrun and second by Mr. Musick to adjourn. By roll call vote, the motion passed unanimously.

Meeting adjourned at 8:10 a.m. (MT) on September 6, 2019.

South Dakota Science and Technology Authority September 19, 2019 Board Meeting	Agenda Item: 04
Conflict of Interest Disclosure—Mr. Tim Engel	
Recommended Action: Informational.	

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South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Disclosures Under SDCL CH. 3-23—Mr. Tim Engel

Attached are completed conflict of interest disclosures under SDCL CH. 3-23 for the following:

- Casey Peterson, waiver attached.
- Ron W. Wheeler, waiver attached.

Recommended Action:

5A. Motion to grant waivers or decline to grant waivers for Mr. Casey Peterson and Mr. Ron Wheeler.

Agenda Item: 05

State Authorities/Boards/Commissions - Annual Disclosure Form

ANNUAL DISCLOSURE FOR AUTHORITY/BOARD/COMMISSION MEMBER PURSUANT TO SDCL CHAPTER 3-23

THIS IS A PUBLIC DOCUMENT

Name of Member: Casey C. Peterson

Name of Board, Authority or Commission: South Dakota Science and Technology Authority

The Member shall disclose below any contract in which the Member has an interest or from which the Member derives a direct benefit if the contract is:

- 1. With the state agency to which the Member's board, authority or commission is attached for reporting or oversight purposes and which contract requires the expenditure of government funds;
- 2. With the state <u>and</u> which contract requires the approval of the Member's board, authority or commission <u>and</u> the expenditure of government funds; <u>or</u>
- 3. With a political subdivision of the state if the political subdivision approves the contract and:
 - a. Is under the regulatory oversight of the authority, board, or commission, or
 - b. Is under the regulatory oversight of the agency to which the Member's board, authority or commission is attached.

The Member shall disclose the contract even though no additional authorization is needed from the Member's board, authority or commission to have an interest or derive a benefit from the contract.

The Member shall also identify every entity in which the Member possesses an ownership interest of five percent or greater if:

- 1. The entity receives grant money from the State, either directly or by a pass-through grant or
- 2. The entity contracts with the State or any political subdivision for services.
- 1. Contracts in which you have an interest pursuant to SDCL Chapter 3-23 and which do not violate any other provision of law Provide the following for each contract in which you have, or will have, an interest. For further information see SDCL 3-23-2.1 and 3-23-3.1.

Description of the contract	Parties	Description of your interest/role in the contract	Date contract was previously disclosed; if applicable

2. Contracts in which you have a direct benefit pursuant to SDCL Chapter 3-23 - Provide the following for each contract from which you derive, or will derive, a direct benefit. For more information see SDCL 3-23-2, 3-23-2.2 and 3-23-3.1.

Description of the contract	Parties	Description of the direct benefit	Date contract was authorized

State, either directly or by a pass-through grant, or that contract with the State or any political subdivision for services

— Provide the following for each such entity. See SDCL 3-23-3.1.

Description of the contract or grant

Party in which you possess the state agency or subdivision interest

See attached Exhibit A for Casey Peterson, LTD

The member shall complete a separate authorization request for any contract identified above that requires authorization from the Member's board, authority or commission in order for the Member to legally derive a direct benefit.

Signature of Member:

Alexander

Alexander

Battached Exhibit A for Casey Peterson, LTD

The member shall complete a separate authorization request for any contract identified above that requires authorization from the Member's board, authority or commission in order for the Member to legally derive a direct benefit.

EXHIBIT A

Parties to the Contract	Board Member's Role	Purpose of Contract
Belle Fourche Irrigation District	none	audit services
Belle Fourche River Watershed Partnership	none	audit services
Black Hills State University	none	audit services
Butte-Meade Sanitary District	none	audit services
City of Box Elder	none	audit services
City of Summerset	none	audit services
Town of Hermosa	none	audit services
Yellow Jacket Foundation	none	audit services
Black Hills Educational Benefits Cooperative	none	audit services
Black Hills Special Services Cooperative	none	audit services
Custer School District	none	audit services
Haakon School District	none	audit services
Harding County School Distrct	none	audit services
Hot Springs School District	none	audit services
Meade School District	none	audit services
Rapid City School District	none	audit services
SD Ellsworth Development Authority	none	accounting consulting
Town of Piedmont	none	audit services
Lincoln County Sheriff	none	accounting consulting
Hill City School District	none	accounting consulting
Wall School District	none	accounting consulting
Town of Keystone	none	audit services
Pennington County Housing & Redevelopm	none	audit services
City of Pierre	none	audit services
Black Hawk Water User District	none	audit services

State Authorities/Boards/Commissions - Annual Disclosure Form

ANNUAL DISCLOSURE FOR AUTHORITY/BOARD/COMMISSION MEMBER PURSUANT TO SDCL CHAPTER 3-23

THIS IS A PUBLIC DOCUMENT

Name of Member: Ron W. Wheeler

Name of Board, Authority or Commission: South Dakota Science and Technology Authority

The Member shall disclose below any contract in which the Member has an interest or from which the Member derives a direct benefit if the contract is:

- 1. With the state agency to which the Member's board, authority or commission is attached for reporting or oversight purposes <u>and</u> which contract requires the expenditure of government funds;
- 2. With the state <u>and</u> which contract requires the approval of the Member's board, authority or commission <u>and</u> the expenditure of government funds; <u>or</u>
- 3. With a political subdivision of the state if the political subdivision approves the contract and:
 - a. Is under the regulatory oversight of the authority, board, or commission, or
 - b. Is under the regulatory oversight of the agency to which the Member's board, authority or commission is attached.

The Member shall disclose the contract even though no additional authorization is needed from the Member's board, authority or commission to have an interest or derive a benefit from the contract.

The Member shall also identify every entity in which the Member possesses an ownership interest of five percent or greater if:

- 1. The entity receives grant money from the State, either directly or by a pass-through grant or
- 2. The entity contracts with the State or any political subdivision for services.
- 1. Contracts in which you have an interest pursuant to SDCL Chapter 3-23 and which do not violate any other provision of law Provide the following for each contract in which you have, or will have, an interest. For further information see SDCL 3-23-2.1 and 3-23-3.1.

Description of the contract	Parties	Description of your	Date contract was
		interest/role in the contract	previously disclosed; if
			applicable

contract from which you derive, or will derive, a direct benefit. For more information see SDCL 3-23-2, 3-23-2.2 and 3-23-3.1.

Description of the contract	Parties	Description of the direct benefit	Date contract was authorized
Mr. Wheeler acts as a governmental and external affairs consultant.	South Dakota Science and Technology Authority and Ron W. Wheeler	Mr. Wheeler is a party to the contract and will be paid fees and expenses.	Last Addendum authorized 9/18/18

add row

3. Entities in which you possess an ownership interest of five percent or more that receive grant money from the State, either directly or by a pass-through grant, or that contract with the State or any political subdivision for services – Provide the following for each such entity. See SDCL 3-23-3.1.

Description of the contract or grant	Party in which you possess the interest	State agency or subdivision

add row

The member shall complete a separate authorization request for any contract identified above that requires authorization from the Member's board, authority or commission in order for the Member to legally derive a direct benefit.

Signature of	f Member:	S.w. Wheel	, , , , , , , , , , , , , , , , , , ,	 	
Date:09/	10/19				

South Dakota Science and Technology Authority September 19, 2019 Board Meeting	Agenda Item: 06		
Update on Scoping Study for Potential STEM Institute—Ms. Elizabeth Freer			
Recommended Action: Informational.			

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Report from Audit Committee—Ms. Patricia Lebrun

Attached is the Audit Committee Charter dated June 19, 2014.

7A. Internal Controls meeting and preaudit meeting update—Ms. Patricia Lebrun, minutes and audit charter attached.

7B. Appointment of new Audit Committee members—Chairperson Casey Peterson.

Agenda Item: 07



SDSTA Audit Committee Meeting

September 3, 2019

Participants:

Ms. Pat Lebrun, SDSTA Board of Director and Audit Committee Chair Mr. Dana Dykhouse, SDSTA Board of Director/Audit Committee Member Mr. Al Schaefer, SD Department of Legislative Audit, Auditor-in-Charge Ms. Nancy Geary, SDSTA Chief Financial Officer

A pre-audit teleconference was held September 3th with discussions on the following:

- 1. Greetings were exchanged and discussions were held concerning the upcoming FY2019 audit. Mr. Schaefer—SD Department of Legislative Audit—noted that this year's audit would not be a full Uniform Guidance Audit, but rather a Fiscal Compliance Audit. This year's scope would primarily entail looking at our indirect cost rate and calculations, sample transactions, xenon inventory, cash entries and other adjustments.
- 2. Mr. Schaefer noted that the rates for FY2019 have not been issued yet, but that the rate per hour would be close to the FY2018 rate of \$68.50/hr. Additionally, Mr. Schaefer will have help from Mr. Paul Mitchell with the State in order to complete the audit in a timely fashion. The audit will start on site September 10th and hopefully be completed by October 7th (the deadline with the State) so it can be included in the State Comprehensive Annual Financial Report (CAFR). Mr. Schaefer noted that he was starting to review the SDSTA Board of Director meeting minutes and would be ready for Ms. Geary to send the FY2019 Audit Compilation spreadsheets to start his review. Additionally, Ms. Geary's Audit Compilation will be sent to SDSTA Board Chairperson Casey Peterson, for review as soon as possible to meet the deadline.
- 3. Further discussions included the upcoming Internal Controls Audit. It has taken longer than anticipated to get in place. Once SDSTA receives the results, the information will be made available to Mr. Schaefer.
- 4. Mr. Schaefer asked if anyone had any concerns or if there was any suspected or known fraud. Ms. Lebrun and Mr. Dykhouse noted no concerns or suspected fraud. If the Board has any issues or concerns, Mr. Schaefer can be contacted at his email,

 Al.Schaefer@state.sd.us or he can be reached at our location # (605) 722-8650. Mr. Schaefer will contract SDSTA Executive Director Mr. Mike Headley to see if he has any questions or concerns.
- 5. Discussion continued concerning the contract held with Lighthouse Services and the website available to employees to report and concerns of suspected fraud. Mr. Dykhouse and Ms. Lebrun noted that the monthly reports from the system do not include any issues.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY AUDIT COMMITTEE CHARTER

STATEMENT OF MISSION

The mission of the South Dakota Science and Technology Authority (SDSTA) Audit Committee is to be the pro-active steward for oversight of the financial reporting and disclosure process for SDSTA, including the investigation of claimed breaches of ethics, theft, fraud, embezzlement and reports of whistle-blowers. Our responsibility is to the SDSTA Board of Directors to report independently on the results of the oversight so as to assist in maintaining and enhancing the quality of the financial reporting. The Audit Committee is committed to communication between and among directors, the external auditor and Chief Financial Officer (CFO).

A. The Audit Committee has the following responsibilities and duties:

1. Appointment

- Annually be appointed by the SDSTA Board of Directors at their annual meeting in June.
- At least one member will be deemed a "financial expert," as defined by applicable law and regulation.

2. Review

- Annually review and update this Charter.
- Annually determine the independence of Audit Committee members through a certification by the SDSTA Board of Director's Chairperson.
- Review the SDSTA's annual financial statements and any reports or other financial information submitted to or from any governmental body, or the public, including any certification, report, opinion or review rendered by the external auditor or the SDSTA CFO
- Review any report or memo or other communication from Federal and State regulators and reviewers, and attend as many entrance and exit conferences as possible.

3. External Auditors/CFO/Independent Counsel/Other Advisors

- The Audit Committee shall have the independent authority to engage any legal counsel or other advisors it deems necessary to carry out its duties.
- Periodically consult with the external auditor out of the presence of management about internal controls and the fullness and accuracy of the company's financial statements.
- Make the selection, retention, and review the performance of, the external auditor, considering independence and effectiveness and approve the fees paid to the external auditor as well as the proposed fee. On an annual basis, the Audit Committee should review and discuss with the external auditor all significant relationships the external auditor has with the company to determine the auditor's independence and consider the appropriateness of the non-audit services prior to their engagement.
- Periodically meet with the CFO on the results of exams, and be available to CFO for appropriate communications at any time they desire the meeting.

4. Financial Reporting Process

• In consultation with the external auditor, review the integrity of the SDSTA's financial reporting processes.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY AUDIT COMMITTEE CHARTER

- Consider the external auditor's judgments about the quality and appropriateness of the SDSTA's accounting principles, as applied in its financial reports and as promulgated by the Governmental Accounting Standards Board.
- Consider and forward to the SDSTA Board of Directors, if appropriate, recommendations
 for major changes to the SDSTA's auditing and accounting principles and practices as
 suggested by the external auditor, management or the CFO.
- Establish regular and separate systems of reporting to the Audit Committee by management and the external auditor regarding any significant judgments made in management's preparation of the financial statements and the Audit Committee's view of each as to appropriateness of such judgments.
- Following completion of the annual audit, review separately with management and the external auditor any significant difficulties encountered during the course of the audit, including any restrictions on the scope of work, or access to required information.
- Review and resolve any significant disagreement among management and the external auditor in connection with the preparation of the financial statements. Review in detail the passed audit adjustments and the materiality levels used by the external auditor, and the impact of Management's estimates used in the financial statement preparation.
- Review with the external auditor and management the extent to which changes or improvements in financial or accounting practices, as approved by the Audit Committee in prior reports or meetings, have been implemented.

5. Ethical and Legal Compliance

- Establish, review and update periodically a Conflict of Interest Policy and ensure that management has established a system to enforce this Policy.
- Review management's monitoring of compliance with the SDSTA's Conflict of Interest Policy, and verify that management has the proper review system in place to ensure that financial statements, reports, and other financial information disseminated to governmental organizations, and the public, satisfy legal requirements.
- Review with SDSTA's retained legal counsel any legal matter that could have a significant impact on the SDSTA's financial statements.
- Periodically review individual committee member education and obtain resources, seminars and materials to keep the level of member's education current.
- Perform any other activities consistent with this Charter, the SDSTA's By-Laws and governing law, as the Audit Committee or the SDSTA Board of Directors deems necessary or appropriate.

6. Reporting

In order to facilitate the proper execution of its duties and responsibilities, the Audit Committee shall conduct its reviews and investigations in a confidential manner. The Audit Committee shall report to the SDSTA Board the results of the Financial Reporting Process, consultations with External Auditors, the CFO or other Advisors, or any other issues they deem important for the SDSTA Board to meet its responsibilities. These reports shall include, but not be limited to, the results of the annual external audit or any internal audit on financial reports or compliance (including difficulties or disagreements encountered, if any, past

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY AUDIT COMMITTEE CHARTER

adjustments, materiality defined by the auditor, any legal matter having a material impact on the report, management letter comments, etc.), the integrity of the financial reporting system, the appropriateness of the accounting principles applied to the financial reports, the status of internal controls, any suggested change to any of the above systems the Audit Committee thinks should be made, any significant report or communication from any other matter that the Audit Committee deems critical information needed by the SDSTA Board. To the extent permitted by applicable law, the Audit Committee's reports to the Board of Directors shall be delivered in closed session.

The Audit Committee shall strive to provide the Board with the information it needs to manage the reporting and accounting for the SDSTA as well as utilize the reports to manage all of the other risks it faces. These reports will be made when information is received and available. The Annual Schedule below outlines some of the reporting dates anticipated.

7. Budget Process

The Audit Committee will meet with the CFO in March to establish the annual budget for the Audit Committee to cover costs for audit fees, legal fees, consulting fees, continuing education travel and costs and miscellaneous costs.

B. Annual Schedule

The Audit Committee will meet at its discretion but the following is a guideline for business to be conducted during the year:

<u>December-January</u> – Meet with external auditors to discuss preliminary audit findings, letters to management, passed adjustments, materiality, management estimates, and quality and appropriateness of accounting principles.

<u>March-June</u> – Present audit findings, letter of comments and other appropriate information to the SDSTA's Board of Directors at SDSTA annual meeting. Meet to update issues on hiring other outside auditors for review, as deemed necessary, of such areas as EDP, compliance, etc.

<u>September</u> – Request proposal for external audit. Meet with CFO.

October/November/December – Meet with CFO to review any issues regarding the audit. Meet to engage external financial auditor on entrance conference. Review all SDSTA regulators' reports (State and/or Federal). Certify as to committee member's independence.

C. Limitations on the Committee's Role:

While the Audit Committee has the responsibilities and powers as stated above, it is not the Committee's duty to audit the SDSTA's financial statements or to determine that the SDSTA's financial statements are complete and accurate in accordance with generally accepted accounting principles (GAAP), as promulgated by the Governmental Accounting Standards Board. These are the responsibilities of management and the independent auditors.

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Financial Report—Mr. Mike Headley

Financial Report:

- 8A. Financial Summaries for August 2019, attached
- 8B. South Dakota Investment Council Letter, attached. (see suggested motion below)
- 8C. Fiscal Year End Inventory Listing, attached.
- 8D. Fiscal Year End Board Per Diem Listing, attached.

Recommended Action:

Agenda Item: 08

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9:33

PAGE 0001

DIVISION: ALL

BALANCE SHEET

ASSETS

	AS OF . 08/31/19
CURRENT ASSETS	
	A 0.470.000.45
First Interstate Checking	\$ 2,172,839.15
First Interstate Other	541.72
Total in Local Checking	2,173,380.87
SD Treas: Indemnification	7,656,569.13
SD Treas: Mine Closure	1,462,524.66
SD Treas: Operating	594,166.11
SD Treas: Sanford	0.40
SD Treas: Sanford Gift #2	29,680.79
SD Treas: Spec Sess - Lab	6,101,751.86
SD Treas: SB196 Transfer	0.27
SD Treas: Experiments	1,341,841.08
Total with SD Treasurer	 17,186,534.30
Billed A/R	•
Unbilled A/R	3,395,882.78
Other A/R	(14,727.86)
Inventory - Supplies	382,296.84
Inventory - Supplies Inventory - Warehouse	2,309,679.01
Other Current Assets	28,955.50
Other Current Assets	423,077.23
Total Current Assets	25,885,078.67
FIXED ASSETS	
Land, Underground & Other	12,633,473.13
Bldgs & Infrastructure	10,079,478.68
Improvements	62,907,485.67
Computer Equipment	458,724.17
Equipment & Fixtures	10,876,194.36
Accum Depr & Amort	(16,668,833.06)
Total Fixed Assets	80,286,522.95
OTHER ASSETS	
Work in Process	1,173,842.61
Pension Deferred Outflows	3,943,908.40
Xenon Purchased	8,164,350.39
Total Other Assets	13,282,101.40
TOTAL ADDETO	=======================================
TOTAL ASSETS	\$ 119,453,703.02
	======================================

9:33

PAGE 0002

DIVISION: ALL

BALANCE SHEET

LIABILITIES & EQUITY

	AS OF 08/31/19
CURRENT LIABILITIES	
Accounts Payable Other Payables	\$ 1,409,426.99 4,862.59
Total Accounts Payable Accrued Payroll Liab	1,414,289.58 1,361,311.49
Total Current Liabilities	2,775,601.07
OTHER LIABILITIES	
LT Xenon Notes Payable Pension Deferred Inflows	6,000,000.00 783,421.31
Total Other Liabilities	6,783,421.31
EQUITY	
Restricted: Indemnificati	7,500,000.00
Restricted: Lab	6,101,751.86
Restricted: Mine Closure	1,462,524.66
Restricted: Sanford Gift2	29,680.79
Restricted: Pension	3,160,487.09
Restricted: Experim. Int.	1,188,667.00
Total Restricted Funds	19,443,111.40
Investment in Gen FA	80,286,522.95
Unrestricted Funds	10,165,046.29
Total Equity	109,894,680.64
TOTAL HARM TIES & FOLUTIV	#==========
TOTAL LIABILITIES & EQUITY	\$ 119,453,703.02
	=======================================

ALL

STATEMENT OF INCOME

FOR THE PERIOD ENDING 08/31/19

	YR-TO-DATE
REVENUE DOE Subcontracts NSF/NASA Subcontracts State Revenue Checking Interest Interest Income	\$ 4,485,476.05 4,445.43 2,500,000.00 522.54 29,147.46
TOTAL REVENUE	7,019,591.48
DIRECT COSTS Direct Labor Board of Directors Capital Outlay >\$5K Contractual Svcs Inventory Supplies Travel - Domestic Travel - Foreign Utilities Other Direct Costs Unallow/Unbill Costs	1,164,239.95 300.00 106,142.57 610,125.02 36,540.46 313,985.23 10,301.44 27,303.96 297,347.42 9,361.61 64,526.95
TOTAL DIRECT COSTS	2,640,174.61
INDIRECT COSTS Fringe Benefits Overhead TOTAL INDIRECT COSTS	880,007.04 1,193,882.53 2,073,889.57
GROSS PROFIT/LOSS ()FROM OPERATIONS	2,305,527.30
OTHER INCOME Water Treatment Miscellaneous Income Other Operating Income TOTAL OTHER INCOME	65,823.39 5,588.09 633.19 72,044.67
OTHER EXPENSES	12,044.61
Reclass Incr Net Assets	(266,775.06)
TOTAL OTHER EXPENSES	(266,775.06)
NET INCOME/LOSS ()	\$ 2,644,347.03

DIVISION: ALL

COMPARATIVE BALANCE SHEET

ASSETS

		AS OF 08/31/19		AS OF 08/31/18		\$ CHANGE	% CHANGE
CURRENT ASSETS							
First Interstate Checking	\$	2,172,839.15	\$	1,643,310.21	\$	529,528.94	32.22%
First Interstate Other	•	541.72	•	3,866.22	•	(3,324.50)	-85.99%
Total in Local Checking		2,173,380.87		1,647,176.43		526,204.44	31.95%
SD Treas: Indemnification		7,656,569.13		7,500,000.00		156,569.13	2.09%
SD Treas: Mine Closure		1,462,524.66		1,432,739.47		29,785.19	2.08%
SD Treas: Operating		594,166.11		582,758.01		11,408.10	1.96%
SD Treas: Sanford		0.40		002,700.01		0.40	100.00%
SD Treas: Sanford Gift #2		29,680.79		129,314.97		(99,634.18)	-77.05%
SD Treas: Spec Sess - Lab		6,101,751.86		123,514.31		6,101,751.86	
SD Treas: SB196 Transfer		0.27		•		0,101,751.86	100.00%
SD Treas: Experiments				2 750 044 25			100.00%
ob freas. Experiments		1,341,841.08 		2,750,011.35		(1,408,170.27)	-51.21%
Total with SD Treasurer		17,186,534.30		12,394,823.80		4,791,710.50	38.66%
Billed A/R		3,395,882.78		2,056,733.86		1,339,148.92	65.11%
Unbilled A/R		(14,727.86)		67,219.62		(81,947.48)	-121.91%
Other A/R		382,296.84		(94,564.85)		476,861.69	-504.27%
Inventory - Supplies		2,309,679.01		2,376,585.40		(66,906.39)	-2.82%
Inventory - Warehouse		28,955.50		29,854.20		(898.70)	-3.01%
Other Current Assets		423,077.23		427,150.33		(4,073.10)	-0.95%
Total Current Assets		25,885,078.67		18,904,978.79		6,980,099.88	36.92%
FIXED ASSETS							
Land, Underground & Other		12,633,473.13		12,633,473.13		-	0.00%
Bldgs & Infrastructure		10,079,478.68		10,079,478.68		-	0.00%
Improvements		62,907,485.67		62,784,754.14		122,731.53	0.20%
Computer Equipment		458,724.17		431,565.17		27,159.00	6.29%
Equipment & Fixtures		10,876,194.36		10,785,282.34		90,912.02	0.84%
Accum Depr & Amort		(16,668,833.06)		(14,921,184.23)		(1,747,648.83)	11.71%
Total Fixed Assets		80,286,522.95		81,793,369.23		(1,506,846.28)	-1.84%
OTHER ASSETS							
Work in Process		1,173,842.61		275,946.90		897,895.71	325.39%
Pension Deferred Outflows		3,943,908.40		4,839,927.07		(896,018.67)	-18.51%
Xenon Purchased		8,164,350.39		6,513,900.39		1,650,450.00	25.34%
Total Other Assets		13,282,101.40		11,629,774.36		1,652,327.04	14.21%
	=:			=======================================	==	=========	==========
TOTAL ASSETS	\$	119,453,703.02	\$	112,328,122.38	\$	7,125,580.64 =======	6.34%
							==========

DIVISION: ALL

COMPARATIVE BALANCE SHEET

LIABILITIES & EQUITY

•		AS OF 08/31/19	AS OF 08/31/18	\$ CHANGE	% CHANGE
CURRENT LIABILITIES				,	
Accounts Payable	\$	1,409,426.99	\$ 777,541.74	631,885.25	81.27%
Other Payables		4,862.59	3,980.23	882.36	22.17%
Total Accounts Payable		1,414,289.58	781,521.97	632,767.61	80.97%
Accrued Payroll Liab		1,361,311.49	1,196,206.10	165,105.39	13.80%
Total Current Liabilities		2,775,601.07	1,977,728.07	797,873.00	40.34%
OTHER LIABILITIES					
LT Xenon Notes		6,000,000.00	5,000,000.00	1,000,000.00	20.00%
Pension Deferred Inflows		783,421.31 	851,741.96	(68,320.65)	-8.02%
Total Other Liabilities		6,783,421.31	5,851,741.96	931,679.35	15.92%
TOTAL LIABILITIES		9,559,022.38	7,829,470.03	1,729,552.35	22.09%
EQUITY					
Restricted: Indemnificati		7,500,000.00	7,500,000.00	•	0.00%
Restricted: Lab		6,101,751.86	• -	6,101,751.86	100.00%
Restricted: Mine Closure		1,462,524.66	1,432,739.47	29,785.19	2.08%
Restricted: Sanford Gift2		29,680.79	129,314.97	(99,634.18)	-77.05%
Restricted: Pension		3,160,487.09	3,988,185.11	(827,698.02)	-20.75%
Restricted: Experim. Int.		1,188,667.00	2,587,769.00	(1,399,102.00)	-54.07%
Total Restricted Funds		19,443,111.40	15,638,008.55	3,805,102.85	24.33%
Investment in Gen FA		80,286,522.95	81,793,369.23	(1,506,846.28)	-1.84%
Unrestricted Funds		10,165,046.29	7,067,274.57	3,097,771.72	43.83%
TOTAL EQUITY		109,894,680.64	104,498,652.35	5,396,028.29	5.16%
TOTAL LIABILITIES & EQUITY		140 452 702 02	440 200 400 20		
TOTAL LIADILITIES & EQUITY	\$ ==	119,453,703.02	\$ 112,328,122.38	\$ 7,125,580.64 =========	6.34%

COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 08/31/19

========	=======	***************	=====		====	=======================================	=======================================
		YEAR TO DATE		PRIOR YEAR TO DATE		\$ CHANGE	0/ CHANCE
	=======	10 DATE =============	=====		====	\$ CHANGE :============	% CHANGE
DEVENUE							
REVENUE DOE Subcontracts	\$	4,485,476.05	œ	2 254 446 22	đ	4 224 220 02	27.040/
NSF/NASA Subcontracts	Ψ	4,465,476.05	\$	3,254,146.23 7,321.79	\$	1,231,329.82	37.84%
State Revenue		2,500,000.00		2,338.46		(2,876.36) 2,497,661.54	-39.28% 106807.97%
Contributions & Donations		2,300,000.00		125,000.00		(125,000.00)	-100.00%
Checking Interest		522.54		479.01		43.53	9.09%
Interest Income		29,147.46		20,528.03		8,619.43	41.99%
intorcot incomo		20,147.40		20,020.00		0,013.40	41.3370
TOTAL REVENUE		7,019,591.48		3,409,813.52		3,609,777.96	105.86%
DIRECT COSTS							
Direct Labor		1,164,239.95		928,795.43		235,444.52	25.35%
Board of Directors		300.00		407.00		(107.00)	-26.29%
Capital Outlay >\$5K		106,142.57		329,596.71		(223,454.14)	-67.80%
Contractual Svcs		610,125.02		167,488.94		442,636.08	264.28%
Inventory		36,540.46		22,838.78		13,701.68	59.99%
Supplies		313,985.23		132,587.59		181,397.64	136.81%
Travel - Domestic		10,301.44		7,968.09		2,333.35	29.28%
Travel - Foreign		27,303.96		10,740.65		16,563.31	154.21%
Utilities		297,347.42		247,010.10		50,337.32	20.38%
Other Direct Costs		9,361.61		8,440.00		921.61	10.92%
Unallow/Unbill Costs		64,526.95		64,662.25		(135.30)	-0.21%
TOTAL DIRECT COSTS		2,640,174.61		1,920,535.54		719,639,07	37.47%
INDIRECT COSTS							
Fringe Benefits		880,007.04		590,847.92		289,159.12	48.94%
Overhead		1,193,882.53		964,113.74		229,768.79	23.83%
TOTAL INDIRECT COSTS		2,073,889.57		1,554,961.66	,	518,927.91	33.37%
GROSS PROFIT/LOSS ()		2,305,527.30		(65,683.68)		2,371,210.98	517.81%
.,							
OTHER INCOME							
Water Treatment		65,823.39		40,212.99		25,610.40	63.69%
Miscellaneous Income		5,588.09		3,389.55		2,198.54	64.86%
Other Operating Income		633.19		2,109.28		(1,476.09)	-69.98%
TOTAL OTHER INCOME		72,044.67		45,711.82		26,332.85	57.61%
OTHER EXPENSES							
Misc. Expenses & Donations		-		-			0.00%
Loss (Gain) on Sale of FA		-		-		-	0.00%
Reclass Incr Net Assets		(266,775.06)		(318,033.17)		51,258.11	-16.12%
TOTAL OTHER EXPENSES		(266,775.06)		(318,033.17)		51,258.11	-16.1 2 %
NET INCOME (LOCAL)		2044.047.00		=======================================	_		=======================================
NET INCOME/LOSS ()	\$	2,644, 347.03	\$	298,061.31	\$	2,346,285.72 =========	787.18% ========
							

South Dakota Science & Technology Authority Available Resources 8/31/2019

Cash Total Checking	\$ 2,172,839
Cash With State Treasurer	\$ 17,186,534
Total Cash	\$ 19,359,373
Less: Restricted Funds	
Indemnification/Mine Closure/Special Session Lab	\$ (15,220,846)
Experiments (Xenon, Interest, Infrastructure)	\$ (1,341,841)
Total Cash Available for Infrastructure Upgrades and Authority Operations	\$ 2,796,687
Plus: Accounts Receivable Billed	\$ 3,395,883
Accounts Receivable Unbilled	\$ (14,728)
Less: Current Liabilities (Accounts Payable & Accrued Payroll)	\$ (2,411,548)
(not including accts. pay. for Experiment funding)	
Available Cash	\$ 3,766,293

