

**South Dakota Science and Technology Authority**

**Board Meeting  
March 25, 2021**



630 East Summit Street  
Lead, SD 57754



**Call to Order—Chairperson Casey Peterson**

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1A. Call Roll

Dr. Ani Aprahamian  
Mr. Dana Dykhouse  
Ms. Pat Lebrun  
Mr. Roger Musick  
Mr. Casey Peterson  
Dr. James Rankin (*ex-officio member*)  
Mr. Ron Wheeler  
Dr. Bob Wilson

1B. Introduce guests

1C. Public comment form (any public comment forms submitted for discussion?)

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

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**South Dakota Science and Technology Authority  
March Board Meeting**

**Agenda Item: 02**

**Approve Agenda—Chairperson Casey Peterson**

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Attached is the agenda for the March 25, 2021 meeting.

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**Recommended Action:**

*Motion to approve agenda as presented.*

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# AGENDA

## South Dakota Science and Technology Authority

### 630 East Summit Street, Lead, South Dakota

### Meeting of the Board of Directors

### Thursday, March 25, 2021 at 8:00 AM (MT)

### \*\*Yates Education & Outreach Conference Room\*\*

**Public (Open) Session: 1-669-900-6833, Meeting ID: 605 722 4022, Passcode: 8650, <https://zoom.us/join>**

SDSTA Mission: *We advance world class science and inspire learning across generations.*

SURFs COVID-19 protocols require all individuals to stop at the health screening unit at the Yates Complex entry gate to answer health questions and get a temperature check before entering the premises. While on site, all individuals shall maintain physical distancing, when possible. SURF requires everyone to wear a mask in all enclosed buildings when groups of two or more people are present. The SDSTA appreciates everyone's cooperation as we all strive to keep SURF a safe and healthy place to work.

**Members of the public are encouraged to join open session by phone.**

| Title  | Report                  | Recommendations   |
|--|-------------------------|---|
| 1. Call to order   | -- Chair Casey Peterson |   |
| A. Call roll   |                         | <i>Confirm quorum</i>   |
| B. Introduce guests  |                         | <i>Ask guests to announce their name/ affiliation</i>   |
| C. Public comment form   |                         | <i>Reminder request to submit public comment form(s)</i>  |
| 2. Approval of agenda  | -- Chair Casey Peterson | <i>Motion to approve agenda</i>   |
| 3. Approval of minutes   | -- Chair Casey Peterson | <i>Motion to approve the December 17, 2020 and January 25, 2021 minutes, as presented</i>   |
| 4. Conflict of interest disclosure   | -- Mr. Tim Engel        | <i>Informational</i>  |
| 5. Conflict of interest disclosure and waiver under SDCL CH. 3-23                            | -- Mr. Tim Engel        | <i>Motion to approve or deny, as appropriate</i>  |
| 6. Report from Audit Committee   | -- Ms. Pat Lebrun       |   |
| A. Internal Controls Audit update  |                         |   |
| B. Audit Committee meeting update—acceptance of Audit Report-fiscal year ended June 30, 2020 |                         | <i>Motion to accept Audit Report Fiscal Year Ended June 30, 2020 as reviewed and discussed at December 17, 2020 board meeting</i> |
| 7. Financial Report  | -- Mr. Mike Headley     |   |
| A. February financial statements   | -- Ms. Nancy Geary      | <i>Motion to accept financial report as presented</i>   |
| 8. Report from Executive Director  | -- Mr. Mike Headley     |   |
| A. Declarations of Surplus—lockers, Flygt pump, Baosteel cylinders                           | -- Mr. Mike Headley     | <i>Informational</i>  |
| B. SDSTA quarterly update  | -- Mr. Mike Headley     | <i>Informational</i>  |
| C. Maintenance Support Facility update   |                         |   |

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## AGENDA

**South Dakota Science and Technology Authority**  
**630 East Summit Street, Lead, South Dakota**  
**Meeting of the Board of Directors**  
**Thursday, March 25, 2021 at 8:00 AM (MT)**

**\*\*Yates Education & Outreach Conference Room\*\***

**Public (Open) Session: 1-669-900-6833, Meeting ID: 605 722 4022, Passcode: 8650, <https://zoom.us/join>**

| Title   | Report                                  | Recommendations   |
|---|---|---|
| D. Science update   | -- Ms. Pam Hamilton                     | <i>Informational</i>  |
|   | -- Dr. Jaret Heise                      | <i>Informational</i><br><i>Motion to accept executive director's report</i>   |
| 9. Approval of Lease Agreement between SDSTA and TMI for Ross Pipe and Maintenance Shop | -- Mr. Mike Headley                     | <i>Motion to approve Lease Agreement between the South Dakota Science and Technology Authority and Thyssen Mining Inc and authorize the chairperson to sign the Agreement</i> |
| 10. Approval of Easements with adjoining landowners                                     | -- Mr. Tim Engel                        | <i>Motion to approve Easements with adjoining landowners and authorize the executive director to sign the Easements</i>   |
| 11. Approval of SURF Foundation Amended By-Laws   | -- Mr. Mike Headley                     | <i>Motion to approve SURF Foundation By-Laws amended Dec 16, 2020, as presented</i>   |
| 12. Executive session<br>(closed meeting)   | -- Chair Casey Peterson                 | <i>Motion to enter executive session to discuss personnel matters and to consult with legal counsel concerning contractual and legal matters—SDCL 1-25-2(1), (3) and (4)</i>  |
| 13. Report from executive session   | -- Chair Casey Peterson                 | <i>Motion to accept executive session report</i>  |
| 14. Approval of insurance package for LBNF logistics support contract (rigging)         | -- Mr. Mike Headley<br>-- Mr. Tim Engel | <i>Motion to approve insurance package for LBNF logistics support contract as presented</i>   |
| 15. Approval of LBNF logistics support contract (rigging)                               | -- Mr. Mike Headley                     | <i>Motion to approve LBNF logistics support contract as presented and to authorize the executive director to sign</i>   |
| 16. Select Nominating Committee   | -- Chair Casey Peterson                 | <i>Chairperson to appoint members of nominating committee for election of officers at annual meeting</i>  |

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## AGENDA

**South Dakota Science and Technology Authority**  
**630 East Summit Street, Lead, South Dakota**  
**Meeting of the Board of Directors**  
**Thursday, March 25, 2021 at 8:00 AM (MT)**

**\*\*Yates Education & Outreach Conference Room\*\***

**Public (Open) Session: 1-669-900-6833, Meeting ID: 605 722 4022, Passcode: 8650, <https://zoom.us/join>**

| Title  | Report                  | Recommendations  |
|--|-------------------------|--|
| 17. SURF Institute Science Program Scoping Study | -- Chair Casey Peterson | <i>Motion to allocate SDSTA funding and authorize the chairperson to modify the existing contract with dialogue LLC to facilitate the development of a SURF Institute Scoping Document. (Follow Financial Conflict of Interest Policy procedures.)</i> |
| 18. SDSTA policies and procedures                | -- Mr. Mike Headley     | <i>Motion to approve updated SDSTA Social Media Policy, as presented.<br/>(Informational—new social media procedure approved by executive director)</i>  |
| 19. Confirm date and time of next meeting        | -- Chair Casey Peterson | <i>Annual meeting—Thursday, June 24, 2021 at 8:00am (Mountain Time)<br/>E&amp;O Building Conference Room and via Zoom</i>  |
| 20. Public comments                              | -- Chair Casey Peterson |  |
| 21. Board comments                               | -- Chair Casey Peterson |  |
| 22. Adjourn                                      | -- Chair Casey Peterson | <i>Motion to adjourn</i>   |

**Meeting of the Board of Directors  
Thursday, March 25, 2021**

**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 15, 2020       | August 14, 2026  |
| 3. | Ms. Patricia Lebrun, Secretary-Treasurer   | Re-appointed August 5, 2016        | August 8, 2022   |
| 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 28, 2020        | April 9, 2025    |
| 7. | Dr. Robert Wilson                          | August 24, 2015                    | August 8, 2021   |
| 8. | Dr. James Rankin, <i>ex-officio member</i> | SDSM&T President as of Jan 8, 2018 |                  |
|    |  |                                    |                  |
|    | Committees and Members (2020-2021)         |                                    |                  |
|    | Audit Committee Members (Sep):             | Nominating Committee Members (Jun) |                  |
|    | ➤ Pat Lebrun-Chair, tbd                    | ➤ Dana Dykhouse, tbd               |                  |
|    | ➤ Dana Dykhouse, tbd                       | ➤ Roger Musick, tbd                |                  |
|    | ➤ Casey Peterson, ex-officio, tbd          |                                    |                  |
|    | 2021 Board Schedule                        |                                    |                  |
|    | Thursday, March 25 2021                    | 8:00 am (MT)                       | E&O Bldg         |
|    | Thursday, June 24, 2021                    | 8:00 am (MT), annual               | E&O Bldg         |
|    | Thursday, September 23, 2021               | 8:00 am (MT)                       | E&O Bldg         |
|    | Thursday, December 16, 2021                | 9:00 am (MT)                       | E&O Bldg         |

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**Approve Minutes—Chairperson Casey Peterson**

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Attached are the Minutes for the following SDSTA Board meetings:

- December 17, 2020
- January 25, 2021 (telephonic)

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**Recommended Action:**

*Motion to approve the Minutes of the December 17, 2020 and January 25, 2021 meetings, as presented.*

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**South Dakota Science and Technology Authority Board of Directors**  
**Meeting Minutes**  
**Thursday, December 17, 2020**  
**Lead, South Dakota**

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 9:00 AM Mountain Time (MT) on Thursday, December 17, 2020, 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. To maintain physical distance due to the COVID-19 pandemic, cloth face masks were encouraged, and a conference number was posted on the agenda with an invitation for members of the public to participate in the meeting by telephone.

**MEMBERS OF THE BOARD IN ATTENDANCE**

Dr. Ani Aprahamian (by phone)  
Vice Chairperson Dana Dykhouse (by phone)  
Secretary/Treasurer Patricia Lebrun (by phone)  
Mr. Roger Musick (by phone)  
Chairperson Casey Peterson (in person)  
Vice Chairperson Ron Wheeler (by phone)  
Dr. Robert Wilson (by phone)  
Dr. James Rankin, ex-officio (by phone)

**MEMBERS OF THE BOARD ABSENT**

*None*

**SDSTA STAFF**

Mr. Tim Engel, Legal Counsel (in person)  
Ms. Nancy Geary, Chief Financial Officer (in person)  
Mr. Mike Headley, Executive Director (in person)  
Dr. Jaret Heise, Science Liaison Director (by phone)  
Ms. Mandy Knight, Administrative Services Manager (in person)  
Mr. William McElroy, Deputy Director of Operations (in person)  
Ms. Staci Miller, SURF Foundation Director (by phone)  
Mr. KC Russell, Cultural Diversity Coordinator (by phone)  
Ms. Constance Walter, Communications Director (in person)  
Ms. Natasha Wheeler, Administrative Assistant (in person)

**ALSO PRESENT DURING ALL OR PART OF THE MEETING**

Ms. Elizabeth Freer, dialogue LLC Principal and Owner (by phone)  
Mr. Alex Portal, Black Hills Pioneer Journalist (by phone)  
Ms. Caroline Thorman, Policy Advisor & Federal Liaison, Office of Governor Noem (by phone)  
Mr. Joshua Willhite, Long-Baseline Neutrino Facility (LBNF) Far Site Conventional Facilities Design Manager (in person)  
Ms. Debra Wolf, Education & Outreach Director (BHSU) (in person)

**ITEM 1. CALL TO ORDER**

Chairperson Casey Peterson called the meeting to order at 9:00 AM (MT). Roll call was held. Dr. Ani Aprahamian, Mr. Dana Dykhouse, Ms. Pat Lebrun, Mr. Roger Musick, Mr. Ron Wheeler, Dr. Bob Wilson and Dr. Jim Rankin were present by phone. Chairperson Peterson was present in person.

Chairperson Peterson then asked audience members to introduce themselves. He said if anyone from the

audience had any questions or comments for 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. He reported no comment forms were submitted.

## **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. Dykhous and seconded by Mr. Musick to approve the agenda as presented. Motion passed unanimously by roll call vote.*

## **ITEM 3. APPROVE MINUTES**

Chairperson Peterson asked for any comments on the September 17 or December 4, 2020 Minutes. Hearing none, he asked for a motion to approve the minutes.

*Motion by Mr. Musick and seconded by Mr. Wheeler to approve the September 17, 2020 and December 4, 2020 minutes as presented. Motion passed unanimously by roll call vote.*

## **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 with respect to items under consideration at today's meeting.

No conflicts of interest were disclosed.

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

Mr. Engel said board members typically make disclosures related to SDCL CH. 3-23 at the quarterly board meeting held in September. He said no additional disclosures have been made since the September 2020 meeting.

## **ITEM 6. REPORT FROM THE AUDIT COMMITTEE**

### **ITEM 6A. INTERNAL CONTROLS AUDIT UPDATE**

Ms. Lebrun said the Information Technology benchmark is included in the audit report, setting a baseline for internal controls.

### **ITEM 6B. AUDIT COMMITTEE MEETING UPDATE**

Ms. Lebrun said the Audit Committee has reviewed and submitted the audit report for review, to be approved at the next regularly scheduled board meeting in March 2021.

### **ITEM 6C. AUDIT REPORT-FISCAL YEAR ENDED JUNE 30, 2020**

Ms. Lebrun said the audit is complete and the report is included in the board packet. She said the audit was clean and looked good. It was noted the SDSTA assets are now \$108 million, which is a significant increase from the early days of SDSTA, indicating much improvement over the years. Ms. Lebrun said this year's state audit included compliance with federal audit requirements, and the status report page is worth remarking because it indicates that SDSTA has a history of clean audits without issue. Ms. Lebrun submitted the report to the board of directors for review and thanked Ms. Nancy Geary and her team for their good work. Ms. Geary also thanked her team. Chairperson Peterson noted the exemplary results and record of the audit.

*Motion by Ms. Lebrun and seconded by Mr. Dykhous to accept the Audit Committee Report and to discuss Audit Report approval at the next regularly scheduled board meeting per statute. Motion passed unanimously by roll call vote.*

## **ITEM 7. FINANCIAL REPORT**

### **ITEM 7A. NOVEMBER FINANCIAL STATEMENTS**

Ms. Geary presented the balance sheet and income statement, provided in the board packet, and noted SDSTA fixed assets that have been purchased through the Cooperative Agreement (CA). She said all of the xenon has been purchased, and its dollar amount should remain the same for the purpose of the financial statements. Income is proportionate with last year. Ms. Geary also said the indirect rate is still being negotiated (with the Department of Energy) and should hopefully be determined by the end of the year.