SDSTA Operating Budget Summary FY2020 Actual vs Budget August 2019 & YTD

3	July 2019	Budget	\$ Over/Under Budget	% of Budget	Actual YTD	YTD Budget	\$ Over/Under Budget	% of Budget	% Remaining
									100%
SDSTA (Authority) Direct Charges									
Board of Directors	\$17,998.00	\$21,108.00	\$3,110.00	85.27%	\$37,775.00	\$42,216.00	\$4,441.00		10.52%
Executive Office	\$32,788.00	\$22,454.00	-\$10,334.00	146.02%	\$45,208.00	\$44,908.00	-\$300.00		-0.67%
Science Center E & O	\$3,135.00	\$5,000.00	\$1,865.00	62.7%	\$53,416.00	\$57,000.00	\$3,584.00	93.71%	6.29%
Science Liaison	-\$682.00	\$0.00	\$682.00	100.0%	\$639.00	\$0.00	-\$639.00	100.00%	0.00%
Subtotal	\$53,239.00	\$48,562.00	-\$4,677.00	109.63%	\$137,038.00	\$144,124.00	\$7,086.00	95.08%	4.92%
Federal/State Funding - Direct Charges									
Fermi P.O.#649934 Prof. Services	\$26,952.00	\$35,000.00	\$8,048.00	77.01%	\$53,505.00	\$77,416.00	\$23,911.00	69.11%	30.89%
Fermi C#629760 SURF Services	\$1,542,018.00	\$953,912.00	-\$588,106.00	161.65%	\$2,223,853.00	\$1,947,772.00	-\$276,081.00	114.17%	-14.17%
Fermi C#630223 Ross Rehab	\$141,847.00	\$179,003.00	\$37,156.00	79.24%	\$245,977.00	\$363,922.00	\$117,945.00	67.59%	32.41%
Fermi C#654406 Ross Logist, Supp	\$169,635.00	\$158,176.00	-\$11,459.00	107.24%	\$260,115.00	\$323,517.00	\$63,402.00	80.40%	19.60%
Fermi Misc. Contracts	\$3,032.00	\$12,000.00	\$8,968.00	25.27%	\$13,193.00	\$24,000.00	\$10,807.00	54.97%	45.03%
LBNL LUX/Zeplin C#7255146	\$70,166.00	\$80,000.00	\$9,834.00	87.71%	\$122,686.00	\$135,000.00	\$12,314.00	90.88%	9.12%
LBNL LZ Operations C#7355157	\$26,572.00	\$40,000.00	\$13,428.00	66.43%	\$78,086.00	\$92,000.00	\$13,914.00	84.88%	15.12%
LBNL SIGMA-V C#7371823	\$5,694.00	\$8,000.00	\$2,306.00	71.18%	\$14,193.00	\$18,000.00	\$3,807.00	78.85%	21.15%
MJD (Majorana) ORNL144149	\$2,052.00	\$2,600.00	\$548.00	78.92%	\$3,988.00	\$5,200.00	\$1,212.00	76.69%	23.31%
BHSU-UGCampus Gen.Serv.	\$0.00	\$200.00	\$200.00	0.0%	\$0.00	\$400.00	\$400.00	0.00%	100.00%
Sanf.Sci.Ed.Center - GOED Funded	\$0.00	\$33,337.00	\$33,337.00	0.0%	-\$9.00	\$66,674.00	\$66,683.00	-0.01%	100.01%
SDSM&Tech CASPAR Gen.Serv.	\$1,482.00	\$2,666.00	\$1,184.00	55.59%	\$2,990.00	\$5,312.00	\$2,322.00	56.29%	43.71%
* Xilinx, Inc. P.O.#732495	\$217.00	\$300.00	\$83.00	72.33%	\$426.00	\$600.00	\$174.00	71.00%	29.00%
Subtotal	\$1,989,667.00	\$1,505,194.00	-\$484,473.00	132.19%	\$3,019,003.00	\$3,059,813.00	\$40,810.00	98.67%	1.33%
Indirect Expenses									
Indirect Charges Personnel	\$336,815.00	\$340,505.00	\$3,690.00	98.92%	\$655,490.00	\$659,691.00	\$4,201.00	99.36%	0.64%
Indirect Charges Other	\$434,322.00	\$416,173.00	-\$18,149.00	104.36%	\$803,445.00	\$894,951.00	\$91,506.00	89.78%	10.22%
Subtotal	\$771,137.00	\$756,678.00	-\$14,459.00	101.91%	\$1,458,935.00	\$1,554,642.00	\$95,707.00	93.84%	6.16%
Totals	\$2,814,043.00	\$2,310,434.00	-\$503,609.00	121.8%	\$4,614,976.00	\$4,758,579.00	\$143,603.00	96.98%	3.02%

^{*} Private Corporations (Commercial Group)

SDSTA CAPEX Budget Summary FY20 Actual vs Budget Aug. YTD FY2020

Budget Area	A	ctual Month	FY	2020 Monthly Budget	\$ Over/Under Budget	% of Budget		Actual YTD	,	FY2020 YTD Budget	\$ Over/Under Budget	% of Budget	% Remaining
													100.00%
Operational CAPEX	_\$	364,834.69	\$	381,500.00	\$ 16,665.31	95.63%	_\$_	1,173,842.61	\$	7,189,826.00	\$ 6,015,983.39	16.33%	83.67%
TOTAL CAPEX	\$	364,834.69	\$	381,500.00	\$ 16,665.31	95.63%	\$	1,173,842.61	\$	7,189,826.00	\$ 6,015,983.39	16.33%	83.67%

SD Science & Technology Authority Operational CAPEX Budget YTD FY2020 Actual vs Budget

Project#	roject # Project Description		Aug. 2020 YTD		FY2020 Budget		ver/UnderBudget	% of Budget_	% Remaining
									100%
CAP2014-01	Sanford Visitor Center Sign/Display	\$	8,292.14	\$	10,000.00	\$	1,707.86	82.92%	17.08%
CAP2016-03	LZ Xenon Gas	\$	605,946.90	\$	926,000.00	\$	320,053.10	65.44%	34.56%
CAP2019-01	Maintenance Support Facility	\$	559,603.57	\$	6,253,826.00	\$	5,694,222.43	8.95%	91.05%
	Totals	\$	1,173,842.61	\$	7,189,826.00	\$	6,015,983.39	16.33%	83.67%

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

Project #	Project Description		ug.FY2020	Budget	\$ Ov	er/UnderBudget	% of Budget	
CAP2014-01	Sanford Visitor Center Displays/Monitoring	\$	1,677.34	\$	1,000.00	\$	(677.34)	167.73%
CAP2016-03	LZ Xenon Gas	\$	473.45	\$	500.00	\$	26.55	94.69%
CAP2019-01	Maintenance Support Facility	\$	362,683.90	\$	380,000.00	\$	17,316.10	95.44%
	Monthly Totals	\$	364,834.69	\$_	381,500.00	\$	16,665.31	95.63%



SOUTH DAKOTA INVESTMENT COUNCIL

4009 West 49th Street, Suite 300 Sioux Falls, SD 57106-3784 USA Phone: (605) 362-2820

August 1, 2019

Interest Proration Participating Agencies:

You recently received your 2019 interest proration voucher this week by e-mail. This represents interest on each agency fund's average balance for fiscal year 2019 as determined by SDCL 4-5-30. The Cash Flow Fund received \$28,226,901.90 of interest and net gains for the fiscal year on an average balance of \$1.343 billion. The rate (net of fees) for fiscal year 2019, payable in fiscal year 2020, is 2.08%.

Interest rates decreased toward the end of the fiscal year, allowing us to capture more gains (or lower losses) on sales of securities during that time. Net capital losses decreased by about \$5MM versus last year. Also, higher interest rates at the beginning and middle of the year allowed us to invest in securities with higher coupon rates. Interest received from the money market funds and the CD Program increased for the year. In total, we received almost \$7MM more in interest income for FY19 vs FY18.

Unfortunately, we don't expect the fund to perform as well for FY 20. Interest rates have declined by 80-100 basis points since the beginning of FY 19. The lower rates should allow us to continue to recognize lower losses upon sales, although there are fewer securities with large embedded losses than previously.

If you have any questions regarding the calculation, please call Darcy McGuigan at the Bureau of Finance and Management or Sherry Nelson at the South Dakota Investment Council.

Sincerely,

Matthew L. Clark

State Investment Officer

Matthew-L. Clark

MLC/szn Enclosure

SD Science & Technology Authority

Year to Date Reconciliation - 7/1/2018 through 6/30/2019

June 30, 2019

Year to Date 7/1/2018 through 6/30	/2019	<u>C</u>	ost of Fixed A	.ssets	Accumulated Depreciation							
000 - SD Science & Technology Auth												
Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending		
110 - Automobiles		•										
77 2003 Chevy Astro AWD	7/15/2008	7/15/2008	9,079.90			9,079.90	8,172.00			8,172.00		
78 2003 Ford F250 63-1658	1/16/2009	1/16/2009	11,890.17			11,890.17	10,700.97			10,700.97		
79 2000 Ford F150 V8 Whit	2/16/2009	2/16/2009	7,273.42			7,273.42	6,545.72			6,545.72		
81 2001 Dodge W/Maintena	2/25/2009	2/25/2009	12,329.88			12,329.88	11,096.90			11,096.90		
347 1999 Chevy Suburban W	8/11/2009	8/11/2009	6,618.17			6,618.17	5,956.35	1.00		5,957.35		
348 2001 Dodge 2500 W/Mai	8/12/2009	8/12/2009	8,906.71			8,906.71	8,016.00			8,016.00		
349 2004 Ford Explorer Sport	6/4/2010	6/4/2010	13,306.83			13,306.83	11,976.00			11,976.00		
570 2009 Chevy G3500 Van	9/8/2014	9/8/2014	16,900.00			16,900.00	8,330.00	2,173.00		10,503.00		
653 2011 Chevy3500Stakebe	11/21/2016	11/21/2016	22,657.45			22,657.45	4,612.00	2,913.00		7,525.00		
702 2002 Chevy 2500 Truck	6/17/2019	6/17/2019		10,000.00		10,000.00				0.00		
		_	108,962.53	10,000.00	0.00	118,962.53	75,405.94	5,087.00	0.00	80,492.94		
120 - Building												
10 Ross Hoist Room	4/14/2006	4/14/2006	436,796.20			436,796.20	115,007.72	8,736.00		123,743.72		
14 Ross Head Frame & Crus	4/14/2006	4/14/2006	421,551.65			421,551.65	110,992.90	8,431.00		119,423.90		
19 Yates Head Frame & Cru	4/14/2006	4/14/2006	496,154.18			496,154.18	130,635.06	9,923.00		140,558.06		
24 Mine Office - Admin Bld	4/14/2006	4/14/2006	461,316.99			461,316.99	121,460.23	9,226.00		130,686.23		
25 Yates Hoist/MG Set Roos	4/14/2006	4/14/2006	797,826.88			797,826.88	210,069.43	15,957.00		226,026.43		
26 Ross Substation Building	4/14/2006	4/14/2006	13,615.43			13,615.43	3,582.12	272.00		3,854.12		
27 Ross Boiler	4/14/2006	4/14/2006	23,236.99			23,236.99	6,120.57	465.00		6,585.57		
28 Ross Core Shed	4/14/2006	4/14/2006	6,785.02			6,785.02	1,789.17	136.00		1,925.17		
29 Ross Dry	4/14/2006	4/14/2006	142,961.96			142,961.96	37,639.27	2,859.00		40,498.27		
30 Ross Pipe Shop	4/14/2006	4/14/2006	50,830.92			50,830.92	13,387.05	1,017.00		14,404.05		
31 LHD Warehouse	4/14/2006	4/14/2006	51,988.23	•		51,988.23	13,690.45	1,040.00		14,730.45		
32 Ross Tramway Shed	4/14/2006	4/14/2006	68,757.90		,	68,757.90	18,102.31	1,375.00		19,477.31		
33 Ross Air Tanks	4/14/2006	4/14/2006	7,760.79			7,760.79	2,041.45	155.00		2,196.45		
34 Ross Ramp	4/14/2006	4/14/2006	7,091.37			7,091.37	1,868.69	142.00		2,010.69		
35 Oro Hondo Fan Building	4/14/2006	4/14/2006	6,807.71			6,807.71	1,791.06	136.00		1,927.06		
36 Oro Hondo Substation Bu	4/14/2006	4/14/2006	6,807.71			6,807.71	1,791.06	136.00		1,927.06		
37 Shaft Heater Room @ #5	4/14/2006	4/14/2006	6,240.40			6,240.40	1,644.81	125.00		1,769.81		
38 Tramway Roundhouse	4/14/2006	4/14/2006	7,624.64			7,624.64	2,003.11	152.00		2,155.11		
39 Main Warehouse	4/14/2006	4/14/2006	142,224.46			142,224.46	37,442.84	2,844.00		40,286.84		

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
20 - Building	•		<u></u>	-			<u> </u>			
41 Bottle Gas Storage	4/14/2006	4/14/2006	20,967.75			20,967.75	5,517.55	419.00		5,936.55
42 Tramway	4/14/2006	4/14/2006	177,908.22			177,908.22	46,841.19	3,558.00		50,399.19
43 Iron House	4/14/2006	4/14/2006	60,044.02			60,044.02	15,810.48	1,201.00		17,011.48
44 Machine Shop	4/14/2006	4/14/2006	257,142.32			257,142.32	67,706.13	5,143.00		72,849.13
45 Foundry	4/14/2006	4/14/2006	162,810.11			162,810.11	42,865.56	3 ,2 56.00		46,121.56
46 Battery Repair Building	4/14/2006	4/14/2006	26,141.62			26,141.62	6,884.51	523.00		7,407.51
47 Bit Shop	4/14/2006	4/14/2006	5,446.17			5,446.17	1,434.65	109.00		1,543.65
48 Paint Shop	4/14/2006	4/14/2006	7,715.41			7,715.41	2,028.67	154.00		2,182.67
50 East Substation Building	4/14/2006	4/14/2006	6,807.71			6,807.71	1,791.06	136.00		1,927.06
51 Wash Rack	4/14/2006	4/14/2006	7,148.10			7,148.10	1,882.41	143.00		2,025.41
52 Steady Head Tank	4/14/2006	4/14/2006	8,271.37			8,271.37	2,173.98	165.00		2,338.98
53 Yates Safety & Dry	4/14/2006	4/14/2006	215,259.87			215,259.87	56,675.46	4,305.00		60,980.46
54 Yates Power Substation F	4/14/2006	4/14/2006	11,436.96			11,436.96	3,013.66	229.00		3,242.66
55 Yates Bosses Office	4/14/2006	4/14/2006	6,490.02			6,490.02	1,710.60	130.00		1,840.60
57 Yates Lamp Room	4/14/2006	4/14/2006	10,620.03			10,620.03	2,792.61	212.00		3,004.61
58 Yates Dust Collector	4/14/2006	4/14/2006	3,630.78			3,630.78	959.43	73.00		1,032.43
59 Yates Sawmill	4/14/2006	4/14/2006	33,947.79			33,947.79	8,938.74	679.00		9,617.74
60 Used Oil Storage Tank	4/14/2006	4/14/2006	2,042.31			2,042.31	539.12	41.00		580.12
61 Yates Cooling Tower	4/14/2006	4/14/2006	5,446.17			5,446.17	1,434.65	109.00		1,543.65
62 Yates Compressor	4/14/2006	4/14/2006	173,180.53			173,180.53	45,601.38	3,464.00		49,065.38
63 Motor Repair Shop	4/14/2006	4/14/2006	17,473.13			17,473.13	4,596.46	349.00		4,945.46
64 WW Influent Building	4/14/2006	4/14/2006	645,487.44			645,487.44	169,957.04	12,910.00		182,867.04
65 WW Lab/Fishouse	4/14/2006	4/14/2006	134,476.55			134,476.55	35,411.47	2,690.00		38,101.47
66 WW Mechanical Buildin;	4/14/2006	4/14/2006	727,249.18			727,249.18	191,482.53	14,545.00		206,027.53
67 WW Warehouse	4/14/2006	4/14/2006	174,012.66			174,012.66	45,814.70	3,480.00		49,294.70
68 WW Sandfilter Building	4/14/2006	4/14/2006	917,399.02			917,399.02	241,548.40	18,348.00		259,896.40
338 Building Closing Costs	1/31/2007	1/31/2007	63,820.42			63,820.42	15,078.67	1,276.00		16,354.67
73 WW Protec Building 56X	12/1/2008	12/1/2008	64,632.77			64,632.77	24,773.10	2,585.00		27,358.10
74 WW Valve Building 9X1	12/16/2008	12/16/2008	15,178.78			15,178.78	2,887.79	304.00		3,191.79
75 WW Pole Frame Building	2/5/2009	2/5/2009	104,518.82			104,518.82	19,680.99	2,090.00		21,770.99
666 Ellison Hoist Bldg	6/12/2017	6/12/2017	24,252.00			24,252.00	525.00	485.00		1,010.00
667 Ellison Boiler	6/12/2017	6/12/2017	40,608.00			40,608.00	880.00	812.00		1,692.00
668 Ellison Dry-Paint Ship	6/12/2017	6/12/2017	49,632.00			49,632.00	1,076.00	993.00		2,069.00
669 Old Compressor Bldg.	6/12/2017	6/12/2017	39,198.00			39,198.00	849.00	784.00		1,633.00
670 Drill Bit Shop	6/12/2017	6/12/2017	87,138.00			87,138.00	1,888.00	1,743.00		3,631.00

Year to Date 7/1/2018 through 6/30/2019

000 - SD Science & Technology Author Sys ID Description		In Service	Beginning	Additions	Retired	Ending	Reginning	YTD 6/30/2019	Retired	Ending
120 - Building	Acquire	III SEI VICE	Degining	Auditions	Kenreu	Enung	Бединия	110 0/30/2019	Keurtu	Duni
671 Rope House	<i>41101</i> 2017	4/12/2017	41 172 00			41 172 00	902.00	823.00		17150
•	6/12/2017	6/12/2017	41,172.00			41,172.00	892.00			1,715.00
686 Radon Removal Building	9/15/2017	9/15/2017	615,530.88	0.00	0.00	615,530.88	10,259.00	12,311.00	0.00	22,570.00
130 - Computer Hardware			8,120,616.34	0.00	0.00	8,120,616.34	1,915,261.29	163,704.00	0.00	2,078,965.29
88 Rack Server RACK	5/30/2009	5/30/2009	5,700.94			5,700.94	5,700.02			5,700.02
89 Rack Server RACK	5/30/2009	5/30/2009	5,700.94			5,700.94	5,700.02			5,700.02
96 Catalyst 48-Port 10/100/1	5/30/2009	5/30/2009	8,910.00			8,910.00	8,910.00			8,910.00
97 Catalyst 48-Port 10/100/J	5/30/2009	5/30/2009	8,938.50			8,938.50	8,937.98			8,937.98
100 41213 Management Swit	5/30/2009	5/30/2009	6,196.90			6,196.90	6,196.28			6,196.28
101 41213 Management Swit	5/30/2009	5/30/2009	6,196.90			6,196.90	6,196.28			6,196.28
102 41213 Management Swit	5/30/2009	5/30/2009	6,196.90			6,196.90	6,196.28			6,196.28
103 41213 Management Swit	5/30/2009	5/30/2009	6,196.90			6,196.90	6,196.28			6,196.28
104 41213 Management Swit	5/30/2009	5/30/2009	6,196.90			6,196.90	6,196.28			6,196.28
105 41213 Management Swit	5/30/2009	5/30/2009	6,196.90			6,196.90	6,196.28			6,196.28
106 41517 48 Port TX 12800	5/30/2009	5/30/2009	6,510.00			6,510.00	6,510.00			6,510.00
107 41517 48 Port TX 12800	5/30/2009	5/30/2009	6,510.00			6,510.00	6,510.00			6,510.00
108 41517 48 Port TX 12800	5/30/2009	5/30/2009	6,510.00			6,510.00	6,510.00			6,510.00
109 41544 48 Port GBIC 128	5/30/2009	5/30/2009	9,916.90			9,916.90	9,916.28			9,916.28
110 41544 48 Port GBIC 128	5/30/2009	5/30/2009	9,916.90			9,916.90	9,916.28			9,916.28
111 41544 48 Port GBIC 128	5/30/2009	5/30/2009	9,916.90			9,916.90	9,916.28			9,916.28
112 41517 BD 12800 Manage	5/30/2009	5/30/2009	6,510.00			6,510.00	6,510.00			6,510.00
113 41517 BD 12800 Manage	5/30/2009	5/30/2009	6,510.00			6,510.00	6,510.00			6,510.00
116 41544 BD 12800 Manage	5/30/2009	5/30/2009	9,916.90			9,916.90	9,916.28			9,916.28
351 Server Rack	6/30/2010	6/30/2010	7,986.99			7,986.99	7,986.00			7,986.00
352 PLC Mine Monitoring Sy	6/30/2010	6/30/2010	7,910.20			7,910.20	7,910.00			7,910.00
429 PLC Mine Monitoring Sy	7/15/2010	7/15/2010	2,343.71			2,343.71	2,343.00			2,343.00
433 PLC Mine Monitoring Sy	4/1/2011	4/1/2011	19,866.94			19,866.94	19,866.00			19,866.00
549 Apple MP 3.5 1TB 32GB		3/31/2014	5,170.42			5,170.42	4,394.00	776.00		5,170.00
583 Power Edge Server Syster	6/30/2015	6/30/2015	6,898.07			6,898.07	6,898.00			6,898.00
586 Dell Equal Logic PS1000	6/30/2015	6/30/2015	31,121.72			31,121.72	31,120.53			31,120.53
587 PowerVault MD1000 Sto	6/30/2015	6/30/2015	8,131.40			8,131.40	8,131.13			8,131.13
588 PowerVault MD1000 Sto	6/30/2015	6/30/2015	8,131.40			8,131.40	8,131.13			8,131.13
600 Virtual HP Server	6/29/2015	6/30/2015	17,362.50			17,362.50	10,416.00	3,472.00		13,888.00
601 Virtual HP Server	6/29/2015	6/30/2015	17,362.50			17,362.50	10,416.00	3,472.00		13,888.00
621 Server-HP DL360Gen9 8		8/21/2015	11,014.87			11,014.87	6,242.00	2,203.00		8,445.00

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000 - SD Science & Technology Auth										
Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
130 - Computer Hardware										
622 Server HP DL360 Gen9 8	8/21/2015	8/21/2015	11,014.88			11,014.88	6,242.00	2,203.00		8,445.00
623 Switch - HP 3800-24G Sv	8/21/2015	8/21/2015	7,522.00			7,522.00	4,262.00	1,504.00		5,766.00
624 Switch 5800-24G Switch	8/21/2015	8/21/2015	7,522.00			7,522.00	4,262.00	1,504.00		5,766.00
645 Toshiba Server (Applicat	6/14/2016	6/14/2016	5,528.00	•		5,528.00	2,304.00	1,106.00		3,410.00
659 Router MX104 Edge Rou	1/16/2017	1/16/2017	35,725.93			35,725.93	10,122.00	7,145.00		17,267.00
660 Backup Server HP DL380	3/2/2017	3/2/2017	9,536.63			9,536.63	2,543.00	1,907.00		4,450.00
661 Backup Server HP DL380	3/2/2017	3/2/2017	9,536.63			9,536.63	2,543.00	1,907.00		4,450.00
662 Firewall Fortigate800D U	4/2/2017	4/2/2017	12,337.00			12,337.00	3,084.00	2,467.00		5,551.00
663 Firewall Fortigate800D U	4/2/2017	4/2/2017	12,337.00			12,337.00	3,084.00	2,467.00		5,551.00
688 StorageArrayNetworkSA)	9/29/2017	9/29/2017	38,555.00			38,555.00	5,783.00	7,711.00		13,494.00
699 CiscoNexusSwitch 10G F	5/7/2019	5/7/2019		8,125.00		8,125.00		271.00		271.00
700 Cisco Nexus Switch 48 1	5/7/2019	5/7/2019		8,125.00		8,125.00		271.00		271.00
		_	431,565.17	16,250.00	0.00	447,815.17	306,723.61	40,386.00	0.00	347,109.61
140 - Equipment & Fixtures										
119 Telephone Equipment	6/1/2006	6/1/2006	3,927.47			3,927.47	3,926.69			3,926.69
120 Kubota RTV900T6H Util	10/31/2006	10/31/2006	16,535.00			16,535.00	16,535.00			16,535.00
121 John Deere 304J Wheel L	11/30/2006	11/30/2006	89,701.26			89,701.26	89,700.83			89,700.83
122 Solomon Corp 1000kva,1	3/16/2007	3/16/2007	8,017.33			8,017.33	3,250.43	200.00		3,450.43
179 Softstart Controllers 7001	6/30/2007	6/30/2007	167,350.00			167,350.00	111,569.67	11,157.00		122,726.67
123 Oxygen Booster Pumps (2	7/1/2007	7/1/2007	21,400.00			21,400.00	21,400.00			21,400.00
124 Command Modules Com	7/1/2007	7/1/2007	18,589.00			18,589.00	18,589.00			18,589.00
125 Self-Contained Breathing	7/1/2007	7/1/2007	97,720.00			97,720.00	97,720.00			97,720.00
207 Motor GE 700HP HL840	9/24/2007	9/24/2007	28,370.67			28,370.67	14,180.53	1,418.00		15,598.53
154 700HP Kirk Timberyard !	11/29/2007	11/29/2007	25,860.76			25,860.76	8,620.03	862.00		9,482.03
168 Transformer 225 KVA TI	12/17/2007	12/17/2007	12,355.22			12,355.22	3,089.88	309.00		3,398.88
126 Safety Apparatus (7 pack	12/31/2007	12/31/2007	48,860.00			48,860.00	48,860.00			48,860.00
213 Transformer GE 500KVA	2/27/2008	2/27/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
220 Transformer GE 500KVA	2/27/2008	2/27/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
221 Transformer Howard Ind	2/27/2008	2/27/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
223 Transformer Howard Ind	2/27/2008	2/27/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
224 Transformer Solomon 10	2/27/2008	2/27/2008	5,900.00			5,900.00	1,479.50	148.00		1,627.50
225 Transformer Solomon 10	2/27/2008	2/27/2008	5,900.00			5,900.00	1,479.50	148.00		1,627.50
226 Transformer Solomon 10	2/27/2008	2/27/2008	5,900.00			5,900.00	1,479.50	148.00		1,627.50
227 Transformer Howard Ind	2/27/2008	2/27/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
228 Transformer GE 75KVA	2/27/2008	2/27/2008	5,800.00			5,800.00	1,450.00	145.00		1,595.00

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
40 - Equipment & Fixtures			,				•			
229 Transformer GE 75KVA	2/27/2008	2/27/2008	5,800.00			5,800.00	1,450.00	145.00		1,595.00
230 Transformer GE 75KVA	2/27/2008	2/27/2008	5,800.00			5,800.00	1,450.00	145.00		1,595.0
218 Transformer GE 500KVA	2/28/2008	2/28/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.7
1293 Ton Locomotive Batter	2/29/2008	2/29/2008	7,884.00			7,884.00	7,884.00			7,884.00
201 Pump Ingersoll Rand 037	3/12/2008	3/12/2008	91,206.72			91,206.72	36,480.27	3,648.00		40,128.2
211 Transformer GE 500KVA	3/25/2008	3/25/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.7
212 Transformer GE 500KVA	3/25/2008	3/25/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
214 Transformer Westinghous	3/25/2008	3/25/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
216 Transformer Westinghous	3/25/2008	3/25/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
217 Transformer Westinghous	3/25/2008	3/25/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
219 Transformer GE 500KVA	3/25/2008	3/25/2008	7,350.00			7,350.00	1,839.75	184.00		2,023.75
144 Cranes	4/30/2008	4/30/2008	100,509.34			100,509.34	13,400.12	1,340.00		14,740.12
204 Motor GE 700HP FM840	5/6/2008	5/6/2008	32,772.50			32,772.50	16,389.63	1,639.00		18,028.63
190 Troll 9500 Water Sample	5/14/2008	5/14/2008	8,325.92			8,325.92	8,324.59			8,324.59
180 Axial Flow Mine Fan 150	5/30/2008	5/30/2008	53,484.75			53,484.75	26,740.24	2,674.00		29,414.2
142 Base Interface 4 channel	6/18/2008	6/18/2008	6,011.00			6,011.00	6,011.00			6,011.00
132 Telephone System Additi	6/30/2008	6/30/2008	11,371.31			11,371.31	11,371.00			11,371.00
166 Ross Hoist (2)	6/30/2008	6/30/2008	121,842.89			121,842.89	16,249.57	1,625.00		17,874.5
169 Transformer GE 5MVA N	7/1/2008	7/1/2008	5,000.00			5,000.00	1,250.00	125.00		1,375.00
171 Transformer GE 1500KV	7/1/2008	7/1/2008	5,000.00			5,000.00	1,250.00	125.00		1,375.00
172 Transformer GE 10,000K	7/1/2008	7/1/2008	10,000.00			10,000.00	2,500.00	250.00		2,750.00
173 Transformer GE 20,000K	7/1/2008	7/1/2008	15,000.00			15,000.00	3,750.00	375.00		4,125.00
174 Transformer GE 10,000 k	7/1/2008	7/1/2008	10,000.00			10,000.00	2,500.00	250.00		2,750.00
175 Transformer GE 10,000K	7/1/2008	7/1/2008	10,000.00			10,000.00	2,500.00	250.00		2,750.00
247 MG Sets (2) Yates	7/1/2008	7/1/2008	60,000.00			60,000.00	8,000.00	800.00		8,800.00
235 FLYGT Centrifugal Pumj	7/23/2008	7/23/2008	11,997.23			11,997.23	4,759.90	480.00		5,239.90
167 Security Monitoring Gate	8/1/2008	8/1/2008	23,126.00			23,126.00	22,936.88	189.00		23,125.88
202 Pump Ingersoll Rand 213	8/1/2008	8/1/2008	22,508.00			22,508.00	8,925.29	900.00		9,825.29
203 Pump Ingersoll Rand 675	8/1/2008	8/1/2008	130,646.97			130,646.97	51,824.39	5,226.00		57,050.39
234 Diesel Generator - WWT)	8/1/2008	8/1/2008	5,000.00			5,000.00	4,958.33	42.00		5,000.33
236 FLYGT 10HP Pumps (2)	8/1/2008	8/1/2008	12,000.00			12,000.00	4,760.00	480.00		5,240.00
237 FLYGT 15HP Pumps (2)	8/1/2008	8/1/2008	18,000.00			18,000.00	7,140.00	720.00		7,860.00
241 Rotating Biological Cont	8/1/2008	8/1/2008	206,014.95			206,014.95	40,856.94	4,120.00		44,976.94
242 Sand Filter Galiger Pump	8/1/2008	8/1/2008	15,000.00			15,000.00	5,950.00	600.00		6,550.00
243 Sand Filters (3) WWTP	8/1/2008	8/1/2008	45,000.00			45,000.00	8,925.00	900.00		9,825.00

O00 - SD Science & Technology Auth Sys ID Description		In Service	Beginning	Additions	Retired	Ending	Reginning	YTD 6/30/2019	Retired	Ending
40 - Equipment & Fixtures	Acquire	III DEL TICC	2.Civinus	Auditions	Actif Eu	Entring	negmming	I A D GIGULEU17	Rentu	Entring
245 Soda Ash System	8/1/2008	8/1/2008	9,573.70			9,573.70	1,894.52	191.00		2,085,52
188 Electric Winch (WE271)	8/15/2008	8/1/2008	47,187.00			47,187.00	9,361.10	944.00		10,305.10
231 Fume Hood for Lab Cabi	8/22/2008	8/22/2008	5,989.95				,	99.00		5,989.16
205 Motor GE 700HP FM84C	8/25/2008	8/25/2008	38,004.39			5,989.95 38,004.39	5,890.16 18,683.52	1,900.00		20,583.52
156 MG Sets (2) Ross	8/31/2008	8/31/2008				-	•			
194 Yates Hoists (2)	8/31/2008		60,000.00			60,000.00	7,866.67	800.00		8,666.67
209 Motor GE 700HP HL840		8/31/2008	89,168.26			89,168.26	11,691.76	1,189.00		12,880.76
	9/22/2008	9/22/2008	31,362.30			31,362.30	15,288.09	1,568.00		16,856.09
150 Kubota GL7000 Generate	10/21/2008		5,300.00			5,300.00	5,123.33	177.00		5,300.33
232 Cornell Pumps W/Baldor	10/29/2008		27,102.98			27,102.98	10,478.75	1,084.00		11,562.75
157 Miller Trailblazer 3020 V	11/5/2008	11/5/2008	7,430.00			7,430.00	7,182.33	248.00		7,430.33
137 40 Unit Cap Lamp Charg	11/20/2008		5,253.00			5,253.00	5,031.43	222.00		5,253.43
206 Motor GE 700HP FM839	11/24/2008		35,025.30			35,025.30	16,780.57	1,751.00		18,531.57
149 FSM-60S Fusion Splice I	11/28/2008		19,810.00			19,810.00	12,659.39	1,321.00		13,980.39
136 Admin. Bldg. Heating/Co	11/30/2008		32,493.88			32,493.88	31,136.48	1,357.00		32,493.48
244 Seepex 200 GPM Pump /	12/15/2008		16,316.24			16,316.24	6,257.71	653.00		6,910.71
238 Hoffman 3R Wall Mount	12/24/2008		11,657.72			11,657.72	7,381.59	777.00		8,158.59
148 Franklin 8" Sand Fighter	12/29/2008		44,457.42			44,457.42	21,118.44	2,223.00		23,341.44
161 1,000,000BTU Indirect F	12/30/2008		15,537.00			15,537.00	14,762.85	774.00		15,536.85
143 (1) Benshaw Softstart 700	1/6/2009	1/6/2009	35,257.43			35,257.43	22,325.25	2,350.00		24,675.25
162 VFD Pump Controller 15	2/2/2009	2/2/2009	23,100.00			23,100.00	14,501.67	1,540.00		16,041.67
163 VFD Pump Controller 20	2/2/2009	2/2/2009	46,200.00			46,200.00	29,003.33	3,080.00		32,083.33
160 Portable Air Conditioner	2/6/2009	2/6/2009	11,325.40			11,325.40	10,659.89	665.00		11,324.89
146 Float Valves for Yates (1-	2/9/2009	2/9/2009	114,346.31			114,346.31	107,679.43	6,667.00		114,346.43
145 Crane #6 Winze Undergr	2/19/2009	2/19/2009	10,631.95			10,631.95	1,325.25	142.00		1,467.25
200 Pump Ingersoll Rand 107	2/25/2009	2/25/2009	122,676.93			122,676.93	45,798.69	4,907.00		50,705.69
208 Motor GE 700HP ZRH28	3/5/2009	3/5/2009	27,154.00			27,154.00	12,674.57	1,358.00		14,032.57
158 3000HP American David	3/6/2009	3/6/2009	78,752.15			78,752.15	24,500.02	2,625.00		27,125.02
199 Pump Ingersoll Rand 100	3/28/2009	3/28/2009	147,258.51			147,258.51	54,482.59	5,890.00		60,372.59
192 Western Tornado Sand S ₁	4/1/2009	4/1/2009	5,168.50			5,168.50	4,782.21	386.00		5,168.21
193 Western Ultramount Pro I	4/1/2009	4/1/2009	5,247.63			5,247.63	4,856.19	391.00		5,247.19
147 Danfoss Flowmatic Checi	4/2/2009	4/2/2009	6,919.11			6,919.11	6,400.98	518.00		6,918.98
198 Pump Ingersofl Rand 372	4/30/2009	4/30/2009	55,987.45			55,987.45	20,524.25	2,239.00		22,763.25
164 VFD 150 HP Control Par	5/14/2009	5/14/2009	12,705.00			12,705.00	7,764.17	847.00		8,611.17
181 Trojan 3.25 Locomotive	6/10/2009	6/10/2009	47,115.60			47,115.60	19,129.00	2,106.00		21,235.00
182 Battery for Trojan Locom	6/10/2009	6/10/2009	11,000.00			11,000.00	10,999.95			10,999.95

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Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
140 - Equipment & Fixtures										
698 WE1 Locomotive Contro	6/10/2009	6/10/2009	4,500.00		(4,500.00)	0.00	2,044.00	206.00	(2,250.00)	0.00
153 Huron 560 Wall Tank and	6/11/2009	6/11/2009	6,098.08			6,098.08	2,770.41	305.00		3,075.41
138 Ansul Inergen Fire Suppr	6/23/2009	6/23/2009	12,919.00			12,919.00	7,749.00	861.00		8,610.00
155 Lift Bag Kit Light US&R	6/25/2009	6/25/2009	16,750.00			16,750.00	15,075.00	1,675.00		16,750.00
135 Telephone Expansion	6/26/2009	6/26/2009	28,249.27			28,249.27	25,425.00	2,824.00		28,249.00
140 2008 Artic Cat 700 Diese	6/30/2009	6/30/2009	10,244.54			10,244.54	9,732.00			9,732.00
141 2008 Artic Cat 700 Diese	6/30/2009	6/30/2009	10,244.55			10,244.55	9,732.00			9,732.00
195 Ross Fuel Tank/Stand/Cc	6/30/2009	6/30/2009	21,100.39			21,100.39	18,990.00	2,110.00		21,100.00
353 JD Skid Steer 315 W/CE	7/18/2009	7/18/2009	23,241.00			23,241.00	20,722.00	2,324.00		23,046.00
354 Trojan 3.25 Locomotive	8/28/2009	8/28/2009	46,692.71			46,692.71	18,417.00	2,085.00		20,502.00
355 .36Cell/72 Volt Battery fo	8/28/2009	8/28/2009	11,000.00			11,000.00	11,000.00			11,000.00
356 Sanyo Air Conditioning S	9/1/2009	9/1/2009	41,401.66			41,401.66	36,570.00	4,140.00		40,710.00
358 High Voltage Cable Testi	9/23/2009	9/23/2009	7,920.00			7,920.00	6,930.00	792.00		7, 7 22.00
359 Water Meter LUX Surfac	10/1/2009	10/1/2009	6,011.30			6,011.30	5,259.00	601.00		5,860.00
360 Wall Mounted Enclosure	10/1/2009	10/1/2009	7,200.00			7,200.00	4,200.00	480.00		4,680.00
361 8-1/2' Western Ultramour	10/1/2009	10/1/2009	5,309.25			5,309.25	4,646.00	531.00		5,177.00
362 Benshaw Softstart 700HF	10/1/2009	10/1/2009	35,257.43			35,257.43	20,563.00	2,350.00		22,913.00
364 Vertical Diesel Symo Pov	10/22/2009	10/22/2009	8,665.05			8,665.05	7,506.00	866.00		8,372.00
365 Vertical Diesel Symo Pov	10/22/2009	10/22/2009	5,721.30			5,721.30	4,957.00	572.00		5,529.00
366 Wall Mounted Enclosure	11/1/2009	11/1/2009	7,200.00			7,200.00	4,160.00	480.00		4,640.00
367 Spendrup 350HP Fan at (11/1/2009	11/1/2009	83,092.63			83,092.63	36,010.00	4,155.00		40,165.00
368 500KVA Transformer3 P	11/1/2009	11/1/2009	18,465.41			18,465.41	4,004.00	462.00		4,466.00
369 Baldor VFD Motors 350F	11/1/2009	11/1/2009	61,000.00			61,000.00	26,433.00	3,050.00		29,483.00
370 Benshaw Switch Disconп	11/1/2009	11/1/2009	8,791.96			8,791.96	5,079.00	586.00		5,665.00
371 GE700HP GE Pump Mot	11/1/2009	11/1/2009	31,986.00			31,986.00	13,858.00	1,599.00		15,457.00
372 350HP Spendrup Fan at #	11/10/2009	11/10/2009	106,641.04			106,641.04	46,211.00	5,332.00		51,543.00
374 S&C PMX Modular Meta	12/1/2009	12/1/2009	27,059.00			27,059.00	15,484.00	1,804.00		17,288.00
375 GE 8000 Series Breaker I	12/3/2009	12/3/2009	6,464.69			6,464.69	3,699.00	431.00		4,130.00
376 GE Spectra Series Switch	12/3/2009	12/3/2009	7,239.85			7,239.85	4,146.00	483.00		4,629.00
377 (2) A Bradley Powerflex .	12/3/2009	12/3/2009	15,068.40			15,068.40	8,626.00	1,005.00		9,631.00
378 Multi Media Sand Filter !	12/3/2009	12/3/2009	615,021.84			615,021.84	105,575.00	12,300.00		117,875.00
397 Telephone System Upgra	12/7/2009	12/7/2009	17,712.14			17,712.14	15,201.00	1,771.00		16,972.00
379 Johnson Controls HVAC	1/1/2010	1/1/2010	18,921.00			18,921.00	16,082.00	1,892.00		17,974.00
380 Johnson Controls HVAC	1/1/2010	1/1/2010	20,427.00			20,427.00	17,365.00	2,043.00		19,408.00
381 HVAC Air Handling Uni	1/1/2010	1/1/2010	20,862.92			20,862.92	17,731.00	2,086.00		19,817.00

Cost of Fixed Assets

Accumulated Depreciation

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
140 - Equipment & Fixtures										
382 Chemical Outdoor Storag	1/15/2010	1/15/2010	28,869.55			28,869.55	12,266.00	1,443.00		13,709.00
383 HydraulicClamb/Pneuma	1/25/2010	1/25/2010	26,940.00			26,940.00	22,674.00	2,694.00		25,368.00
384 Fire Pump	2/1/2010	2/1/2010	13,163.08			13,163.08	11,076.00	1,316.00		12,392.00
385 Jockey Pump	2/1/2010	2/1/2010	13,163.08			13,163.08	11,076.00	1,316.00		12,392.00
386 HY-25XLT 2-1/2" Sq Dr	2/4/2010	2/4/2010	13,957.43			13,957.43	11,750.00	1,396.00		13,146.00
399 Telephone System LUX 5	2/15/2010	2/15/2010	9,218.04			9,218.04	7,760.00	922.00		8,682.00
387 Wall Mounted Enclosure	3/1/2010	3/1/2010	7,200.00			7,200.00	4,000.00	480.00		4,480.00
388 S&C PMX Modular Meta	3/1/2010	3/1/2010	27,059.00			27,059.00	15,033.00	1,804.00		16,837.00
389 GE Switchgear	3/1/2010	3/1/2010	58,844.32			58,844.32	32,692.00	3,923.00		36,615.00
390 MQ Generator 15KW Mc	3/1/2010	3/1/2010	10,117.00			10,117.00	8,433.00	1,012.00		9,445.00
391 Atlas Copco XAS 185 CI	3/1/2010	3/1/2010	8,924.50			8,924.50	7,433.00	892.00		8,325.00
392 Atlas Copco XAS 185 CI	3/1/2010	3/1/2010	8,924.50			8,924.50	7,433.00	892.00		8,325.00
393 115V PSI Hytorc Pump	3/30/2010	3/30/2010	5,108.37			5,108.37	4,216.00	511.00		4,727.00
394 Clean Room-Surface Lab	5/31/2010	5/31/2010	116,000.00			116,000.00	93,767.00	11,600.00		105,367.00
395 S&C Metal Enclosed Fus	6/30/2010	6/30/2010	7,200.00			7,200.00	3,840.00	480.00		4,320.00
398 Telephone System Upgra-	6/30/2010	6/30/2010	8,451.00			8,451.00	6,760.00	845.00		7,605.00
400 Telephone System Ross I	6/30/2010	6/30/2010	6,683.90			6,683.90	5,344.00	668.00		6,012.00
426 S&C Wall-Mounted Meta	7/1/2010	7/1/2010	7,200.00			7,200.00	3,840.00	480.00		4,320.00
430 Chem Grout Machine Pur	7/29/2010	7/29/2010	5,500.00			5,500.00	4,354.00	550.00		4,9 04.00
420 Bobcat Skidsteer S300 D	8/2/2010	8/2/2010	33,030.64			33,030.64	26,149.00	3,303.00		29,452.00
423 Air Compressor 125HP F	9/1/2010	9/1/2010	18,515.00			18,515.00	14,507.00	1,852.00		16,359.00
422 JD Angle Broom for Skid	9/3/2010	9/3/2010	5,925.00			5,925.00	4,638.00	592.00		5,230.00
421 S&C PMX Modular Meta	9/16/2010	9/16/2010	27,059.00			27,059.00	13,981.00	1,804.00		15,785.00
439 Ross Dry Phone/Data Sys	9/24/2010	9/24/2010	9,183.36			9,183.36	7,115.00	918.00		8,033.00
440 Ross Shaft UG Phone/Da	10/25/2010	10/25/2010	8,550.63			8,550.63	6,555.00	855.00		7,410.00
441 Yates E&O Phone/Data S	11/30/2010	11/30/2010	12,314.24			12,314.24	9,335.00	1,231.00		10,566.00
424 Radon Monitor Alphagua	12/1/2010	12/1/2010	15,028.98			15,028.98	11,398.00	1,503.00		12,901.00
416 Locomotive 1975 8 Ton #	1/27/2011	1/27/2011	130,000.00			130,000.00	130,000.00			130,000.00
417 Locomotive 1975 8 Ton #	1/27/2011	1/27/2011	130,000.00			130,000.00	130,000.00			130,000.00
418 Loader 2007 LT 210 #07-	1/27/2011	1/27/2011	195,000.00			195,000.00	144,625.00	19,500.00		164,125.00
427 Shotcrete Mixing Auger	2/28/2011	2/28/2011	18,450.00			18,450.00	13,530.00	1,845.00		15,375.00
438 Admin Building Phone/D	3/1/2011	3/1/2011	3,876.26			3,876.26	2,845.00	388.00		3,233.00
432 Loader 2007 LT350 #07-	5/31/2011	5/31/2011	230,000.00			230,000.00	162,917.00	23,000.00		185,917.00
451 JD XAS 375 CFM Air Co	9/1/2011	9/1/2011	27,900.00			27,900.00	19,065.00	2,790.00		21,855.00
469 Transformer 45KVA 600	9/1/2011	9/1/2011	5,298.00			5,298.00	902.00	132.00		1,034.00

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Sys ID Description		In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Endin
40 - Equipment & Fixtures		-11 501 1100	2.08				~~6	7.13 0/00/2017	11001100	
453 Battery Charger for 9-Toi	1/1/2012	1/1/2012	6,127.78			6,127.78	3,984.00	613.00		4,597.0
455 TEI 260 Hydraulic Percu:	1/1/2012	1/1/2012	32,949.71			32,949.71	21,417.00	3,295.00		24,712.0
454 Lefon Portable Electric P	1/4/2012	1/4/2012	8,218.50			8,218.50	5,343.00	822,00		6,165.0
461 Lull 541 Telescopic Forkli	1/12/2012	1/12/2012	52,500.00			52,500.00	34,125.00	5,250.00		39,375.0
456 Ross Shaft Work Deck	1/20/2012	1/20/2012	16,395.00			16,395.00	10,523.00	1,640.00		12,163.0
459 JD 315 Skid Steer W/Buc	2/10/2012	2/10/2012	25,234.00			25,234.00	16,189.00	2,523.00		18,712.0
457 GE 1500KVA 480/277V	3/1/2012	3/1/2012	102,230.90			102,230.90	16,188.00	2,556.00		18,744.0
458 GE Switchboard 1500KV	3/1/2012	3/1/2012	20,762.10			20,762.10	8,765.00	1,384.00		10,149.0
462 Yates Hoist South Cage	5/1/2012	5/1/2012	123,484.05			123,484.05	76,146.00	12,348.00		88,494.0
480 Rope Dog System Yates!	5/1/2012	5/1/2012	69,642.40			69,642.40	42,945.00	6,964.00		49,909.0
599 Yates Rope Dog System	5/1/2012	5/1/2012	227,216.99		•	227,216.99	90,214.87	15,148.00		105,362.8
463 Caterpillar Diesel Genera	5/3/2012	5/3/2012	54,313.83			54,313.83	33,491.00	5,431.00		38,922.0
464 Profi 1-Ton Air Hoist 25'	5/8/2012	5/8/2012	6,970.00			6,970.00	4,298.00	697.00		4,995.0
465 Profi 1-Ton Air Hoist 25'	5/8/2012	5/8/2012	6,970.00			6,970.00	4,298.00	697.00		4,995.0
470 S&C Metal Enclosed Swi	6/1/2012	6/1/2012	21,656.40			21,656.40	8,784.00	1,444.00		10,228.0
471 S&C Metal Enclosed Swi	6/1/2012	6/1/2012	21,656.40			21,656.40	8,784.00	1,444.00		10,228.0
472 S&C Metal Enclosed Swi	6/1/2012	6/1/2012	21,656.40			21,656.40	8,784.00	1,444.00		10,228.0
473 S&C Metal Enclosed Swi	6/1/2012	6/1/2012	21,656.40			21,656.40	8,784.00	1,444.00		10,228.0
474 S&C Metal Enclosed Swi	6/1/2012	6/1/2012	21,656.40			21,656.40	8,784.00	1,444.00		10,228.0
475 Multilin PQM II Meter fo	6/1/2012	6/1/2012	5,389.00			5,389.00	2,184.00	359.00		2,543.0
466 Scanstation C10 Laser Sc	6/5/2012	6/5/2012	59,609.44			59,609.44	36,263.00	5,961.00		42,224.0
467 Refuge Chamber 6X6X1	6/19/2012	6/19/2012	38,105.00			38,105.00	11,430.00	1,905.00		13,335.0
468 Refuge Chamber 6X6X1	6/19/2012	6/19/2012	38,105.00			38,105.00	11,430.00	1,905.00		13,335.00
496 Justice Fire & Safety Pan	7/1/2012	7/1/2012	7,588.00			7,588.00	3,036.00	506.00		3,542.0
497 Quincy Air Regulator	7/1/2012	7/1/2012	17,788.76			17,788.76	10,674.00	1,779.00		12,453.0
498 Cornell McKeon Rollup I	7/1/2012	7/1/2012	8,980.00			8,980.00	3,594.00	599.00		4,193.0
499 Rheem Water Heater	7/1/2012	7/1/2012	10,070.00			10,070.00	6,042.00	1,007.00		7,049.0
500 Johnson Controls Air Har	7/1/2012	7/1/2012	25,071.00			25,071.00	15,042.00	2,507.00		17,549.0
501 Johnson Controls Air Har	7/1/2012	7/1/2012	21,529.00			21,529.00	12,918.00	2,153.00		15,071.0
502 Johnson Controls Air Har	7/1/2012	7/1/2012	21,529.00			21,529.00	12,918.00	2,153.00		15,071.00
503 Johnson Controls Air Hai	7/1/2012	7/1/2012	17,039.00			17,039.00	10,224.00	1,704.00		11,928.0
504 Johnson Controls Chiller	7/1/2012	7/1/2012	17,245.00			17,245.00	10,344.00	1,724.00		12,068.0
505 Johnson Controls Chiller	7/1/2012	7/1/2012	17,245.00			17,245.00	10,344.00	1,724.00		12,068.00
506 Johnson Controls Air Har	7 /1/2012	7/1/2012	17,436.00			17,436.00	10,464.00	1,744.00		12,208.00
525 Line Power Transformers	7/1/2012	7/1/2012	5,000.00			5,000.00	750.00	125.00		875.00

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Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
140 - Equipment & Fixtures	-		-							
526 LN Tank Concrete Pad	8/1/2012	8/1/2012	7,920.00			7,920.00	2,343.00	396.00		2,739.00
484 R&M Hoist 7.5 Ton	8/2/2012	8/2/2012	19,510.50			19,510.50	11,543.00	1,951.00		13,494.00
485 R&M Hoist 10 Ton	8/2/2012	8/2/2012	21,560.50			21,560.50	12,756.00	2,156.00		14,912.00
490 Skyclimber Suspended W	9/6/2012	9/6/2012	67,172.86			67,172.86	39,183.00	6,717.00		45,900.00
491 Skyclimber Electric Hois	9/6/2012	9/6/2012	6,586.85			6,586.85	3,844.00	659.00		4,503.00
492 Skyclimber Electric Hois	9/6/2012	9/6/2012	6,586.85			6,586.85	3,844.00	659.00		4,503.00
493 Skyclimber Electric Hois	9/6/2012	9/6/2012	6,586.85			6,586.85	3,844.00	659.00		4,503.00
494 Skyclimber Electric Hois	9/6/2012	9/6/2012	6,586.85			6,586.85	3,844.00	659.00		4,503.00
489 Ross Cage Work Deck	9/12/2012	9/12/2012	70,226.22			70,226.22	58,520.00	10,032.00		68,552.00
486 LUX Water Treatment Sy	9/25/2012	9/25/2012	147,582.73			147,582.73	56,574.00	9,839.00		66,413.00
483 North Skip Work Deck (F	9/28/2012	9/28/2012	30,837.94			30,837.94	25,329.00	4,405.00		29,734.00
487 Jib Crane Ceiling Mounte	10/1/2012	10/1/2012	28,175.00			28,175.00	16,203.00	2,818.00		19,021.00
488 Jib Crane Ceiling Mounte	10/1/2012	10/1/2012	30,450.00			30,450.00	17,509.00	3,045.00		20,554.00
508 S205 Skidsteer W/Forks	10/19/2012	10/19/2012	21,000.00			21,000.00	11,900.00	2,100.00		14,000.00
495 LUX Water Tank 4850	10/22/2012	10/22/2012	364,225.82			364,225.82	137,598.00	24,282.00		161,880.00
524 Line Power Transformer 1	12/10/2012	12/10/2012	8,000.00			8,000.00	1,117.00	200.00		1,317.00
512 Profi 1Ton Air Hoist 25'	1/16/2013	1/16/2013	7,415.07			7,415.07	4,014.00	741.00		4,755.00
513 Caterpillar Diesel Genera	2/1/2013	2/1/2013	28,434.00			28,434.00	15,400.00	2,843.00		18,243.00
519 MS Scrubbing Systems D	2/1/2013	2/1/2013	17,040.00			17,040.00	9,230.00	1,704.00		10,934.00
520 MS Scrubbing Systems D	2/1/2013	2/1/2013	17,040.00			17,040.00	9,230.00	1,704.00		10,934.00
515 Ross Headframe Garage 1	2/26/2013	2/26/2013	22,621.00			22,621.00	12,064.00	2,262.00		14,326.00
523 Modification to Ross Wo	4/16/2013	4/16/2013	7,010.22			7,010.22	5,172.00	1,001.00		6,173.00
528 25HP Diesel Hydraulic Po	6/15/2013	6/15/2013	11,070.85			11,070.85	5,627.00	1,107.00		6,734.00
536 IT Generator Concrete Pa	8/1/2013	8/1/2013	6,640.00			6,640.00	1,632.00	332.00		1,964.00
538 Yates Loading Dock	9/9/2013	9/9/2013	7,040.00			7,040.00	1,363.00	282.00		1,645.00
540 IT Generator Install	10/31/2013	10/31/2013	28,056.44			28,056.44	13,094.00	2,806.00		15,900.00
554 Hitachi CPWU9410 Proje	1/18/2014	1/18/2014	13,228.18			13,228.18	5,843.00	1,323.00		7,166.00
542 Chem Grout Machine Pur	3/10/2014	3/10/2014	5,909.59			5,909.59	2,561.00	591.00		3,152.00
547 Bolter J.H. Fletcher & Co	4/25/2014	4/25/2014	546,642.95			546,642.95	91,108.00	21,866.00		112,974.00
550 Big Blue 300 Pro Kubota	5/2/2014	5/2/2014	10,445.00			10,445.00	4,350.00	1,044.00		5,394.00
551 Big Blue 300 Pro Kubota	5/2/2014	5/2/2014	10,445.00			10,445.00	4,350.00	1,044.00		5,394.00
548 2014 Toolmaster Trailer	5/8/2014	5/8/2014	11,200.00			11,200.00	4,667.00	1,120.00		5,787.00
553 Ultrasonic Flaw Detector	6/9/2014	6/9/2014	11,742.78			11,742.78	4,794.00	1,174.00		5,968.00
579 Line Power Skid Transfor	7/1/2014	7/1/2014	5,000.00			5,000.00	500.00	125.00		625.00
580 Line Power Skid Transfor	7/1/2014	7/1/2014	8,000.00			8,000.00	800.00	200.00		1,000.00

Cost of Fixed Assets

Accumulated Depreciation

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
40 - Equipment & Fixtures										
566 Davis Campus Dehumidi	7/22/2014	7/22/2014	508,965.03			508,965.03	199,343.00	50,896.00		250,239.00
565 Fisher 2" Valves (2)	8/8/2014	8/8/2014	13,554.96			13,554.96	5,307.00	1,355.00		6,662.00
568 Canon EOS C100 Cinem	8/8/2014	8/8/2014	5,499.00			5,499.00	4,308.00	1,100.00		5,408.00
569 WTP Mix Tank	8/27/2014	8/27/2014	110,641.63			110,641.63	16,966.00	4,426.00		21,392.00
572 HVAC Unit - Adm, Buile	10/10/2014	10/10/2014	17,358.78			17,358.78	6,510.00	1,736.00		8,246.00
577 Pressure Tank 660Gal.on	11/5/2014	11/5/2014	6,081.27			6,081.27	2,229.00	608.00		2,837.00
574 Yates Work Platform (Sk	12/22/2014	12/22/2014	30,419.20			30,419.20	10,647.00	3,042.00		13,689.00
575 Thern Winch (Helical-Be	12/23/2014	12/23/2014	7,909.00			7,909.00	2,768.00	791.00		3,559.00
581 Mining Controls Portable	1/1/2015	1/1/2015	5,000.00			5,000.00	437.00	125.00		562.00
576 Profi 1-Ton Air Hoist 25'	1/26/2015	1/26/2015	7,675.00			7,675.00	2,624.00	768.00		3,392.00
578 JLG Electric Scrissor Lift	2/24/2015	2/24/2015	20,470.00			20,470.00	6,823.00	2,047.00		8,870.00
584 Network Video Recorder	6/30/2015	6/30/2015	5,984.00		(5,984.00)	0.00	5,983.86		(5,983.86)	0.00
585 Shot Tech Robotic Arm §	6/30/2015	6/30/2015	171,390.00		(171,390.00)	0.00	171,389.62		(171,389.62)	0.00
589 Topcon GPT Data Collec	6/30/2015	6/30/2015	9,850.00			9,850.00	8,072.16	1,642.00		9,714.16
590 Wolverine 25D Hydraulic	6/30/2015	6/30/2015	12,816.00			12,816.00	8,388.25	1,602.00		9,990.25
591 Micro 1000 Data Logger	6/30/2015	6/30/2015	7,705.14			7,705.14	7,704.69			7,704.69
592 Micro 1000 Data Logger	6/30/2015	6/30/2015	7,705.14			7,705.14	7,704.69			7,704.69
593 Mini Track Loader	6/30/2015	6/30/2015	22,546.19			22,546.19	16,765.78	3,469.00		20,234.78
594 Vertical Diesel Symo Pov	6/30/2015	6/30/2015	14,023.44			14,023.44	12,263.23	1,760.00		14,023.23
595 IT Generac Generator	6/30/2015	6/30/2015	26,208.14			26,208.14	19,789.76	3,744.00		23,533.76
596 Kubota RTV Utility	6/30/2015	6/30/2015	11,542.33	•		11,542.33	7,570.14	1,649.00		9,219.14
597 Kubota RTV Utility	6/30/2015	6/30/2015	11,542.33			11,542.33	7,570.14	1,649.00		9,219.14
598 HD Video Conferencing	6/30/2015	6/30/2015	13,990.26			13,990.26	13,990.08			13,990.08
636 Neutron Doors (2)Lead R	7/1/2015	7/1/2015	89,520.00			89,520.00	26,856.00	8,952.00		35,808.00
640 DDX Preaction Valve Re	7/22/2015	7/22/2015	12,801.00			12,801.00	3,733.00	1,280.00		5,013.00
637 Lighting Inverter Ross Ca	7/31/2015	7/31/2015	10,000.00			10,000.00	2,917.00	1,000.00		3,917.00
638 Transformer 300KVA 12-	7/31/2015	7/31/2015	20,572.35			20,572.35	1,499.00	514.00		2,013.00
639 Fire Alarm Panel Ross Ca	7/31/2015	7/31/2015	18,291.60			18,291.60	3,556.00	1,219.00		4,775.00
610 S&CMetal Encl.Switchge	8/1/2015	8/1/2015	81,000.00			81,000.00	15,750.00	5,400.00		21,150.00
629 AHU-1-Ross Campus Aiı	9/9/2015	9/9/2015	12,695.62			12,695.62	3,598.00	1,270.00		4,868.00
630 AHU-2-Ross Campus Air	9/9/2015	9/9/2015	12,695.6 2			12,695.62	3,598.00	1,270.00		4,868.00
631 DOAS-1Ross Campus Ai	9/9/2015	9/9/2015	11,691.80			11,691.80	3,312.00	1,169.00		4,481.00
632 Chiller CH-1 Ross Camp	9/9/2015	9/9/2015	57,680.96			57,680.96	16,343.00	5,768.00		22,111.00
633 AHU-1 BSUCleanroom /	9/9/2015	9/9/2015	20,988.00			20,988.00	5,947.00	2,099.00		8,046.00
634 Heat Exchanger Ross Car	9/9/2015	9/9/2015	26,581.62			26,581.62	7,531.00	2,658.00		10,189.00

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Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
140 - Equipment & Fixtures										
635 Liq.NitrogenDistri.Syster	9/9/2015	9/9/2015	22,654.00			22,654.00	6,418.00	2,265.00		8,683.00
612 Polycom16ChannelMicN	10/14/2015	10/14/2015	8,030.30			8,030.30	4,416.00	1,606.00		6,022.00
613 3-Series Digital Media Pr	10/14/2015	10/14/2015	7,464.30			7,464.30	4,106.00	1,493.00		5,599.00
614 Polycom EagleEyeVCam	10/14/2015	10/14/2015	12,259.30			12,259.30	6,743.00	2,452.00		9,195.00
615 Hitachi CPWU9411 Proje	10/14/2015	10/14/2015	13,803.30			13,803.30	7,592.00	2,761.00		10,353.00
616 SMART Board 84 Flat Pa	10/14/2015	10/14/2015	16,331.32			16,331.32	8,982.00	3,266.00		12,248.00
617 Polycom 16 Channel Mic	10/14/2015	10/14/2015	8,030.30			8,030.30	4,416.00	1,606.00		6,022.00
618 Polycom 16Channel Micl	10/14/2015	10/14/2015	8,030.30			8,030.30	4,416.00	1,606.00		6,022.00
619 Crestron 3 Series Digital	10/14/2015	10/14/2015	7,464.30	•		7,464.30	4,106.00	1,493.00		5,599.00
620 Polycom Eagle Eye V Ca	10/14/2015	10/14/2015	12,259.30			12,259.30	6,743.00	2,452.00		9,195.00
611 Yates Skip Bonnet E-Z F	10/24/2015	10/24/2015	30,147.20			30,147.20	8,040.00	3,015.00		11,055.00
628 ET Globe Valve - Fisher	2/8/2016	2/8/2016	8,978.72			8,978.72	2,170.00	898.00		3,068.00
625 LG 79" TV	3/14/2016	3/14/2016	8,040.11			8,040.11	3,752.00	1,608.00		5,360.00
626 Cable Puller Assembly	3/16/2016	3/16/2016	5,763.01			5,763.01	1,296.00	576.00		1,872.00
651 Yates Skip Bonnet W/De	3/25/2016	3/25/2016	16,040.25			16,040.25	3,609.00	1,604.00		5,213.00
627 IVAC PV500 Vacuum Sy	5/27/2016	5/27/2016	47,984.50			47,984.50	9,996.00	4,798.00		14,794.00
654 Snow Plow 8'6" VPlow Ja	12/6/2016	12/6/2016	6,594.00			6,594.00	1,044.00	659.00		1,703.00
656 Milliken 16"Eccent.Plug	1/3/2017	1/3/2017	10,030.30			10,030.30	1,505.00	1,003.00		2,508.00
657 Milliken 8" Eccent, Plug	1/3/2017	1/3/2017	5,746.55			5,746.55	862.00	575.00		1,437.00
658 McCrometer Mag-Flo Mc	1/3/2017	1/3/2017	6,979.65			6,979.65	1,047.00	698.00		1,745.00
676 Radon Removal System	6/30/2017	6/30/2017	421,974.38			421,974.38	42,197.00	42,197.00		84,394.00
678 Atlas Copco Air Compres	6/30/2017	6/30/2017	26,300.00			26,300.00	2,630.00	2,630.00		5,260.00
679 Atlas Copco Air Dryer Ra	6/30/2017	6/30/2017	7,425.00			7,425.00	742.00	742.00		1,484.00
680 RO Reverse Osmosis Sys	6/30/2017	6/30/2017	49,328.24			49,328.24	4,933.00	4,933.00		9,866.00
681 FCU-1 Fan-RadonRemBl	6/30/2017	6/30/2017	7,556.82			7,556.82	756.00	756.00		1,512.00
692 Mini Split HVAC Refuge	7/24/2018	7/24/2018		7,143.25		7,143.25		655.00		655.00
693 Mini Split HVAC 4850'L	9/19/2018	9/19/2018		7,143.25		7,143.25		536.00		536.00
694 Forklift 5000#UsedMode	11/8/2018	11/8/2018		16,625.00		16,625.00		1,108.00		1,108.00
695 LZ Water Tank Modifica	12/1/2018	12/1/2018		123,441.52		123,441.52		4,800.00		4,800.00
696 (3) Hitachi Projector/Len:	12/20/2018	12/20/2018		45,436.00		45,436.00		2,272.00		2,272.00
703 HVAC Unit E & O Bldg.	6/25/2019	6/25/2019		13,134.62		13,134.62				0.00
704 HVAC Unit E & O Bldg.	6/25/2019	6/25/2019		13,134.63		13,134.63				0.00
			10,594,965.06	226,058.27	(181,874.00)	10,639,149.33	4,906,766.52	672,278.00	(179,623.48)	5,399,421.04
150 - Furniture & Fixtures										
249 Blinds	6/1/2006	6/1/2006	1,877.92			1,877.92	1,877.25			1,877.25
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Cost of Fixed Assets