*Motion by Mr. Wheeler and seconded by Ms. Lebrun to accept the financial report as presented. Motion passed unanimously by roll call vote.*

## **ITEM 8. REPORT FROM THE EXECUTIVE DIRECTOR**

### **ITEM 8A. DECLARATION OF SURPLUS – TRANSFORMER AND WALL SUPPLY FAN**

Mr. Headley said SDSTA traded a transformer with Kiewit for two smaller transformers. Also, a wall-supply fan that was used on the 4850L is no longer functional and needs to be retired. These will be considered surplus property.

Mr. Headley then went out of the order in his report and asked Ms. Freer to begin her presentation with Mr. Willhite to follow.

### **ITEM 8D. SURF INSTITUTE SCIENCE STUDY UPDATE**

Ms. Freer provided an overview from her findings from interviews with the science community concerning the development of a science institute at SURF. She said the goal of the study was to gather input from prominent researchers in the fields applicable to underground science to inform the development of the SURF Institute science program.

Ms. Freer described her process, resulting in summarized findings and recommendations, and reviewed key questions posed during her interviews, which addressed science programming, facility features, Education and Outreach content, technology needs, potential gaps that SURF could fill in the science community, diversity, equity and inclusion considerations, and potential prototypes for programming.

She said 18 individuals were interviewed, and discussions dove into the key questions outlined for the interviews. She said an institute could provide an opportunity to focus on interdisciplinary underground science, connecting the intellectual community at SURF, and defining what science is possible at SURF, at all levels.

Ms. Freer said feedback shows that long-term planning is needed to engage with the community, and the institute should connect the community and SURF. She said a scientific advisory committee is needed and, along with the institute's director, should include respected members of the science community, represent all fields of science being conducted at SURF, and should represent a commitment to diversity, equity and inclusion, as well as a clearly established code of conduct.

She said other factors to consider include access, such as transportation and housing, missions and visions of potential partnering agencies, overlapping science programs to represent international scale, a focal point to build the institute around, creating a welcoming environment and community, establishing intentional culture, effective project review protocols, and spaces for working groups to collaborate and workshop. Ms. Freer said the Center for Theoretical Underground Physics (CETUP), was a six to seven-week summer program that ran prior to 2016 and was a tested model that resulted in 20-30 published papers per year, and reviewing this program could better inform the institute. She added, online programming could be used for prototype content.

Ms. Freer said diversity, equity and inclusion continue to be a challenge for many organizations and consideration should be given to prevent any type of abuse and to consider age diversity, family dynamics, minority inclusion and outreach efforts to open doors for underrepresented groups.

She said, the facility should encourage a sense of community and connection to experimental work, be designed as a warm and welcoming space, encourage people to collaborate, provide technology to support remote presentations, allow for flexible workspace, include social areas for ideas and conversation, plan for future state-of-the art technology updates and provide options for housing and transportation.

Ms. Freer said it is important for science to reach the general public, underground science provides a unique opportunity for the institute to share findings, the artist in residence program could be expanded, connections between science and schools could be better fostered, researchers could work more closely with educators, scientists could learn more about communication skills, and mentorship programs, student-scientist interactions, and university/technical school relationships could be developed. She said interviewees would be excited to participate but they need to know how to help and would like to be invited to do so.

Ms. Freer concluded with four recommendations resulting from her report. She said, the institute should (1) engage a small science-based working group to define the scope of the Institute, including a science program and major facility elements, utilizing the two completed institute studies, (2) form the Science Advisory Committee (SAC) as soon as possible (also recommended by the SURF Strategic Advisory committee)—a single SAC should provide recommendations on the science direction for both the institute and the lab—(3) SDSTA should provide leadership-level staffing to advance the development of the institute and (4) identify near-term opportunities for prototype programs to build science programing and test implementation methods.

Mr. Headley suggested SDSTA create a science-based working group, made up of a subset of study interviewees, to develop an initial platform for the institute, utilizing the information gathered from the two completed science institute studies. He said he would like the group to create a white paper outlining potential funding, planning and science community incorporation into the institute. Mr. Headley reported that Dr. Bob Wilson has agreed to co-chair the working group with Mr. Headley.

#### **ITEM 8C. LBNF UPDATE**

Mr. Willhite said the last two years of LBNF work has been the “pre-excavation phase” of the Long-Baseline Neutrino Facility (LBNF) project, leading up to the excavation of space on the 4850L, underground. He said the pre-excavation phase is almost done with construction and has begun commissioning. Reviewing work completed by LBNF, Mr. Willhite shared a series of photos illustrating project progress. He said the ore pass is complete, the skip loading system is complete, the crushing system is expected to be completed early in January 2021, the conveyor inside the tramway and over the highway are complete, and all of these components are scheduled for loaded or final commissioning in March 2021. He said the Ross substation electrical is complete, including commissioning. Mr. Willhite said the structural steel work and foundation work are complete for the headframe abatement and reinforcement project, except for foundation work to be finished during the next scheduled shut down. He said three primary utilities were installed for the shafts, including power through the Ross, fiber through the Yates and Ross Shafts. A fire water sump at the 4550L, including pipe from the 4550L to the 4850L, will be installed this week.

He said work on early ventilation enhancement on the 3650L includes blasting that began on June 22 and completed on November 5, 2020, the concrete mud slab and shotcrete back and ribs completed in December and an overall cavern size of 32 feet wide by 23 feet tall and 50 feet deep, including the

existing drift. On the 4850L, he said ventilation enhancements include blast door installation that was completed August 26, blasting that started on August 27 and completed on December 15, approximately 700 feet of total drift, and rock that will be used for commissioning of the rock removal system.

Mr. Willhite reviewed Ross Shaft reliability project components including completed electrical, the pinned ore hoist clutch, refurbished ore hoist bearings and bushings, new service hoist ropes (performed by SDSTA), three new 1750 horsepower motors currently in fabrication, near-completion of Ross Shaft refurbishment and headframe brattice modifications. He said a Ross hoist shutdown is scheduled for January 18 to March 18, 2021 to install the completed components and the cage and skips are expected to be installed by the end of this month.

Looking at upcoming work, Mr. Willhite said April 7 is the expected date for the end of pre-excavation, which will be followed up by the excavation phase of the project, executed by Thyssen Mining, Inc. and overseen by Kiewit Alberici Joint Venture (KAJV).

Mr. Willhite said there have been no recordable incidents for KAJV or their subcontractors, first aid incidents have been acted on immediately and reviewed for safer practices, good housekeeping has been maintained throughout work areas, focus has remained on protecting workers, testing and quarantine measures have been taken for COVID-19 cases, and the few issues or nonconformities that have occurred have been addressed quickly.

#### **ITEM 8B. SDSTA QUARTERLY UPDATE**

Mr. Headley said SDSTA continues to maintain a good safety record, with only two recordable incidents in the last 12 months, resulting in a decreasing Experience Modification Rate (EMR) and subsequently decreasing premium payment for workers compensation insurance. Also, he said a strong Wellness Program has been developed at SURF and in October, Breast Cancer Awareness Month, large LED ribbons decorated both headframes. Online donations by staff and the community totaled \$4,000.00 to support the Black Hills Foundation for Health, staff wore pink ribbons on their hardhats and cancer awareness wristbands, pink flags were placed along the Administration building sidewalk to honor those who have suffered from breast cancer, and medical personnel from Monument Health gave a public presentation.

Mr. Headley said updated COVID-19 controls released September 16, 2020 remain in force at SURF, operations remain at Level One (1) with day and night shift support, staff has been encouraged to follow safety protocols both on and off site, infections and quarantines have decreased since the beginning of December, the increased underground headcount and cage count began December 16, science work continues to proceed on day shift with CASPAR using the Ross Shaft to access night shift work, and PPE supplies are being maintained at six-month inventory levels, with the exception of the three to four month supply of N95 respirators which are currently difficult to source.

Mr. Headley said a Cultural Advisory Committee (CAC) meeting was held on December 2, and CAC is pleased with the new core values including those that emphasis increasing diversity with new hires. He said CAC provided positive comments on an “outstanding” virtual Neutrino Day, stating it placed the event at an international level and expressed the impressive advances in expansion of virtual approaches for K-12 E&O offerings including presentations, curriculum and teacher professional development. He said CAC recommendations included continuing to push the limits of virtual approaches to expand public outreach and K-12 E&O audiences, continuing to use virtual approaches for Neutrino Day, updating and expanding Visitor Center programs to provide more information on Native American history in the Black Hills, continuing to implement programs to meet the Cultural Strategic plan goals, establishing a close partnership between the SURF Foundation and CAC for design of the

Ethnobotanical Garden, and providing a detailed update from SURF to CAC at the March 2021 SDSTA board meeting.

Mr. Headley said SDSTA recently established a new Operations Division, including two currently advertised positions for a Shaft and Hoists Department Director and a Surface Operations & Utilities Department Deputy Director. A new position was posted for a Chief Diversity, Equity and Inclusion (DEI) Officer which will combine the current Education and Public Relations Department Director posted as one FTE hire.

Reviewing SURF operations funding, Mr. Headley said a budget has not yet been provided for FY2021, and current projects are those funded with FY2020 dollars—CA projects have consistently been at or under budget.

In science, Mr. Headley said LUX-ZEPLIN (LZ) has first use of SDSTA-funded xenon planned for January, with the goal of a direct dark matter search using dual-phase xenon in a titanium cryostat surrounded by ultra-pure water in a gadolinium neutrino detector. He said the collaboration has approximately 250 members representing 37 institutions and the start of data production is expected in 2021, operating for five years. Mr. Headley said the CASPAR experiment is working through their final data collection activities with a goal of completion before Thyssen Mining begins their excavation work in March.

Mr. Headley shared photos of current progress at the new Maintenance Support Facility, planned for completion in April 2021, and mentioned the roof was installed successfully before the snow arrived.

Mr. Headley reviewed a list of accomplishments from 2020, including a completed successful first year of SURF operations under the CA, an effective COVID response allowing work to continue at SURF (no known cases of spread at SURF to date), strong and advancing safety performance, 20-25% decrease in workers compensation premiums in each of the last three years, and a strong relationship among SDSTA, Fermi Research Alliance and KAJV. In addition, he said LBNF pre-excavation and reliability projects are on track, the LZ dark matter experiment is on track for a data collection beginning in 2021, SDSTA successfully implemented a new strategic planning toolset that provides a strong focus in uncertain times and sets a bold vision for SURF, successful progression continued of approved infrastructure improvement projects, the first major commercial partnership was created and secured between SDSTA and Caterpillar, SURF achieved 11 years of water treatment excellence and, last but not least, SDSTA has held clean financial audits.

*Motion by Mr. Wheeler and seconded by Mr. Dykhouse to accept the Executive Director's report as presented. Motion passed unanimously by roll call vote.*

## **ITEM 9. DISCUSS REGISTRATION OF LOBBYISTS**

Mr. Engel explained that every year, the board authorizes several persons to register as lobbyists for SDSTA. He said he is not aware of any initiatives this year, but lobbyists monitor what is going on in the legislature. Mr. Engel recommended Mr. Headley, himself and Doug Abraham, a partner in Mr. Engel's firm, to be designated as SDSTA lobbyists.

Mr. Wheeler, who has previously been part of the lobbyist team, commented that he will not be joining the lobbyists this year.

*Motion by Mr. Wheeler and seconded by Mr. Musick to designate Mike Headley, Tim Engel and Doug Abraham as lobbyists for the SDSTA for the 2021 Legislative Session. Motion passed unanimously by roll call vote.*

## **ITEM 10. EXECUTIVE SESSION**

*Motion by Dr. Wilson 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 as permitted by SDCL 1-25-2(1), (3) and (4). Motion passed unanimously by roll call vote.*

*The board recessed at 10:28 AM for a fifteen-minute break followed by executive session.*

*The board reconvened in open session at 11:20 AM.*

## **ITEM 11. REPORT FROM EXECUTIVE SESSION**

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

*Motion by Dr. Wilson and seconded by Mr. Musick to approve the executive session report. Motion passed unanimously by roll call vote.*

*Mr. Dykhous left the meeting after Executive Session.*

*Dr. Aprahamian rejoined the meeting at 11:22 AM.*

## **ITEM 12. 2021 GENERAL LIABILITY INSURANCE RENEWAL**

Mr. Engel said the SDSTA board held a special meeting in December 2019 to approve a budget change to account for an increase in the general liability insurance premium, and the premium is increasing again this year. Mr. Engel requested that the board adjust the budget amount for general liability insurance required by the Property Donation Agreement to a total \$950,000.00 to account for anticipated increases for the 2021 renewal.

*Motion by Mr. Wheeler and seconded by Ms. Lebrun to revise the amount budgeted for commercial general liability insurance required by the property donation agreement to \$950,000.00. Motion passed unanimously by roll call vote.*

## **ITEM 13. CONFIRM DATE AND TIME OF NEXT MEETING, ANNOUNCE 2021 SCHEDULE**

Chairperson Peterson reminded the board of the next meeting, scheduled for March 25, 2021 at 8:00 AM (MT) in the E&O Conference room and via Zoom. He referenced the agenda and announced the 2021 board meeting schedule: Thursday, March 25 at 8:00 AM (MT), Thursday, June 24 at 8:00 AM (MT), Thursday, September 23 at 8:00 AM (MT) and Thursday, December 16 at 9:00 AM (MT).

## **ITEM 14. PUBLIC COMMENTS**

Chairperson Peterson said he did not receive any public comment request forms and there were no questions from the audience.

## **ITEM 15. BOARD COMMENTS**

Dr. Aprahamian said she is impressed with what is getting done and she is enthusiastic about the institute. She said as progress continues underground, she hopes efforts will be made to find CASPAR a new space.

Ms. Lebrun said she is impressed with the activity being done at the lab and amazed at the scale and complexity of issues at SURF. She offered her congratulations to everyone making it work so well. She also wished everyone a Happy Holiday Season.

Mr. Musick said it was a positive meeting, thanked everyone for their help and wished everyone a Merry Christmas.

Mr. Wheeler echoed the comments of the other board members and requested to make a motion for Mr. Headley to pass along a sincere thank you to SURF staff on behalf of the board and acknowledge all they have accomplished.

Dr. Wilson echoed the comments of the board and thanked Mr. Headley for inviting him to co-chair the working group for the institute. He said he is looking forward to it, thinks it will help move SURF forward, and he is happy to help where he can.

Mr. Engel thanked the board for the opportunity to work with SDSTA and wished everyone a Merry Christmas, Happy New Year and Happy Holidays.

Mr. Headley thanked the board for their support, thanked Ms. Knight, Ms. Wheeler and everyone who helps make board meetings run smoothly, thanked Mr. Engel for his guidance, thanked the SURF staff, and said he looks forward to drafting the board's note of appreciation. He wished everyone a Happy Holiday.

Chairperson Peterson echoed the board comments with his thanks, wished everyone a Merry Christmas and Happy New Year, and expressed his appreciation for everyone's efforts. He said he is excited about the institute, noted the progress in funding the ethnobotanical garden, and said these are seeds being planted that will grow decades into the future.

*Motion by Mr. Wheeler and seconded by Ms. Lebrun to have Mr. Headley draft an acknowledgement to SDSTA staff on behalf of the board of directors to be reviewed and signed by the board and shared with the staff to express the board's appreciation of their work. Motion passed unanimously by roll call vote.*

#### **ITEM 16. ADJOURN**

Chairperson Peterson called for a motion to adjourn.

*Motion by Dr. Aprahamian and seconded by Mr. Musick to adjourn. Motion passed unanimously by roll call vote.*

**Meeting adjourned at 11:29 AM.**

**South Dakota Science and Technology Authority Board of Directors**  
**Special Telephonic Meeting Minutes**  
**Monday, January 25, 2021**  
**Lead, South Dakota**

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 9:30 a.m. Mountain Time (MT) on Monday, January 25, 2021, via teleconference. The SDSTA office was operating with limited onsite personnel at the time of the board meeting due to the COVID-19 pandemic; a conference number was posted on the agenda with an invitation for members of the public to participate in the meeting by telephone.

**MEMBERS OF THE BOARD IN ATTENDANCE BY TELEPHONE**

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

**MEMBERS OF THE BOARD ABSENT**

Vice-Chairperson Dana Dykhouse  
Dr. James Rankin, *ex-officio member*

**SDSTA STAFF IN ATTENDANCE**

Mr. Tim Engel, General Counsel (by phone)  
Ms. Nancy Geary, Chief Financial Officer  
Mr. Mike Headley, Executive Director  
Ms. Mandy Knight, Administrative Services Manager  
Mr. Will McElroy, Operations Program Manager  
Ms. Staci Miller, SURF Foundation Director (by phone)  
Ms. Natasha Wheeler, Administrative Assistant (by phone)

**ITEM 1. CALL TO ORDER**

**ITEM 1A. DETERMINATION OF A QUORUM**

Chairperson Casey Peterson called the meeting to order at 9:30 a.m. (MT). Chairperson Peterson declared a quorum was present, consisting of board members Dr. Ani Aprahamian, Ms. Pat Lebrun, Mr. Roger Musick, Chairperson Peterson, Mr. Ron Wheeler and Dr. Bob Wilson. Dr. James Rankin and Mr. Dana Dykhouse were absent.

*Dr. Bob Wilson joined the call at 9:31 a.m. while meeting guests were being introduced.*

**ITEM 1B. INTRODUCE GUESTS (LISTENING POST IN LEAD)**

The SDSTA office was operating with limited onsite personnel at the time of the board meeting due to the COVID-19 pandemic. Chairperson Peterson asked participants to identify themselves. Ms. Nancy Geary, Mr. Mike Headley, Ms. Mandy Knight and Mr. Will McElroy were present at the listening post in Lead. Ms. Staci Miller and Ms. Natasha Wheeler joined by phone.

## **ITEM 1C. PUBLIC COMMENT FORM**

Chairperson Peterson said no public comment forms were submitted before the meeting.

## **ITEM 2. APPROVE AGENDA**

Chairperson Peterson asked for a motion to approve the agenda.

*Motion by Ms. Lebrun and seconded 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 asked if any member of the board, who feels they have anything that might be construed to be a conflict of interest, to disclose it verbally.

No conflicts of interest were disclosed.

## **ITEM 4. APPROVAL OF AMENDMENT NO. 01 OF THE LAND LEASE BETWEEN SDSTA AND CATERPILLAR GLOBAL MINING, LLC**

Mr. Headley said there are two amendment items put forward for the land lease between SDSTA and Caterpillar. He said the first item concerns 15 stations on various levels of the Ross and Yates Shafts that SDSTA would like to have equipped with personnel and equipment tracking gear, but those stations are not of particular interest to Caterpillar. He said in consideration for the installation and commissioning of the gear at those stations, SDSTA would by virtue of the amendment agree to reduce the payment made by Caterpillar for the first year of the 10-year lease. Mr. Headley said the \$150,000.00 payment amount would be reduced by \$100,000.00 to total \$50,000.00 for the first year of the lease. Mr. Headley said he spoke with SDSTA's Cooperative Agreement representative at the Department of Energy and no concerns were raised.

Mr. Headley said the second amendment item is a naming change to allow for Caterpillar branding on the personnel and equipment tracking technology that will be installed on site. He said the current lease attributes the tracking devices, hardware and equipment to Minetec, but the devices will be branded as "Caterpillar personnel tracking devices" instead. Mr. Headley said he and general counsel Tim Engel reviewed the change and confirmed it is a name change only.

Chairperson Peterson said it will be a positive move to have the technology installed and that it will enhance safety, and Mr. Headley said SDSTA is excited to have the capability of real-time tracking of people and assets underground. Mr. Headley noted it will reduce the time to locate and evacuate underground personnel in case of emergency. Mr. Wheeler also expressed his appreciation for the partnership and project with CAT.

*Motion by Mr. Wheeler and seconded by Dr. Aprahamian to approve Amendment No. 01 of the Land Lease between the South Dakota Science and Technology Authority and Caterpillar Global Mining, LLC and authorize the executive director to sign the amendment. By roll call vote, motion passed unanimously.*

## **ITEM 5. PUBLIC COMMENTS**

Chairperson Peterson said no requests were made for Public Comment.

## **ITEM 6. BOARD COMMENTS**

Chairperson Peterson asked if there were any questions or comments from the board. No board comments were made.

Chairperson Peterson said the next regularly scheduled board meeting is Thursday, March 25, 2021 at 8:00 a.m. (MT), at the E&O Building Conference Room and via Zoom.

**ITEM 7. ADJOURN**

*Motion by Mr. Musick and seconded by Dr. Aprahamian to adjourn. By roll call vote, the motion passed unanimously.*

Meeting adjourned at 9:41 a.m. (MT) on January 25, 2021.



**Conflict of Interest Disclosure—Mr. Tim Engel**

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**Recommended Action:**  
*Informational.*

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**Conflict of Interest Disclosure and Waiver Under SDCL Ch. 3-23—Mr. Tim Engel**

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**Recommended Action:**

*Motion to approve or deny as appropriate.*

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**Report from Audit Committee—Ms. Pat Lebrun**

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The Audit Committee Report includes the following:

6A. Internal Controls Update

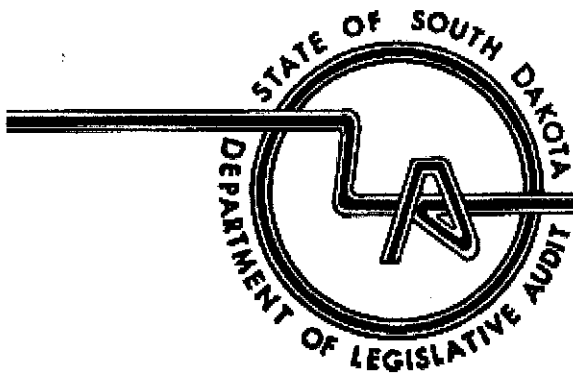
6B. Acceptance of SDSTA Audit Report-Fiscal Year Ended June 30, 2020, attached.

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**Recommended Action:**

*Motion to accept the Audit Report for Fiscal Year Ended June 30, 2020.*

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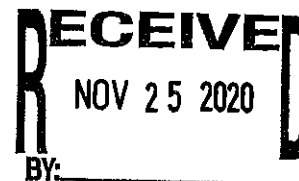


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PIERRE, SD 57501-5070  
(605) 773-3595

RUSSELL A. OLSON  
AUDITOR GENERAL

November 10, 2020

South Dakota Science and Technology Authority  
630 East Summit Street  
Lead, South Dakota 57754



Dear Pat Lebrun:

This letter is intended to inform you of matters that must be formally communicated to those charged with governance in accordance with auditing standards generally accepted in the United States of America. These required communications include, but are not limited to, the following:

- 1) The auditor's views about qualitative aspects of the entity's significant accounting practices;
- 2) Any significant difficulties encountered during the audit;
- 3) Any disagreements with management;
- 4) Corrected and uncorrected misstatements, other than those that are trivial, brought to management's attention as a result of the audit;
- 5) Representations the auditor has requested from management;
- 6) Management's consultation with other accountants, if any;
- 7) Any significant issues arising from the audit that were discussed or communicated to management;
- 8) Any other findings or issues considered significant or relevant to those charged with governance regarding their oversight of the financial reporting process, such as any threats to auditor independence.

As part of performing the South Dakota Science and Technology Authority audit for the fiscal year ended June 30, 2020, we have identified the following matters that we feel are required to be communicated to those charged with governance:

Qualitative Aspects Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. In accordance with the terms of our engagement letter, we will advise management about the appropriateness of accounting policies and their application. The significant policies used by the South Dakota Science and Technology Authority are described in Note 1 to the financial statements. No accounting policies were changed during the year ended June 30, 2020. We noted no transactions entered into by the South Dakota Science and Technology Authority during the year for which there was a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The major estimates used by the Authority include estimated useful life of capital assets.

#### Difficulties Encountered in Performing the Audit

We noted no significant difficulties in dealing with management in performing and completing our audit.

#### Disagreements with Management

For the purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no significant disagreements arose during the course of our audit.

#### Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit other than those that are trivial and communicate them to the appropriate level of management and those charged with governance. There were no material misstatements or adjustments noted for the year ended June 30, 2020.

We are also required to communicate with management and those charged with governance the effect of any uncorrected misstatements which are less than material but more than trivial, including the impact of unposted adjustments in prior years. These have been included in the management representation letter which is attached to this letter.

#### Management Representations

We have requested certain representations from management that are included in the management representation letter dated November 10, 2020 which has been attached.

#### Management's Consultation with other Accountants

In some cases management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If consultation involves application of an accounting principle to the State's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

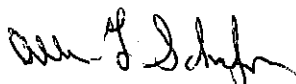
#### Other Audit Findings or Issues

We had one finding that was not a material weakness or significant item and that was the Authority did not maintain adequate records to document the procurement process and documentation of suspended or debarred parties.

This communication is intended solely for the information and use of those charged with governance and, if appropriate, management and is not intended to be and should not be used by anyone other than those specified parties.

If you have any questions, please contact me at 773-3595.

Sincerely,



Allen L. Schaefer  
Auditor In Charge

# **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

## **AUDIT REPORT**

**Fiscal Year Ended June 30, 2020**



**State of South Dakota**  
**Department of Legislative Audit**  
427 South Chapelle  
% 500 East Capitol  
Pierre, SD 57501-5070

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY  
AUTHORITY OFFICIALS  
June 30, 2020

Board of Directors:

Casey Peterson, Chairperson  
Dana Dykhouse, Vice-Chairperson  
Ron Wheeler, Vice-Chairperson  
Patricia Lebrun, Secretary/Treasurer  
Dr. Robert Wilson, Member  
Dr. Ani Aprahamian, Member  
Robert Musick, Member  
Dr. James Rankin, Ex-Officio Member

Executive Director:

Michael Headley

Chief Financial Officer:

Nancy Geary

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY  
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RUSSELL A. OLSON  
AUDITOR GENERAL

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF FINANCIAL STATEMENTS  
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

The Honorable Kristi Noem  
Governor of South Dakota

and

Board of Directors  
South Dakota Science and Technology Authority

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the South Dakota Science and Technology Authority (Authority), a business-type activities component unit of the State of South Dakota, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements and have issued our report thereon dated November 10, 2020.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) as a basis for determining audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the Authority's financial statements will not be prevented or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

## Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose. As required by South Dakota Codified Law 4-11-11, this report is a matter of public record and its distribution is not limited.



Russell A. Olson  
Auditor General

November 10, 2020



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RUSSELL A. OLSON  
AUDITOR GENERAL

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR  
FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL  
OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE**

The Honorable Kristi Noem  
Governor of South Dakota

and

Board of Directors  
South Dakota Science and Technology Authority

**Report on Compliance for Each Major Federal Program**

We have audited the South Dakota Science and Technology Authority's (Authority), a business-type activities component unit of the State of South Dakota, compliance with the types of compliance requirements described in the *U.S. Office of Management and Budget (OMB) Compliance Supplement* that could have a direct and material effect on each of the Authority's major federal programs for the year ended June 30, 2020. The Authority's major federal programs are identified in the State of South Dakota Single Audit and included in the summary of auditor's results section of the accompanying Schedule of Current Audit Findings and Questioned Costs.

***Management's Responsibility***

Management is responsible for compliance with federal statutes, regulations, and terms and conditions of its federal awards applicable to its federal programs.

***Auditor's Responsibility***

Our responsibility is to express an opinion on compliance for each of the Authority's major federal programs based on our audit of the types of compliance requirements referred to above.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of *Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination on the Authority's compliance.

### ***Opinion on Each Major Federal Program***

In our opinion, the Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2020.

### **Report on Internal Control Over Compliance**

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

*A deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### **Purpose of this Report**

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purposes. As required by South Dakota Codified Law 4-11-11, this report is a matter of public record and its distribution is not limited.



Russell A. Olson  
Auditor General

November 10, 2020

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY  
SCHEDULE OF PRIOR AND CURRENT AUDIT FINDINGS AND QUESTIONED COSTS

**SCHEDULE OF PRIOR AUDIT FINDINGS**

**Prior Federal Audit Findings:**

The prior audit report contained no written federal audit findings.

**Prior Other Audit Findings:**

The prior audit report contained no written other audit findings.

**SCHEDULE OF CURRENT AUDIT FINDINGS AND QUESTIONED COSTS**

**Summary of the Independent Auditor's Results:**

***Financial Statements***

- a. An unmodified opinion was issued on the financial statements.
- b. No material weaknesses or significant deficiencies were disclosed by our audit of the financial statements.
- c. Our audit did not disclose any noncompliance which was material to the financial statements.

***Federal Awards***

- d. An unmodified opinion was issued on compliance with the requirements applicable to major programs.
- e. Our audit did not disclose any audit findings that are required to be reported in accordance with 2 CFR 200.516(a).
- f. The federal awards tested as major programs were:
  - 1. 81.629760 SURF (Sanford Underground Research Facility) Operations Support
  - 2. 81.049 SURF (Sanford Underground Research Facility) Operations Support
- g. The dollar threshold used to distinguish between Type A and Type B federal award programs was \$8,800,000 as determined for the State of South Dakota Single Audit for fiscal year 2020.
- h. The South Dakota Science and Technology Authority, as a component unit of the State of South Dakota, did not qualify as a low-risk auditee.

**Current Federal Audit Findings:**

There are no written current federal compliance audit findings to report.

**Current Other Audit Findings:**

There are no written current other audit findings to report.