Accumulated Depreciation

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
150 - Furniture & Fixtures										
250 6X8 Workstations - Adm	12/31/2008	12/31/2008	67,297.83			67,297.83	42,617.26	4,486.00		47,103.26
251 Blinds - Admin Bldg	2/1/2009	2/1/2009	5,035.75			5,035.75	4,745.82	289.00		5,034.82
		-	74,211.50	0.00	0.00	74,211.50	49,240.33	4,775.00	0.00	54,015.33
60 - Improvements										
189 Carpet - Admin Bldg	4/25/2006	4/25/2006	6,589.30			6,589.30	6,589.29			6,589.29
283 Office Remodel - Admin	6/1/2006	6/1/2006	19,584.00			19,584.00	19,584.00			19,584.00
284 Office Remodel/Painting	6/1/2006	6/1/2006	10,898.27			10,898.27	10,898.27			10,898.27
285 Yates Building Renovation	2/14/2007	2/14/2007	16,714.32			16,714.32	3,947.43	334.00		4,281.43
263 Power Line East Sub Stat	7/27/2007	7/27/2007	31,222.00			31,222.00	6,240.44	624.00		6,864.44
269 Ross Guard Station	5/31/2008	5/31/2008	8,617.06			8,617.06	1,720.34	172.00		1,892.34
271 Ross Hoist Building	6/30/2008	6/30/2008	197,674.59			197,674.59	39,530.49	3,953.00		43,483.49
286 Kitchen Improvements - ,	6/30/2008	6/30/2008	5,792.72			5,792.72	1,159.85	116.00		1,275.85
259 Gas Line System (Existin	7/1/2008	7/1/2008	5,795.00			5,795.00	2,319.80	232.00		2,551.80
261 Parking Lot - Admin Area	7/1/2008	7/1/2008	60,000.00			60,000.00	30,000.00	3,000.00		33,000.00
264 Power Line Oro Hondo 6	7/1/2008	7/1/2008	8,250.00			8,250.00	1,650.00	165.00		1,815.00
265 Power Line Ross 69KV P	7/1/2008	7/1/2008	25,000.00			25,000.00	5,000.00	500.00		5,500.00
267 Rail System Undergroung	7/1/2008	7/1/2008	61,267.89			61,267.89	12,250.36	1,225.00		13,475.36
275 Ross Yard (Gravel Yard)	7/1/2008	7/1/2008	22,277.00			22,277.00	5,569.93	557.00		6,126.93
282 Yates Yard (Gravel Yard)	7/1/2008	7/1/2008	16,282.20			16,282.20	4,070.06	407.00		4,477.06
277 Yates Gas Line	11/24/2008	11/24/2008	17,695.65			17,695.65	6,784.90	708.00		7,492.90
288 Carpet/Vinyl - Admin Bk	1/1/2009	1/1/2009	53,826.21			53,826.21	51,138.31	2,688.00		53,826.31
256 Communications - Ross 5	2/18/2009	2/18/2009	10,340.00		•	10,340.00	6,430.78	689.00		7,119.78
257 Communications - Yates	2/18/2009	2/18/2009	57,716.63			57,716.63	35,914.59	3,848.00		39,762.59
266 Propane Storage Building	2/25/2009	2/25/2009	16,200.00			16,200.00	3,024.00	324.00		3,348.00
270 Ross Headframe Crusher	3/1/2009	3/1/2009	26,409.12			26,409.12	4,928.06	528.00		5,456.06
278 Yates Headframe/Crushe	3/1/2009	3/1/2009	33,519.74			33,519.74	6,253.46	670.00		6,923.46
280 Yates Safety/Dry Buildin	3/1/2009	3/1/2009	52,177.41			52,177.41	9,743.85	1,044.00		10,787.85
260 IT Room Electrical/Instal	3/4/2009	3/4/2009	41,618.32			41,618.32	19,422.64	2,081.00		21,503.64
279 Yates Hoist Building	4/14/2009	4/14/2009	159,110.28			159,110.28	29,433.55	3,182.00		32,615.55
272 Ross Pump System	6/12/2009	6/12/2009	963,663.60			963,663.60	350,135.00	38,547.00		388,682.00
258 Fiber Optic Network Syst	6/30/2009	6/30/2009	17,541.98			17,541.98	7,893.00	877.00		8,770.00
262 Power Distribution	6/30/2009	6/30/2009	783,887.52			783,887.52	141,102.00	15,678.00		156,780.00
268 Ross Dry Building	6/30/2009	6/30/2009	63,368.30			63,368.30	11,403.00	1,267.00		12,670.00
273 Ross Shaft	6/30/2009	6/30/2009	9,773,260.40			9,773,260.40	1,759,185.00	195,465.00		1,954,650.00
274 Ross Substation	6/30/2009	6/30/2009	277,760.27			277,760.27	49,995.00	5,555.00		55,550.00

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O00 - SD Science & Technology Auth Sys ID Description		In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
160 - Improvements	-1					s				
276 WWTP Improvements	6/30/2009	6/30/2009	660,400.84			660,400.84	118,872.00	13,208.00		132,080.00
281 Yates Shaft	6/30/2009	6/30/2009	4,694,581.28			4,694,581.28	845,028.00	93,892.00		938,920.00
287 Admin Bldg Improvemen	6/30/2009	6/30/2009	382,643.40			382,643.40	68,877.00	7,653.00		76,530.00
407 Ross Substation Upgrade	3/1/2010	3/1/2010	79,000.94			79,000.94	13,167.00	1,580.00		14,747.00
409 Yates Shaft	4/1/2010	4/1/2010	2,185,614.49			2,185,614.49	360,624.00	43,712.00		404,336.00
402 LUX Surface Lab	5/1/2010	5/1/2010	1,563,830.79			1,563,830.79	255,429.00	31,277.00		286,706.00
403 Oro Hondo Substation U	5/15/2010	5/15/2010	85,015.90			85,015.90	13,883.00	1,700.00		15,583.00
404 Pole Frame Building	6/1/2010	6/1/2010	14,183.70			14,183.70	2,296.00	284.00		2,580.00
408 Yates Fencing	6/15/2010	6/15/2010	10,469.70			10,469.70	4,228.00	523.00		4,751.00
401 Fiber Optic Network Syst	6/30/2010	6/30/2010	19,495.55			19,495.55	7,800.00	975.00		8,775.00
405 Power Distribution Upgra	6/30/2010	6/30/2010	341,565.29			341,565.29	54,648.00	6,831.00		61,479.00
406 Ross Pumping System	6/30/2010	6/30/2010	159,652.84			159,652.84	51,088.00	6,386.00		57,474.00
447 Yates Parking Lot Resurf	9/24/2010	9/24/2010	259,641.41			259,641.41	201,221.00	25,964.00		227,185.00
445 Majorana Shotcreting Imj	10/15/2010	10/15/2010	268,602.24			268,602.24	69,386.00	8,953.00		78,339.00
428 Ross Dry Renovations	10/30/2010	10/30/2010	243,726.84			243,726.84	37,375.00	4,875.00		42,250.00
431 Yates E&O Dry Renovati	11/30/2010	11/30/2010	214,711.49			214,711.49	32,563.00	4,294.00		36,857.00
434 Communications Improve	6/30/2011	6/30/2011	89,807.33			89,807.33	41,909.00	5,987.00		47,896.00
435 Power Distribution Impro	6/30/2011	6/30/2011	108,274.04			108,274.04	15,155.00	2,165.00		17,320.00
436 Fiber Optic Network Syst	6/30/2011	6/30/2011	24,228.00			24,228.00	8,477.00	1,211.00		9,688.00
437 Ross Pump System Impro	6/30/2011	6/30/2011	17,311.87			17,311.87	4,844.00	692.00		5,536.00
443 Davis Shotcreting Improv	6/30/2011	7/1/2011	857,538.24			857,538.24	200,095.00	28,585.00		228,680.00
481 Improvements to Yates R	5/1/2012	5/1/2012	42,785.45			42,785.45	5,279.00	856.00		6,135.00
510 Davis Campus Laborator	11/30/2012	11/30/2012	8,453,584.87			8,453,584.87	1,573,305.00	281,786.00		1,855,091.00
527 Ross Gas Line	1/14/2013	1/14/2013	15,873.11			15,873.11	3,492.00	635.00		4,127.00
521 4850 Refuge Area	2/1/2013	2/1/2013	175,941.14			175,941.14	47,650.00	8, 797.00		56,447.00
642 Ross Campus Shotcrete P	7/1/2015	7/1/2015	419,793.13			419,793.13	41,979.00	13,993.00		55,972.00
643 Ross Campus Laboratory	9/9/2015	9/9/2015	2,541,235.84			2,541,235.84	240,006.00	84,708.00		324,714.00
644 Ross Water Suppression !	2/8/2016	2/8/2016	232,972.47			232,972.47	22,521.00	9,319.00		31,840.00
684 Thermal Insulation Davis	1/30/2017	1/30/2017	45,636.90			45,636.90	6,466.00	4,564.00		11,030.00
687 Surface Lab Bldg.IMP	9/15/2017	9/15/2017	461,088.32			461,088.32	7,685.00	9,222.00		16,907.00
697 Davis C.Laboratory Upgr	1/1/2019	1/1/2019		295,191.44		295,191.44		4,920.00		4,920.00
		_	37,513,267.19	295,191.44	0.00	37,808,458.63	6,998,665.40	993,983.00	0.00	7,992,648.40
170 - Improvements in Progress						004.404.0				
477 Improvements in Progress	6/30/2012	6/30/2012	934,406.24			934,406.24				0.00
529 Inprovement in Progress	6/30/2013	6/30/2013	1,635,423.51			1,635,423.51				0.00

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Accumulated Depreciation

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
170 - Improvements in Progress										•
535 Ross Shaft Labor/SCC/E)	6/30/2013	. 6/30/2013	1,096,843.28			1,096,843.28				0.00
557 Ross Shaft Rehab FY14 I	6/30/2014	6/30/2014	3,873,268.01			3,873,268.01				0.00
563 Ross Rehab FY14 SCC/L	6/30/2014	6/30/2014	1,216,243.78			1,216,243.78				0.00
604 Ross Shaft Rehab FY201	6/30/2015	6/30/2015	6,331,306.42			6,331,306.42				0.00
648 Ross Rehab Rehab FY16	6/30/2016	6/30/2016	1,141,668.38			1,141,668.38				0.00
649 Ross Rehab FY16 Labor/	6/30/2016	6/30/2016	1,436,075.93			1,436,075.93				0.00
650 LZ Facility Upgrades	6/30/2016	6/30/2016	119,694.93		(119,694.93)	0.00				0.00
691 LZ UG Facility Upgrades	6/30/2018	6/30/2018	175,496.51		(175,496.51)	0.00				0.00
701 Impr.Prog.Mainten.Suppc	6/30/2019	6/30/2019		246,173.05		246,173.05				0.00
		_	17,960,426.99	246,173.05	(295,191.44)	17,911,408.60	0.00	0.00	0.00	0.00
180 - Infrastructure										
294 Road Gravel WWTP East	7/1/2008	7/1/2008	48,846.60			48,846.60	12,210.17	1,221.00		13,431.17
296 Road Gravel Yates Hillsia	7/1/2008	7/1/2008	5,159.00			5,159.00	1,289.98	129.00		1,418.98
298 Sewer Line System	7/1/2008	7/1/2008	14,850.00			14,850.00	5,940.00	594.00		6,534.00
300 Water Line System (Histo	7/1/2008	7/1/2008	38,150.00			38,150.00	15,260.00	1,526.00		16,786.00
301 Water Line System (Othe	7/1/2008	7/1/2008	25,675.00			25,675.00	10,270.00	1,027.00		11,297.00
292 Concrete Cooling Basins	8/1/2008	8/1/2008	25,000.00			25,000.00	4,958.33	500.00		5,458.33
293 Concrete Vault System	8/1/2008	8/1/2008	25,000.00			25,000.00	4,958.33	500.00		5,458.33
290 Mill Reservoir	10/30/2008	10/30/2008	117,540.85			117,540.85	22,726.21	2,351.00		25,077.21
297 Sewer Line - Backwash t	11/1/2008	11/1/2008	155,156.08			155,156.08	59,991.50	6,206.00		66,197.50
291 Clarifier - WWTP	11/25/2008	11/25/2008	117,245.74			117,245.74	22,472.87	2,345.00		24,817.87
414 Grizzly Gulch Decant Pip	1/1/2011	1/1/2011	1,060,808.89			1,060,808.89	159,120.00	21,216.00		180,336.00
415 Ross Potable Water Line	1/1/2011	1/1/2011	24,810.00			24,810.00	7,440.00	992.00		8,432.00
655 Water Inflow Pipe Systen	1/3/2017	1/3/2017	241,210.06			241,210.06	14,472.00	9,648.00		24,120.00
665 Water Inflow Pipe Fusion	3/15/2017	3/15/2017	20,459.22			20,459.22	1,091.00	818.00		1,909.00
673 Ellison Gravel Road	6/12/2017	6/12/2017	25,400.25			25,400.25	1,376.00	1,270.00		2,646.00
674 Ellison Paved Road	6/12/2017	6/12/2017	13,550.65			13,550.65	367.00	339.00		706.00
		_	1,958,862.34	0.00	0.00	1,958,862.34	343,943.39	50,682.00	0.00	394,625.39
90 - Land										
304 Land - Donated by Home	4/14/2006	4/14/2006	1,511,000.00			1,511,000.00				0.00
305 Land - Closing Costs	1/31/2007	1/31/2007	13,435.39			13,435.39				0.00
306 Land - Phase I Enviromer	6/30/2008	6/30/2008	4,000.00			4,000.00				0.00
307 Land - Phase II Site Asses	12/23/2008	12/23/2008	5,602.65			5,602.65				0.00
603 Ellison Option	6/30/2015	6/30/2015	45,260.00			45,260.00				0.00
672 Ellison Property	6/12/2017	6/12/2017	234,838.10			234,838.10				0.00

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Cost of Fixed Assets

Accumulated Depreciation

Sys ID Description	Acquire	In Service	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
90 - Land										
		_	1,814,136.14	0.00	0.00	1,814,136.14	0.00	0.00	0.00	0.00
00 - Other Non Dep										
309 Archive Materials - Gold	7/1/2008	7/1/2008	20,000.00			20,000.00				0.0
310 Archive Materials	7/1/2008	7/1/2008	50,000.00			50,000.00				0.0
		_	70,000.00	0.00	0.00	70,000.00	0.00	0.00	0.00	0.0
10 - Underground										
311 Underground - Closing C	1/31/2007	1/31/2007	90,686.99			90,686.99				0.0
312 Underground	1/31/2007	1/31/2007	10,658,650.00			10,658,650.00				0.0
		_	10,749,336.99	0.00	0.00	10,749,336.99	0.00	0.00	0.00	0.0
20 - Underground Improvements										
410 Improvements - Undergro	6/30/2010	6/30/2010	1,210,109.78			1,210,109.78				0.0
444 Improvement Majorana E	10/31/2010	10/31/2010	159,204.14			159,204.14				0.0
446 Improvement Hazard Mit	5/31/2011	5/31/2011	60,774.93			60,774.93				0.0
442 Inprovements Davis Exca	6/30/2011	7/1/2011	4,460,860.74			4,460,860.74				0.0
479 Improvement to UG Haze	6/30/2012	6/30/2012	69,223.43			69,223.43				0.0
530 Improvements-Haz.Mit.2	6/30/2013	6/30/2013	51,019.29		,	51,019.29				0.0
556 Hazard Mitigation Inprov	6/30/2014	6/30/2014	294,893.16			294,893.16				0.0
567 D.Campus Excav.Dehum	7/22/2014	7/22/2014	31,530.99			31,530.99				0.0
602 Hazard Mitigation 2015	6/30/2015	6/30/2015	163,874.47			163,874.47				0.0
641 Ross Campus Excavation	7/1/2015	7/1/2015	329,557.51			329,557.51				0.0
646 Hazard Mitigation Yates	6/21/2016	6/21/2016	187,570.00			187,570.00				0.00
664 Haz. Mit. Yates Tunnel	6/30/2017	6/30/2017	169,000.00			169,000.00				0.0
		_	7,187,618.44	0.00	0.00	7,187,618.44	0.00	0.00	0.00	0.00

Summary

000 - SD Science & Technology Authority		•••						
	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
I10 - Automobiles	108,962.53	10,000.00	0.00	118,962.53	75,405.94	5,087.00	0.00	80,492.94
120 - Building	8,120,616.34	0.00	0.00	8,120,616.34	1,915,261.29	163,704.00	0.00	2,078,965.29
130 - Computer Hardware	431,565.17	16,250.00	0.00	447,815.17	306,723.61	40,386.00	0.00	347,109.61
140 - Equipment & Fixtures	10,594,965.06	226,058.27	(181,874.00)	10,639,149.33	4,906,766.52	672,278.00	(179,623.48)	5,399,421.04
150 - Furniture & Fixtures	74,211.50	0.00	0.00	74,211.50	49,240.33	4,775.00	0.00	54,015.33
160 - Improvements	37,513,267.19	295,191.44	0.00	37,808,458.63	6,998,665.40	993,983.00	0.00	7,992,648.40
170 - Improvements in Progress	17,960,426.99	246,173.05	(295,191.44)	17,911,408.60	0.00	0.00	0.00	0.00
180 - Infrastructure	1,958,862.34	0.00	0.00	1,958,862.34	343,943.39	50,682.00	0.00	394,625.39
190 - Land	1,814,136.14	0.00	0.00	1,814,136.14	0.00	0.00	0.00	0.00
200 - Other Non Dep	70,000.00	0.00	0.00	70,000.00	0.00	0.00	0.00	0.00
210 - Underground	10,749,336.99	0.00	0.00	10,749,336.99	0.00	0.00	0.00	0.00
220 - Underground Improvements	7,187,618.44	0.00	0.00	7,187,618.44	0.00	0.00	0.00	0.00
	96,583,968.69	793,672.76	(477,065.44)	96,900,576.01	14,596,006.48	1,930,895.00	(179,623.48)	16,347,278.00

Year to Date 7/1/2018 through 6/30/2019	Cost of Fixed A	ssets		<u>A</u>	ccumulated	<u>Depreciation</u>		
Combined	Beginning	Additions	Retired	Ending	Beginning	YTD 6/30/2019	Retired	Ending
110 - Automobiles	108,962.53	10,000.00	0.00	118,962.53	75,405.94	5,087.00	0.00	80,492.94
120 - Building	8,120,616.34	0.00	0.00	8,120,616.34	1,915,261.29	163,704.00	0.00	2,078,965.29
130 - Computer Hardware	431,565.17	16,250.00	0.00	447,815.17	306,723.61	40,386.00	0.00	347,109.61
140 - Equipment & Fixtures	10,594,965.06	226,058.27	(181,874.00)	10,639,149.33	4,906,766.52	672,278.00	(179,623.48)	5,399,421.04
150 - Furniture & Fixtures	74,211.50	0.00	0.00	74,211.50	49,240.33	4,775.00	0.00	54,015.33
160 - Improvements	37,513,267.19	295,191.44	0.00	37,808,458.63	6,998,665.40	993,983.00	0.00	7,992,648.40
170 - Improvements in Progress	17,960,426.99	246,173.05	(295,191.44)	17,911,408.60	0.00	0.00	0.00	0.00
180 - Infrastructure	1,958,862.34	0.00	0.00	1,958,862.34	343,943.39	50,682.00	0.00	394,625.39
190 - Land	1,814,136.14	0.00	0.00	1,814,136.14	0.00	0.00	0.00	0.00
200 - Other Non Dep	70,000.00	0.00	0.00	70,000.00	0.00	0.00	0.00	0.00
210 - Underground	10,749,336.99	0.00	0.00	10,749,336.99	0.00	0.00	0.00	0.00
220 - Underground Improvements	7,187,618.44	0.00	0.00	7,187,618.44	0.00	0.00	0.00	0.00
	96,583,968.69	793,672.76	(477,065,44)	96,900,576.01	14,596,006.48	1,930,895.00	(179,623.48)	16,347,278.00

SD Science and Technology Authority Consolidated Report 6/30/19 Inventory of Supplies

Inventory of Supplies	Balance 2016	Additions 2017	<u>Deletions</u> 2017	Balance 2017	Additions 2018	Deletions 2018	Balance 2018	Additions 2019	Deletions 2019	Balance 2019
Foundry Motors/Tuggers/Switches/Skips	\$ 779,000.00			\$ 779,000.00			\$ 779,000.00		4	779,000.00
Transformers in Foundry	\$ 94,346.30			\$ 94,346.30			\$ 94,346.30		9	94,346.30
Transformers in Machine Shop	\$ 114,650.00			\$ 114,650.00			\$ 114,650.00		9	114,650.00
(from 6Winze) 6800/8000 Pump/Motor Spares	\$ 23,975.00			\$ 23,975.00			\$ 23,975.00		\$	23,975.00
Ropes	\$ 9,842.86			\$ 9,842.86			\$ 9,842.86		\$	9,842.86
Transformers Refurbished (Machine Shop)	\$ 17,400.00			\$ 17,400.00			\$ 17,400.00		\$	17,400.00
Shaft Level Pumps (from Homestake)	\$ 283,536.36			\$ 283,536.36			\$ 283,536.36		\$ 15,975.46 \$	267,560.90
Benshaw Softstart Starters (3)	\$ 105,772.27			\$ 105,772.27			\$ 105,772.27		\$	105,772.27
Used Joy Fans (2)	\$ 13,372.00			\$ 13,372.00			\$ 13,372.00		\$	13,372.00
Baldor Motor (5000LSpare) S#S9069457-001 001	\$ 6,240.00			\$ 6,240.00			\$ 6,240.00		\$	6,240.00
Flygt Pump (Yates Sump Spare) S#1070147	\$ 22,870.00			\$ 22,870.00			\$ 22,870.00		\$	22,870.00
Sandpiper Air Powered Dbl Diaph.PumpS#1905122	\$ 5,328.06			\$ 5,328.06			\$ 5,328.06		\$	5,328.06
Cable from Improvements Progress	\$ 354,853.92			\$ 354,853.92			\$ 354,853.92		\$	354,853.92
Tsurumi Pumps	\$ 70,513.79			\$ 70,513.79		\$ 40,994.37	\$ 29,519.42		\$ 29,519.42 \$	-
10,000KVA Transformer S# 161916B	\$ 10,000.00			\$ 10,000.00			\$ 10,000.00		\$	10,000.00
Termination Cabinets (4) for Ross Pump System	\$ 15,914.48			\$ 15,914.48			\$ 15,914.48		\$	15,914.48
#5 Shaft Axial Flow Mine Fan S# 3533	\$ 47,245.51			\$ 47,245.51			\$ 47,245.51		\$	47,245.51
DAD Pump S#882157	\$ 140,191.41			\$ 140,191.41			\$ 140,191.41		\$	140,191.41
DAD Pump S#882158	\$ 131,559.36			\$ 131,559.36			\$ 131,559.36		\$	131,559.36
(2) Siemen Motors Malloy (for2 X 11 DAD Pumps)	\$ 94,011.92			\$ 94,011.92			\$ 94,011.92		\$	94,011.92
Sky Climber Electric 208V Hoist	\$ 5,880.13			\$ 5,880.13			\$ 5,880.13		\$	5,880.13
AC Generator 1974 kato S#73392	\$ 40,036.00			\$ 40,036.00		\$ 40,036.00	\$ -		\$	•
Delta Optical Comparator	\$ 21,783.37		•	\$ 21,783.37			\$ 21,783.37		\$	21,783.37
(4) Skid Tanks Pumping System				\$ -	\$ 15,668.98		\$ 15,668.98		\$	15,668.98
Concrete Busket Dumas				\$ -	\$ 10,797.51		\$ 10,797.51		\$ 10,797.51 \$	-
Cement Hopper E-Z Fab				\$ -	\$ 10,614.00		\$ 10,614.00		\$ 10,614.00 \$	-
Surface Lab Water Tank				\$ -	\$ 8,373.54		\$ 8,373.54		\$	8,373.54
Portable Generator S#J100VC06016590			4	\$ -	\$ 3,839.00		\$ 3,839.00		\$	3,839.00
Dry Ice Blast Unit				\$ -	\$ 2,663.00	\$ 2,663.00	\$ -		\$	
Cisco Nexus Core Switch 93180YC-FX							\$	\$ 10,909.00	\$	10,909.00
Totals	\$ 2,408,322.74	\$ -	\$ -	\$ 2,408,322.74	\$ 51,956.03	\$ 81,030.37	\$ 2,376,585.40	\$ 10,909.00	\$ 66,906.39 \$	2,320,588.01

PROPERTY MANAGEMENT SYSTEM ASSESSMENT PROPERTY REPORT CERTIFICATE PROPERTY REPORT

Black print= Fermilab #s Red print=

Subcontract Number: 630223

Date: 6.19.19

			historical #s											
Subcontractor Property Identification Number	Qty	Property Description, Manufacturer Name, Agreement No.	DOE/FRA Property Number	SDSTA Asset #	Serial Number	Model Number	Location	Acquisition Date	Condition at purchase	Grams	Unit Cost	Total Cost	Tagged	Notes
1	1	Slack Rope System Hardware					Ross	3/2/2018	1		\$ 63,917.00	\$ 63,917.00		Contract #2013-39 CO#14
2	1	Dog System Retrofit Kit					Ross	3/8/2018	1		\$ 36,800.00	\$ 36,800.00		Contract #2013-39 CO#15
									_					
									:					1
														

CONDITION CODES

For the purpose of Indicating Condition of Property, please use the following codes:

Condition Code	Brief Description	Expanded Definition
1	Excellent	Property which is in new condition or unused condition and can be used immediately without modifications or repairs.
4	Usable	Property which shows some wear, but can be used without significant repair.
7	Repairable	Property which is unusable in its current condition but can be economically repaired.
x	Salvage	Property which has value in excess of its basic material content but repair or rehabilitation is impractical and/or uneconomical.
s	Scrap	Property which has no value except for its basic material content.

At the close of an agreement, ALL Government Furnished Property (GFP) and Subcontractor Acquired Property (SAP) including materials must be accounted for regardless of the value of the property.

Residual Materials: Remaining property that may be incorporated into or attached to a property item. It includes, but is not limited to precious metals, raw or processed materials, parts, components, assemblies or supplies

PROPERTY MANAGEMENT SYSTEM ASSESSMENT PROPERTY REPORT CERTIFICATE PROPERTY REPORT

| Black print= | Fermilab #s | Red print= | | Red print= | |

Date: 6/30/19

ubcontract Number	r:	629760	Red print= historical #s					Date: 6/30/19						
Subcontractor Property Identification Number	Qty	Property Description, Manufacturer Name, Agreement No.	DOE/FRA Property Number	SDSTA Asset #	Serial Number	Model Number	Location	Acquisition Date	Condition at purchase	Grams	Unit Cost	Total Cost	Tagged	Notes
1	1	Fluke Three Phase Quality Analyzer Meter [PO #3019]	6761832 130070	TS-TMB07-01	12990014	435	Director of Facility Infrastructure's office	2012-03	1	n/a	\$ 5,895.00	\$ 5,895.00	Tagged	
2	1	Flygt Submersible Power Cable (150' @\$ 38.82/ft.) [PO #2929]	Gold Tag		none	FLY94-21-11	SDSTA/Yates Shaft 4850L	2012-02	1	n/a	\$ 5,823.00	\$ 5,823.00		450 Feet Reels for \$30.00 a foot of Sweden (in Yates Sump) 2.8.2
3	1	Allen Bradley Flex Solid State Con-troller [PO #2860]	6761818 130057	MC-YSU48-01	none	2752991	SDSTA/Yates Shaft 4850L	2012-01	1	n/a	\$ 5,375.00	\$ 5,375.00	Tagged	
4	1	Dell Equal Logic SAN [PO #2959]	6761825 130058	SV-YSS12-20	50DMKS1	PS4100Xi SCSI	SDSTA Admin Bldg Server Room	2012-03	1	n/a	\$ 38,950.00	\$ 38,950.00	Tagged	
5	1	Thern Ceiling Mount Winch [PO #2896]	Gold Tag		4012-64281	4WS6M12	SDSTA 4850L Yates Station	2012-05	1	n/a	\$ 6,360.00	\$ 6,360.00	Tagged	
5	1	Thern Single Speed Control [PO #2896]	Gold Tag		none	1057E4	SDSTA 4850L Yates Station	2012-05	1	n/a	\$ 1,055.00	\$ 1,055.00	Tagged	
6	1	Corning 96 Count Figure 8 Fiber Optic Cable (5000'@ \$1.93/ft) [PO #3163]	Gold Tag		none	096-EUA-T4101D20	SDSTA/Yates Shaft	2012-06	i	n/a	\$ 9,650.00	\$ 9,650.00		
7	1	Commercial Evolu-tion Series 8' "Pivot Gate" [PO #3524]	Gold Tag		ES810-01007	CGC-ES810	SDSTA/Ross	2012-10	1	n/a	\$ 15,489.50	\$ 15,489.50	Tagged	
8	1	Flygt Submersible Pump with Agitator 50' Cable (No Control) 30 hp [PO #3699]	Gold Tag		1280005	5100.251A	SDSTA/Ross Shaft 5000L	2013-01	1	n/a	\$ 20,500.00	\$ 20,500.00	Tagged	Trash Pump locatedd in the Ross Maintenance Shop Usable 2.8.20
9	1	R&M 5-ton Electric Chain Hoist [PO #4043]	Gold Tag	-	10026149	LM25-5-015LM12T2C1	SDSTA 4850L Governor's Corner	2013-05	1	n/a	\$ 5,133.00	\$ 5,133.00	Tagged	
10	1	Vigilant VM Panel (REMICA mic & mounting box, Ethernet & NOC Cards, VM Control switches, Duct Detector, 2-RLCD- C Annumiciators) [PO #13064]	6774245 130059	EP-DVU48-01	none	Vigilant VM-RCCM/D (Part #260512)	4850L Davis Campus Fire Alarm System	2013-06	1	n/a	\$ 18,333.70	\$ 18,333.70	Tagged	
11 CORR	1	Staticon Battery Charger [PO #4138]	Gold Tag		S/N 032961	MPL36F600M1	1700L Yates Station	2013-07	1	n/a	\$ 5,689.00	\$ 5,689.00	Tagged	

		Fujikura 70S Fusion Splicer w/Cleaver & Battery Drop					Ross Hoist Cyber	and the latest the same of the						
12	1	(PO #4252)	6774177 130060	TL-TMB07-12	VG239CX06DPEN4CZ	Stock #AFL FSM-70S/S015591	Tool Room	2013-07	1	n/a	\$ 15,752.93	\$ 15,752.93	Tagged	
13	1	Baldor 400 hp, 547 amp Power Module (PO #4321)	Gold Tag		550210008EF	VSIPF4400-9L	5 Shaft	2013-08	1	n/a	\$8,800.00	\$8,800.00	Tagged	At Pipe Shop needs repaired don'
14	1	Flygt Submersible Pump Model 2670, 27 hp (PO #4310)	6774160 130061	PU-XXB99-08	1350012	Model 2670	2600' Yates Pump Station	2013-08	1	n/a	\$12,556.00	\$12,556.00		know what is wrong with it North Dewatering can take a look at if w need them to 2.8.2018
15	1	Sullair 185 Portable Air Compressor 2013 SU 185DLQ (PO 4206)	6774153 130062	CO-XXB99-09	Air Compressor SN 201308070067 John Deere Engine SN PE4024R129152	Model 49HP/185/B DLQ/JD14 EPA	UG Hazard Mitigation	2013-08	1	n/a	\$13,507.00	\$13,507.00	Tagged	
16	1	Fluke OptiFiber Pro OTDR Fiber Testing Tool (PO #4302)	6777741 130063	TS-TMB07-02	2298620	Factory Build to Order	Ross Hoist Cyber Tool Room	2013-08	1	n/a	\$13,178.88	\$13,178.88	Tagged	
17	1	Cornell 6H-F16 Frame Mounted Pump/Motor Assembly (PO 4324)	129953	PU-XXB99-27	Pump/Motor Assembly SN 187888; 100 HP Motor SN A1309122094	6H-F16	SDSTA/YRoss Shaft 2600L	2013-10	i	n/a	\$20,823.75	\$20,823.75		
18	1	Cornell 6H-F16K Spare Pump (PO 4324)	Gold Tag		Pump End only SN 187892	6H-F16K	Warehouse (until	2013-10	1	n/a	\$6,867.90	\$6,867.90	Tagged	
19	1	Maestro Vigilante AQS Air Quality Station (PO 4326)	Gold Tag		none	VAQS-PF-PF-G002-NR-NR-NR NR-MB-IM-SP1-SP2-SP3	Oro Hondo Fan	2013-11	1	n/a	\$7,175.00	\$7,175.00	Tagged	
21	1	Movex Twin Track 66 Track-O- lift, stair climber, remote, sides/backrest (PO 4739)	6777727 130065	ME-XXB99-01	Serial Number 14011421CA045236-2	Twin-Track 66	4850L Yates Shaft Davis Campus	2014-02	i	n/a	\$ 25,455.00	\$25,455.00	Tagged	
22	2	Titan Air Make-Up Units Natural Gas, 50,000 CFM, 3,620,000 BTU [PO 4613]	#1 - 6777703 130066 #2 - 6777710 130067		Unit #1 - SN 15028 Unit #2 - SN 15029	Unit #1 - Model TA-133 NG HLH DA Unit #2 - Model TA-133 NG HRH DA	#1 - Ross Shaft #2 - Yates Shaft	2014-02	1	n/a	\$ 31,215.00	\$ 62,430.00	Tagged	
23	1	CAF-960-5 Blow-Through/Wall Supply-Air Package Fan .(PO 4833)	Gold Tag		Serial Number E3792	Model CAF-960-5 Filtered Supply Fan	Temporary Clean Room - Ross 4850L	2014-03	1	n/a	\$ 6,995.00	\$ 6,995.00	Tagged	
24	1	Big Blue 300 Pro Kubota CC/CV (1800 RPM) Welder (PO 4981)	6777659 130068		Serial Number ME160009E	MIL907521	Hazard Mitigation Crew 4850L	2014-05	1	n/a	\$ 10,445.00	\$ 10,445.00	Tagged	
25	2	Warren Battery mtd in Std Trojan Battery Box (PO 5495)	Gold Tag		Batteries: SN 73362 & 73363	36C 72V 510AH	UG locations	2014-10	1	n/a	\$ 9,583.00	5 19,166.00	Tagged	
26	1	Bobcat SB200 Snowblower X 78 attachment (PO 5836)	Gold Tag		713004771	SB200	Surface - WWTP	2015-02	1	n/a	\$ 6,133.00	\$ 6,133.00	Tagged	

27	1	Benson Medical CCA-200mini Plus System Audiometer (PO 6082)	Gold Tag		68205	CCA-200mini (Item #500303-13)	E&O Bldg.	2015-04	1	n/a	\$ 5,99	0.00 \$	5,990.00	Tagged	
28	3	Fisher 2" 300RF ETCAVII	Gold Tag		15933881	ET-771-75297	Yates Shaft	2015-12	1	n/a	\$ 6,37	6.00 \$	19,128.00		
29	1	2016 John Deere 324K loader w/bucket, chains, spare	6804034 130069		1LU324KXLZB040867	324K	Surface	2016-02	1	n/a	\$ 104,79	1.61 \$	104,791.61	Tagged	
30	1	2016 DYMAX Inc Forks-48 for JD 324K loader	Gold Tag		WG52706	DYMAX 48	Surface	2016-02	1	n/a	\$ 5,36	5.39 \$	5,365.39	Tagged	
30a	1	Block heater for #30	n/a		8800239723	Powerplan B/F	Surface	2016-03	1	n/a		4.96 \$	754.96	Tagged	
70		Salari Cara Salari				Accessed to the last	Yates M-G Set								
31	1	5 ton R&M ECH 20 ft Lift Flygt submersible pump, 58 HP w/50' cord	Gold Tag 130056 (not tagged- submerged)	PU-XXB99-25	11233881 1540033	LK25C042500 BS2201.011 Version HT-244	room Yates 4850L sump	2016-04	1	n/a n/a	\$ 5,30	1.00 \$		Tagged new (FRA subk 629760)	Vegetabel Oil Pump in Rick S 2.8.2018
33	1	Septic System	130071	SE-DVU01-01	427050	AX20RT-C	Yates 4850L	2017-08	1	n/a	\$ 19,66	_	19,664.85	Tagged	
34	3	Bosch Buderus Boiler SSB 512 Floor mount Flygt submersible pump, 58 HP	130072, 130073, 130074	HT-RSS02-04 HT-RSS02-05 HT- RSS02-06	3520-655-000012- 7738004896 3520-657-000023- 7738004896 3520- 654-00008-7738004896	SSB 512	Ross Hoist Building Yates Shaft	2017-08	1	n/a	\$ 15,30	5.00 \$	45,915.00	Tagged	Contract 2014-12 CO#5
35	1	460 V 4"	130075	PU-XXB99-28	1740031	2201.012-0006	Replacement	2017-08	1	n/a	\$ 25,39	0.80 \$	25,390.80	Tagged	
44.			1 125153 4	(2.14233234)	The second of	The same of the same of	6.155	CONTACT TO		24.	1 1 1 1			1 200	
36 37	1	Isco 5800 Refrigerated Sampler Draeger RZ 7000	130076 130077	TS-WTS00-09	217H00557	5800 155 V ISCO Draeger RZ7000 CCBA	WWTP ERT	2017-09 2017-11	1	n/a n/a		1.00 \$ 1.15 \$		Tagged Tagged	
31	1	13 HP 3" Flyght Pump - HT234	1500//		ARKJ-0030	Draeger KZ/UUU CCBA	2600 Sump by Ross	2017-11	1	n/a	\$ 6,95	1.15 \$	0,351.15	Not Tagged as pump is	
38	1	Impellar, 460 Volt	130078		1770014	2125.181.0255	Shaft	2018-01	1	n/a	\$ 9,98	3.92 \$	9,983.92	Submerged	
39	1	58HP Flygt Pump Ht 261 Impeller, 406V, 4" discharge	130079		1750057	2201.012-0006	Yates Shaft	2018-01	1	n/a	\$ 29,20	0.00 \$	29,200.00	Not tagged	
40	1	See 'Deep Well Pump' tab	130080		multiple	multiple	5000L, Yates Shaft	2012-05	X*	n/a	\$ 771,69	6.47 \$	771,696.47	Not Tagged as pump is Submerged	Waiting to get access to Ros then it will be used 2.8.2018
41	72	8 5/8" Pipe for Deep Well Pump	130081		n/a	n/a	Yates Yard	2018-03	1	n/a	\$ 79,70	0.00 \$	79,700.00	Not tagged pipe is sitting in Yates yard till we need to install for the Deep Well Pump	3.5.18
42	4	550 HP 3950 V KMH Motor (Deep Well Pump)	130082	1		Centrilift Baker Hughes	Hydro	2018-08	1	n/a	\$ 86,29	ء ا م	86 200 00	Holding at Hydro	Hydro will store till we are re
42	1	Seal Section HSB3 675 (Deep	150082			Centriiit baker nugnes	riyuro	2010-08	-	11/4	3 00,29	\$ 00.0	30,290.00	Inolanig acriyato	injulo will store till we die fi
43	1	Well Pump)	130083			Centrilift Baker Hughes	Hydro	2018-08	1	n/a	\$ 23,17	7.50 \$	23,177.50	Holding at Hydro	Hydro will store till we are r
44	1	WJJ1200A 8 Stage Pump (Deep Well Pump) 2 AWG Submersible Cable (Deep	130084			Centrilift Baker Hughes	Hydro	2018-08	1	n/a	\$ 45,36	0.00 \$	45,360.00	Holding at Hydro	Hydro will store till we are r
45	1500'	Well Pump) Pressure Transducer with	130085			Centrilift Baker Hughes	Yates Yard	2018-04	1	n/a	\$ 47,28	5.00 \$	47,285.00	to much to tag	stored by Yates at SDSTA
15	1	Stainless Steel Cable (Deep Well Pump)	130086			Dyno Tek			1	n/a	\$ 944	5.00 \$	9 445 00	Holding at Hydro	Hydro will store till we are r
	1	r ump)	131623		M100-1411	RA Warren Equipment			1	n/a		0.00 \$			nyaro win store tili we die i
46	_	Locomotive Controller													
46 47	1	Locomotive Controller	151625					T . T . T	5						
46	2	Locomotive Controller Mitsubishi Mini Split Units Crane Test Weights	131624 & 131625 131626		74M01581 & 7ZM04787	Mitsubishi Electric Mars Metal Company	Refuge Chamber UG	2018-06	1	n/a n/a	\$ 12,08 \$ 13.97	6.50 \$	12,086.50 13,971.60	Tagged Tagged	

51	1	533378 - Bolter Feed Cylinder Assembly	131628		533378 JH Fletcher & Conmpany		2018-10	1	n/a	\$	14,993.47	\$ 14,993.47	Tag will not go on assembly due to it falling off while in use	PO# 12608
52	1	Locomotive Controller	131629		RA Warren Equipment		2018-10	1	n/a	\$	7,800.00	\$ 7,800.00	Tagged	PO#12531
53		MT85 Walk Behind Skid Steer and attachments	131630		Bobcat of Miles City	Underground	2018-12	1	n/a	\$	29,193.32	\$ 29,193.32	Tagged	PO#12913
			40400			Underground in							Not Tagged as pump be Submerged in water tag will fall	20114277
54	 ' -	Flygt Sewage Pump	131631		Northern Dewatering, Inc.	Water	2019-01	1	n/a	\$	16,786.00	\$ 16,786.00	off	PO# 12773
55	3	RTV-X1140WL-H RTV900 Four Seater Diesel	131632, 131633, 131634	30326, 30538, 30560	Jenner Equipment Company	Duane's Shop	2019-04	1 1	n/a	ξ.	14,323.84	\$ 42,971.52	Tagged	PO# 13612
	+ -	550101	Administrative	Serial #'s G9FV22106 &	senner Equipment company	Dualie 3 Slicp	2013 04		17.5	+-	14,525.04	7 42,571.52	100000	10.12002
56	2	8 Ton Locomotive Battery Tray	Controlled Property Tag	G9FV22106 (Model# 2485V23 935AH)	RA Warren Equipment	Yates Shaft	2019-05	1	n/a		10,091.00	\$ 20,182.00	Tagged	PO# 13870
	+	o for Escatilistive Bartery Hay	Administrative	2463¥23 933AII)	NA Watter Edolphient	Tates Shart	2013-03	 	11/0	-	10,091.00	20,102.00	198850	101/150/0
		li .	Controlled	İ						İ				ĺ
57	2	8 Ton Battery Chargers	Property Tag	No Serial #'s	RA Warren Equipment	Yates Shaft	2019-05	1 1	n/a	Ś	4,700.00	\$ 9,400.00	Tagged	PO#13870
58	3	Locomotives			Electric Controllers	On order	2019-05	1	n/a	\$	59,000.00	\$ 177,000.00		PO#14057
59	3	Battery Chargers 8 Ton			Electric Controllers	On order	2019-06	1	n/a	\$	6,050.00	\$ 18,150.00	i -	PO#14057
60	1	Omni B" C2 Water Valve			Lead-Deadwood Sanitary District	On order	2019-07	1	n/a	\$	8,006.00	\$ 8,006.00		PO#14151
61	2	350 HP 480 VFD with surge protector and load reactor			20558-350T3P00-23S-4-00		2019-07	1	n/a	\$	19,737.81	\$ 39,475.62		PO#14256
62	1	Hoist 5 Ton 3 Phase 20 Lift (Oro Hondo Fan)			NER2050L	On order	2019-07	1	n/a	\$	7,007.81	\$ 7,007.81		PO#14255
63	1	8048 Porta Model Respirator Tester			8048 Porta Model	On order	2019-08	1	n/a	\$	12,454.41	\$ 12,454.41		PO#14407
64		Fit Test Adapter Kit - 3M			8025-16	On order	2019-08	1	n/a	\$	325.00	\$ 325.00		PO#14407
65	1	Fit Test Adapter Kit - North			8025-17	On order	2019-08	1	n/a	\$	300.00	\$ 300.00		PO#14407
66		Fit Test Adapter Kit -Draeger			8025-26	On order	2019-08	1	n/a	\$	515.00	\$ 515.00		PO#14407
-		PU-XXU99-02 Flygt Pump CP 3085 183-2012MT 434 Impellar					2012.05		,					DO#42003
67	2	Solid Handling 3"	l l			On order	2019-06	1	n/a	\$	5,564.15	\$ 11,128.30	l	PO#13982

^{*}SDSTA took possession of this pump and motor Jan. 1, 2018 upon termination of lease agreement. Leased in 2012; at end of life but still functioning. Scheduled for replacement upon failure, est. by Sept 2018.

At the close of an agreement, ALL Government Furnished Property (GFP) and Subcontractor Acquired Property (SAP) including materials must be accounted for regardless of the value of the property.

Residual Materials: Remaining property that may be incorporated into or attached to a property item. It includes, but is not limited to precious metals, raw or processed materials, parts, components, assemblies or supplies

	CONDITION	
·	or the purpose of indicating Condition of P	roperty, please use the following codes:
Condition Code	Brief Description	Expanded Definition
1	Excellent	Property which is in new condition or unused condition and car be used immediately without modifications or repairs.
4	Usable	Property which shows some wear, but can be used without significant repair.
7	Repairable	Property which is unusable in its current condition but can be economically repaired.
x	Salvage	Property which has value in excess of its basic material conten but repair or rehabilitation is impractical and/or uneconomical
S	Scrap	Property which has no value except for its basic material conte

<u>Date</u>	<u>Name</u>	<u>Purpose</u>	<u>Amount</u>
07/13/18	Peterson, Casey C.	7/11/18 Meeting with Nigel Lockyer & Mike Headley	75.00
07/27/18	Christen, Paul R.	7/23/2018 Special Telephonic BOD meeting	75.00
07/27/18	Lebrun, Patricia O.	7/23/2018 Special Telephonic BOD meeting	75.00
07/27/18	Peterson, Casey C.	7/23/2018 Special Telephonic BOD meeting	75.00
07/27/18	Wilson, Robert J.	7/23/2018 Special Telephonic BOD meeting	75.00
09/07/18	Christen, Paul R.	9/6/18 Audit Cmte Teleconference.	75.00
09/07/18	Lebrun, Patricia O.	9/6/18 Audit Cmte Teleconference.	75.00
09/07/18	Peterson, Casey C.	Misc phone calls with SDSTA Exec Dir this payroll period.	75.00
09/21/18	Christen, Paul R.	9/18 Quarterly SDSTA BoD Mtg	75.00
09/21/18	Lebrun, Patricia O.	9/10/18 FRA Board reception. 9/18 Quarterly SDSTA BoD Mtg	150.00
09/21/18	Peterson, Casey C.	8/23 & 9/6 working group focused on the DUNE Integration and Test Facility (ITF) at SDSM&T	450.00
		9/10-9/11 FRA Site Visit, Mtg and Reception & 9/18 Quarterly SDSTA BOD Meeting	
09/21/18	Wilson, Robert J.	9/18 Quarterly SDSTA BoD Mtg	75.00
10/05/18	Dykhouse, Dana J.	10/1 Audit Cmte Teleconference	75.00
10/05/18	Lebrun, Patricia O.	10/1 Audit Cmte Teleconference	75.00
10/05/18	Peterson, Casey C.	9/24 Teleconference with Fermilab Nigel Lockyer	150.00
		10/3 Teleconference with DOE Joe McBrearty	
10/19/18	Dykhouse, Dana J.	10/17/18 Audit Cmte Teleconference	75.00
10/19/18	Peterson, Casey C.	10/11/18 attended group focused on the DUNE Integration and Test Facility (ITF) at SDSM&T	150.00
		10/17/18 Audit Cmte Teleconference	
11/02/18	Dykhouse, Dana J.	10/17/18 SDSTA Committee on Development for SURF meeting	75.00
11/02/18	Lebrun, Patricia O.	10/23/18 SDSTA Telephonic Special BoD Mtg & 10/30/18 CAC Meeting	150.00
11/02/18	Peterson, Casey C.	10/17/18 SDSTA Committee on Development for SURF meeting	375.00
		10/23/18 SDSTA Telephonic Special BoD Mtg	
		10/28, 10/29, 10/30/2018 SPAC Meeting at Fermilab	
11/16/18	Dykhouse, Dana J.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
11/16/18	Lebrun, Patricia O.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
11/16/18	Peterson, Casey C.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
11/16/18	Wilson, Robert J.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
11/30/18	Peterson, Casey C.	11/26, 11/27 Travel to FRIB with SDSTA Mgmt Team; CA mtg	150.00

<u>Date</u>	<u>Name</u>	<u>Purpose</u>	<u>Amount</u>
12/14/18	Lebrun, Patricia O.	12/13 SDSTA Quarterly Board Meeting in Lead	75.00
12/14/18	Peterson, Casey C.	12/13 SDSTA Quarterly Board Meeting in Lead	75.00
12/14/18	Wilson, Robert J.	12/13 SDSTA Quarterly Board Meeting in Lead	75.00
12/28/18	Peterson, Casey C.	December CA discussion with Mike Headley	75.00
01/25/19	Peterson, Casey C.	1/21/19 DUNE Integration and Test Facility (ITF) mtg at SDSM&T	75.00
02/22/19	Dykhouse, Dana J.	2/21/19 SDSTA Telephonic Board mtg	75.00
02/22/19	Lebrun, Patricia O.	2/21/19 SDSTA Telephonic Board mtg	75.00
02/22/19	Peterson, Casey C.	2/19/19 SDSTA business; 2/21 SDSTA Telephonic Board mtg	150.00
02/22/19	Wilson, Robert J.	2/21/19 SDSTA Telephonic Board mtg	75.00
03/08/19	Peterson, Casey C.	3/2 SDSTA business discussions with Mike Headley	75.00
03/22/19	Dykhouse, Dana J.	3/21 SDSTA BoD Quarterly Mtg, call-in	75.00
03/22/19	Lebrun, Patricia O.	3/21 SDSTA BoD Quarterly Mtg, call-in & 3/14 Audit Committee call in	150.00
03/22/19	Peterson, Casey C.	3/1 Discussions with Sen Mike Rounds, call	225.00
		3/13 Discussions with Qusi Al Haj (Sen. Thune) and Jeff Marlette (Sen Rounds) and Headley, call	
		3/21 SDSTA BoD Quarterly Mtg, present in person	
04/05/19	Lebrun, Patricia O.	4/3/19 participated in CAC mtg via phone	75.00
04/19/19	Peterson, Casey C.	4/16/19 signed leased vehicle docs and delivered to Liberty Dodge/RC	225.00
		4/18/19 LBNF Strategic Planning Advisory Committee (SPAC) teleconference	
		Misc phones calls with Executive Director	
05/03/19	Peterson, Casey C.	5/2/19 Participated in DOE HEP mtg via telephone.	75.00
05/31/19	Dykhouse, Dana J.	5/23 Teleconference with Roger Musick as SDSTA nominating cmte.	75.00
06/14/19	Peterson, Casey C.	6/12 review SDSTA contract and other business	75.00
06/28/19	Dykhouse, Dana J.	6/20/19 SDSTA annual board meeting/by phone	75.00
06/28/19	Lebrun, Patricia O.	6/20/19 SDSTA annual board meeting/by phone	75.00
06/28/19	Peterson, Casey C.	6/20/19 SDSTA annual board meeting/in person	150.00
		misc teleconferences (DOE Jim Siegrist, Elizabeth Freer/contract)	
06/28/19	Wilson, Robert J.	6/20/19 SDSTA annual board meeting/by phone	75.00

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<u>Date</u>	<u>Name</u>	<u>Purpose</u>	<u>Amount</u>
		Aprahamian Total	\$0.00
		Paul Christen	
07/27/18	Christen, Paul R.	7/23/2018 Special Telephonic BOD meeting	75.00
09/07/18	Christen, Paul R.	9/6/18 Audit Cmte Teleconference.	75.00
09/21/18	Christen, Paul R.	9/18 Quarterly SDSTA BoD Mtg	75.00
		Christen Total	\$225.00
		DANA DYKHOUSE	
10/05/18	Dykhouse, Dana J.	10/1 Audit Cmte Teleconference	75.00
10/19/18	Dykhouse, Dana J.	10/17/18 Audit Cmte Teleconference	75.00
11/02/18	B Dykhouse, Dana J.	10/17/18 SDSTA Committee on Development for SURF meeting	75.00
11/16/18	B Dykhouse, Dana J.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
02/22/19	Dykhouse, Dana J.	2/21/19 SDSTA Telephonic Board mtg	75.00
	Dykhouse, Dana J.	3/21 SDSTA BoD Quarterly Mtg, call-in	75.00
	Dykhouse, Dana J.	5/23 Teleconference with Roger Musick as SDSTA nominating cmte.	75.00
06/28/19	Dykhouse, Dana J.	6/20/19 SDSTA annual board meeting/by phone	75.00
		Dykhouse Total	\$600.00
		PAT LEBRUN	
07/27/18	Lebrun, Patricia O.	7/23/2018 Special Telephonic BOD meeting	75.00
09/07/18	Lebrun, Patricia O.	9/6/18 Audit Cmte Teleconference.	75.00
09/21/18	Lebrun, Patricia O.	9/10/18 FRA Board reception. 9/18 Quarterly SDSTA BoD Mtg	150.00
10/05/18	Lebrun, Patricia O.	10/1 Audit Cmte Teleconference	75.00
11/02/18	Lebrun, Patricia O.	10/23/18 SDSTA Telephonic Special BoD Mtg & 10/30/18 CAC Meeting	150.00
11/16/18	Lebrun, Patricia O.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
12/14/18	Lebrun, Patricia O.	12/13 SDSTA Quarterly Board Meeting in Lead	75.00
02/22/19	Lebrun, Patricia O.	2/21/19 SDSTA Telephonic Board mtg	75.00
	Lebrun, Patricia O.	3/21 SDSTA BoD Quarterly Mtg, call-in & 3/14 Audit Committee call in	150.00
04/05/40	Lebrun, Patricia O.	4/3/19 participated in CAC mtg via phone	75.00

<u>Date</u>	<u>Name</u>	<u>Purpose</u>	<u>Amount</u>
06/28/19	9 Lebrun, Patricia O.	6/20/19 SDSTA annual board meeting/by phone	75.00
		Lebrun Total	\$1,050.00
		CASEY PETERSON	
07/13/18	8 Peterson, Casey C.	7/11/18 Meeting with Nigel Lockyer & Mike Headley	75.00
07/27/18	8 Peterson, Casey C.	7/23/2018 Special Telephonic BOD meeting	75.00
09/07/18	8 Peterson, Casey C.	Misc phone calls with SDSTA Exec Dir this payroll period.	75.00
09/21/18	8 Peterson, Casey C.	8/23 & 9/6 working group focused on the DUNE Integration and Test Facility (ITF) at SDSM&T	450.00
09/21/18	8 Peterson, Casey C.	9/10-9/11 FRA Site Visit, Mtg and Reception & 9/18 Quarterly SDSTA BOD Meeting	
10/05/18	8 Peterson, Casey C.	9/24 Teleconference with Fermilab Nigel Lockyer	150.00
10/05/18	8 Peterson, Casey C.	10/3 Teleconference with DOE Joe McBrearty	
10/19/18	8 Peterson, Casey C.	10/11/18 attended group focused on the DUNE Integration and Test Facility (ITF) at SDSM&T	150.00
10/19/18	8 Peterson, Casey C.	10/17/18 Audit Cmte Teleconference	
11/02/18	8 Peterson, Casey C.	10/17/18 SDSTA Committee on Development for SURF meeting	375.00
11/02/18	8 Peterson, Casey C.	10/23/18 SDSTA Telephonic Special BoD Mtg	
11/02/18	8 Peterson, Casey C.	10/28, 10/29, 10/30/2018 SPAC Meeting at Fermilab	
11/16/18	8 Peterson, Casey C.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
11/30/18	8 Peterson, Casey C.	11/26, 11/27 Travel to FRIB with SDSTA Mgmt Team; CA mtg	150.00
12/14/18	8 Peterson, Casey C.	12/13 SDSTA Quarterly Board Meeting in Lead	75.00
12/28/18	8 Peterson, Casey C.	December CA discussion with Mike Headley	75.00
01/25/19	9 Peterson, Casey C.	1/21/19 DUNE Integration and Test Facility (ITF) mtg at SDSM&T	75.00
02/22/19	9 Peterson, Casey C.	2/19/19 SDSTA business; 2/21 SDSTA Telephonic Board mtg	150.00
03/08/19	9 Peterson, Casey C.	3/2 SDSTA business discussions with Mike Headley	75.00
03/22/19	9 Peterson, Casey C.	3/1 Discussions with Sen Mike Rounds, call	225.00
03/22/19	9 Peterson, Casey C.	3/13 Discussions with Qusi Al Haj (Sen. Thune) and Jeff Marlette (Sen Rounds) and Headley, call	
03/22/19	9 Peterson, Casey C.	3/21 SDSTA BoD Quarterly Mtg, present in person	
04/19/19	9 Peterson, Casey C.	4/16/19 signed leased vehicle docs and delivered to Liberty Dodge/RC	225.00
04/19/19	9 Peterson, Casey C.	4/18/19 LBNF Strategic Planning Advisory Committee (SPAC) teleconference	
04/19/19	9 Peterson, Casey C.	Misc phones calls with Executive Director	
05/03/19	9 Peterson, Casey C.	5/2/19 Participated in DOE HEP mtg via telephone.	75.00

<u>Date</u>	<u>Name</u>	<u>Purpose</u>	<u>Amount</u>
06/14/19	Peterson, Casey C.	6/12 review SDSTA contract and other business	75.00
06/28/19	Peterson, Casey C.	6/20/19 SDSTA annual board meeting/in person	150.00
06/28/19	Peterson, Casey C.	misc teleconferences (DOE Jim Siegrist, Elizabeth Freer/contract)	
		Peterson Total	\$2,775.00
		Robert Wilson	
07/27/18	Wilson, Robert J.	7/23/2018 Special Telephonic BOD meeting	75.00
09/21/18	Wilson, Robert J.	9/18 Quarterly SDSTA BoD Mtg	75.00
11/16/18	Wilson, Robert J.	11/13/18 SDSTA Telephonic Special BoD Mtg	75.00
12/14/18	Wilson, Robert J.	12/13 SDSTA Quarterly Board Meeting in Lead	75.00
02/22/19	Wilson, Robert J.	2/21/19 SDSTA Telephonic Board mtg	75.00
06/28/19	Wilson, Robert J.	6/20/19 SDSTA annual board meeting/by phone	75.00
		Wilson Total	\$450.00

South Dakota Science and Technology Authority Agenda Item: 09 September 19, 2019 Board Meeting Approval of Cooperative Agreement—Mr. Mike Headley See suggested motion below.

Recommended Action:

Motion to authorize the SDSTA Executive Director and Legal Counsel to finalize the terms of the Cooperative Agreement with DOE, and to authorize the executive director to sign the final agreement.

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

MOU between SDSTA and FRA for LBNF/DUNE—Mr. Mike Headley

Attached is the Memorandum of Understanding between the SDSTA and Fermi Research Alliance LLC for LBNF/DUNE.

See suggested motion below.

Recommended Action:

Motion to authorize the Executive Director to sign the Memorandum of Understanding between SDSTA and FRA for the Long-Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE), as presented.

Agenda Item: 10

Pase intentionally

MEMORANDUM OF UNDERSTANDING

BETWEEN

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

AND

FERMI RESEARCH ALLIANCE, LLC

This Memorandum of Understanding ("MOU") is entered into by and between the South Dakota Science and Technology Authority ("SDSTA"), as operator of the Sanford Underground Research Facility ("SURF") under Cooperative Agreement ("CA") number ______ and Fermi Research Alliance, LLC ("FRA"), as operator of the Fermi National Accelerator Laboratory ("Fermilab") (referred to hereinafter as the "Parties") under U.S. Department of Energy ("DOE") Contract Number DE-AC02-07CH11359.

A. Purpose and Vision

The partnership between SDSTA and FRA is vital to the success of both organizations. The successful execution of LBNF/DUNE lays the foundation for SURF as an internationally renowned underground laboratory hosting a world-leading multidisciplinary science program for decades into the future.

This MOU establishes a process to ensure strong communication, coordination, and resolution of issues between SDSTA and FRA, which is essential to a robust partnership and the successful execution of LBNF/DUNE and existing and future DOE experiments at SURF.

This document is a non-binding agreement between SDSTA and FRA. No language in this MOU shall be construed to modify any language in existing or future agreements, including subcontracts, between SDSTA and FRA.

B. Scope and Applicability

This MOU relates to all LBNF/DUNE-related activities in Lead, SD, and recognizes the mutual interests of the Parties as well as the need for cooperation while pursuing the goals of scientific research during the duration of the LBNF/DUNE Project. Coordination among the Parties regarding the LBNF/DUNE Project is necessary to ensure project success and efficient and safe operations at SURF while meeting LBNF/DUNE requirements.

C. Standard Forms of Agreements

The Parties have entered into or expect to enter into contracts, and SDSTA has entered into a CA with DOE that, collectively with this MOU, make up the cooperative model contributing to the successful delivery of the LBNF/DUNE Project and reflecting the following relationships:

- Traditional Prime/Subcontractor (For certain LBNF/DUNE work)
- Landlord/Tenant
- Easement Owner/Assignee

A summary of the existing contracts and their purpose is set out below. A complete list is attached as Exhibit A. Future agreements between the Parties may be entered into and appended herein without executing any modification or revision to this MOU, unless expressly requested by one of the Parties.

D. Contracts

Existing Contracts	<u>Purpose</u>	<u>Parties</u>
Ross Shaft Refurb	Refurbishment construction	FRA – SDSTA
Ross Shaft Support	LBNF/DUNE Project Support	FRA – SDSTA
	Service for exclusive use of Ross	
	Shaft during Project construction (with limited exceptions)	
LBNF Staff Services	Engineering support to the LBNF Project	FRA – SDSTA
Reliability Projects Support	Reliability projects support	FRA - SDSTA
SURF Ops Cooperative	SURF Operations	DOE – SDSTA
Agreement (CA)		
DOE Lease	Land lease	DOE - SDSTA
DOE Easement	Temporary construction easement	DOE - SDSTA
SDSTA Easements	Third party easements	SDSTA – various
		parties
Facility and Land	Third party easement use	SDSTA – Kiewit
Use Agreements		Alberici Joint
Hamantalan DD A	Town of the of the control to CDCTA	Venture (KAJV)
Homestake PDA	Transfer of property to SDSTA	Homestake – SDSTA

Additionally, the Parties recognize in the course of the FRA-SDSTA alliance to execute LBNF/DUNE, there are and will be a number of activities that are implied but not expressly stated in existing contracts, including:

- SDSTA is providing access to SURF to facilitate the construction of LBNF/DUNE
- SDSTA is facilitating access (for FRA and its concomitant DOE oversight) to certain third-party property

- Participation in various DOE and other reviews
- Assessments, evaluations, and/or certain audit activities.

The Parties acknowledge that in order for the LBNF/DUNE Project to be successful, each must participate in good faith in the types of activities identified above. To the extent that any of the activities create a material burden on resources, the Parties agree to formalize the activity as a requirement in an existing or future agreement.

Without committing to enter into any future agreements and understanding that any such future agreement is contingent upon available funds and other requirements, the following future agreements might be required:

• Long Term - Decommissioning Plan (consistent with the latest version of said Plan).

E. Roles and Responsibilities

DOE supports both FRA and SDSTA in carrying out their distinct but related scopes of work. FRA is supported by DOE for many activities; the relevant one for this MOU is the construction of the Long Baseline Neutrino Facility and the Deep Underground Neutrino Experiment (LBNF/DUNE). SDSTA is supported by DOE to operate the Sanford Underground Research Facility (SURF) in Lead, South Dakota. SURF has been selected to be the far site of LBNF/DUNE, and this creates a relationship between FRA and SDSTA.

DOE has a relationship with FRA through a Management and Operations contract to run Fermi National Accelerator Laboratory (Fermilab). DOE has a relationship with SDSTA via a Cooperative Agreement for financial assistance for SURF operations. The Cooperative Agreement provides that that DOE has a right to substantial involvement in the operation of SURF (within the scope of the Cooperative Agreement).

Given these relationships, it is appropriate for DOE to participate in the discussion of how FRA and SDSTA will cooperate on making LBNF/DUNE successful and to mediate any significant issues that may arise. However, the Parties recognize DOE expects that FRA and SDSTA will develop an effective partnering relationship and will use this MOU to document the processes they will use to work together on the common goal of the successful and safe construction and operation of LBNF/DUNE at SURF. The Parties also recognize DOE further expects that most issues can be resolved without direct mediation by DOE.