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RUSSELL A. OLSON  
AUDITOR GENERAL

## INDEPENDENT AUDITOR'S REPORT

The Honorable Kristi Noem  
Governor of South Dakota

and

Board of Directors  
South Dakota Science and Technology Authority

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the South Dakota Science and Technology Authority (Authority), a business-type activities component unit of the State of South Dakota, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the Table of Contents.

### ***Management's Responsibility for the Financial Statements***

The Authority's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2020, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (MD&A) on pages 8-15, the Schedule of Proportionate Share of the Net Pension Liability (Asset) on page 33, and the Schedule of the Authority Contributions on page 34 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Supplementary Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The Schedule of Expenditures of Federal Awards, which as required by *Title 2 U.S. Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance) and the Schedule of Operating Expenses listed in the Table of Contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. The information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

## **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated November 10, 2020 on our consideration of the Authority's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.



Russell A. Olson  
Auditor General

November 10, 2020

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS**

**JUNE 30, 2020**

This section of the South Dakota Science and Technology Authority's (SDSTA's) annual financial report presents management's discussion and analysis of the SDSTA's financial performance during the fiscal year ended June 30, 2020 (FY 2020). This analysis should be read in conjunction with the financial statements and notes to the financial statements.

The SDSTA's financial statements include the operations of funds that the SDSTA has established to achieve its goal of converting its acquired Homestake Mine property into an underground science and engineering laboratory. The property was donated to the SDSTA by Barrick Gold Corporation in May 2006.

The activity of the SDSTA is accounted for as a proprietary fund type. The SDSTA is a component unit of the State of South Dakota and its financial statements are included in the Comprehensive Annual Financial Report of the State of South Dakota.

Included in the financial statements presented is a current year comparison to prior year balance sheet summary, revenue and expense summary, and capital assets. Further reports reflect current year detailed statement of net position, statement of revenue, expense and changes in net position, cash flow, and schedule of operating expenses. Comparisons of current year to prior year are important to display increases and decreases in various elements of the financial reports for the SDSTA. Current year detailed reports provide significant detail for statement of net position, revenues, expenses and cash flows for the SDSTA.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)** **JUNE 30, 2020**

#### **FINANCIAL HIGHLIGHTS:**

- Total Assets at year-end increased to \$115,858,880.
- Current Assets increased by \$1,346,170. An additional \$2,500,000 was received from the State of South Dakota, Governor's Office of Economic Development (GOED) to be used for the construction of a new Maintenance Support Facility (MSF). Furthermore, Prepaid Expenses and Inventory of Supplies have increased due to increases in insurance premiums and for fixed assets added to Inventory of Supplies. An additional increase in Accounts Receivable is related to the formation of the new Sanford Underground Research Facility Foundation (SURF) Foundation. Pledged support was received for education purposes in favor of the Davis Bahcall Internship Program.
- Capital Assets increased slightly by \$152,500 net of depreciation expense. Page 12 details the major capital asset additions and deletions. Furthermore, page 23 summarizes the changes in capital assets by major categories. Most notable was the transfer of property purchased under the Operations subcontracts with Lawrence Berkeley National Laboratory (LBNL) and Fermi Research Alliance (FRA). In September 2019, various property was abandoned by the Department of Energy (DOE) Fermi Site Office and thus transferred to the SDSTA. This transfer was the result of the closure of the contract with FRA that supported the operations of the SDSTA facility. The current funding to manage and operate the facility comes from a Cooperative Agreement with the DOE – Office of Science that was effective September 30, 2019. Notable increases to Improvements in Progress include the additional work on the new MSF.
- Net Pension Asset increased to \$52,451. The State's retirement system is fully funded (see Note 6 – page 25). The SDSTA's total contributions to the South Dakota Retirement System (SDRS) increased by \$114,678 from 2019 to 2020. This was due primarily to an increase in personnel. GASB standards allow entities to use a pension measurement date up to one year prior to the entities reporting period. Therefore, the SDSTA is using a June 30, 2019 pension measurement date for our fiscal year end June 30, 2020 statements. GOED funding of \$2,000,000 received in 2017 along with loans from various South Dakota Foundations have enabled the SDSTA to purchase xenon to be used in the future LZ experiment. As of June 2020, \$8,934,350 of xenon has been purchased. In summary, Net Pension Asset and Xenon Purchased have increased by \$812,085.
- Pension Related Deferred Outflows is also related to our retirement plan with SDRS. The amounts recorded relate to our proportionate share of the differences between expected and actual experience in pension earnings along with the SDSTA's pension contributions made subsequent to June 30, 2019. The total Deferred Outflows of Resources equals \$2,943,364.
- Total Liabilities at year end increased to \$9,506,114. Accounts payable is slightly lower when comparing the two time periods. However, liabilities associated with employee leave and benefits increased due to additional personnel.
- Pension Related Deferred Inflows is also connected to our retirement plan with SDRS. The recorded amount relates to our portion of the difference between projected and actual earnings on pension plan investments. Our portion equals \$1,266,585.
- Total Restricted Net Position decreased to \$16,238,175. Even though we received an additional \$2,500,000 from GOED for the new MSF, the experiment funding set aside for xenon procurement and interest payments has decreased by \$1,064,362. This was due to purchasing the final xenon needed for the LZ experiment and for the quarterly interest payments to the three SD Foundations from which we have loans used to purchase this xenon. Likewise, the restricted net pension has decreased. However, an addition to our Restricted Net Position includes \$75,898 associated with the Sanford Underground Research Facility Foundation. In February 2020, we received IRS approval for the newly formed Sanford Underground Research Facility Foundation as a tax exempt entity under Internal Revenue Code (IRC) Section 501 (c) (3).
- Unrestricted Net Position increased by \$1,946,004 to \$11,085,572.
- Total Net Position at year end increased by \$512,436 to \$108,029,545.
- Charges for Services increased to \$278,160. Revenue from Homestake increased due to an increase in the amount of water being treated and discharged for Homestake.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)**

**JUNE 30, 2020**

#### **FINANCIAL HIGHLIGHTS (Continued)**

- Operating Grants increased to \$29,814,412. The revenue received in this classification includes \$16,037,755 from the Cooperative Agreement with DOE, \$11,624,592 from FRA, \$2,110,975 from LBNL, and \$41,090 from various smaller universities.
- Capital Grants and Contributions decreased to \$2,926,197. Included in this amount is \$2,500,000 from the GOED to be used for the design and construction of a new MSF as well as \$426,197 related to the various property that was transferred by the Department of Energy (DOE) Fermi Site Office to the SDSTA.
- Investment Earnings decreased slightly to \$760,390 compared to \$773,114 in the previous year as average interest rates fluctuated during the current year as well as having a lower amount of cash being deposited for investment with the State Treasurer.
- Total Program Expenses for the SDSTA were \$33,393,743 which represents an increase of 16.98% percent from the previous year. Included in Total Program Expenses are Operating Expenses which increased by \$4,552,576 to \$32,827,999. Personal Services represent 57.2 percent of the Operating Expenses; Contractual Services represent 25 percent; and Supplies, Materials, and Other Expenses represent 11.2 percent of these expenses. Most of the increase in Operating Expenses is due to an increase in personnel.
- Net Position increased by \$512,436 for fiscal year 2020.
- During this fiscal year, the SDSTA requested the services of an independent consulting firm to evaluate the SDSTA's Internal Controls to ensure compliance with federal, state, and sponsor requirements and to provide recommendations to SDSTA for improvements. Key areas included governance, accounting disbursement process, cash management, payroll, procurement, property management, information technology, and segregation of duties. The SDSTA received a satisfactory rating with a few minor control deficiencies that are being evaluated by the Board of Directors and Management.

# **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

## **MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)**

**JUNE 30, 2020**

### **FINANCIAL STATEMENT ELEMENTS:**

#### **NET POSITION**

|                                       | 2020                  | 2019                  | Dollar<br>Change  | Percent<br>Change |
|---------------------------------------|-----------------------|-----------------------|-------------------|-------------------|
| Current Assets                        | \$ 26,166,281         | \$ 24,820,111         | \$ 1,346,170      | 5.42%             |
| Capital Assets                        | 80,705,798            | 80,553,298            | 152,500           | 0.19%             |
| Net Pension Asset and Xenon Purchased | 8,986,801             | 8,174,716             | 812,085           | 9.93%             |
| <b>Total Assets</b>                   | <b>115,858,880</b>    | <b>113,548,125</b>    | <b>2,310,755</b>  | <b>2.04%</b>      |
| Pension Related Deferred Outflows     | 2,943,364             | 3,933,542             | (990,178)         | -25.17%           |
| Long-Term Liabilities Outstanding     | 6,757,826             | 6,604,470             | 153,356           | 2.32%             |
| Other Liabilities                     | 2,748,288             | 2,576,667             | 171,621           | 6.66%             |
| <b>Total Liabilities</b>              | <b>9,506,114</b>      | <b>9,181,137</b>      | <b>324,977</b>    | <b>3.54%</b>      |
| Pension Related Deferred Inflows      | 1,266,585             | 783,421               | 483,164           | 61.67%            |
| <b>Net Position:</b>                  |                       |                       |                   |                   |
| Net Investment in Capital Assets      | 80,705,798            | 80,553,298            | 152,500           | 0.19%             |
| Restricted                            | 16,238,175            | 17,824,243            | (1,586,068)       | -8.90%            |
| Unrestricted                          | 11,085,572            | 9,139,568             | 1,946,004         | 21.29%            |
| <b>Total Net Position</b>             | <b>\$ 108,029,545</b> | <b>\$ 107,517,109</b> | <b>\$ 512,436</b> | <b>0.48%</b>      |

#### **CHANGE IN NET POSITION**

|                                  | 2020                  | 2019                  | Dollar<br>Change  | Percent<br>Change |
|----------------------------------|-----------------------|-----------------------|-------------------|-------------------|
| <b>Revenues</b>                  |                       |                       |                   |                   |
| Program Revenues:                |                       |                       |                   |                   |
| Charges for Services             | \$ 278,160            | \$ 185,534            | \$ 92,626         | 49.92%            |
| Operating Grants                 | 29,814,412            | 26,499,519            | 3,314,893         | 12.51%            |
| Miscellaneous                    | 127,020               | 86,402                | 40,618            | 47.01%            |
| Capital Grants and Contributions | 2,926,197             | 4,000,000             | (1,073,803)       | -26.85%           |
| General Revenues:                |                       |                       |                   |                   |
| Investment Earnings              | 760,390               | 773,114               | (12,724)          | -1.65%            |
| <b>Total Revenue</b>             | <b>33,906,179</b>     | <b>31,544,569</b>     | <b>2,361,610</b>  | <b>7.49%</b>      |
| Program Expenses:                |                       |                       |                   |                   |
| Science and Technology Authority | 33,393,743            | 28,546,084            | 4,847,659         | 16.98%            |
| <b>Total Expense</b>             | <b>33,393,743</b>     | <b>28,546,084</b>     | <b>4,847,659</b>  | <b>16.98%</b>     |
| Change in Net Position           | 512,436               | 2,998,485             | (2,486,049)       | -82.91%           |
| Net Position-Beginning           | 107,517,109           | 104,518,624           | 2,998,485         | 2.87%             |
| <b>Net Position-Ending</b>       | <b>\$ 108,029,545</b> | <b>\$ 107,517,109</b> | <b>\$ 512,436</b> | <b>0.48%</b>      |

By June 30, 2020, the SDSTA had invested \$80,705,798 in a broad range of capital assets, including computer equipment, land, buildings, improvements to infrastructure and the underground, and various machinery and equipment. \$20,551,152 of this \$80,705,798 (approximately 25% of this total value) was donated by Barrick Gold. This amount represents a net increase (including additions and deductions) of \$152,500, or .19 percent, over the last year.

# SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

JUNE 30, 2020

### CAPITAL ASSETS (Net of Depreciation)

|                             | 2020                 | 2019                 | Change            |
|-----------------------------|----------------------|----------------------|-------------------|
| Improvements                | \$ 46,547,569        | \$ 29,815,811        | \$ 16,731,758     |
| Underground                 | 17,936,955           | 17,936,955           | -                 |
| Buildings                   | 5,568,049            | 6,041,651            | (473,602)         |
| Computer Equipment          | 169,598              | 100,705              | 68,893            |
| Equipment                   | 4,752,599            | 5,239,726            | (487,127)         |
| Construction in Progress    | 1,824,308            | 17,911,409           | (16,087,101)      |
| Land                        | 1,814,136            | 1,814,136            | -                 |
| Infrastructure              | 1,556,552            | 1,564,237            | (7,685)           |
| Furniture                   | 15,711               | 20,197               | (4,486)           |
| Archive Material            | 70,000               | 70,000               | -                 |
| Auto                        | 159,837              | 38,471               | 121,366           |
| DOE Property Transfer       | 290,484              | -                    | 290,484           |
| <b>Total Capital Assets</b> | <b>\$ 80,705,798</b> | <b>\$ 80,553,298</b> | <b>\$ 152,500</b> |

This year's major capital asset additions and deletions included:

#### *Purchased Capital Assets:*

|   |            |
|---|------------|
| Johnson C. Metasys Server, (4) Nexus FX48 Switches, (2) Fortinet Firewalls, Apple iMacPro | \$ 112,209 |
| (4) 3 Ton Mini Split AC Units for IT Room, (3) Natural Gas Tankless Water Heaters         | 43,871     |
| Screen for Yates Work Deck, (2) Tilt-Away Gate Systems                                    | 77,297     |
| Boss Laser Engraver, Insta360 8KPro 3D Camera   | 15,248     |
| (3) Vehicles - 2018 Dodge Ram, 2019 Dodge Ram, 2020 Ford Passenger Van                    | 137,322    |

#### *Equipment (Current Year Reclassifications):*

|                    |        |
|--------------------|--------|
| Cisco Nexus Switch | 10,909 |
| Flygt 27HP Pump    | 22,870 |

#### *Improvements (Current Year Reclassifications):*

|                                      |            |
|--------------------------------------|------------|
| Ross Shaft Rehabilitation Completion | 17,817,059 |
|--------------------------------------|------------|

#### *Improvements in Progress (Current Year Additions):*

|                              |           |
|------------------------------|-----------|
| Maintenance Support Facility | 1,578,135 |
| Ross Shaft Rehabilitation    | 151,823   |

#### *Improvements in Progress (Current Year Reclassifications):*

|                                      |              |
|--------------------------------------|--------------|
| Ross Shaft Rehabilitation Completion | (17,817,059) |
|--------------------------------------|--------------|

#### *Infrastructure (Current Year Purchases):*

|                           |        |
|---------------------------|--------|
| Houston Street Water Line | 44,326 |
|---------------------------|--------|

#### *Autos, Buildings, Equipment (Current Year Deletions):*

|   |           |
|---|-----------|
| 1999 Chevy Suburban, 2001 Dodge 3500 Plow Truck   | (18,948)  |
| Demolished Iron House, Machine Shop, Motor Repair Shop, Ellison Boiler, & Rope House            | (416,440) |
| IT Air Conditioner, (2) Tilt-Away Gates, Snow Plow, (2) Davis Campus Chillers, Cap Lamp Charger | (109,518) |

#### *DOE Property Transfer:*

|   |         |
|---|---------|
| Fusion Splicer, Stair Climber, J.Deere Loader, Bobcat, (3) RTV's, (3) Bosch Boilers, Fiber Optic Cable, Fire Alarm Panel, (2) Titan Air Units, (2) Loco. Batteries, Test Weights, Fletcher Feed Assembly, Baldor Power Module, Draeger Leak Tester, Bullseye Training Pkg., Loco. Controller, Septic System | 290,484 |
|---|---------|

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)**

**JUNE 30, 2020**

#### **LONG-TERM DEBT**

At the year-end, the SDSTA had \$6,757,826 in other long-term obligations. This is an increase of 2.32 percent as shown below.

|                             | <b>2020</b>         | <b>2019</b>         | <b>Total<br/>Dollar<br/>Change</b> | <b>Total<br/>Percentage<br/>Change</b> |
|-----------------------------|---------------------|---------------------|------------------------------------|--|
| Compensated Absences        | \$ 757,826          | \$ 604,470          | \$ 153,356                         | 25.37%                                 |
| Xenon Notes Payable         | 6,000,000           | 6,000,000           | -                                  | 0.00%                                  |
| <b>Total Long-Term Debt</b> | <b>\$ 6,757,826</b> | <b>\$ 6,604,470</b> | <b>\$ 153,356</b>                  | <b>2.32%</b>                           |

- The SDSTA is liable for the accrued vacation leave payable to all full-time employees. In addition, the SDSTA is liable for a portion of the earned sick leave of employees who have been employed for seven consecutive years. The \$153,356 increase in compensated absences is due to an increase in the corresponding amount of leave accumulated and outstanding at the end of the year for employees. There was not an increase in the xenon notes payable in fiscal year 2020. Note (4) Long-Term Debt in the Notes to Financial Statements on page 24 details the activity for the period for compensated absences and the xenon note payable.
- On October 31, 2019 the SDSTA signed a Promissory Note with the First Interstate Bank for \$5,000,000. This agreement represents a variable rate revolving line of credit. Collateral for this line of credit includes the SDSTA's Account Receivable. The SDSTA put this loan in place if government funding were to be slowed due to a Continued Resolution. The SDSTA has not drawn down any funding from this line of credit. The maturity date is October 31, 2020 at which time we will renew for another one-year term.

#### **ECONOMIC FACTORS**

- A report released from the Particle Physics Project Prioritization Panel (P5) in May 2014, outlined the 10-year strategic plan for high-energy physics in the United States. The report provides strong support for science programs envisioned for the Sanford Underground Research Facility (SURF) including research into neutrinos and dark matter, both of which are being researched at Sanford Lab. This panel formally advises both the DOE Office of Science and the National Science Foundation (NSF) on support for physics. We expect this report to play a key role in the federal government funding process for years to come. The SDSTA is better positioned to receive continued funding for Operations in the future.
- The SDSTA's Board of Directors approved a capital budget for fiscal year 2020 of \$7,189,826 towards the final xenon procurement, including interest payments to the three SD Foundations that we have loans with for this procurement, and insurance on the xenon. Additional projects included the first phase of the construction of a new Maintenance Support Facility (MSF) along with inclinometer maintenance at the Sanford Lab Homestake Visitor Center. Actual expenditures for the year totaled \$2,586,302. Actual expenses were lower than budgeted primarily because the MSF is not complete. The SDSTA's fiscal year 2021 capital budget provides for spending \$5,068,074. Projects include continued interest payments for the xenon loans along with insurance, a small amount for inclinometer testing at the Sanford Lab Homestake Visitor Center, and the construction of the new MSF. Funding for xenon procurement was secured with the signing of Letter Agreement #1586 in August 2015 with the GOED and through separate funding from three SD Foundations. The total funding of \$6,000,000 has been received from GOED as well as \$6,000,000 from the three SD Foundations. The SDSTA's Board of Directors also approved a budget of \$704,806 for fiscal year 2021 in favor of SDSTA supported activities.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)**

**JUNE 30, 2020**

#### **ECONOMIC FACTORS (Continued)**

- The SURF Services contract with Fermi National Accelerator Laboratory (FNAL) to manage and operate the facility for the federal fiscal year October 2018 – September 2019 has concluded. Included in the contract was a no cost extension to spend out the funding through the end of December 2019. Items that had been procured prior to the end of September but not actually received were included in this no cost extension. \$48,377,110 was the budget for the full term of the contract – October 2016 – September 2019. Actual expenditures at the end of the contract were \$48,152,056. The SDSTA transitioned to a five-year Cooperative Agreement with the Department of Energy's (DOE) Office of Science. Negotiations were finalized in September 2019 including a budget for the first year of the project October 2019 – September 2020 at \$21,750,000. An additional \$4,385,996 was received for Infrastructure Improvement Projects (IIP). Actual expenditures through the end of September are at \$19,982,578 for the Operations portion and \$1,138,674 for the IIP portion.
- The Ross Shaft rehabilitation project funding continues with FNAL through the end of December 2020. Additionally, the Ross Shaft Logistics Support contract involves our support to the Long-Baseline Neutrino Facility (LBNF) construction efforts and the buildout of the large underground caverns at SURF for this experiment.
- In late 2012, the DOE approved the Long Baseline Neutrino Experiment (LBNE) to proceed with preliminary designs to construct a large neutrino detector at SURF. In October 2014, the United States along with international partners agreed that the Sanford Lab was to remain the host for the LBNE related detectors. After further meetings, the LBNE collaboration officially dissolved and transferred all experiment responsibilities to a new collaboration referred to as the associated Deep Underground Neutrino Experiment (DUNE) consisting of United States and International support. The facility to host DUNE, called the Long Baseline Neutrino Facility (LBNF), will send neutrinos through the earth from Fermilab in Batavia, Illinois to SURF in Lead, SD. More recent developments (September 2016) involve the DOE formally approving plans for construction at SURF. The first step of installing LBNF systems to transport 875,000 tons of rock to the surface began in January 2019. Underground activities to house the neutrino detectors and related utilities is expected to begin in 2021. DOE Support for professional engineering management services continues into fiscal year 2021 for this LBNF effort.
- Further funding was received in fiscal year 2020 through LBNL in support of various experiments. Included was support for the LZ investigations as well as a geothermal analysis project labeled SIGMA-V. These awards reimbursed the SDSTA for expenses incurred in support of the various experiments for materials and supplies as well as a percentage of the salaries of the design team members for their project management skills essential to the work being performed. Support continues in fiscal year 2021 for these same activities through LBNL.
- Additional funding was received during the fiscal year from Oak Ridge National Laboratory and South Dakota Schools of Mines & Technology. Funds were received at SURF to support the Majorana experiment located at the 4850-foot level Davis Campus, as well as the CASPAR experiment located on the same underground level. Support continues in fiscal year 2021 from these universities.
- A Memorandum of Understanding (MOU) was signed in November 2014 between the SDSTA and a commercial organization – Xilinx, Inc. to establish an experiment located near the Davis Campus. Their testing measures failure rates and modes in electronic chips. We charged them for lab space, experiment access fees, and SURF scientific support. This agreement will not continue into fiscal year 2021 but may be started up again in the future. Additionally, funding was received from the Kiewit/Alberici Joint Venture for equipment rentals and miscellaneous items associated with the DUNE project. Amounts charged were then credited to the Cooperative Agreement as the equipment maintenance charges were covered under that funding.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS (CONCLUDED)**

**JUNE 30, 2020**

#### **ECONOMIC FACTORS (Continued)**

- A Letter Agreement dated February 24, 2014 between the SDSTA and Black Hills State University (BHSU) provides up to \$300,000 per year for three years from the SDSTA to BHSU to administer the Sanford Science Education Center. Matching funds of \$150,000 per year by BHSU is documented. An amended agreement dated June 6, 2017 committed an additional \$275,000 toward education and outreach priorities for the period July 2017 – June 2018. The agreement was amended as of June 8, 2018 for \$275,000 for the period July 2018 – June 2019. Furthermore, the agreement was amended as of July 2019 and again in May 2020 for \$660,000 each year for additional one-year periods. The full period of performance now extends from June 2014 through June 2021. Funding for this agreement originated from a Letter Agreement #1524 between the GOED and the SDSTA. The first \$300,000 from the Governor's office was received in September 2014 and was extended to BHSU on a reimbursement schedule. Years two and three funding of \$300,000 and \$250,000 were received from GOED. Additional support of \$125,000 per year for four years for education programs was received from Great Plains Education Foundation. The final support from Great Plains Education Foundation was received in July 2018 for fiscal year 2019 education program support. The funding going forward for the Sanford Science Education Center program through BHSU is included in the indirect expenses of the Cooperative Agreement with the DOE Office of Science. This type of funding is encouraged as Cooperative Agreements require the support of a public purpose.
- The SDSTA is compliant with all legal and environmental regulations.

#### **CONTACTING THE SDSTA'S FINANCIAL MANAGEMENT**

This financial report is designed to provide our citizens, taxpayers, customers, and investors and creditors with a general overview of the SDSTA's finances and to demonstrate the SDSTA's accountability for the money it receives. If you have any questions about this report or need additional information, contact the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, SD 57754.

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY****STATEMENT OF NET POSITION  
JUNE 30, 2020****ASSETS****Current Assets**

|                                      |                   |
|--------------------------------------|-------------------|
| Cash in Local Bank and Petty Cash    | \$ 3,715,991      |
| Cash on Deposit with State Treasurer | 16,708,470        |
| Accounts Receivable                  | 2,571,286         |
| Interest Receivable                  | 76,471            |
| Prepaid Expenses                     | 643,286           |
| Inventory of Supplies & Warehouse    | 2,450,777         |
| <b>Total Current Assets</b>          | <b>26,166,281</b> |

**Noncurrent Assets**

|  |                   |
|--|-------------------|
| Xenon Purchased (note 5)   | 8,934,350         |
| Net Pension Asset  | 52,451            |
| Land   | 1,814,136         |
| Underground  | 17,936,955        |
| Improvements in Progress   | 1,824,308         |
| Buildings, Machinery, Equipment, Infrastructure, & DOE Property Transferred (Net) (Note 3) | 59,130,399        |
| <b>Total Noncurrent Assets</b>   | <b>89,692,599</b> |

|                     |                    |
|---------------------|--------------------|
| <b>TOTAL ASSETS</b> | <b>115,858,880</b> |
|---------------------|--------------------|

**Deferred Outflows of Resources**

|                                   |           |
|-----------------------------------|-----------|
| Pension Related Deferred Outflows | 2,943,364 |
|-----------------------------------|-----------|

**LIABILITIES****Current Liabilities**

|                                  |                  |
|----------------------------------|------------------|
| Accounts Payable                 | 1,230,615        |
| Accrued Wages and Benefits       | 759,847          |
| Accrued Leave, Benefits (Note 4) | 757,826          |
| <b>Total Current Liabilities</b> | <b>2,748,288</b> |

**Long-Term Liabilities**

|                                    |                  |
|------------------------------------|------------------|
| Accrued Leave, Benefits (Note 4)   | 757,826          |
| Long-Term Xenon Notes Payable      | 6,000,000        |
| <b>Total Long-Term Liabilities</b> | <b>6,757,826</b> |

|                          |                  |
|--------------------------|------------------|
| <b>TOTAL LIABILITIES</b> | <b>9,506,114</b> |
|--------------------------|------------------|

**Deferred Inflows of Resources**

|                                  |           |
|----------------------------------|-----------|
| Pension Related Deferred Inflows | 1,266,585 |
|----------------------------------|-----------|

**NET POSITION**

|                                      |            |
|--------------------------------------|------------|
| Invested in Capital Assets           | 80,705,798 |
| Restricted for:                      |            |
| Mine Closure                         | 1,521,059  |
| Maintenance Support Facility         | 4,675,692  |
| Experiments                          | 729,305    |
| Indemnification                      | 7,500,000  |
| Sanford Center for Science Education | 6,992      |
| Pension                              | 1,729,229  |
| Foundation                           | 75,898     |
| Unrestricted Net Position            | 11,085,572 |

|                           |                       |
|---------------------------|-----------------------|
| <b>TOTAL NET POSITION</b> | <b>\$ 108,029,545</b> |
|---------------------------|-----------------------|

The accompanying notes are an integral part of this statement.

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY****STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION  
FOR THE YEAR ENDED JUNE 30, 2020****Operating Revenue**

|                                |                   |
|--------------------------------|-------------------|
| Charges for Goods and Services | \$ 278,160        |
| Operating Grants               | 29,814,412        |
| Miscellaneous                  | 127,020           |
| <b>Total Operating Revenue</b> | <b>30,219,592</b> |

**Operating Expenses**

|  |                   |
|--|-------------------|
| Personal Services                                | 18,773,452        |
| Travel   | 176,938           |
| Contractual Services                             | 8,199,489         |
| Supplies, Materials and Other Operating Expenses | 3,671,973         |
| Depreciation Expense                             | 2,006,147         |
| <b>Total Operating Expenses</b>                  | <b>32,827,999</b> |

|                       |                    |
|-----------------------|--------------------|
| <b>Operating Loss</b> | <b>(2,608,407)</b> |
|-----------------------|--------------------|

**Nonoperating Revenues/Expenses**

|   |                |
|---|----------------|
| Interest Revenue                            | 760,390        |
| Other Expense                               | (565,744)      |
| <b>Total Nonoperating Revenues/Expenses</b> | <b>194,646</b> |

|   |                  |
|---|------------------|
| <b>Capital Grants and Contributions</b> | <b>2,926,197</b> |
|---|------------------|

|                               |                |
|-------------------------------|----------------|
| <b>Change in Net Position</b> | <b>512,436</b> |
|-------------------------------|----------------|

|  |                    |
|--|--------------------|
| <b>Net Position -- Beginning of Year</b> | <b>107,517,109</b> |
|--|--------------------|

|                                    |                       |
|------------------------------------|-----------------------|
| <b>Net Position -- End of Year</b> | <b>\$ 108,029,545</b> |
|------------------------------------|-----------------------|

The accompanying notes are an integral part of this statement.

# SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED JUNE 30, 2020

### Cash Flows from Operating Activities:

|  |    |                  |
|--|----|------------------|
| Other Operating Cash Receipts                    | \$ | 319,598          |
| Cash Receipts from Operating Grants              |    | 31,590,378       |
| Cash Payments to Employees for Services          |    | (16,861,383)     |
| Cash Payments to Suppliers of Goods and Services |    | (12,626,138)     |
| <b>Net Cash Provided by Operating Activities</b> |    | <b>2,422,455</b> |

### Cash Flows from Noncapital Financing Activities:

|   |  |                    |
|---|--|--------------------|
| Xenon Purchases   |  | (770,000)          |
| Interest/Insurance Paid on Xenon                        |  | (331,304)          |
| Grants & Donations Paid                                 |  | (40,837)           |
| <b>Net Cash Used in Noncapital Financing Activities</b> |  | <b>(1,142,141)</b> |

### Cash Flows from Capital and Related Financing Activities:

|  |  |                |
|--|--|----------------|
| Grant Revenue  |  | 2,500,000      |
| Proceeds from Sale of Capital Assets                                 |  | 1,036          |
| Purchase of Capital Assets   |  | (1,889,180)    |
| <b>Net Cash Provided by Capital and Related Financing Activities</b> |  | <b>611,856</b> |

### Cash Flows from Investing Activities:

|  |  |                |
|--|--|----------------|
| Interest Earnings                                |  | 760,312        |
| <b>Net Cash Provided by Investing Activities</b> |  | <b>760,312</b> |

**Net increase in Cash and Cash Equivalents** **2,652,482**

Cash and Cash Equivalents at Beginning of Year 17,771,979

**Cash and Cash Equivalents at End of Year** **\$ 20,424,461**

### Reconciliation of Operating Loss to Net Cash Used in Operating Activities:

|  |           |                  |
|--|-----------|------------------|
| Operating Loss   | \$        | (2,608,407)      |
| <i>Adjustments to Reconcile Operating Loss to Net Cash Used in Operating Activities:</i> |           |                  |
| Depreciation & Amortization Expense  |           | 2,006,147        |
| Change in Assets and Liabilities:  |           |                  |
| Receivables  |           | 1,690,384        |
| Prepaid Expenses   |           | (203,575)        |
| Inventory of Supplies  |           | 725              |
| Net Pension Asset  |           | (42,085)         |
| Decrease(Increase) in Deferred Outflow of Resources - Pension                            |           | 990,179          |
| Increase (Decrease) Deferred Inflow of Resources - Pension                               |           | 483,165          |
| Accounts and Other Payables  |           | (374,889)        |
| Accrued Wages Payable  |           | 174,100          |
| Accrued Leave Payable  |           | 306,711          |
| <b>Net Cash Provided by Operating Activities</b>   | <b>\$</b> | <b>2,422,455</b> |

Continued on next page

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

**STATEMENT OF CASH FLOWS (CONTINUED)  
FOR THE YEAR ENDED JUNE 30, 2020**

**Cash and Cash Equivalents:**

|  |           |                   |
|--|-----------|-------------------|
| Cash in Local Bank                     | \$        | 3,715,941         |
| Petty Cash                             |           | 50                |
| Cash with State Treasurer              |           | 16,708,470        |
| <b>Total Cash and Cash Equivalents</b> | <b>\$</b> | <b>20,424,461</b> |

**Non-Cash Capital and Related Financing Activities:**

|                                  |           |                |
|----------------------------------|-----------|----------------|
| Loss on disposal of Assets       | \$        | 324,811        |
| Donated Capital Assets From DOE  |           | 290,484        |
| Donated Inventory From DOE       |           | 135,712        |
| <b>Total Non-Cash Activities</b> | <b>\$</b> | <b>751,007</b> |

The accompanying notes are an integral part of this statement.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS**

**JUNE 30, 2020**

#### **(1) Summary of Significant Accounting Policies**

##### **a. Reporting Entity**

The South Dakota Science and Technology Authority (SDSTA) was created and organized by Chapter 1-16H of the South Dakota Codified Laws. The purposes of the SDSTA are to foster and facilitate scientific and technology investigation, experimentation, and development by creating a mechanism through which laboratory, experimental and development facilities may be acquired, developed, constructed, maintained, operated, and decommissioned. The initial focus of the SDSTA is to support the transfer of the Homestake Gold Mine in Lead, South Dakota for development by the research community to become the world's premier Underground Science and Engineering Laboratory; more specifically, the Sanford Underground Research Facility (SURF). Additional focus is maintained by the SDSTA for an education and outreach program detailing the progress. The SDSTA is a business type component unit of the State of South Dakota (the State). As such, the accompanying financial statement are included in the Comprehensive Annual Financial Report of the State of South Dakota.

The Sanford Underground Research Facility Foundation (SURF) Foundation is a legally separate, tax exempt component unit of the SDSTA. The SURF Foundation was established as a fundraising organization to supplement resources for the SDSTA programs related to education, internships, public outreach, and the development of the SURF Institute. Thus, the services the SURF Foundation provides is for the SDSTA. The sitting Chairperson of the SDSTA serves as a voting Director on an ex officio basis and is included in the total number of Directors called by the Bylaws. Two board members from the SDSTA are also on the Board of the SURF Foundation. The SDSTA is also responsible for any outstanding debt.

##### **b. Fund Accounting**

The SDSTA Fund is accounted for as an enterprise fund. Enterprise funds are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

##### **c. Basis of Accounting**

The SDSTA Fund follows the accrual basis of accounting. Likewise, the Sanford Underground Research Facility Foundation follows the accrual basis of accounting. Revenues are recognized when they are earned, and expenses are recognized when they are incurred.

##### **d. Inventory of Supplies**

Inventory of supplies consists primarily of expendable equipment/supplies, donated and purchased, not yet in service. Donated inventory of supplies are revalued at their estimated fair value on date of donation. Purchased equipment values are reported at cost. Reported cost values include ancillary charges necessary to place the asset into its intended location and condition for use at a later date.

##### **e. Capital Assets**

Capital assets include land, buildings, machinery and equipment, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period. Infrastructure assets are long-lived capital assets that normally are stationary in nature and normally can be preserved for a significantly greater number of years than most capital assets. Capital assets are recorded at historical cost. Donated capital assets are valued at their estimated fair value on the date donated. Reported cost values include ancillary charges necessary to place the asset into its intended location and condition for use. Subsequent to initial capitalization, improvements or betterments that are significant, and which extend the useful life of a capital asset are also capitalized.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)** **JUNE 30, 2020**

#### **(1) Summary of Significant Accounting Policies (Continued)**

##### **e. Capital Assets (Continued)**

Depreciation of all exhaustible capital assets is recorded as an expense in the Statement of Revenues, Expenses, and Changes in Net Position, with net capital assets reflected in the Statement of Net Position. Accumulated depreciation is reported on the Statement of Net Position.

Capitalization thresholds (the dollar values above which asset acquisitions are added to the capital asset accounts), depreciation methods, and estimated useful lives of capital assets reported in the SDSTA's financial statements are as follows:

|   | Capitalization<br>Threshold | Depreciation<br>Method | Estimated<br>Useful Life |
|---|-----------------------------|------------------------|--------------------------|
| Land and Land Rights                            | All Land                    | N/A                    | N/A                      |
| Improvements                                    | \$ 5,000                    | Straight-line          | 10-50 yrs.               |
| Infrastructure                                  | 5,000                       | Straight-line          | 25-50 yrs.               |
| Buildings                                       | 5,000                       | Straight-line          | 25-50 yrs.               |
| Automobiles, Furniture, Machinery and Equipment | 5,000                       | Straight-line          | 5-75 yrs.                |

##### **f. Revenue and Expense Classifications**

In the Statement of Revenues, Expenses, and Changes in Net Position, revenues and expenses are classified in a manner consistent with how they are classified in the Statement of Cash Flows. That is, transactions for which related cash flows are reported as capital and related financing activities, non-capital financing activities, or investing activities are not reported as components of operating revenue or expenses. The Authority's proprietary fund distinguishes between operating and non-operating revenues and expenses. Operating revenues and expenses of the SDSTA consist of reimbursement of the costs of operations from Homestake Mining Company and other entities, and the costs of providing those services, including depreciation. All other revenues and expenses are reported as non-operating.

##### **g. Cash and Cash Equivalents**

Cash includes cash on hand, demand deposits, and participating interest in the State's internal investment pool held by the State Treasurer. The amount held in the State's internal investment pool is reported at fair value. The SDSTA essentially has access to the entire amount of their cash resources on demand. Accordingly, equity in the cash management pool is considered to be cash and cash equivalents for the purpose of the Statement of Cash Flows.

##### **h. Equity Classifications**

Equity is classified as net position and is displayed in three components:

1. Net investment in capital assets consists of capital assets, including restricted capital assets, net of accumulated depreciation (if applicable) and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvements of those assets.
2. Restricted net position consists of net position with constraints placed on their use either by (a) external groups such as creditors, grantors, contributors, or laws and regulations of other governments; or (b) law through constitutional provisions or enabling legislation.
3. Unrestricted net position all other net position that do not meet the definition of "restricted" or "net investment in capital assets."

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

#### **(1) Summary of Significant Accounting Policies (Concluded)**

##### **i. Application of Net Position**

It is the SDSTA's policy to first use restricted net position, prior to the use of unrestricted net position, when an expense is incurred for purposes for which both restricted and unrestricted net position are available.

##### **j. Accrued Leave**

Compensated absences consist of vacation and sick leave earned. The vacation leave is earned by full-time employees at the rate of 4.62 hours per pay period, increasing to 6.16 hours per pay period after 15 years of service. The vacation leave may accumulate only to a maximum of twice the annual accrual. Upon retirement or resignation, only full-time employees with 180 days of continuous service will be paid for accumulated vacation leave. Sick leave is earned at the rate of 4.32 hours per pay period. Upon termination, some employees are entitled to receive compensation for a portion of their sick leave balance. Those with seven years of service or more will receive compensation at the rate of 25 percent of their balance up to a maximum of 480 hours.

##### **k. Pensions**

For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense (revenue), information about the fiduciary net position of the South Dakota Retirement System (SDRS) and additions to/deletions from SDRS's fiduciary net position have been determined on the same basis as they are reported by SDRS. The SDSTA's contributions and net pension liability (asset) are recognized on an accrual basis of accounting.

#### **(2) Deposits and Investments**

##### **Deposits**

The majority of the SDSTA's cash is on deposit with the State Treasurer. Such funds are invested through the South Dakota Investment Council. Management of the State's internal investment pool is the statutory responsibility of the South Dakota Investment Council (SDIC). The investment policy and required risk disclosures for the State's internal investment pool are presented in the audit report of the South Dakota Investment Council, which can be obtained by contacting the Department of Legislative Audit, 427 South Chapelle, c/o 500 East Capitol, Pierre, South Dakota 57501.

Custodial credit risk is the risk that in the event of a bank failure, the SDSTA's deposits may not be returned to it. The SDSTA does not have a deposit policy for custodial credit risk. None of the SDSTA's deposits were exposed to custodial credit risk.

##### **Investments**

In general, SDCL 1-16H-18 permits funds to be invested in (a) direct obligations of, or obligations the principal of the interest on which are fully guaranteed or insured by, the United States of America; or (b) obligations of any solvent insurance company or other corporation or business entity if rated in the two highest classifications established by a standard rating service or insurance companies or a nationally recognized rating agency; or (c) short term discount obligations of the Federal National Mortgage Association; or (d) obligations of any state of the United States or any political subdivision, public instrumentality, or public authority of any state of the United States, which obligations are not callable before the principal is to be paid, are fully secured as to both sufficiency and timely payment by, and payable solely from, obligations described in (a). The SDSTA did not have any investments as of June 30, 2020.

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

**NOTES TO FINANCIAL STATEMENTS (CONTINUED)**  
**JUNE 30, 2020**

**(3) Changes in Capital Assets**

A summary of changes in capital assets for the year ended June 30, 2020 is as follows:

|  | Balance<br>June 30, 2019 | Reclassified*       | Increases         | Decreases         | Balance<br>June 30, 2020 |
|--|--------------------------|---------------------|-------------------|-------------------|--------------------------|
| <b>Business-Type Activities:</b>                   |                          |                     |                   |                   |                          |
| Capital Assets, not Being Depreciated:             |                          |                     |                   |                   |                          |
| Land   | \$ 1,814,136             | \$ -                | \$ -              | \$ -              | \$ 1,814,136             |
| Underground  | 17,936,955               | -                   | -                 | -                 | 17,936,955               |
| Archive Materials                                  | 70,000                   | -                   | -                 | -                 | 70,000                   |
| Construction Work in Progress (Note 9)             | 17,911,409               | (17,817,059)        | 1,729,958         | -                 | 1,824,308                |
| <b>Total Capital Assets, not Being Depreciated</b> | <b>37,732,500</b>        | <b>(17,817,059)</b> | <b>1,729,958</b>  | <b>-</b>          | <b>21,645,399</b>        |
| Capital Assets, Being Depreciated:                 |                          |                     |                   |                   |                          |
| DOE Property Transferred                           | -                        | -                   | 290,484           |                   | 290,484                  |
| Automobiles  | 118,963                  | -                   | 137,322           | 18,948            | 237,336                  |
| Buildings  | 8,120,616                | -                   | -                 | 416,440           | 7,704,177                |
| Furniture  | 74,212                   | -                   | -                 | -                 | 74,212                   |
| Computer Equipment                                 | 447,815                  | 10,909              | 112,209           |                   | 570,933                  |
| Improvements                                       | 37,808,459               | 17,817,059          |                   |                   | 55,625,517               |
| Infrastructure                                     | 1,958,862                | -                   | 44,326            |                   | 2,003,189                |
| Machinery and Equipment                            | 10,639,149               | 22,870              | 136,416           | 109,518           | 10,688,917               |
| <b>Total Capital Assets, Being Depreciated</b>     | <b>59,168,076</b>        | <b>17,850,838</b>   | <b>720,757</b>    | <b>544,906</b>    | <b>77,194,765</b>        |
| <b>Total Capital Assets, Before Depreciation</b>   | <b>96,900,576</b>        | <b>33,779</b>       | <b>2,450,715</b>  | <b>544,906</b>    | <b>98,840,164</b>        |
| Less Accumulated Depreciation:                     |                          |                     |                   |                   |                          |
| DOE Property Transferred                           | -                        | -                   | -                 | -                 | -                        |
| Automobiles  | 80,492                   | -                   | 14,060            | 17,053            | 77,499                   |
| Buildings  | 2,078,965                | -                   | 158,684           | 101,521           | 2,136,128                |
| Computer Equipment                                 | 347,110                  |                     | 54,225            |                   | 401,335                  |
| Furniture  | 54,015                   | -                   | 4,486             |                   | 58,501                   |
| Improvements                                       | 7,992,648                | -                   | 1,085,300         |                   | 9,077,948                |
| Infrastructure                                     | 394,625                  | -                   | 52,012            |                   | 446,637                  |
| Machinery and Equipment                            | 5,399,423                |                     | 637,380           | 100,485           | 5,936,318                |
| <b>Total Accumulated Depreciation</b>              | <b>16,347,278</b>        | <b>-</b>            | <b>2,006,147</b>  | <b>219,059</b>    | <b>18,134,366</b>        |
| <b>Capital Assets, Net</b>                         | <b>\$ 80,553,298</b>     | <b>\$ 33,779</b>    | <b>\$ 444,568</b> | <b>\$ 325,847</b> | <b>\$ 80,705,798</b>     |

\*Reclassifications are due to the SDSTA performing analysis of assets that were previously grouped in construction work in progress costs. Various items were transferred to improvements as they were placed into service.