FRA Roles and Responsibilities

- FRA is responsible for executing the scope of work defined in the Management and Operations contract with the DOE for Fermilab.
- FRA is responsible for the successful execution the LBNF/DUNE Project.
- FRA, through LBNF/DUNE is the largest tenant of SURF.
- FRA is responsible to ensure its employees, users, and contractors follow the policies put in place to ensure compliance with all applicable DOE regulations,

- including but not necessarily limited to those made applicable by the Management and Operating Agreement with DOE.
- FRA is responsible to ensure its employees, users, and contractors follow SDSTA policies when they apply.
- FRA currently has and will continue to have separate contracts where SDSTA is FRA's subcontractor. Those contracts define the relationship between the parties. Nothing in this MOU in any way modifies or supersedes any of the language in those contracts.

SDSTA Roles and Responsibilities

- SDSTA is the owner and operator of SURF.
- SDSTA is responsible for operating SURF in accordance with the Property Donation Agreement between the Homestake Mining Company and SDSTA and the SDSTA Risk Transfer Protocols.
- SDSTA is responsible for operating and maintaining SURF in accordance with the Cooperative Agreement with DOE.
- SDSTA is responsible to ensure its employees, users, and contractors follow the policies put in place to ensure compliance with all DOE regulations and SDSTA policies.
- SDSTA currently has and will continue to have separate contracts where SDSTA is FRA's subcontractor in support of LBNF/DUNE. Those contracts define the relationship between the parties. Nothing in this MOU in any way modifies or supersedes any of the language in those contracts.

Key Stakeholder Roles and Responsibilities

FRA Board

- On behalf of FRA members, Universities Research Association (URA) and The University of Chicago provide oversight and guidance to Fermilab leadership.
- Advise and support for Fermilab mission.

FRA Deputy Director for LBNF

- Ensure DOE and Fermilab mission success at SURF.
- Direct and advocate for LBNF/DUNE Project.
- Communicate with and be responsive to FRA Board, Fermilab Director and DOE.

FRA South Dakota Services Division Head

- Serve as a single point of contact for any matters concerning FRA related to this MOU.
- Coordinate FRA and DOE-sponsored LBNF activities at SURF.
- Arrange and support DOE and FRA-related visits including DUNE collaborators.

FRA LBNF/DUNE ESH Manager

• Coordinate with DOE and SDSTA to establish ESH requirements and to the extent possible maintain common standards for worker safety at SURF.

- Oversee and assure LBNF/DUNE ESH performance to the Deputy Director for LBNF.
- Foster a strong culture of safety and continuous improvement.
- Liaise with DOE and FRA ESH assurance programs.
- Report all incidents to SDSTA in accordance with this MOU.

SDSTA Board of Directors

- Oversee activities of SDSTA ED.
- Report to South Dakota Governor's Office and Legislature.
- Advise and support SDSTA mission.

SDSTA Executive Director (ED) and SURF Laboratory Director

- Ensure SDSTA performance and alignment in support of this MOU and all other agreements between/among SDSTA, FRA, and/or DOE.
- Resolve conflicting priorities at SURF to ensure the execution of LBNF/DUNE, while recognizing the needs of other experiments hosted at SURF.
- Communicate with and be responsive to local governments, state officials, SDSTA Board of Directors, and DOE.

SDSTA ESH Director

- Coordinates with DOE and FRA to establish ESH requirements and to the extent possible maintain common standards for worker safety at SURF.
- Oversee and assure ESH performance to SDSTA ED.
- Foster a strong culture of safety and continuous improvement.
- Develop and implement the ESH Program in support of SDSTA line managers.
- Report incidents in accordance with contractual requirements and this MOU.

F. Joint Coordination Team

In order to ensure the necessary robust communication and coordination, this MOU establishes the Joint Coordination Team (JCT). The JCT shall ensure the efforts of SDSTA and FRA remain coordinated by establishing a formal communication channel and timely resolution of issues.

FRA members of the JCT:

- FRA LBNF Project Director
- FRA South Dakota Services Division Head
- FRA LBNF/DUNE ESH Manager

SDSTA members of the JCT:

- SDSTA Executive Director
- SDSTA Science Director
- SDSTA ESH Director

Each member of the JCT will endeavor to attend each meeting but may from time-to-time designate another person to appear in their stead. Either party may from time-to-time bring in subject matter experts as necessary to facilitate discussion and resolution of the issue at hand.

Meetings

The primary way that the JCT will fulfill its charge is through periodic meetings. An agenda will be established in advance of each meeting, and minutes will be kept and distributed to members. Formal action items will be documented and tracked through the meeting minutes.

The JCT shall meet via teleconference every two weeks. The goal of these meetings is to discuss and resolve current and emerging issues. The standard agenda for the bi-weekly meetings will include the following:

- Emergent issues
- ESH issues
- Access issues, including shaft utilization (personnel and materials)
- 1-month look-ahead schedule of activities from both SDSTA and FRA perspective
- Proposed changes to infrastructure
- Other changes by either party that may affect any part or use of SURF
- Any outstanding or unresolved issues
- Review of open action items

The JCT shall meet every two months in person, preferably at SURF. The goal of these meetings will be to discuss longer-term planning and coordination. The standard agenda will include the following issues:

- Proposed SDSTA ESH policies that may affect LBNF/DUNE
- Proposed FRA ESH policies that may affect leased space at SURF
- Proposed operational changes that may affect the other entity
- Access issues, including planned shaft utilization (personnel and materials) expected in the upcoming quarter
- A report on current and future or potential experiments from SDSTA
- LBNF/DUNE schedule status
- Status on infrastructure projects managed by SDSTA and planned schedules
- VIP visits and major events
- Risk management and insurance
- Incidents
- Communications among the Fermilab Director, Chairperson of the SDSTA Board, and DOE Associate Director of Science for High Energy Physics, including arranging for and providing a draft agenda for periodic meetings as described below

For proposed policies and changes that affect the other organization, both FRA and SDSTA members must agree to the change in order for it to be implemented.

Once per year, the JCT shall meet in person and include in its agenda the following issues:

• Review the MOU and determine if any changes are necessary.

- Update the General Services Agreement between SDSTA and FRA based on upcoming or planned activities.
- Review JCT membership and agendas.

Communication and Coordination

The JCT is responsible for ensuring SDSTA and FRA remain coordinated in the execution of LBNF/DUNE. The scheduled JCT meetings are intended by SDSTA and FRA to ensure this coordination. JCT members are responsible for communicating to their respective organizations the issues discussed and decisions of the JCT. However, in order to achieve broader organizational alignment, the JCT will facilitate a regular meeting between the Fermilab Director, Chairperson of the SDSTA Board, and Associate Director of Science for High Energy Physics. The JCT will provide an agenda of items for the meeting to include the following:

- Issues that have arisen since the last meeting
- Anticipated issues
- LBNF/DUNE schedule status
- Other outstanding issues

Issue Resolution

If an issue raised at a JCT meeting requires coordinated action from both FRA and SDSTA and cannot be resolved in that meeting, a separate JCT meeting will be called and dedicated to addressing that issue. The members of the JCT will use best efforts to arrive at compromise positions, which will be considered at the dedicated meeting. If after the dedicated meeting, a solution cannot be agreed to by both parties, the parties will identify the issues at impasse.

When an issue is at impasse, the Executive Director of SDSTA and the LBNF Project Director will draft a joint statement explaining the issue, FRA's and SDSTA's respective positions, and compromise positions considered by the JCT. This joint statement will be sent by email to the HEP Director of Scientific Facilities Division. This email will also be sent to the Fermilab Director and the Chairperson of SDSTA. After guidance or resolution of the issues at impasse is received from the HEP Director of Scientific Facilities Division, the JCT members will communicate the outcome to their respective organizations.

G. Advisory Resources

SDSTA employs many subject matter experts whose expertise will be required to plan and execute LBNF/DUNE. Within available resources, SDSTA will provide experts to serve on committees or workgroups that FRA convenes to plan execution of the LBNF/DUNE project.

H. Insurance and Risk Management

Work by science collaborators at SURF requires certain insurance liability thresholds that stem from the Property Donation Agreement between SDSTA and Homestake. SDSTA will work with DOE to explore a holistic solution that addresses the required liability insurance for science collaborations to perform work at SURF. The JCT shall periodically review progress on this goal.

I. Culture

DOE, FRA and SDSTA recognize the importance of diversity, equity and inclusion at SURF and will strive for a workforce that is reflective of the cultures that inhabit the Black Hills region. The Parties recognize the Black Hills are sacred ground to Native Americans of the region and will treat the land and the people with dignity and respect.

J. General Communications

The Parties will collaborate on communications and public affairs activities that relate to LBNF/DUNE. SDSTA recognizes that FRA must follow certain requirements and protocols – including Prime Contract Clause I.72, DEAR 952.204-75 and related procedures and processes from the Department of Energy – that also flow to SDSTA as subcontractor for LBNF-specific activities. FRA recognizes that SDSTA must comply with certain statutory requirements, such as SDCL 1-16H-38 (informational budget and other reporting to the Governor's Office of Economic Development), SDCL Ch. 1-25 (open meetings), and SDCL Ch. 1-27 (open records), as well as reporting to the appointing authority (Office of the Governor) and keeping the Legislature, citizens of South Dakota, and other stakeholders informed concerning its activities. The Parties agree to work in good faith to accommodate their respective obligations, and to establish a separate communications and public affairs protocol to implement these obligations and other processes.

K. Ethics and Compliance — Conflicts of Interest

The Parties maintain and execute robust ethics and compliance programs and acknowledge the criticality of such programs to the success of LBNF/DUNE. The Parties further acknowledge that existing and anticipated agreements that provide funding through the Prime Contract and CA require compliance with ethics and compliance rules applicable to federal government contractors and grantees.

The Parties acknowledge the potential for conflicts of interest related to participation in delivery of the LBNF/DUNE Project or in supporting operational activities at SURF and commit to work diligently to identify apparent or actual conflicts, and develop mitigation plans as appropriate. The Parties' ethics and compliance programs are designed, in part, to facilitate the management of conflicts as they arise.

L. Environment, Safety, and Health Integration

LBNF/DUNE subcontract activities will follow 10 CFR 851, except for the reliability projects located in non-leased space, and Fermilab Environmental Safety and Health Manual (FESHM) and South Dakota Science and Technology Authority (SDSTA) Surface and Underground Access requirements. Other regulatory requirements may be used to support specific work activities, e.g. explosives management, ventilation, etc.

SDSTA will provide for regularly scheduled workshops to facilitate open, and transparent communications with FRA Environmental Health and Safety (ESH) personnel.

Fermi Research Alliance (FRA) and SDSTA Work Planning and Control Documents will be accessible and notifications will be made if planned activities could affect operations or safety systems.

FRA will provide daily written notification for active work areas defining the location of personnel.

FRA and SDSTA will follow the interorganizational Crisis Communication Plan with defined roles and responsibilities.

SDSTA Emergency Response Team (ERT) input on activities is required to assure appropriate staffing and rescue equipment. FRA shall provide SDSTA with early notification of the construction means and methods for non-standard access and egress scenarios.

SDSTA is responsible for response, initial treatment and extrication in all emergency situations and will deliver the casualty to a paramedic, ambulance or the nearest clinic as necessary. All Environmental, Safety, Security or Health unintended outcomes at SURF will be communicated between onsite FRA and SDSTA ESH personnel.

SDSTA is responsible for the SURF ESH Manual contents, the review process and the development and upgrade of ESH requirements. FRA will be placed in the review/comment process.

Environmental Management requirements shall meet or exceed existing procedures set forth by SURF.

For activities that will impact SDSTA operations or facilities, FRA will include SDSTA in the following:

- project scoping
- design review
- authorization for use and possession, and
- operational readiness clearance.

The manufacturer specifications, "as-built" drawings and commissioning documents shall be provided to SDSTA for equipment and facilities installed at SURF.

FRA shall provide SDSTA a detailed explanation of any intended alternative method, equivalency or variance to applicable SDSTA standard(s) on SURF property. These changes shall be submitted to SDSTA for review and final written approval. In the event an outside resource is deemed necessary by SURF to provide subject matter expert guidance, cost shall be absorbed by the requester of the change.

Accessibility to Refuge Chambers and escapeways:

• The 4850 Refuge Chamber shall be readily available to all personnel. Maintenance shall be scheduled and performed by SDSTA and its service providers.

- Access to the Refuge Chamber, primary and secondary egress routes and
 associated travel ways shall be maintained and made readily available for
 emergency purposes. It is understood that travel ways include leased and unleased
 space and it is the responsibility of individual stakeholders and contract owners to
 abide by these requirements.
- If an escape route is encumbered for any reason, those responsible for that impediment shall ensure that travel ways are made safe and access opened to all personnel, without undue delay.
- Shaft activities shall be planned and scheduled to ensure that at least one shaft and the Refuge Chamber is available for emergency use.
- All activities which may impair the use or impede access to the Refuge Chamber shall be risk assessed by the responsible party and scheduled with SDSTA before engaging in impairment activity.

M. Insurance and Liability

The parties acknowledge that risk management is a key component of the successful delivery of the LBNF/DUNE Project, and commit to working together, including with the various third-party stakeholders, to facilitate risk analysis and management. Without limiting the generality of the foregoing, the parties recognize that the Property Donation Agreement among SDSTA, Homestake Mining Company of California and others (the "PDA") imposes certain insurance and other risk management requirements as a condition to SDSTA's ongoing occupancy and operation of SURF. The Parties will work diligently to ensure compliance with all insurance and other risk management requirements of the PDA and DOE, as well as the applicable corporate and/or site-specific requirements of SDSTA and FRA, provided those requirements are in writing.

SDSTA will work with DOE in order to explore a holistic solution to insurable risk that addresses required liability insurance to perform work at SURF. Work at SURF requires certain insurance liability thresholds that stem from the Property Donation Agreement between SDSTA and Barrick that accompanied the original transfer of the SURF site. The JCT shall periodically review the progress of this charge.

N. General Services Agreement

Contemporaneously herewith, the parties have entered into a non-binding General Services Agreement ("GSA") establishing their expectations concerning services to be provided by each Party in relationship to LBNF/DUNE. A copy of the GSA for the fiscal year beginning October 1, 2019, is attached hereto as Exhibit B. Prior to the beginning of each fiscal year during the term of this MOU, the parties will meet and agree upon updated terms for the GSA. The updated GSA will then be attached to this MOU as an updated Exhibit B.

O. Decommissioning

The parties recognize the need for the prompt adoption of a LBNF/DUNE decommissioning plan, keeping in mind the requirement to avoid unfunded obligations. Any such plan must take

into account the need to remove or abandon in place (as appropriate and safe) experiment infrastructure, safely secure the relevant portions of SURF, and address any ongoing security, monitoring or other requirements. The Parties decommissioning plan will be consistent with the latest version of the *LBNF/DUNE Preliminary Decommissioning Plan*.

P. Duration

The initial term of this MOU shall *be five years*, with the option to renew upon mutual written agreement of the Parties for additional terms of one year per renewal.

Upon expiration of the term of this MOU (as renewed), the conclusion of civil construction of LBNF/DUNE, the cessation of funding for LBNF/DUNE, or other substantial change in circumstances, whichever occurs first, the Parties will as appropriate given the circumstances in good faith renegotiate the terms of this MOU.

During the term of this MOU, including any renewal terms, the Parties will at least annually review and update the terms hereof, including any necessary and appropriate updates to Addenda or Exhibits.

Anything in the foregoing notwithstanding, this MOU shall terminate upon sixty (60) days written notice given by either Party to the other of any of the following events:

- (a) FRA is no longer the Maintenance and Operation prime contractor for Fermilab National Accelerator Laboratory;
- (b) SDSTA no longer has ownership or control of SURF;
- (c) Permanent cessation of funding for LBNF/DUNE; or
- (d) Any other change in circumstances so substantial as to affect the underlying nature and purpose of this MOU.

Q. Other

Except as otherwise provided above in subsection B ("Transition to Cooperative Agreement", this MOU supersedes the Memorandum of Understanding previously executed by the Parties on

This MOU does not create any legally binding obligations between or among the Parties.

The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.

The Parties are each responsible for their respective costs incurred in participating in cooperative activities under this MOU.

Any activities agreed to under this MOU, activities agreed to in addenda under this MOU, or agreements developed as a result of this MOU will be in accordance with applicable laws, regulations, and agreements to which each party is subject, as well as with the Property Donation

Agreement (PDA) between and among Homestake Mi South Dakota, and SDSTA.	ining Company of California, the State of
Signed:	
Mike Headley Executive Director South Dakota Science and Technology Authority	Date
Nigel Lockyer Laboratory Director Fermi Research Alliance, LLC	Date

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Agenda Item: 11

11A. SURF Foundation upda

11B. Ratification of establishment of initial SURF Foundation (SURFF) board of directors.

Recommended Action:

11B. Motion to ratify membership of initial SURFF board of directors, as presented.

Pase intentionally

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Executive Director's Report—Mr. Mike Headley

The Executive Director's Report includes the following:

- 12A. Declarations of surplus (4)—steel rail, thermal imaging gun, 4 incinolets and 135 wood guides.
- 12B. SDSTA quarterly update—informational.
- 12C. LZ update—SDSTA Engineer Mr. Charles Maupin, presentation.
- 12D. LBNF update—Fermilab Far Site Project Manager Joshua Willhite, presentation.

Agenda Item: 12

Pase intentionally

DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) purchased two (2) 35lb 15-foot rail in 2014 from the Mike Green Estate. The rails are unusuable in the underground due to the size and have no operational use to the SDSTA. SDSTA wishes to surplus it.

Having no further use for this property, I hereby declare the steel rails to be surplus property. The steel rails will be donated to the South Dakota School of Mines and Technology's Mining and Mucking Team. They will haul it away at no cost to SDSTA.

Dated at Lead, South Dakota this 27th day of June, 2019.

Mike Headley

DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) purchased a Fluke thermal image gun, Model No. Ti110, in 2012. It no longer functions due to the "on" trigger failing in 2017 and repair costs are prohibitive. SDSTA wishes to surplus the thermal image gun.

Having no further use for this property, I hereby declare the thermal image gun to be surplus property. It will be discarded.

Dated at Lead, South Dakota this 22nd day of August, 2019.

Mike Headley

DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) purchased four (4) incinolets for use underground three years ago. The incinolets were not working corrrectly and were removed from the underground. They are currently being stored in the saw mill on our property. Due to having no operational use, SDSTA wishes to surplus them. There value of all four incinolets combined is less than \$4,000.

Having no further use for this property, I hereby declare the four incinolets to be surplus property. They will be placed in the recycled steel dumpster.

Dated at Lead, South Dakota this 12th day of September, 2019.

Mike Headley

DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) purchased wood guides at various times since the Ross Shaft refurbishment project started in 2012. Approximately 135 wood guides did not meet the shaft specifications and have been replaced. They have no operational use and SDSTA wishes to surplus them. The average price of each wood guide is \$350.

Having no further use for the property, I hereby declare the 135 guides to be surplus property. The wood guides will be presented for bid or hauled away at no cost to SDSTA.

Dated at Lead, South Dakota this 12th day of Septmember, 2019.

Mike Headley



August Monthly Progress Report

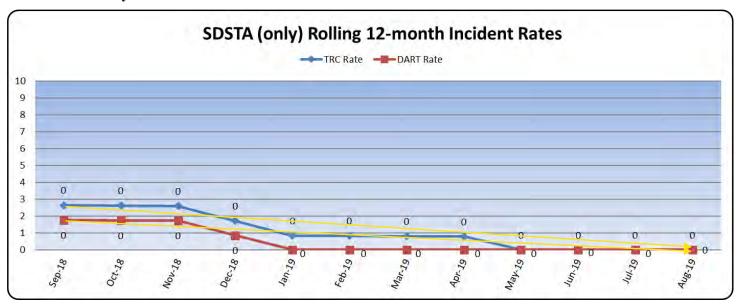
Submitted September 12, 2019

Submitted to:
Fermi Research Alliance, LLC
Fermi National Accelerator Laboratory
Subcontract No. 629760
and
South Dakota Science and Technology Authority Board of Directors

Submitted by Mike Headley SDSTA Executive Director Sanford Underground Research Facility Laboratory Director

Environment, Safety and Health Status

Health and Safety Status



Note: Recordable incident monthly totals are shown in chart above

TRC (Total Recordable Case) = more than first aid treatment was given.

DART (Days Away Restricted Transferred) = more than first aid treatment was given AND restrictions were job-limiting, or the employee could not work (subset of a TRC). *Rates are subject to change

August 2019 DARTS/TRC

• 8/6: Contractor hand injury; medical attention required.

August 2019 First Aid Cases

• 8/12: SDSTA employee cut hand; band aid applied.

August 2019 Category 1 or 2 Events

• No events to report.

August 2019 Category 3 Events

• 8/6: Contractor hand injury; medical attention required.

Health and Safety Support

• Ten of 12 Emergency Response Team (ERT) full-time positions have been filled. Recruiting for two additional positions are underway.

Work Accomplishments

- ESH finalized a proactive Human Performance Improvement program in the LUX-ZEPLIN (LZ) underground workspaces and communicated the findings to the SDSTA Science and ESH Directors.
- ESH initiated a trial communication application called $IAmResponding^{TM}$ to convey emergency information quickly and efficiently to ERT personnel.
- ESH presented the SDSTA Work Planning and Control Program at the LBNF Far Site Enterprise Assessment Review held onsite in August.
- ESH submitted the HazCom Chapter of the ESH Manual for Configuration Change Board review and approval.
- ESH received the South Dakota State Explosives Permit for SDSTA's Renewal of License.
- ESH participated in the "deep dive" Risk Assessment for the Yates Shaft.
- ESH held an onsite Blood Drive which exceeded the goals of donated units.

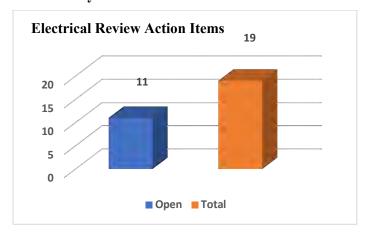
Upcoming Activities/Trainings

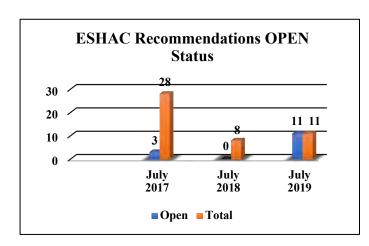
- Hearing Conservation / Annual Audiograms (August and September)
- Prostate Cancer Awareness Campaign (September)
- Health and Wellness Fair on site (September)
- Physical Exams for ERT and Hoist Operator personnel (September)
- CPR/AED/First Aid Certification Training onsite (September)
- Human Performance Improvement Training onsite (September)
- Hazcom Safety Data Sheet (SDS) real-time database training to SURF stakeholders
- Multi-agency emergency preparedness exercise onsite including South Dakota Department of Homeland Security (DHS), Federal Bureau of Investigation (FBI), Federal Emergency Management Agency (FEMA), SD National Guard and local and regional emergency support services (September)
- OSHA 30-hour class onsite (October)

Environmental Support

- The annual biomonitoring assessment on Gold Run and Whitewood Creek was performed in compliance with the NPDES permit requirements. Annual chemical monitoring was completed in order to supplement biological monitoring.
- The annual DMR-Quality Control Report was prepared and submitted to SD Department of Environment and Natural Resources.
- Assistance was provided to the Machine Shop demolition contractor in preparing their construction storm water permit.
- Various inspections of Kiewit/Alberici Joint Venture (KAJV) construction sites were performed to ensure compliance with KAJV's Storm Water Pollution Prevention Plan (SWPPP).
- A scope of work and contractor's bid meeting was held in anticipation of removing asbestos from two pipes that partially surrounding the Ross Substation and on the trestle to the Ross Boiler.
- Detailed information was provided to the LBNF subcontractors concerning historical underground water quality and processes. This information was supplemented by various discussions in preparation of an underground water quality forecasting summit in late September.

Third Party Review Recommendations Status





Facility Operations Status

Yates Shaft

Work Accomplishments

- A total of 188 loads were handled through the shaft in August.
- Top Down Maintenance corrected 291 conditions for the month with a focus near the 4100L.
- The new Yates cage bonnet was installed.
- Air door and water walls were inspected at every station.

Upcoming Activities

- Continue Top Down Maintenance below the 4100L.
- Install guides in the South cage compartment.

Underground Hazard Mitigation

Work Accomplishments

- Ground support installation continued in the 4850L No. 17 Ledge drift.
- Crews continued maintaining the 4850L 17 Ledge shop area and ramp.
- Ross ore pass muck was disposed in the 4850L 17 Ledge.

Upcoming Activities

- Installation of ground support in the 4850L No. 17 Ledge drift will continue.
- Placement of Ross ore pass muck in the 4850L 17 Ledge area will continue.

Davis and Ross Campus

Work Accomplishments

- Quarterly air handling equipment and fire alarm preventive maintenance activities continued with vendors.
- Oxygen monitors in the Davis Campus have been calibrated to ensure any low oxygen events are detected and alarm notifications are sounded.
- Additional monitoring and physical inspections have been increased at the Ross Campus to assess the air quality with the increased activities at the Ross 4850L station.

Upcoming Activities

- Work with engineers and vendors to define cooling and humidity requirements will continue.
- Maintenance activities will be ongoing.

Surface Facilities

Work Accomplishments

- The SDSTA completed all seven (7) day, thirty (30) day, and annual (360) day preventative maintenance activities. Boart drill and jackleg repairs continue.
- In support of Sanford Lab recycling efforts, nine gaylords of material were accumulated and shipped off site. An additional eleven gaylords were filled with recycle material.
- The Oro Hondo American Davidson fan variable frequency drive replacement project continued. The backup Spendrup Fan was put into service after the American Davidson fan failed beyond repair.
- All storm water control points were reinspected after heavy rainfall in August.

Upcoming Activities

• Preventive maintenance activities will continue.

Dewatering

Work Accomplishments

- Preventative maintenance was performed on pumps and pumping apparatus.
- A team member traveled to Denver to perform a quality control inspection on two pumps being repaired at the Sulzer Repair Facility in July. The two pumps were delivered to Sanford Lab in August.

Upcoming Activities

- Trouble shooting pressure reducing manifold will continue.
- Scheduled preventative maintenance activities will continue.
- A 100-horse power pump will be installed on the 2600L.

Waste Water Treatment Plant (WWTP)

Work Accomplishments

- At the end of August, the water level in the underground pool was at 5,666 feet—net loss for the month was twenty feet. Underground water infiltration began to slow down during the month. A large portion of the infiltration was captured on the 2000L and pumped to the surface there by reducing the amount of water that could be taken from the underground pool.
- Modifications to the control system to allow specific functions to be operated from off-site advanced as planned—there were three off hour call-outs in August. The WWTP has not discharged any water to the sanitary sewer for over 1,196 days. The team continues to balance water sources to manage temperatures.
- In cooperation with Barrick, planning for winter operations will begin.

Upcoming Activities

- Monitoring and sample collection at the underground waste water treatment plant located on the 4850L will
 continue
- Anthracite coal media in the Yardney filters will be replaced.
- Neutralizing acid from the MJD experiment will continue.

Transportation and Mobile Equipment

Work Accomplishments

• The team performed vehicle preventative maintenance actions and repairs to fleet vehicles. In addition, the team maintained underground locomotives, support equipment including air compressors, loaders and rail cars.

Upcoming Activities

- Repairs on the walk behind skid steers and two-yards loader located on the 4850L will continue.
- The Fletcher Bolter hydraulic hose groups will be assembled, and repairs will continue.
- The Kubota UTV will be prepared for transport to the underground.

Electrical and Cyber Infrastructure

Work Accomplishments

- The team continues review and modify the underground communications infrastructure to ensure each level has voice over IP (VoIP) and FEMCO (i.e. twisted pair) phones at each underground facility level. Various preventative maintenance activities were performed.
- The team continued to work with KAJV to establish construction power on the 4850L near the Ross station.
- Upgrades to the Yates 4100L station continued.

Upcoming Activities

- Camera replacements to the pump rooms and the Waste Water Treatment Plant will continue.
- Provide electrical and control support for the 5000L pump change.
- Support to contractor installation of the variable frequency drive for the American Davidson Fan located at the Oro Hondo Shaft will continue.

Engineering Support

Work Accomplishments

- Ventsim Training in Elko, NV was completed, which will enable SDSTA to accurately model our ventilation system and simulate different scenarios such as fire, carbon monoxide, stench gas evacuation, heat load and diesel PPM. Training was leveraged to start refining a full model of all the workings.
- Ross waterline project—worked with the City of Lead contractor to install an 8-inch potable main extended 60-feet towards the Ross Headframe. This work was performed so that when the Ross system is replaced, new city pavement will not have to be removed.
- A high-level scope of work for a contractor was developed to perform electrical preventive maintenance service on all medium-voltage electrical equipment at Sanford Lab.

- Two Engineering staff attended and successfully completed Qualified Electrical Worker 2 (QEW2) training. This is an NFPA 70 (National Electric Code) requirement.
- A site-wide lightning risk assessment is being developed based on guidance from NFPA 780; Installation of Lightning Protection Systems. This was done as a result of an ESH HPI investigation.

Upcoming Activities

• The Arc Flash Study and Medium Voltage Maintenance Support Contract will be awarded.

Science Support Status

- Discussions have been held with all major groups expected to be impacted by LBNF/DUNE excavation activities.
- General services agreements updated for FY2020 have been finalized for some experiment groups.
- Facility highlights: Corrosion monitoring coupons were swapped at both underground campuses. A new worktable was installed in the Common Corridor to accommodate increasing personnel numbers at the Davis Campus. First-aid kits at the Davis Campus were replaced with updated units.
- Interruptions: Brief power outages due to electrical storms affected the Surface Laboratory reduced-radon system (twice) as well as elements of the Davis Campus HVAC system (three times). In one case, the underground facility alarm was not cleared for about a day (with no one underground), and in another case environmental conditions were affected for several days due to the failure of a sensor that had to be ordered and replaced by the HVAC service contractor. The setpoint for one of the Davis Cavern air handlers was adjusted to reduce condensation near the perimeter of the space (including near an electrical cable conduit). Reduced underground air flow persists while the Oro Hondo operates with the backup Spendrup fan. As a result of one of the power interruptions, the backup fan was offline for approximately 12 hours, which temporarily increased radon levels at both 4850L campuses (groups continue to monitor levels to determine if any operational changes will be necessary). An unstable oxygen sensor in a storage area intended for future liquid nitrogen use outside the main Davis Campus clean spaces triggered a low-oxygen facility alarm (a replacement sensor has been installed and calibrated). Previous HVAC programming changes related to alarms in this area performed as expected.

LUX-ZEPLIN—LZ

- The internal detector chamber was successfully inserted into the inner cryostat vessel at the Surface Laboratory.
- Post-insertion detector checkouts are underway, including high-voltage grids, photomultiplier tubes (PMTs) and associated cabling. All of the bottom PMTs were evaluated and 99.6% are confirmed working (one disconnected).
- The first cable bellows arrived at Sanford Lab in early September, into which cables from the bottom portion of the detector are being routed. The top PMTs will be tested in the next checkout phase. The detector is still slated to be moved underground by mid-October, and details of impacts associated with necessary ductwork modifications are being developed and will be communicated to other groups.
- Work on key components of the underground xenon circulation system continued to advance, including xenon line welding, leak checking and exercising the xenon circulation compressors (operated at the target recirculation rate). A walk-through inspection of the piping and instrumentation diagram was also performed. Tests using xenon gas will be conducted starting in September followed by liquid tests starting in late October or November.
- There was also significant progress on the underground liquid nitrogen system, including the thermosyphon cooling system and associated control panel as well as the cryocooler liquid nitrogen storage vessel. Engineering documentation and review will be completed in September, which will support subsequent pressure testing. Liquid nitrogen usage is expected to significantly increase in September.
- Issues were encountered during the test fit of the top acrylic vessels that surround the main detector inside the water shielding tank. The top liquid scintillator acrylic tanks do not fit on the outer cryostat vessel; in addition, both suffered damage in transit from the vendor or in handling. Vendor representatives will visit Sanford Lab to evaluate repair options, but it is likely they will be returned to the vendor for repair and modified to fit.
- The annual LBNL ESH walkthrough as well as the scintillator review is scheduled for Sep 10-12 at Sanford Lab.

MAJORANA DEMONSTRATOR—MJD

• Electroforming operations and maintenance continues at the Davis Campus, including regular electrolyte concentration measurements. The second batch of electrowinning was completed at the surface WWTP, and the system was powered off until there is enough material to begin a third batch.

- Inventories of cables and other items were conducted in preparation for upcoming activities. To accommodate the
 detector characterization scanner for LEGEND-200 germanium detectors and other supplies, several shipments of
 hardware were transported to surface and moved into surface storage. Copper chips from previous machining will
 be recycled (approximately twelve 55-gallon drums).
- Larger onsite crews are expected once detector testing starts in September. Copper machining that was planned for late September is not expected to begin until October.
- There were some minor issues with the data acquisition and control computer during a calibration session.
- All surface storage items were moved from a surface storage building. Roof leaks resulted in damage to some empty crates (and as previously noted a metal frame for a low-background counter system required re-painting).
- SDSTA personnel provided radiation safety training for regular MJD onsite personnel.

Low-Background Counting

Black Hills State University Underground Campus—BHUC:

- Additional Sanford Lab cleaning resources and a tarp barrier continue to be important in combating dust issues.
- Assays of LZ samples continue using four low-background counters (LBCs).
- Shield/purge issues were resolved for LBNL LBCs.
- More details were made available regarding the footprint for the new Lawrence Livermore National Lab (LLNL) dual-crystal system that is planned to be installed at Sanford Lab to support assay requirements for a number of community experiments, including LZ, WATCHMAN (water-based liquid scintillator at the Boulby Underground Laboratory) and nEXO.
- Plans are developing to assay the radiopurity of the Ray Davis tank steel in underground storage.

SIGMA-V

- Long-term chilled-water flow tests and microbial water sampling continue successfully on the 4850L with assistance from SDSTA and contractor personnel.
- Pressure tests were performed at various depths in the new 4100L boreholes, after which geophysical logging was performed to quantify the direction and magnitude of stresses in the amphibolite and rhyolite geology regions.
- Core from the 4100L holes was viewed during several sessions on the surface, and additional geologic and fracture mapping was performed on the 4100L.
- The collaboration is convening in September to determine the suitability of the 4100L site for future testing.
- Representatives from the DOE (Office of Energy Efficiency and Renewable Energy) visited the site to evaluate progress and learn additional details regarding the techniques and tools being employed.

Annual Work Plan Variances

- SURF Services was over budget for August by \$853k.
- The labor overrun was primarily due to the third payroll in August, which added \$447k.
- Effort continues to spend out funds. In August, there were two pump rebuilds for a total of \$483k.
- Remaining spend plan items total \$678k. This leaves SURF in a comfortable position heading into the final month of the contract.
- Contract to date underrun is now \$925k.

Financial Status

Included in the Financial Report are the following:

- SDSTA SURF Services FY2019 SPA Curve as of August 2019 (included as Appendix B at the end of the report)
- SDSTA Staffing Plan by Funding Source as of August 2019 (included as Appendix C at the end of the report)
- Financial Summary (included as Appendix D at the end of the report)
 - 1) Balance Sheet as of August 2019
 - 2) Comprehensive Statement of Income August 2019
 - 3) Comparative Balance Sheet August 2019 vs. August 2018
 - 4) Comparative Statement of Income August 2019 vs. August 2018
 - 5) Available Resources as of August 2019
 - 6) Operating Budget Summary

- 7) CAPEX Budget Summary
- 8) August 2019 and YTD CAPEX Budget actual vs. budget

SDSTA SURF Services FY2019 Scheduled Performed Actual (SPA) Curve

• This graph represents an analysis of the SURF Services subcontract No. 629760 scheduled funding compared to actual. The report shows funding through September 2019 along with information related to Funded-to-Date dollars, Scheduled dollars, Performed dollars and Actual dollars by month. The subcontract has been extended through September 2019. Actual dollars represent actual invoices for the months sent to Fermi Research Alliance LLC (FRA) for reimbursement. For August, the invoices totaled \$2,268,928 which is higher than the anticipated reimbursements of \$1,415,180 by \$853,748. Cumulative expenses are at \$45,907,419 which is lower than the budgeted \$46,832,272 by \$924,853.

Balance Sheet Items

- Cash in Local Checking—Total on hand at August 31, 2019 was \$2,173,381; down from last month by \$15,171. Funds on hand were necessary to pay employee medical/life/vision insurance due September 1. The balance also contains funds received from federal contracts late in the month on open accounts receivable.
- Cash with State Treasurer—Total balance of \$17,186,534. This balance has decreased from last month by \$603,164. This amount is net of \$902,466 drawn down during August and the interest proration of \$299,302 from fiscal year 2019.
- Billed Accounts Receivable (A/R)—Billed A/R represents any open invoices based on contracts from sources such as LBNL, Fermilab, other smaller contracts from other universities and Barrick-Homestake Mining Company. Total is at \$3,395,883; up from last month by \$638,060. Included in the balance are open invoices to LBNL for \$302,804; representing invoices for the LUX-ZEPLIN (LZ) engineering support, (LZ) Operations contract, and the SIGMA-V experiment support. Additional open invoices include \$3,043,476 from Fermilab primarily from the SURF Services subcontract, the Ross Shaft Rehabilitation work and a contract for Ross Shaft Logistics Support. Additionally, there are open receivables for \$8,135 from small university subcontracts, \$41,146 from Barrick/Homestake, and \$322 from a small commercial organization namedXilinx.
- Unbilled A/R—Balance at \$(14,728). Unbilled A/R represents items that have not been billed on various contracts. August's balance has decreased by \$467,674.
- Other A/R—Current balance of \$382,297. This balance represents any Interest Receivable and Miscellaneous Accounts Receivable. The balance increased by \$334,909. This balance includes the adjusting entry on the unrealized appreciation on undistributed earnings on the funds held with the State as of June 30, 2019. Activity for this month also includes recording the interest accrual for August.
- Inventory/Supplies—Balance at \$2,309,679, for fixed assets being stored but not in service. This balance is unchanged for the month.
- Inventory Warehouse/Personal Protective Equipment (PPE)—Current balance of \$28,955. This balance represents the warehouse inventory that was purchased by SDSTA prior to federal funding. The balance is unchanged for the month
- Other Current Assets—This listing on the balance sheet represents the balances of both prepaid insurance—\$287,288 and prepaid other—\$136,881. Total balance of \$423,077 is lower from last month by \$85,243. This decrease represents the monthly insurance expense and the expensing of various prepaid items in August.
- Fixed Assets—Total of \$80,286,523 (net of depreciation through August 2019). Fixed assets activity includes the installation of three natural gas water heaters in the Yates Ramp Dry. The net decrease of \$138,558 includes depreciation for the month of August.
- Work in Progress—This balance of \$1,173,843 represents the current fiscal year progress being made using Sanford/SDSTA funds, borrowed Foundation funds and funds received from the Governor's Office of Economic Development (GOED) to support the budgeted projects on the CAPEX budget less any items that are being capitalized within the Fixed Asset designation or Xenon Purchased. Current balance has increased by \$364,835 from the previous month. Progress has been made on the Maintenance Support Facility (MSF) with deconstruction of the old buildings being almost complete.
- Pension Deferred Outflows—This designation on our Balance Sheet reflects the requirements related to the Governmental Accounting Standards Board (GASB) No. 68 and No. 71 in reference to pensions. SDSTA is required to report the net pension asset or liability on the face of our financials along with related deferred inflows and outflows. The State's retirement system is now fully funded. The Net Pension Asset is a restricted asset.

- Thus, the equity created is also restricted. The balance Pension Deferred Outflows shown as a noncurrent asset is \$3,943,908 created by FY2019 final entries. The balance has decreased from the previous statement by \$896,018.
- Xenon Purchased—Balance of \$8,164,351 represents the value of xenon purchased for future use by experiments. The xenon inventory is considered a non-current asset and includes all the purchases through fiscal year end 2019. The balance is unchanged from last month.
- Total Assets—Total of \$119,453,703. This balance has decreased from last month by \$868,024 which represents the net activity as listed above.
- Accounts Payable—Our Total Accounts Payable balance of \$1,414,290 at the end of the month compared to last month has decreased slightly by \$256,155.
- Accrued Payroll Liabilities—Current balance of \$1,361,311 has decreased by \$335,276 from last month. This
 represents the net change between earned vacation and vacation taken and other changes in employee benefitrelated liabilities.
- Long Term Xenon Notes Payable—This designation represents \$2M of funding received from the South Dakota Community Foundation (SDCF), \$2M received from the University of South Dakota Foundation (USDF) and \$2M received from the South Dakota State University Foundation (SDSUF). The \$6,000,000 balance is designated for purchasing xenon for experiment use at Sanford Lab. The balance is unchanged from last month.
- Pension Deferred Inflows—This classification reflects the requirements of GASB No. 68 and No. 71, as discussed earlier. The balance of \$783,421 represents our portion of the difference between projected and actual earnings on pension plan investments with the South Dakota Retirement System. The balance has decreased by \$68,321 created by fiscal year 2019 final entries.
- Total Liabilities—Total Liabilities decreased by \$659,752 (from \$10,218,774 to \$9,559,022), which reflects the net activity listed above.
- Total Equity—Decrease to \$109,894,681 from the previous month \$110,102,953.
- Total Liabilities & Equity—Decrease to \$119,453,703 from the previous month of \$120,321,727.

Statement of Income Items

- On the SDSTA's Statement of Income, the DOE Subcontracts are consolidated into one line 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 Oak Ridge National Laboratory. Total revenue through August 2019 is \$4,485,476 (increase from July of \$2,520,169).
- National Science Foundation (NSF)/National Aeronautics & Space Administration (NASA) Subcontracts—Total revenue through August 2019 from this funding is \$4,445 (increase from July of \$2,204). The balance represents revenue from the South Dakota School of Mines and Technology (SDSM&T) for CASPAR.
- State Revenue—Total revenue through August is \$2,500,000. This is additional funding from State Future Funds for construction of the new MSF.
- Interest income recorded for the current fiscal year on State Funds is at \$29,147. This represents interest accruing at 1% on the cash held by the state on behalf of the SDSTA.
- Direct Costs are then listed on the Statement of Income. 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 \$2,640,175 for the current fiscal year. Indirect Costs including fringe benefits are at \$2,073,890. Costs are lower than revenue by \$2,305,527 primarily because of the \$2,500,000 receipt from State Future Funds.
- Other Income is at \$72,045, which represents miscellaneous income received from Xilinx and small amounts from Barrick.
- Net income through August after Reclass Increase in Net Assets is at \$2,644,347. \$2,500,000 of this relates to the Future Funds that will be spent later.

Comparative Balance Sheet

- Total in Local Checking is higher by \$526,204 due to receiving more funds from contracts in Accounts Receivable when comparing the two time frames.
- Total Cash with State Treasurer is higher by \$4,791,711 from this time last year as we received State Future Funds for a total of \$6,500,000 some of which has been expended.
- Billed A/R is higher by \$1,339,149 when comparing the two-time frames. Most of the increase is for increased personnel whose time are being invoiced on various contracts. Last year at this same time SDSTA only had 121 full-time employees. The number of full-time employees has grown to 152.

- Total Fixed Assets are lower by \$1,506,846 when comparing the two-time frames, primarily for additional depreciation.
- Work in Progress is higher by \$897,896 when comparing the two-time frames, due to increased activity with the (MSF).
- Pension Deferred Outflows is lower by \$896,019 due to fiscal year 2019 entries.
- Xenon Purchased has increased by \$1,650,450 for the purchases made during fiscal year 2019.
- In summary, Total Assets have increased by \$7,125,581.
- Total Accounts Payable is higher by \$632,768. This is primarily due to owning for expenses related to the old machine shop demolition.
- Total LT Xenon Notes Payable are higher by \$1,000,000 for the additional notes from foundations.
- Total Equity has increased by \$5,396,028 from this time last year.
- Restricted Funds and Unrestricted Funds are higher when comparing the two-time frames. Yet, Investment in General Fixed Assets is lower than this same time last year primarily due to depreciation for the current fiscal year.
- In summary, Total Liabilities & Equity have increased by \$7,125,581.

Comparative Profit/Loss

• Total Revenue for year-to-date August 2019 compared to year-to-date August 2018 has increased by \$3,609,778. DOE subcontract revenue has increased by \$7.84%. This is primarily due to the increase in employees on DOE contracts. State Revenue has increased by \$2,497,662 for the receipt of (GOED) funding. Direct Costs and Indirect Costs for year-to-date August 2019 compared to this time last year show a combined increase of \$1,238,567 (a 35.6% increase). This is primarily due to the increase in personnel and for an increase in fringe benefit costs; primarily medical insurance coverage. Other Income is slightly higher from last year. Net Income/Loss for the comparative time periods shows an increase in income of \$2,346,286, primarily due to the Future Funds receipt.

Available Resources

• This report reflects our available cash/accounts receivable after noting the restricted cash balances in the Indemnification, Mine Closure, and Special Session Lab accounts, and funds held for Experiments—xenon purchase and interest for investors. This report has been restructured to better reflect our available cash and (short term) accounts receivable as compared to our current liabilities including accrued payroll liabilities. It is important to include receivables as many of the items in accounts payable are invoiced on our current contract. \$3,766,293 is available after noting our current obligations. It is also important to note that our accrued payroll liabilities include accrued vacation and sick pay. Therefore, the report reflects our available resources compared to current obligations.

Operating Budget Analysis

- This report is separated into three sections: SDSTA-funded activities, Federal & State funded activities and Indirect expenses that benefit various activities. Total operating expenses are over budget for August 2019 by \$503,609. This is mainly due to increased spending on the SURF Services contract with Fermilab. Two pumps were reconditioned and returned to us in August. The expenditures were budgeted, but in a prior month.
- Year-to-date figures are slightly under budget by \$143,603.

Capital Expenditure Budget Analysis

- Our current capital expenditure projects have been condensed and are listed as CAP2014-01, CAP2016-03, and CAP2019-01. Total project dollars for FY2020 have increased to \$7,189,826 A small amount remains for the Sanford Lab Homestake Visitor Center project particularly for continuing to monitor the ground movement.
- Funding for the LZ Xenon Gas Purchase was secured from the GOED granting \$6,000,000. Loan documents have been executed for \$2,000,000 each from the South Dakota Community Foundation, the South Dakota State University Foundation and the University of South Dakota Foundation for xenon purchases. Approximately 30,000 liters of xenon are still to be received.
- The MSF is progressing with Dean Kurtz Construction. Building demolition is progressing each day and is close to completion.
- In August we spent \$364,835 on our CAPEX projects with a budget for the month of \$381,500. Year-to-date we have spent 1,173,843 on these projects.

Human Resources

There are currently 152 full time employees and 13 temporary staff, primarily Emergency Response Team members. Business Services & Contracts Manager Elizabeth Rodgers resigned effective September 6. The position has been posted. Sharon Hemmingson, former Business Services & Contracts Manager, has agreed to act as the interim manager until the position is filled. Sharon's work is contracted. Full time ERT member Glenn Skala resigned effective September 5—his position will be backfilled. Warehouse Specialist Tim Havens accepted the open Facilities Technician position—his position will also be backfilled. Other full-time positions currently being recruited include: an Operations Program Manager, Senior Contracts Specialist, Quality Control & Compliance Specialist and SURF Foundation Director.



Ross Shaft Rehabilitation - Subcontract No. 630223
PO No. 645509—hoist motor testing
PO No. 645673—rock resistivity

Ross Shaft Rehabilitation

Work Accomplishments

- Site visits by KAJV-FRA were conducted for design and project purposes.
- Guide replacement installation was completed.

Upcoming Activities

- Shaft alignment will be completed.
- Mock up for Set 305 will begin.

Rock Resistivity

Work Accomplishments

• None.

Upcoming Activities

• None.



Professional Staff Services - Subcontract No. 607915

Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Facility (DUNE)

- Oro Hondo Fan Variable Frequency Drive housed inside an E-House was delivered to site and set on a foundation pad. Installation continues with the contractor's schedule showing completion mid-October.
- The 4850L Ross Shaft Waste Dump Rehabilitation Project is progressing with successful completion of the excavation down 55-feet. The effort has reached the point of intersection with the #6 Winze raise and preparations are underway to modify the ground support accordingly within the intersection zone. Preparations are ongoing for set up of the excavation equipment system onto the 4850L sill position over the #6 Winze raise collar.
- The Tramway Rehabilitation Project continues with bolting completed to approximately 100-feet north of the Ross Shaft loadout bins.
- Engineering support was provided for the switch over of the 2400 volt power at Ross headframe to exterior power allowing LBNF headframe strengthening work to occur in the headframe electric room.



LZ - Subcontract No. 7255146 LZ Operations - Subcontract No. 7355146 LZ Davis Infrastructure Construction - Subcontract No. 7351116

Other Experiment Support LUX-ZEPLIN (LZ)

- A key milestone was met with the installation of the TPC into the Inner Cryostat Vessel (ICV) in the Surface Lab. Initial fit challenges were addressed with modifications to clearance bumpers to allow for successful installation.
- The Liquid Nitrogen Storage Vessel vacuum conduits were installed along with the dedicated vacuum pumping station. Following the installation of the vacuum conduits and the vacuum pumping station, the assembly was helium-leak tested and vacuum pumping was started.
- The cleanroom was designed to be placed on the mezzanine around the breakouts in the Davis Campus including a model of the assembly, parts list and assembly drawing.
- The mock ICV was completely redesigned to get the cost of manufacturing down to include new drawings.
- Liquid Scintillator top and bottom tank fit tests were completed. Two top sections have damage from transport pressurization changes and will be returned to the vendor for repair.
- The 50KW Generator set was tested for remote start functionality but did not meet project requirements. Additional hardware and software requirements will need to be addressed.



Indirect Funded Activities Status

Contracts Status

Department of Energy (DOE) subcontracts to SDSTA

Fermi Research Alliance

- PO No. 649934 Revision No. 3; additional funding (\$195,000) and extension of time (through 11/30/19)
- Subcontract No. 658208 Ross Hoist Bearing and Bushing Removal and Installation awarded (\$275,312.80; 9/1/19-8/31/21)
- Subcontract No. 658475 Modification No. 1; extended end date to 10/31/19

Lawrence Berkeley National Laboratory

• Subcontract No. 7355157 – Modification No. 8; additional funding (\$125,000)

Summary of Contracts Awarded by SDSTA in August:

Contract	Contractor/Vendor	Type	Project
No.			
2018-21	Ventilation Innovation	CO#2	Ventilation Services
NA	Lewis Burke	extension	Master Agreement
2017-24	American Engineering Testing	CO#2	Visitors Center Inclinometer Data Files
2017-31	Sandbox Studio	CO#3	Website Security Updates
2017-24	American Engineering Testing	CO#3	Visitors Center Inclinometer Data Files
2018-29	Sharon Hemmingson	CO#2	Cooperative Agreement
2019-07	Dean Kurtz	CO#2	Construction Management at Risk Services for Maintenance Support Facility
2017-36	Horsley Specialties, Inc.	CO#6	Ross Headframe
2017-26	CVD Construction	CO#26	General Services
2018-33	Robert Wunderlich	CO#1	Consultant Review of Cooperative Agreement

Purchase Orders (POs): 205 POs were issued in August totaling \$478,955.81.

Warehouse Inventory: Warehouse inventory on August 31, 2019, totaled \$212,364.75.

Education and Outreach (E&O) Status

Cultural and Diversity

SDSTA Cultural and Diveristy Coordinator KC Russell visited schools across the state in August to update administrators and teachers about Sanford Lab and our E&O offerings.

K-12 Education and Outreach

Curriculum units

- Two summer programs, the Pine Ridge Retreat Center and Girls, Inc. in Rapid City, continued to use Sanford Lab curriculum units for their summer science programming. Impact numbers are given in Table 1.
- With school starting, curriculum units are starting to make their way into classrooms across the state. The first part of Perplexing Puddles was used to start the year in biology classes at Lincoln High in Sioux Falls. In September, units will be in use at schools in Belle Fourche, Bison, Brookings, Pierre, Rapid City (2 schools), Sioux Falls, Whitewood and Yankton, with more to come.
- The team met with staff from Technology in Education (TIE) who are working on the WoLakota project and the integration of the Oceti Sakowin Essential Understandings into K-12 classrooms. The WoLakota project has collected 500 different video interviews with elders of regional tribes, and there were immediate connections between some of the stories collected and particular Sanford Lab curriculum units. The E&O Team is already using these to add a cultural element to Creature Features and As a Matter of Fact, and will be working on others.

Table 1. Curriculum Units Completed – August 2019

Unit	School	City	Grade or Course (high school)	Total No. of students
Between a Rock and a Dark Place	Girls, Inc.	Rapid City	K-3	40
Creature Features	Girls, Inc.	Rapid City	K-3	120
Cleature reatures	Pine Ridge Retreat Center	Pine Ridge	K-3	12
Exploring the Unseen	Pine Ridge Retreat Center	Pine Ridge	4-6	60
Perplexing Puddles	Lincoln High	Sioux Falls	10	120
The Search for Dark Matter	Girls, Inc.	Rapid City	7-9	20
Waterworks	Girls, Inc.	Rapid City	4-6	40
	3 organizations		3 teachers	412 students

Classroom presentations

- Three presentations took place at Girls, Inc. in Rapid City for grades 3 (Particle Accelerators) and grades 6-8 (Hot Rocks). A total of 39 girls participated.
- Presentations also took place for an elementary STEM camp at Tiospaye Topa School in La Plant, on the Cheyenne River Reservation—27 students participated. An additional 11 students explored the mystery of dark matter in a presentation at a middle school STEM camp on the reservation.

Field trips to Sanford Lab

• There were no field trips in August. The fall field trip season will start mid-September and run through most of October. Dates have been announced and schools are beginning to sign up.

Other K-12

Professional Development (PD)

- E&O Director Deb Wolf was contracted for two days of PD training for the full staff of Lincoln High School in Sioux Falls. The PD included a lesson from 'We are Made of Starstuff'. Additional days of training will take place in October and February.
- While in Sioux Falls, Deb also met with the Science Departments at Lincoln, Roosevelt and Washington High Schools to remind them about our offerings.

Undergraduate

• On August 14, E&O Director Deb Wolf gave a presentation and show-and-tell to visiting BHSU Interim President Laurie Nichols and her staff. The group also visited underground.

Table 2. Total Impact – August 2019

C	Charlanta Education Dall's										
Group	Students				Educators			Public			
	Pre-K	K-5	8-9	9 -12	Undergrad	Graduate	K-12 Educator	Univ. Faculty / Staff	Informal	Parents	General Public
Field Trips / Onsite Activities											
Subtotal	0	0	0	0	0	0	0	0	0	0	0
Curriculum Units											
Subtotal	0	272	20	120	0	0	1	0	2	0	0
Assembly Presentations											
Subtotal	0	45	32	0	0	0	3	2	2	0	3
Other Offsite Activities											
Lincoln High PD	0	0	0	0	0	0	128	0	0	0	0
Subtotal	0	0	0	0	0	0	128	0	0	0	0
Total	0	317	52	120	0	0	132	2	4	0	3
GRAND TOTAL: 630 students, educators and members of the public											

Communications Status

- Communications continues to develop multimedia pieces for Deep Thoughts articles.
- Communications is documenting construction and installation of LUX-ZEPLIN, as well as the deconstruction of the Maintenance buildings and the LBNF pre-excavation.
- Communications continues to host the Artist-in-Residence.
- Communications is attending preparation meetings for the multi--agency emergency preparedness exercise.
- Work on the Communications section of the Strategic Plan is going forward.
- An internal/external communications plan is being developed.
- Updates to the website and digital signage continue.
- Regular communications meetings with Fermilab and LBNF/DUNE are being attended.

Community Outreach/Media/Site Visits/Presentations/Site Visits

- KOTA wrote a news piece about water testing; Sanford Lab communications hosted CineCo-op Productions.
- Communications organized/led site visits for Sen. Thune's science staff, the Federal Communications Commissioner, Barrick Corp and BHSU Interim President Dr. Nichols.
- Presentations were given in Brookings and Sioux Falls to the Osher Lifelong Learning Institute.
- Communications represented Sanford Lab at the BHSU Annual Scholarship Gala.

Upcoming Community Outreach/Media/Site Visits/Presentations/Site Visits

- Communications will participate in the site visit for the NASA EPSCOR reviewer.
- Communications will attend the DUNE Collaboration meeting at Fermilab September 23-25.

Video, Web, Graphics

- Communications completed a script for a new contractor video and is now working on rewriting the safety video.
- Communications is working with Administrative Services and Science to update the Publications section of the Sanford Lab web page.
- New underground signage is being created.
- New features are being created and all experiment pages are being updated for the Sanford Lab website.
- Fresh content is being created weekly for all social media platforms.
- Albums in the Sanford Lab Photo Gallery may be viewed at: http://pics.sanfordlab.org.
- Stories for Deep Thoughts, updates to the website, general web maintenance, digital signage content; media assistance, and science collaborations and educational institutions assistance with photographic and information needs are ongoing.

The August Communications Photos are included as Appendix A.

News coverage

Note: The Rapid City Journal and Black Hills Pioneer continue to re-run Deep Thoughts stories weekly.

- <u>Sanford Lab and BHSU: Partnerships create learning opportunities</u>, by Erin Broberg, Rapid City Journal, August 22, 2019.
- Spearfish and Black Hills State University A partnership for success, by Steve Menken, Black Hills Business, August 25, 2019
- <u>First major superconducting component for new high-power particle accelerator arrives at Fermilab</u>, by Lead Hesla, Fermilab, August 19, 2019
- Next-Generation Xenon Detector Assembled at Sanford Underground Research Facility, AZoQuantum, August 8, 2018
- Global team of scientists finish assembling next-generation dark matter detector, by Hayley Dunning, Imperial College London, August 7, 2019
- Researchers Complete Heart of Dark Matter Detector in Lead, by Jackie Hendry, South Dakota Public Broadcasting, August 6, 2019
- <u>Sanford Lab's water treatment plant takes the 'waste' out of 'wastewater'</u>, by Alex Portal, Black Hills Pioneer, August 5, 2019

Information Technology Status

Projects

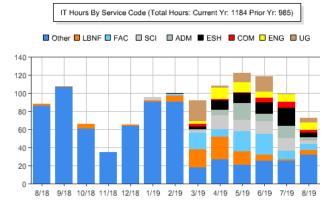
- Switch ports were setup in preparation for LZ's reduced-radon system move to the underground next month.
- A switch and WiFi was setup and deployed for KAJV underground at the 5000L, which also included a port for the air flow monitoring.
- Four new Cisco Catalyst switches were procured for major networking upgrades scheduled to take place in October.
- IT performed work on the displays at the Sanford Lab Homestake Visitor Center in August.
- IT is working with the Administrative Services office on office adds/moves/changes in the Administration Building.
- IT launched its first "phishing" campaign this month to promote dangerous email scam awareness and help education users.

Daily Activities

In addition to work order activity, IT monitors and reviews wireless and general network activity and counts, network hardware readiness, VPN Remote Access logs, Firewall logs, and establishes new VPN and Docushare accounts for individuals and user groups, as requested.



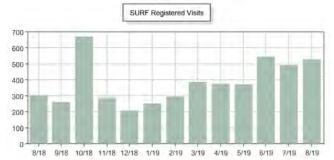
Help Desk Activities (measured in closed Work Orders)



Help Desk Activities (measured in closed Work Orders)

August Events

• In August, the Administrative Services team registered 531 visits and issued 17 new access badges. The August Visitor Log Report was submitted electronically to the SD Fusion Center/Homeland Security utilizing the SURF database reporting tool. The monthly report has been updated to include country of citizenship and country of birth.



Number of New Visitors, Users and Contractors On-Site

Logistical and administrative support were provided for the following events and meetings in August:

- Aug 5-9: SDSTA/SURF Risk Assessment (B. Pietzyk)
- Aug 9: SURF Cultural Strategic Planning Session (M. Headley)
- Aug 14: BHSU Interim President Nichols and Staff Site Visit (M. Headley)
- Aug 19-23: SDSTA Qualified Electrical Training (P. Bauer)
- Aug 19-20: Barrick Corp Staff Site Visit (C. Walter)
- Aug 19-21: DUNE BSI-CF Integration (P. Weber)
- Aug 22: Senator Thune's Staffers Site Visit (C. Walter)
- Aug 26-30: DOE/LBNF Enterprise Assessment (M. Andrews)
- Aug 29: Senator Rounds's Staffers Site Visit (C. Walter))

Administrative Activities

- Monthly Researcher hours were tracked, and Science training records entered; packing slips were matched to invoices; purchase orders were invoiced and closed in ManagerPlus; digital display information was updated; monthly office supply order was received and sorted; scanning, filing and copyediting were completed for various departments; Bridge training courses were reviewed and new learners added to the system; safety training courses and first aid training were completed; organizational charts and telephone lists were updated and distributed; Amelia conducted the monthly safety committee meeting and SDSTA ERT member Jessica Santee was selected as the new safety committee chairperson.
- Administrative Assistant Natasha Wheeler is finalizing logistics for the LZ ESH Readiness Review to be held on site September 10-12 and will provide administrative support for the review.
- With the hiring of several new SDSTA employees, additional office space is being sought in the Administration Building. Three cubicles have been procured and installation is scheduled for the third week in September. One of the larger offices on the first floor will be converted into workspace to accommodate three employees.
- As noted last month, the form to capture site visit information and an approval process have been put on hold until an overall process is established on how all visitors, users and contractors get access to SURF (surface and underground). Research and discussion began on implementation of a Foreign Visitors and Assignments (FVA) program to comply with new DOE requirements.
- Administrative Services is working with the Communications and Science Departments to update the Publications section of the Sanford Lab web page.
- August monthly progress reports for FRA and SDSTA were compiled, edited and distributed. Preparations began
 for the next quarterly SDSTA Board of Directors meeting to be held on September 19, 2019. Three SDSTA Policies
 (Publications, Sexual Harassment Investigation and Telephone Reimbursement) have been updated and approval
 will be requested at the meeting.
- The application for the "Sanford" trademark on the principal register has been filed and will be reviewed by the U.S. Patent and Trademark Office in the next 3-4 month. (The "Sanford" trademark is currently registered on the supplemental register).



Support Status

(Non-SURF Services Funded Activities)

CASPAR Compact Accelerator System for Performing Astrophysical Research—CASPAR

- Radiation monitors were transported to the University of Notre Dame for annual calibration then re-installed at Sanford Lab to support additional beam and gas target testing in September.
- Other recent activities include pump troubleshooting, replacing a beamline flange, and testing a new NMR probe.
- The majority of the remaining recommendations associated with previous readiness reviews were closed.
- In September, the neutron array will be used offsite by another experiment and during that time different liquid scintillator neutron detectors from Oak Ridge National Lab (ORNL) will be employed (the limited energy sensitivity of these detectors may help distinguish neutrons from different reactions).
- The next data campaign is now planned for late October or early November, due in part to the availability and cost of the neon-22 gas for the target.

Other Current Research Activities

Physics

• DUGL: Some additional site information was shared with representatives to support upcoming publications.

Geology

- GEOXTM: New air flow, temperature and humidity instruments were installed at 4850L locations around #4 Winze Wye. SDSTA personnel performed laser scans to determine the cross-sectional area that are used to calculate air volume rates. Instruments on the 5000L have also been connected to the Sanford Lab network.
- Core Archive: Several groups have submitted paperwork to view core at the Homestake core repository.

Biology / Chemistry

• BHSU Biodiversity & Chemistry: The next sampling trip is expected in January.

Engineering

 Thermal Breakout: A second heating test was performed in the overcore hole in the 4850L West Drift powered by a Sanford Lab generator. The heater is believed to have reached the target temperature but no fractures were observed. Data from the two tests are being evaluated, and adjustments to the model may motivate subsequent testing.



South Dakota Science and Technology Authority

APPENDIX

Communications Department Photo Appendix A









Top left: Paneling is replaced on the Ross Headframe.

Top right: A Kiewit-Alberici Joint Venture (KAJV) worker uses a crane to lift muck from the Ross Ore Pass.

Center left: Dr. Brianna Mount (left) with interim Black Hills State University President Dr. Laurie Stenberg Nichols at the Black Hills State Underground Campus.

Center right: Annual stream testing in Whitewood Creek where crews catch, count and measure fish to determine the health of the stream.

Right: LBNF Far Site Project Manager Joshua Willhite prepares to enter the tramway construction project.



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Communications Department Photo Appendix A





The photos on this page are from the dismanteling of the old shop building.

Top: A backhoe sorts and separates debris from the build rubble.