# **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

## **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

### **(4) Long-Term Debt**

A summary of changes in long-term debt follows:

|                              | Beginning<br>Balance | Additions         | Deletions         | Ending<br>Balance   | Due Within<br>One Year |
|------------------------------|----------------------|-------------------|-------------------|---------------------|------------------------|
| Accrued Compensated Absences | \$ 1,208,941         | \$ 852,570        | \$ 545,859        | \$ 1,515,652        | \$ 757,826             |
| Xenon Notes Payable          | 6,000,000            | -                 | -                 | 6,000,000           | -                      |
|                              | <u>\$ 7,208,941</u>  | <u>\$ 852,570</u> | <u>\$ 545,859</u> | <u>\$ 7,515,652</u> | <u>\$ 757,826</u>      |

#### *Xenon Notes Payable*

Loan Agreements with S.D. Community Foundation (SDCF), S.D. State University Foundation (SDSUF), and University of S.D. Foundation (USDF) to purchase xenon.

#### *Repayment of Xenon Notes Payable*

Each Foundation's share of the xenon shall be sold at a time such that the loans will be paid by the maturity date provided by the loan documents. Furthermore, if the SDSTA sells the xenon for more than the cost to purchase it, the Foundations shall be paid the full principal amount payable plus an amount equal to the Average Return times the number of liters of xenon purchased using Foundation Funds. The "Average Return" means the total price received for the sale of all xenon owned by SDSTA within the Project minus the amount paid to all Foundations providing funding, with the difference then divided by the total number of liters sold. Furthermore, if the SDSTA fails to pay any payment required on or before the due date, the Foundations may declare the entire remaining balance immediately due and payable.

The loans are 11 year, unsecured non recourse loans with 2.5% simple interest paid quarterly. The SDCF note is due on October 1, 2026. The SDSUF and USDF notes are due December 1, 2026.

Also see Note 8.

\$ 6,000,000

The annual requirements to amortize long-term debt outstanding as of June 30, 2020, are as follows:

|           | Xenon Notes Payable |                     | Totals            |                     |
|-----------|---------------------|---------------------|-------------------|---------------------|
|           | Interest            | Principal           | Interest          | Principal           |
| 2021      | \$ 150,000          | \$ -                | \$ 150,000        | \$ -                |
| 2022      | 150,000             | -                   | 150,000           | -                   |
| 2023      | 150,000             | -                   | 150,000           | -                   |
| 2024      | 150,000             | -                   | 150,000           | -                   |
| 2025      | 150,000             | -                   | 150,000           | -                   |
| 2026-2027 | 212,500             | 6,000,000           | 212,500           | 6,000,000           |
| Total     | <u>\$ 962,500</u>   | <u>\$ 6,000,000</u> | <u>\$ 962,500</u> | <u>\$ 6,000,000</u> |

### **(5) Xenon Purchases**

Xenon purchased is valued at a cost per liter with additional freight, customs, and analysis charges. Total xenon purchased to date is \$8,934,350 as shown by the detail below.

| Fiscal Year     | # of Liters      | Total Cost          | Average Cost/Liter   |
|-----------------|------------------|---------------------|----------------------|
| 2014            | 20,000           | \$ 332,855          | \$ 16.64/liter       |
| 2016            | 200,000          | 1,273,808           | 6.37/liter           |
| 2017            | 600,295          | 3,433,693           | 5.72/liter           |
| 2018            | 260,000          | 1,473,544           | 5.67/liter           |
| 2019            | 300,000          | 1,650,450           | 5.50/liter           |
| 2020            | 140,000          | 770,000             | 5.50/liter           |
| Total Purchased | <u>1,520,295</u> | <u>\$ 8,934,350</u> | <u>\$ 5.88/liter</u> |

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

#### **(6) Retirement/Pension Plan**

##### **Plan Information:**

All employees, working more than 20 hours per week during the year, participate in the South Dakota Retirement System (SDRS), a cost sharing, multiple employer defined benefit pension plan administered by SDRS to provide retirement benefits for employees of the State of South Dakota and its political subdivisions. The SDRS provides retirement, disability, and survivors' benefits. The right to receive retirement benefits vests after three years of credited service. Authority for establishing, administering and amending plan provisions are found in SDCL 3-12. The SDRS issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained at <http://www.sdrs.sd.gov/publications/> or by writing to the SDRS, P.O. Box 1098, Pierre, SD 57501-1098 or by calling (605) 773-3731.

##### **Benefits Provided:**

SDRS has three different classes of employees, Class A general members, class B public safety and judicial members, and Class C Cement Plant Retirement Fund members.

Members that were hired before July 1, 2017 are Foundation members. Class A Foundation members and Class B Foundation members who retire after age 65 with three years of contributory service are entitled to an unreduced annual retirement benefit. An unreduced annual retirement benefit is also available after age 55 for Class A Foundation members where the sum of age and credited service is equal to or greater than 85 or after age 55 for Class B Foundation judicial members where the sum of age and credited service is equal to or greater than 80. Class B Foundation public safety members can retire with an unreduced annual retirement benefit after age 55 with three years of contributory service. An unreduced annual retirement benefit is also available after age 45 for Class B Foundation public safety members where the sum of age and credited service is equal to or greater than 75. All Foundation retirement benefits that do not meet the above criteria may be payable at a reduced level.

Members that were hired on/after July 1, 2017, are Generational members. Class A Generational members and Class B Generational judicial members who retire after age 67 with three years of contributory service are entitled to an unreduced annual retirement benefit. Class B Generational public safety members can retire with an unreduced annual retirement benefit after age 57 with three years of contributory service. At retirement, married Generational members may elect a single-life benefit, a 60 percent joint and survivor benefit, or a 100 percent joint and survivor benefit. All Generational retirement benefits that do not meet the above criteria may be payable at a reduced level. Generational members will also have a variable retirement account (VRA) established, in which they will receive up to 1.5 percent of compensation funded by part of the employer contribution. VRA's will receive investment earnings based on investment returns.

Legislation enacted in 2017 established the current COLA process. At each valuation date:

- Baseline actuarial accrued liabilities will be calculated assuming the COLA is equal to the long-term inflation assumption of 2.25%.
- If the fair value of assets is greater or equal to the baseline actuarial accrued liabilities, the COLA will be:
  - The increase in the 3rd quarter CPI-W, no less than 0.5% and no greater than 3.5%.
- If the fair value of assets is less than the baseline actuarial accrued liabilities, the COLA will be:
  - The increase in the 3rd quarter CPI-W, no less than 0.5% and no greater than a restricted maximum such that, that if the restricted maximum is assumed for future COLA's, the fair value of assets will be greater or equal to the accrued liabilities.

All benefits except those depending on the Member's Accumulated Contributions are annually increased by the Cost-of-Living Adjustment.

##### **Contributions:**

Per SDCL3-12, contribution requirements of the active employees and the participating employers are established and may be amended by the SDRS Board. Covered employees are required by state statute to contribute the following percentages of their salary to the plan; Class A Members 6.0% of salary; Class B Judicial Members, 9.0% of salary; and Class B Public Safety Members, 8.0% of salary. State Statute also requires the employer to contribute an amount equal to the employee's contribution. The SDSTA's share of contributions to the SDRS for the fiscal

# **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

## **NOTES TO FINANCIAL STATEMENTS (CONTINUED)** **JUNE 30, 2020**

### **(6) Retirement/Pension Plan (Continued)**

years ended June 30, 2020, 2019, and 2018 was \$746,095, \$631,417, and \$554,398, respectively, equal to the required contributions each year.

#### **Pension Liabilities (Assets), Pension Expense (Revenue), and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions:**

At June 30, 2019, SDRS is 100.09% funded and accordingly has a net pension asset. The proportionate share of the components of the net pension asset of the South Dakota Retirement System for the SDSTA as of the measurement period ending June 30, 2019 and reported by the SDSTA as of June 30, 2020 are as follows:

|   |                    |
|---|--------------------|
| Proportionate share of pension liability                                | \$ 61,681,471      |
| Less Proportionate share of net pension restricted for pension benefits | <u>61,733,922</u>  |
| Proportionate share of net pension liability (asset)                    | <u>\$ (52,451)</u> |

At June 30, 2020, the SDSTA reported a liability (asset) of \$ (52,451) for its proportionate share of the net pension liability (asset). The net pension liability (asset) was measured as of June 30, 2019, and the total pension liability (asset) used to calculate the net pension asset was based on a projection of the SDSTA's share of contributions to the pension plan relative to the contributions of all participating entities. At June 30, 2019, the SDSTA's proportion was .49494840% which is an increase of .0504851% from its proportion measured as of June 30, 2018.

For the year ended June 30, 2020, the SDSTA recognized pension expense of \$1,431,258. At June 30, 2020, the SDSTA reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

|   | <u>Deferred Outflows<br/>Of Resources</u> | <u>Deferred Inflows<br/>Of Resources</u> |
|---|---|--|
| Difference between expected and actual experience   | \$ 205,745                                | \$ 23,740                                |
| Changes in assumption   | 1,811,520                                 | 742,635                                  |
| Net Difference between projected and actual earnings on pension plan investments                          |   | 302,160                                  |
| Changes in proportion and difference between SDSTA contributions and proportionate share of contributions | 180,004                                   | 198,050                                  |
| SDSTA contributions subsequent to the measurement date  | <u>746,095</u>                            | <u>-0-</u>                               |
| TOTAL   | <u>\$ 2,943,364</u>                       | <u>\$ 1,266,585</u>                      |

# **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

## **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

### **(6) Retirement/Pension Plan (Continued)**

\$746,095 reported as deferred outflow of resources related to pensions resulting from the SDSTA's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense (revenue) as follows:

| <u>Year Ended June 30:</u> |                   |
|----------------------------|-------------------|
| 2021                       | \$ 1,172,878      |
| 2022                       | (160,498)         |
| 2023                       | (156,976)         |
| 2024                       | <u>75,280</u>     |
| TOTAL                      | <u>\$ 930,684</u> |

#### **Actuarial Assumptions:**

The total pension liability (asset) in the June 30, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

|                  |  |
|------------------|--|
| Inflation        | 2.25 %   |
| Salary Increases | Graded by years of service, from 6.50% at entry to 3.00% after 25 years of service |
| Discount Rate    | 6.50% net of plan investment expense   |
| Future COLAs     | 1.88%  |

Mortality rates were based on 97% of the RP-2014 Mortality Table, projected generationally with Scale MP-2016, white collar rates for females and total dataset rates for males. Mortality rates for disabled members were based on the RP-2014 Disabled Retiree Mortality Table, adjusted to 2006 and projected generationally with Scale MP-2016.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period of July 1, 2011 to June 30, 2016.

Investment portfolio management is the statutory responsibility of the South Dakota Investment Council (SDIC), which may utilize the services of external money managers for management of a portion of the portfolio. SDIC is governed by the Prudent Man Rule (i.e., the council should use the same degree of care as a prudent man). Current SDIC investment policies dictate limits on the percentage of assets invested in various types of vehicles (equities, fixed income securities, real estate, cash, private equity, etc.). The long-term expected rate of return on pension plan investments was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2019 (see the discussion of the pension plan's investment policy) are summarized in the following table using geometric means:

| <u>Asset Class</u> | <u>Target Allocation</u> | <u>Long-Term Expected Real Rate of Return</u> |
|--------------------|--------------------------|---|
| Global Equity      | 58.0%                    | 4.7%  |
| Fixed Income       | 30.0%                    | 1.7%  |
| Real Estate        | 10.0%                    | 4.3%  |
| Cash               | <u>2.0%</u>              | <u>0.9%</u>                                   |
| Total              | <u>100%</u>              |   |

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

#### **(6) Retirement/Pension Plan (Concluded)**

##### **Discount Rate:**

The discount rate used to measure the total pension liability (asset) was 6.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that matching employer contributions will be made at rates equal to the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability (asset).

##### **Sensitivity of (liability) to changes in the discount rate:**

The following presents the SDSTA's proportionate share of the net pension liability (asset) calculated using the discount rate of 6.50% as well as what the SDSTA's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower (5.50%) or 1-percentage point higher (7.50%) than the current rate:

|  | <u>1%<br/>Decrease</u> | <u>Current<br/>Discount<br/>Rate</u> | <u>1%<br/>Increase</u> |
|--|------------------------|--------------------------------------|------------------------|
| SDSTA's proportionate share of the net pension liability (asset) | \$ 8,705,836           | \$ (52,451)                          | \$ (7,188,872)         |

##### **Pension Plan Fiduciary Net Position:**

Detailed information about the plan's fiduciary net position is available in the separately issued SDRS financial report.

#### **(7) Risk Management**

The SDSTA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. There were no insurance claims exceeding insurance coverage during the past three years. During the period ended June 30, 2020, the SDSTA managed its risks as follows:

##### **Building Structure Charges:**

The buildings and permanent structures owned by the SDSTA are not covered by commercial insurance.

##### **Personal Property Insurance:**

The SDSTA purchases insurance for the contents of the administration building from a commercial insurance carrier, however, the contents of the SDSTA's other buildings are not insured.

##### **Employee Health Insurance:**

The SDSTA purchases health insurance for its employees from a commercial insurance carrier. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

#### **(7) Risk Management (Continued)**

##### Liability Insurance:

The SDSTA purchases liability insurance for risks related to torts, theft or damage of property, errors and omissions of public officials, employee practices liability coverage, and professional engineers' coverage through its participation in the South Dakota Authority Captive Insurance Company, a component unit of the State of South Dakota. Additional liability coverage including auto liability coverage and environmental liability is purchased from commercial insurance carriers. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

##### Worker's Compensation:

For the policy renewal date of January 1, 2020 through January 1, 2021, the SDSTA continued to purchase workmen's compensation through a commercial insurance carrier. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

##### Unemployment Benefits:

The SDSTA provides coverage for unemployment benefits by paying into the Unemployment Compensation Fund established by state law and managed by the State of South Dakota.