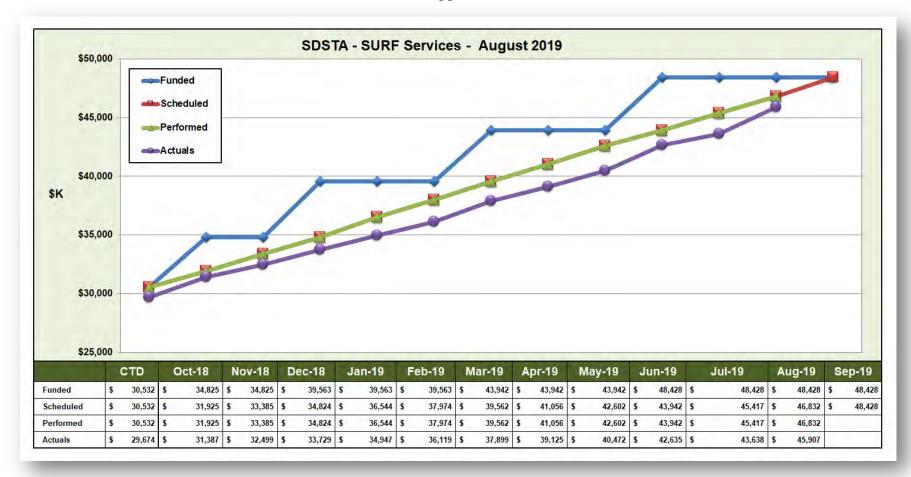
Center: This perspective shows two pieces of heavy equipment that were used to take down the building. In the background, a portion of the building stands.

Right: Care was taken in respect to the large wooden beams so that they could be salvaged and repurposed somewhere in Lead.



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Finance & HR Department Appendix B



DOE SDSTA Fiscal Year 2019 SPA Curve August 2019

Finance & HR Department Appendix C

Source/WBS	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
DOE SURF SERVICES	64.35	70.35	70.35	70.85	75.85	75.85	75.85	76.85	76.85	76.85	76.85	76.85
ERT	1.00	7.00	7.00	7.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Engineering	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Science	4.15	4.15	4.15	4.15	4.15	4.15	4.15	5.15	5.15	5.15	5.15	5.15
Operations												
Management	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Ross Shaft	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Yates Shaft	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Hoist Operations	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Hoist Maintenance	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Ventilation	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Underground Maintenance	7.50	7.50	7.50	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Water Treatment	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40
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	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Cyberinfrastructure	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Buildings and Grounds	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Equipment Maintenance	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Davis Campus	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
ROSS SHAFT (DOE)	26.00	26.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
LZ Project	4.15	4.15	4.15	2.75	2.75	2.75	2.75	4.30	4.30	4.30	4.30	4.30
LZ Operations	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.40	2.40	2.40	2.40
LBNF / DUNE	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	1.80	1.80
INDIRECT	36.40	36.40	36.40	37.40	37.40	37.40	37.40	39.40	39.40	39.40	39.40	39.40
Grand Total	135.60	141.60	145.60	145.70	150.70	150.70	150.70	155.25	155.55	155.55	154.75	154.7

SDSTA Staffing Plan by Funding Source August 2019

Appendix D - Financial Summaries

REPORT DATE 09/10/19

SOUTH DAKOTA SCIENCE & TECHNOLOGY

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DIVISION: ALL

BALANCE SHEET

ASSETS

	AS OF 08/31/19
CURRENT ASSETS	
First Interstate Checking	¢ 0.470.000.4E
First Interstate Other	\$ 2,172,839.15 541.72
Total in Local Checking	2,173,380.87
SD Treas: Indemnification	7,656,569.13
SD Treas: Mine Closure	1,462,524.66
SD Treas: Operating	594,166.11
SD Treas: Sanford	0.40
SD Treas: Sanford Gift #2	29,680.79
SD Treas: Spec Sess - Lab	6,101,751.86
SD Treas: SB196 Transfer	0.27
SD Treas: Experiments	1,341,841.08
Total with SD Treasurer	17,186,534.30
Billed A/R	3,395,882.78
Unbilled A/R	(14,727.86)
Other A/R	382,296.84
Inventory - Supplies	2,309,679.01
Inventory - Warehouse	28,955.50
Other Current Assets	423,077.23
Total Current Assets	25,885,078.67
IXED ASSETS	
Land, Underground & Other	12,633,473.13
Bldgs & Infrastructure	10,079,478.68
Improvements	62,907,485.67
Computer Equipment	458,724.17
Equipment & Fixtures	10,876,194.36
Accum Depr & Amort	(16,668,833.06)
Total Fixed Assets	80,286,522.95
OTHER ASSETS	
Work in Process	1,173,842.61
Pension Deferred Outflows	3,943,908.40
Xenon Purchased	8,164,350.39
Total Other Assets	13,282,101.40
OTAL ASSETS	* 119,453,703.02
	\$ 119,453,703.02

9:33

PAGE 0002

DIVISION: ALL

BALANCE SHEET

LIABILITIES & EQUITY

	AS OF 08/31/19
CURRENT LIABILITIES	
Accounts Payable Other Payables	\$ 1,409,426.99 4,862.59
Total Accounts Payable Accrued Payroll Liab	1,414,289.58 1,361,311.49
Total Current Liabilities	2,775,601.07
OTHER LIABILITIES	
LT Xenon Notes Payable	6,000,000.00
Pension Deferred Inflows	783,421.31
Total Other Liabilities	6,783,421.31
EQUITY	
Restricted: Indemnificati	7,500,000.00
Restricted: Lab	6,101,751.86
Restricted: Mine Closure	1,462,524.66
Restricted: Sanford Gift2	29,680.79
Restricted: Pension	3,160,487.09
Restricted: Experim. Int.	1,188,667.00
Total Restricted Funds	19,443,111.40
Investment in Gen FA	80,286,522.95
Unrestricted Funds	10,165,046.29
Total Equity	109,894,680.64
	==========
TOTAL LIABILITIES & EQUITY	\$ 119,453,703.02
	==========

ALL

STATEMENT OF INCOME

FOR THE PERIOD ENDING 08/31/19

		YR-TO-DATE
REVENUE		
DOE Subcontracts	\$	4,485,476.05
NSF/NASA Subcontracts	Ψ	4,445.43
State Revenue		2,500,000.00
Checking Interest		522.54
Interest Income		29,147.46
TOTAL REVENUE		7,019,591.48
DIRECT COSTS		
Direct Labor		1,164,239.95
Board of Directors		300.00
Capital Outlay >\$5K		106,142.57
Contractual Svcs		610,125.02
Inventory		36,540.46
Supplies		313,985.23
Travel - Domestic		10,301.44
Travel - Foreign		27,303.96
Utilities		297,347.42
Other Direct Costs		9,361.61
Unallow/Unbill Costs		64,526.95
TOTAL DIRECT COSTS		2,640,174.61
INDIRECT COSTS		
Fringe Benefits		880,007.04
Overhead		1,193,882.53
TOTAL INDIRECT COSTS		2,073,889.57
GROSS PROFIT/LOSS ()FROM OPERATIONS		2,305,527.30
OTHER INCOME		
OTHER INCOME		AE 000 00
Water Treatment Miscellaneous Income		65,823.39
		5,588.09
Other Operating Income		633.19
TOTAL OTHER INCOME		72,044.67
OTHER EXPENSES		
Reclass Incr Net Assets		(266,775.06)
TOTAL OTHER EXPENSES		(266,775.06)
		=======================================
NET INCOME/LOSS ()	\$	2,644,347.03
		=======================================

DIVISION: ALL

COMPARATIVE BALANCE SHEET

ASSETS

		AS OF 08/31/19		AS OF 08/31/18		\$ CHANGE	% CHANGE
CURRENT ASSETS							
First Interstate Checking	\$	2,172,839.15	\$	1,643,310.21	\$	529,528.94	32.22%
First Interstate Other	•	541.72	•	3,866.22	•	(3,324.50)	-85.99%
Total in Local Checking		2,173,380.87		1,647,176.43		526,204.44	31.95%
SD Treas: Indemnification		7,656,569.13		7,500,000.00		156,569.13	2.09%
SD Treas: Mine Closure		1,462,524.66		1,432,739.47		29,785.19	2.08%
SD Treas: Operating		594,166.11		582,758.01		11,408.10	1.96%
SD Treas: Sanford		0.40		002,700.01		0.40	100.00%
SD Treas: Sanford Gift #2		29,680.79		129,314.97		(99,634.18)	-77.05%
SD Treas: Spec Sess - Lab		6,101,751.86		123,514.31		6,101,751.86	
SD Treas: SB196 Transfer		0.27		•		0,101,751.86	100.00%
SD Treas: Experiments				2 750 044 25			100.00%
ob freas. Experiments		1,341,841.08 		2,750,011.35		(1,408,170.27)	-51.21%
Total with SD Treasurer		17,186,534.30		12,394,823.80		4,791,710.50	38.66%
Billed A/R		3,395,882.78		2,056,733.86		1,339,148.92	65.11%
Unbilled A/R		(14,727.86)		67,219.62		(81,947.48)	-121.91%
Other A/R		382,296.84		(94,564.85)		476,861.69	-504.27%
Inventory - Supplies		2,309,679.01		2,376,585.40		(66,906.39)	-2.82%
Inventory - Warehouse		28,955.50		29,854.20		(898.70)	-3.01%
Other Current Assets		423,077.23		427,150.33		(4,073.10)	-0.95%
Total Current Assets		25,885,078.67		18,904,978.79		6,980,099.88	36.92%
FIXED ASSETS							
Land, Underground & Other		12,633,473.13		12,633,473.13		-	0.00%
Bldgs & Infrastructure		10,079,478.68		10,079,478.68		-	0.00%
Improvements		62,907,485.67		62,784,754.14		122,731.53	0.20%
Computer Equipment		458,724.17		431,565.17		27,159.00	6.29%
Equipment & Fixtures		10,876,194.36		10,785,282.34		90,912.02	0.84%
Accum Depr & Amort		(16,668,833.06)		(14,921,184.23)		(1,747,648.83)	11.71%
Total Fixed Assets		80,286,522.95		81,793,369.23		(1,506,846.28)	-1.84%
OTHER ASSETS							
Work in Process		1,173,842.61		275,946.90		897,895.71	325.39%
Pension Deferred Outflows		3,943,908.40		4,839,927.07		(896,018.67)	-18.51%
Xenon Purchased		8,164,350.39		6,513,900.39		1,650,450.00	25.34%
Total Other Assets		13,282,101.40		11,629,774.36		1,652,327.04	14.21%
	=:			=======================================	==	=========	==========
TOTAL ASSETS	\$	119,453,703.02	\$	112,328,122.38	\$	7,125,580.64 =======	6.34%
							==========

DIVISION: ALL

COMPARATIVE BALANCE SHEET

LIABILITIES & EQUITY

•		AS OF /31/19	AS OF 08/31/18	\$ CHANGE	% CHANGE
CURRENT LIABILITIES				 -	
Accounts Payable	\$ 1,409,4	26.99 \$	777,541.74	631,885.25	81,27%
Other Payables	4,8	62.59	3,980.23	882.36	22.17%
Total Accounts Payable	1,414,2	89.58	781,521.97	632,767.61	80.97%
Accrued Payroll Liab	1,361,3	11.49	1,196,206.10	165,105.39	13.80%
Total Current Liabilities	2,775,6	01.07	1,977,728.07	797,873.00	40.34%
OTHER LIABILITIES					
LT Xenon Notes	6,000,0	00.00	5,000,000.00	1,000,000.00	20.00%
Pension Deferred Inflows	783,4		851,741.96	(68,320.65)	-8.02%
Total Other Liabilities	6,783,4 	21.31	5,851,741.96	931,679.35	15.92%
TOTAL LIABILITIES	9,559,0		7,829,470.03	1,729,552.35	22.09%
EQUITY					
Restricted: Indemnificati	7,500,0	00.00	7,500,000.00	-	0.00%
Restricted: Lab	6,101,7	51.86	• •	6,101,751.86	100.00%
Restricted: Mine Closure	1,462,5	24.66	1,432,739.47	29,785.19	2.08%
Restricted: Sanford Gift2	29,68	30.79	129,314.97	(99,634.18)	-77.05%
Restricted: Pension	3,160,48		3,988,185.11	(827,698.02)	-20.75%
Restricted: Experim. Int.	1,188,66		2,587,769.00	(1,399,102.00)	-54.07%
Total Restricted Funds	19,443,1		15,638,008.55	3,805,102.85	24.33%
Investment in Gen FA	80,286,52	22.95	81,793,369.23	(1,506,846.28)	-1.84%
Unrestricted Funds	10,165,04		7,067,274.57	3,097,771.72	43.83%
TOTAL EQUITY	109,894,68		104,498,652.35	5,396,028.29	5.16%
TOTAL 14400 TIES A FOLUE	========		=======================================	=========	=======================================
TOTAL LIABILITIES & EQUITY	\$ 119,453,70		112,328,122.38	\$ 7,125,580.64	6.34%
		====	=======================================	===== ===============================	=======================================

COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 08/31/19

=========	=======	======================================	=== ==	=======================================	====	=======================================	
		YEAR		PRIOR YEAR			
		TO DATE		TO DATE		\$ CHANGE	% CHANGE
		=======================================	=====		=====	=======================================	
REVENUE							
DOE Subcontracts	\$	4,485,476.05	\$	3,254,146.23	\$	1,231,329.82	37.84%
NSF/NASA Subcontracts		4,445.43		7,321.79		(2,876.36)	-39.28%
State Revenue		2,500,000.00		2,338.46		2,497,661.54	106807.97%
Contributions & Donations		-		125,000.00		(125,000.00)	-100.00%
Checking Interest		522.54		479.01		43.53	9.09%
Interest Income		29,147.46		20,528.03		8,619.43	41.99%
TOTAL REVENUE		7,019,591.48		3,409,813.52		3,609,777.96	105.86%
DIRECT COSTS							
Direct Labor		1,164,239.95		928,795.43		235,444.52	25.35%
Board of Directors		300.00		407.00		(107.00)	-26.29%
Capital Outlay >\$5K		106,142.57		329,596.71		(223,454.14)	-67.80%
Contractual Svcs		610,125.02		167,488.94		442,636.08	264.28%
Inventory		36,540.46		22,838.78		13,701.68	59.99%
Supplies		313,985.23		132,587.59		181,397.64	136.81%
Travel - Domestic		10,301.44		7,968.09		2,333.35	29.28%
Travel - Foreign		27,303.96		10,740.65		16,563.31	154.21%
Utilities		297,347.42		247,010.10		50,337.32	20.38%
Other Direct Costs		9,361.61		8,440.00		921.61	10.92%
Unallow/Unbill Costs		64,526.95		64,662.25		(135.30)	-0.21%
TOTAL DIRECT COSTS		2,640,174.61		1,920,535.54		719,639.07	37.47%
INDIRECT COSTS							
Fringe Benefits		880,007.04		590,847.92		289,159.12	48.94%
Overhead		1,193,882.53		964,113.74		229,768.79	23.83%
TOTAL INDIRECT COSTS		2,073,889.57		1,554,961.66		518,927.91	33.37%
GROSS PROFIT/LOSS ()		2,305,527.30		(65,683.68)		2,371,210.98	517.81%
							###
OTHER INCOME Water Treatment		65,823.39		40,212.99		25 640 40	60.000
Miscellaneous Income						25,610.40	63.69%
Other Operating Income		5,588.09 633.19		3,389.55		2,198.54	64.86%
Other Operating income				2,109.28 		(1,476.09) 	-69.98%
TOTAL OTHER INCOME		72,044.67		45,711.82		26,332.85	57.61%
OTHER EXPENSES							
Misc. Expenses & Donations		-		-			0.00%
Loss (Gain) on Sale of FA		-		-		-	0.00%
Reclass Incr Net Assets		(266,775.06)		(318,033.17)		51,258.11	-16.12%
TOTAL OTHER EXPENSES		(266,775.06)		(318,033.17)		51,258.11	-16.12%
NET INCOME/LOSS ()	\$	2,644,347.03	\$	298,061.31	\$	2,346,285.72	787.18%
		=========		=======================================		=======================================	=========

South Dakota Science & Technology Authority Available Resources 8/31/2019

Cash Total Checking	\$ 2,172,839
Cash With State Treasurer	\$ 17,186,534
Total Cash	\$ 19,359,373
Less: Restricted Funds	
Indemnification/Mine Closure/Special Session Lab	\$ (15,220,846)
Experiments (Xenon, Interest, Infrastructure)	\$ (1,341,841)
Total Cash Available for Infrastructure Upgrades and Authority Operations	\$ 2,796,687
Plus: Accounts Receivable Billed	\$ 3,395,883
Accounts Receivable Unbilled	\$ (14,728)
Less: Current Liabilities (Accounts Payable & Accrued Payroll)	\$ (2,411,548)
(not including accts. pay. for Experiment funding)	
Available Cash	\$ 3,766,293

SDSTA Operating Budget Summary FY2020 Actual vs Budget August 2019 & YTD

3	July 2019	Budget	\$ Over/Under Budget	% of Budget	Actual YTD	YTD Budget	\$ Over/Under Budget	% of Budget	% Remaining
									100%
SDSTA (Authority) Direct Charges									
Board of Directors	\$17,998.00	\$21,108.00	\$3,110.00	85.27%	\$37,775.00	\$42,216.00	\$4,441.00		10.52%
Executive Office	\$32,788.00	\$22,454.00	-\$10,334.00	146.02%	\$45,208.00	\$44,908.00	-\$300.00		-0.67%
Science Center E & O	\$3,135.00	\$5,000.00	\$1,865.00	62.7%	\$53,416.00	\$57,000.00	\$3,584.00	93.71%	6.29%
Science Liaison	-\$682.00	\$0.00	\$682.00	100.0%	\$639.00	\$0.00	-\$639.00	100.00%	0.00%
Subtotal	\$53,239.00	\$48,562.00	-\$4,677.00	109.63%	\$137,038.00	\$144,124.00	\$7,086.00	95.08%	4.92%
Federal/State Funding - Direct Charges									
Fermi P.O.#649934 Prof. Services	\$26,952.00	\$35,000.00	\$8,048.00	77.01%	\$53,505.00	\$77,416.00	\$23,911.00	69.11%	30.89%
Fermi C#629760 SURF Services	\$1,542,018.00	\$953,912.00	-\$588,106.00	161.65%	\$2,223,853.00	\$1,947,772.00	-\$276,081.00	114.17%	-14.17%
Fermi C#630223 Ross Rehab	\$141,847.00	\$179,003.00	\$37,156.00	79.24%	\$245,977.00	\$363,922.00	\$117,945.00	67.59%	32.41%
Fermi C#654406 Ross Logist, Supp	\$169,635.00	\$158,176.00	-\$11,459.00	107.24%	\$260,115.00	\$323,517.00	\$63,402.00	80.40%	19.60%
Fermi Misc. Contracts	\$3,032.00	\$12,000.00	\$8,968.00	25.27%	\$13,193.00	\$24,000.00	\$10,807.00	54.97%	45.03%
LBNL LUX/Zeplin C#7255146	\$70,166.00	\$80,000.00	\$9,834.00	87.71%	\$122,686.00	\$135,000.00	\$12,314.00	90.88%	9.12%
LBNL LZ Operations C#7355157	\$26,572.00	\$40,000.00	\$13,428.00	66.43%	\$78,086.00	\$92,000.00	\$13,914.00	84.88%	15.12%
LBNL SIGMA-V C#7371823	\$5,694.00	\$8,000.00	\$2,306.00	71.18%	\$14,193.00	\$18,000.00	\$3,807.00	78.85%	21.15%
MJD (Majorana) ORNL144149	\$2,052.00	\$2,600.00	\$548.00	78.92%	\$3,988.00	\$5,200.00	\$1,212.00	76.69%	23.31%
BHSU-UGCampus Gen.Serv.	\$0.00	\$200.00	\$200.00	0.0%	\$0.00	\$400.00	\$400.00	0.00%	100.00%
Sanf.Sci.Ed.Center - GOED Funded	\$0.00	\$33,337.00	\$33,337.00	0.0%	-\$9.00	\$66,674.00	\$66,683.00	-0.01%	100.01%
SDSM&Tech CASPAR Gen.Serv.	\$1,482.00	\$2,666.00	\$1,184.00	55.59%	\$2,990.00	\$5,312.00	\$2,322.00	56.29%	43.71%
* Xilinx, Inc. P.O.#732495	\$217.00	\$300.00	\$83.00	72.33%	\$426.00	\$600.00	\$174.00	71.00%	29.00%
Subtotal	\$1,989,667.00	\$1,505,194.00	-\$484,473.00	132.19%	\$3,019,003.00	\$3,059,813.00	\$40,810.00	98.67%	1.33%
Indirect Expenses									
Indirect Charges Personnel	\$336,815.00	\$340,505.00	\$3,690.00	98.92%	\$655,490.00	\$659,691.00	\$4,201.00	99.36%	0.64%
Indirect Charges Other	\$434,322.00	\$416,173.00	-\$18,149.00	104.36%	\$803,445.00	\$894,951.00	\$91,506.00	89.78%	10.22%
Subtotal	\$771,137.00	\$756,678.00	-\$14,459.00	101.91%	\$1,458,935.00	\$1,554,642.00	\$95,707.00	93.84%	6.16%
Totals	\$2,814,043.00	\$2,310,434.00	-\$503,609.00	121.8%	\$4,614,976.00	\$4,758,579.00	\$143,603.00	96.98%	3.02%

^{*} Private Corporations (Commercial Group)

SDSTA CAPEX Budget Summary FY20 Actual vs Budget Aug. YTD FY2020

Budget Area	Ac	ctual Month	FY	2020 Monthly Budget	\$ Over/Under Budget	% of Budget		Actual YTD	,	FY2020 YTD Budget	;	Over/Under Budget	% of Budget	% Remaining
														100.00%
Operational CAPEX	\$	364,834.69	\$	381,500.00	\$ 16,665.31	95.63%	_\$_	1,173,842.61	\$	7,189,826.00	\$	6,015,983.39	16.33%	83.67%
TOTAL CAPEX	\$	364,834.69	\$	381,500.00	\$ 16,665.31	95.63%	\$	1,173,842.61	\$	7,189,826.00	\$	6,015,983.39	16.33%	83.67%

SD Science & Technology Authority Operational CAPEX Budget YTD FY2020 Actual vs Budget

Project#	Project Description		Aug. 2020 YTD		Y2020 Budget	\$ O	ver/UnderBudget	% of Budget_	% Remaining	
									100%	
CAP2014-01	Sanford Visitor Center Sign/Display	\$	8,292.14	\$	10,000.00	\$	1,707.86	82.92%	17.08%	
CAP2016-03	LZ Xenon Gas	\$	605,946.90	\$	926,000.00	\$	320,053.10	65.44%	34.56%	
CAP2019-01	Maintenance Support Facility	\$	559,603.57	\$	6,253,826.00	\$	5,694,222.43	8.95%	91.05%	
	Totals	\$	1,173,842.61	\$	7,189,826.00	\$	6,015,983.39	16.33%	83.67%	

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

Project #	Project Description	Aug.FY2020			Budget	\$ Ov	er/UnderBudget	% of Budget	
CAP2014-01	Sanford Visitor Center Displays/Monitoring	\$	1,677.34	\$	1,000.00	\$	(677.34)	167.73%	
CAP2016-03	LZ Xenon Gas	\$	473.45	\$	500.00	\$	26.55	94.69%	
CAP2019-01	Maintenance Support Facility	\$	362,683.90	\$	380,000.00	\$	17,316.10	95.44%	
	Monthly Totals	\$	364,834.69	\$	381,500.00	\$	16,665.31	95.63%	

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

SDSTA Policies and Procedures—Mr. Mike Headley

Attached are the following updated SDSTA Policies reviewed by legal counsel and recommended for approval:

- Publications Policy (updated)
- Sexual Harassment Investigation Policy (updated)
- Telephone Reimbursement Policy

Recommended Action:

Agenda Item: 13

Pase intentionally

Publication Policy (be approved at the Sep 19 BoD mtg)

The purpose of this policy is twofold:

- To establish high standards of excellence for publications by encouraging appropriate review for all scientific, technical and engineering publications related to Sanford Underground Research Facility (Sanford LabSURF) research and technical activities prior to publication; and
- 2. To ensure Sanford LabSURF is notified of all publications that are based on work performed in whole, or in part, at Sanford LabSURF.

A. Applicability

This policy concerns collaborating partners ("Users"), employees, contractors and visitors working at or with the Sanford LabSURF.

This policy applies to all publications that are based on work performed in whole, or in part, at Sanford LabSURF. For the purposes of this policy, the term "Publication" means any document (in whatever form) such as abstracts, manuscripts and technical papers printed in a professional journal, popular periodical, published as a book or portion of a book (including electronic versions) and is made available to the public. The term includes materials subject to patents or copyrights.

B. Responsibilities

The SDSTA is not responsible for the validity, opinions, findings, conclusions or methods of the research performed by Users at the Sanford LabSURF.

Prior to the publication of any work resulting from the research performed at the Sanford LabSURF, it is the responsibility of the author(s), or other person(s) responsible for the content of the publication and/or those who originated or developed the content, to ensure that:

- 1. All requirements of any relevant investigator institution's review processes are met.
- 2. Findings adhere to scientific community standards of ethics and values.
- 3. All requirements of any applicable funding agencies are met.
- 4. The publication contains the appropriate credits, oral acknowledgements, legal disclaimers and patent or copyright notices.
- 5. The publication complies with all applicable patent, copyright, intellectual property, and other applicable laws, as well as the requirements of the User's Memorandum of Understanding with the South Dakota Science and Technology Authority.

C. Acknowledgements

To the extent possible, Ppublications should must contain the appropriate credit lineacknowledgement, including the funding source(s); the DOE or other agency contract number; any applicable facility (non-NSF or non-DOE or non-NSF contract number); and/or a disclaimer must appear in the publication of any material whether copyrighted or not, based on or developed under the project, as follows:and an acknowledgement of the assistance provided by the Sanford Lab. The acknowledgement of the Sanford Underground Research Facility must be included for publications that are based on work performed in whole, or in part, at Sanford Lab. The following are examples of credit lines:

1. Credit line for publications with restricted word counts:

This material is based upon work supported by the U.S. Department of Energy, Office of Science, Office of High Energy Physics: [or list other funding agencies and supporting institutions] and resources of the Sanford Underground Research Facility (SURF), which is a federally sponsored research facility under Award Number DE-SC000xxxx.

Full credit line for research developed with DOE funding (no restricted word count): Note that acknowledgement of the DOE should always include two levels of organization, such as "the Office of Science of the Department of Energy":

The research supporting this work took place in whole or in part at the Sanford Underground Research Facility (SURF) in Lead, South Dakota. Funding for this work is supported by the U.S. Department of Energy, Office of Science, Office of High Energy Physicsthe Office of Science of the Department of Energy under Contract Number [LIST CONTRACT NUMBERS]. This research was also supported by [INSERT FUNDING AGENCIES AND GRANT/CONTRACT NUMBERS HERE]. The assistance of the Sanford Underground Research FacilitySURF and its personnel in providing physical access and general logistical and technical support is acknowledged.

3. Disclaimer:

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade

name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

3.4. Oral acknowledgements—Funding agency support and contributions of the Sanford Lab should also be acknowledged during all news media interviews including popular media such as radio, television and news magazines as well as during presentations of papers at conferences, seminars, colloquia, public outreach presentations, workshops or other proceedings.

Publications produced as a result of research conducted at the Sanford LabSURF are one of the measures of the lab's success. Authors can help by notifying Sanford LabSURF of new publications.

Sanford Lab SURF will make every effort to make publications available through the Sanford Lab website. For publications that are not available in the public domain (i.e., published in a journal or other publication with copyright restrictions), the abstract of the publication with information concerning where the full publication can be obtained will be provided through the Sanford Lab website.

Sexual Harassment Investigation Policy (to be approved at Sep 19 board mtg)

The purpose of this policy is to establish a mechanism for third-party investigation of claims of sexual harassment and related alleged retaliatory adverse employment actions. This policy applies to the SDSTA Board of Directors, management and staff.

A. Definitions

- 1. Board of Directors—The duly-appointed, acting and qualified Board of Directors of SDSTA, including ex officio members.
- 2. Management—The Executive Director, Laboratory Director and all other SDSTA employees with authority to make hiring and firing decisions or whose recommendations concerning hiring and firing decisions carry great weight.
- 3. Staff—All SDSTA employees other than management.
- 4. Adverse Employment Action—For the purposes of this policy only, an employer action that might dissuade a reasonable employee from making or supporting a charge of sexual harassment or related discrimination, including but not limited to a tangible change in working conditions that produces a material employment disadvantage, such as termination, cuts in pay or benefits, denial of promotion, refusal to hire, denial of job benefits, demotion, suspension and other changes that affect an employee's future career prospects, as well as circumstances amounting to a constructive discharge.
- 5. Sexual Harassment—see Employee Handbook, Anti-Harassment Policy.

B. Investigation of claims of harassment and retaliatory adverse employment actions

- 1. All allegations of sexual harassment or retaliatory adverse employment actions shall be reported to the executive dDirector. The Executive Director shall promptly forward any such report to the chairperson of the Board and to general counsel. If the Executive Director, chairperson of the Board or general counsel are implicated in the report, the report will not be forwarded to the person implicated. If the Executive Director is implicated in the report, the report will be forwarded to the chairperson of the Board or other member of the Board of Directors not implicated in the report. If the chairperson or other member of the Board of Directors not implicated in the report. If general counsel is implicated in the report, the chairperson of the Board or other member of the Board of Directors will retain other legal counsel to act in the place of general counsel in connection with the report.
- 2. General counsel (or any other lawyer to whom the report is referred), in consultation with the chairperson of the Board or other board member, shall retain the services of a consultant to investigate the report and promptly provide a written summary of its findings to general counsel and the chairperson of the Board. After consultation, general counsel and the chairperson of the Board shall provide a copy of the report to the executive dDirector and solicit the Eexecutive Ddirector's recommendation concerning how to respond to the report.

- The recommendation is subject to approval, modification or rejection by the chairperson of the Board.
- 3. Any proposed adverse employment action related to, or alleged to be related to, a claim of sexual harassment or discrimination may not be implemented until after the application of the procedures set forth in this policy. Any such adverse employment action implemented in violation of this section 3 is subject to reversal by the chairperson of the Board.

Nothing in this policy is intended to limit or otherwise modify the authority of the Board of Directors.

Telephone Reimbursement Policy (to be approved at Sep 19 board mtg)

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.

SDSTA employees other than the Executive Director may be reimbursed for cell phone actually charges incurred that are attributable to SDSTA business, as deemed necessary by the Executive Director, up to a maximum of \$50.00 per month.

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

The SDSTA will accept charges for collect calls from SDSTA employees on the rare occasion this would be necessary.

South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Executive Session—Chairperson Casey Peterson

Meeting closed to public during executive session.

See recommended motion below.

Recommended Action:

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

Agenda Item: 14

Pase intentionally

South Dakota Science and Technology Authority Agenda Item: 15 September 19, 2019 Board Meeting

Report from Executive Session—Chairperson Casey Peterson See recommended motion below. **Recommended Action:**

"The board consulted with legal counsel concerning contractual and legal matters. No action was taken."

OR

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Agenda Item: 16

Confirm date and time of next meeting—Chairperson Casey Peterson

The next board meeting will be held on Thursday, December, beginning at 9:00 AM (Mountain Time). Lunch will be provided.

2019 Regular Quarterly Board Schedule		
March 21, 2019	08:00 am (MT)	
June 20, 2019	08:00 am (MT)	
September 19, 2019	08:00 am (MT)	
December 12, 2019	09:00 am (MT), lunch provided	

South Dakota Science and Technology Authority
Sanford Underground Research Facility
Education & Outreach Building (large conference room)
630 E. Summit Street,
Lead SD 57754

Questions? Contact Mandy Knight, mknight@sanfordlab.org

Direct Line: 605.722.4022, Cell: 605.641.0475

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South Dakota Science and Technology Authority September 19, 2019 Board Meeting

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Ask if any public comment request forms were submitted from the audience.	

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Agenda Item: 17

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South Dakota Science and Technology Authority September 19, 2019 Board Meeting

Board Comments—Chairperson Casey Peterson

- 1. Dr. Ani Aprahamian
- 2. Mr. Dana Dykhouse, Vice-Chairperson
- 3. Ms. Pat Lebrun, Secretary-Treasurer
- 4. Mr. Roger Musick
- 5. Mr. Casey Peterson, Chairperson
- 6. Mr. Ron Wheeler, Vice-Chairperson
- 7. Dr. Robert Wilson
- 8. Dr. Jim Rankin, Ex-officio member

Recommended Action:

Agenda Item: 18

Pase intentionality

South Dakota Science and Technology Authority September 19, 2019 Board Meeting Agenda Item: 19 Adjournment—Chairperson Casey Peterson See recommended motion below.

Recommended Action:

Motion to adjourn.