#### **(8) Significant Commitments, Contracts, and Subsequent Events**

On December 23, 2009, the SDSTA received \$20,000,000 designated as Sanford Gift No.2. Gift No.2 was originally established for the Sanford Center for Science Education. Two amendments to the Homestake Gift Agreement were signed in June 2010 and October 2011, respectively, whereby it was agreed to use \$15 million of this \$20 million for infrastructure and safety upgrades at the Underground Davis Campus and for replacing steel and other rehabilitation of the Ross Shaft. In early August 2012, the SDSTA signed a third amendment to the Gift Agreement and received the remaining \$15 million of Gift No.2 called for by Section 2 of the Gift Agreement. The Gift No.2 balance of \$20 million was to be held in a restricted fund whereby the principal was not to be expended until a written approval of a business and operational plan for the Sanford Center for Science Education was received from Mr. Sanford. Furthermore, the third amendment allowed the SDSTA to utilize and expend interest and other earnings on Gift No.2 restricted funds. In May, 2013, the SDSTA signed a fourth amendment to the Gift Agreement whereby it was agreed to expend up to \$7,000,000 of Gift No.2 for the construction or remodeling of the Yates Dry Building (located at SURF), the remodeling or replacement of the Lead Homestake Visitor's Center and the remodeling of Jonas Hall (located on the campus of Black Hills State University in Spearfish, SD). This authorization was conditioned on the SDSTA raising \$1.5 million from other sources for the Black Hills State University project and \$1 million for the Sanford Lab Homestake Visitor's Center (SLHVC) in Lead. The SDSTA secured a \$2 million Future Fund grant from the State of South Dakota in October 2013 and an additional \$500,000 was received in July 2014 from Great Plains Education Foundation that satisfied this monetary obligation. Both outside facilities agreed in writing to incorporate and use the name "Sanford" in the naming of the facilities. Operating agreements are in place which reasonably provide for the ongoing operations of the respective facilities by the Homestake Visitor Center, Inc. and Black Hills State University. Given the construction budget of the SLHVC and the Jonas Science Building renovation costs, it was not possible to undertake the upgrades to the Yates Dry. These details were reported in the Fifth Amendment to the Homestake Gift Agreement in February 2015. Furthermore, any part of Gift No.2 not used for the three construction projects may be used for the construction and operation of additional underground laboratory space at SURF to accommodate other experiments, and for related infrastructure to access or support the new laboratory space through the shafts. After the above projects were finished approximately \$1,000,000 remained. On June 23, 2016 the sixth amendment was signed allowing the SDSTA to use the remaining funds to purchase real estate known as "Ellison Hill" and to conduct needed environmental assessments and remediation of the property. This will provide needed storage and construction material laydown space for the LBNF and DUNE projects. The "Ellison Hill" property was purchased in May 2017. The cost of this remediation was shared equally by the SDSTA and Homestake Mining Company per the purchase agreement.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

#### **(8) Significant Commitments, Contracts, and Subsequent Events (Continued)**

With additional change orders, the contract amount was decreased to \$302,319. Remediation of the property was completed in November 2017. At fiscal year end, a balance of \$6,992 remained as Gift No. 2 funds. This will be used for updating of displays at the Sanford Lab Homestake Visitor Center.

A contract was signed in early January 2014 with the South Dakota School of Mines and Technology (SDSM&T) to be the lead institution for the accelerator project known as (CASPAR) Compact Acceleration System Performing Astrophysical Research. With an additional change the contract total was \$999,334 which was finalized in November 2017. This project is located at the Ross Campus laboratory at the 4850' Level. Another underground facility was completed as a laboratory for Black Hills State University to support low background counting activities, biology study workstations, and other future small-scale experiments. Contracts have been signed with both institutions whereby each will pay the SDSTA for reasonable energy costs and any other specific needed supplies.

The SDSTA's long-term cooperative agreement with Homestake Mining Company of California continues. The SDSTA agrees to combine Homestake's wastewater from Grizzly Gulch with the mine wastewater, as well as treat, and discharge the water. For the first year of this agreement, Homestake agreed to pay the SDSTA an amount ranging from \$.58 to \$.84 per 1000 gallons based on average total gallons treated per minute per month. Revenue from this agreement for the past two years was \$173,422 and \$242,769 respectively. Revenue was higher this last year due to the number of gallons treated being higher. This negotiated treatment price will be renegotiated once per year for the length of the contract. The negotiated price was renewed for the current year. Estimated revenues for the upcoming year are at \$175,000. The term of the contract runs to September 30, 2020. An amendment was signed in September, extending this contract to December 2020. We are currently negotiating an additional agreement to continue to treat Homestake's wastewater into the future.

A lease between the SDSTA and DOE for land (above ground) and space (underground) for the LBNF was signed on March 29, 2016. The term of the lease goes through April 30, 2036 but shall remain in force thereafter from year to year without further notice but shall in no event extend beyond a total of 65 years. Additional amendments to this lease executed in June 2017 and May 2018 (Amendment #1 and Amendment #2) added additional space in the Ross Dry Facility in support of the Long Baseline Neutrino Facility. An easement was signed with Homestake Mining Company for the construction and maintenance of conveyor facilities for the transportation of excavated rock to the Open Cut (open mine pit) owned by Homestake. The LBNF will include a large experimental facility underground at the 4850'L. Waste rock excavated from that level will be deposited into the Open Cut. An additional easement was negotiated with the City of Lead across their property to construct, maintain, and operate this overhead conveyance system. The conveyance system is currently under construction.

Homestake Mining Company agreed with the signing of the Third Amendment to the Property Donation Agreement in August 2015 to release \$2,500,000 from the Indemnification Fund for the SDSTA to fund the captive insurance company. The original appropriation for the indemnification fund found at 2004 SD Session Laws, Chapter 14, Section 1 was revised by the State Legislature per Legislative Session 2015 HB 1186, to allow the use of up to \$2,500,000 to provide initial capital and pay expenses for the SDSTA's purposes in the captive insurance company.

Letter Agreement #1586 was signed in August 2015 between the GOED and the SDSTA whereby the State is granting up to \$6,000,000 between July 14, 2015 and September 30, 2018. The State has chosen to engage in a partnership with the SDSTA, the South Dakota Community Foundation, the South Dakota State University Foundation, and the University of South Dakota Foundation to assist with the costs of infrastructure/laboratory upgrades, procurement of xenon for future "Dark Matter" experiments, and interest payments to these foundations. The full \$6,000,000 has been received from the State as well as \$2,000,000 each from the South Dakota Community Foundation, the University of South Dakota Foundation, and the South Dakota State University Foundation. Loan agreements are in place between the SDSTA and the three foundations for a total of \$6,000,000 to be used for the purchase of xenon for the future LZ experiment. The loans extend to the last quarter of 2026. They are unsecured nonrecourse loans with 2.5% simple interest to be paid quarterly to each lender. The loans will be repaid at the end of the LZ experiment (approximately October 2026) from the sale proceeds of the xenon previously purchased. A total of 1,520,295 liters of xenon have been purchased for experiment use.

## **SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

### **NOTES TO FINANCIAL STATEMENTS (CONTINUED)**

**JUNE 30, 2020**

#### **(8) Significant Commitments, Contracts, and Subsequent Events (Continued)**

Letter Agreement #1640 was signed in October 2019 between the GOED and the SDSTA. The SDSTA received \$4,000,000 to design, build, and maintain a new Maintenance Support Facility (MSF). The current facilities are dated, requiring substantial upgrades. Therefore, the State of South Dakota provided funding to assist in the construction of a new MSF. This is appropriate to accomplish the SDSTA's present and future requirements. Additionally, GOED Letter Agreement #1659 was signed in June 2019 for an additional \$2,500,000 to assist in the construction of the new facility. This was necessary to ensure that it will be completed on schedule. An additional amendment to Letter Agreement #1659 was signed in June 2020 to extend the period of performance to June 30, 2021. This was necessary due to a work stoppage during March and April 2020 due to concerns related to the COVID-19 pandemic.

#### **(9) Construction Work in Process**

The SDSTA accumulates the costs of construction projects in Construction Work in Progress until the projects are completed and/or placed in service. Some of the ongoing improvement projects are capitalized as they progress. The \$1,824,308 of construction work in progress at June 30, 2020 represents the accumulated costs for the Maintenance Support Facility (MSF). A contract with Dean Kurtz Construction was signed in June 2019 in the amount of \$411,863 for pre-construction services and demolition of the current structure. An additional agreement was signed in February 2020 for a Guaranteed Maximum Price for construction of \$5,136,424 bringing the total of the contract to \$5,713,040 (including various change orders). The commitment on existing contracts at June 30, 2020 is \$4,118,241 for the construction and design support of the MSF. Funds from GOED Letter Agreement #1640 and #1659 will be used for this effort.

#### **(10) Continuing Operations**

On September 30, 2019 the SDSTA transitioned to a five-year Cooperative Agreement with the DOE's Office of Science – Integrated Support Center. This will fund the SDSTA's operations of the SURF. The federal fiscal year 2021 budget totals \$22,750,000. The five-year total equals \$120,605,674 to support the facility including critical upgrades. Additionally, the SDSTA has proposed for fiscal year 2021 approximately \$8.6M of infrastructure improvements that will be awarded separately. The Ross Shaft rehabilitation project funding continues with FNAL as well as the contract for Ross Shaft Logistics Support. Additionally, SDSTA support for the LZ experiment operations efforts has been extended to September 2022.

#### **(11) Related Party Transactions**

Mr. Ron Wheeler was appointed to the Board of Directors by the Governor effective July 1, 2013 and is a current member of the Board of Directors. As of July 1, 2013, Ron Wheeler transitioned from Executive Director to the Director of Governmental & External Affairs for the SDSTA. Mr. Wheeler was a full-time employee of the SDSTA until January 3, 2014, at which time he retired from full-time employment. Effective January 3, 2014, the SDSTA signed a contract with Mr. Wheeler as a consultant for the SDSTA. The contract, including amendments, is for \$539,000 and extends to January 15, 2022. For the period of July 1, 2019 – June 30, 2020, he was paid \$48,000 for his consulting services. Mr. Wheeler will assist in directing the state and federal government affairs programs for the SDSTA.

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY****NOTES TO FINANCIAL STATEMENTS (CONTINUED)**  
**JUNE 30, 2020****(12) Blended Component Unit Condensed Financial Information****SANFORD UNDERGROUND RESEARCH FACILITY FOUNDATION**  
**CONDENSED STATEMENT OF NET POSITION**  
**JUNE 30, 2020****ASSETS****Current Assets**

|                             |    |               |
|-----------------------------|----|---------------|
| Cash in Local Bank          | \$ | 1             |
| Contributions Receivable    |    | 75,000        |
| <b>Total Current Assets</b> |    | <b>75,001</b> |

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|                     |  |               |
|---------------------|--|---------------|
| <b>TOTAL ASSETS</b> |  | <b>75,001</b> |
|---------------------|--|---------------|

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**NET POSITION**

|                           |  |        |
|---------------------------|--|--------|
| Restricted for:           |  |        |
| Davis-Bachall             |  | 75,000 |
| Unrestricted Net Position |  | 1      |

---

|                           |    |               |
|---------------------------|----|---------------|
| <b>TOTAL NET POSITION</b> | \$ | <b>75,001</b> |
|---------------------------|----|---------------|

---

**CONDENSED STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**  
**JUNE 30, 2020****Restricted Revenue**

|                 |        |
|-----------------|--------|
| Davis-Bachall   | 75,000 |
| Interns         | 122    |
| Public Outreach | 17,500 |
| STEM Education  | 97     |

|   |              |
|---|--------------|
| <b>Miscellaneous and Unrestricted Revenue</b> | <b>5,123</b> |
|---|--------------|

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|                      |               |
|----------------------|---------------|
| <b>Total Revenue</b> | <b>97,842</b> |
|----------------------|---------------|

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|  |               |
|--|---------------|
| <b>Transfers to Primary Government</b> | <b>22,841</b> |
|--|---------------|

---

|                               |               |
|-------------------------------|---------------|
| <b>Change in Net Position</b> | <b>75,001</b> |
|-------------------------------|---------------|

|  |          |
|--|----------|
| <b>Net Position -- Beginning of Year</b> | <b>0</b> |
|--|----------|

---

|                                    |               |
|------------------------------------|---------------|
| <b>Net Position -- End of Year</b> | <b>75,001</b> |
|------------------------------------|---------------|

---

**CONDENSED STATEMENT OF CASH FLOWS**  
**JUNE 30, 2020**

|  |               |
|--|---------------|
| Cash Provided from Operating Activities          |               |
| Cash Received from Donations                     | 97,842        |
| Cash Payments for Operating Activities           | 22,841        |
| <b>Net Increase in Cash and Cash Equivalents</b> | <b>75,001</b> |

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|  |   |
|--|---|
| Cash and Cash Equivalents at Beginning of Year | 0 |
|--|---|

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|  |               |
|--|---------------|
| Cash and Cash Equivalents at End of Year | <b>75,001</b> |
|--|---------------|

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REQUIRED SUPPLEMENTARY INFORMATION OTHER THAN MD&A

# **SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET)**

## **South Dakota Retirement System**

Last 10 Fiscal Years \*

|  | 2020          | 2019         | 2018         | 2017         | 2016           | 2015           |
|--|---------------|--------------|--------------|--------------|----------------|----------------|
| SDSTA's proportion of the net pension liability (asset)  | 0.4949484%    | 0.4444633%   | 0.4881662%   | 0.5027360%   | 0.5089089%     | 0.5287996%     |
| SDSTA's proportionate share of net pension liability (asset)   | \$ (52,451)   | \$ (10,366)  | \$ (44,302)  | \$ 1,698,193 | \$ (2,158,428) | \$ (3,809,788) |
| SDSTA's covered employer payroll   | \$ 10,237,119 | \$ 8,995,993 | \$ 9,596,007 | \$ 9,256,007 | \$ 9,042,866   | \$ 8,888,749   |
| SDSTA's proportionate share of the net pension liability (asset) as a percentage of its covered-employee payroll | 0.51%         | 0.12%        | 0.46%        | 18.35%       | 23.87%         | 42.86%         |
| Plan fiduciary net position as a percentage of the total pension liability (asset)                               | 100.09%       | 100.02%      | 100.10%      | 96.89%       | 104.10%        | 107.30%        |

\* The amounts presented for each fiscal year were determined as of the measurement date of the collective net pension liability (asset) which is 6/30 of previous fiscal year. Until a full 10-year trend is compiled, the SDSTA will present information for those years for which information is available.

# **SCHEDULE OF THE AUTHORITY CONTRIBUTIONS**

## **South Dakota Retirement System**

Last 10 Fiscal Years \*

|  | 2020          | 2019          | 2018         | 2017         | 2016         | 2015         |
|--|---------------|---------------|--------------|--------------|--------------|--------------|
| Contractually required contribution                                  | \$ 746,095    | \$ 631,417    | \$ 554,398   | \$ 595,112   | \$ 573,626   | \$ 557,420   |
| Contributions in relation to the contractually required contribution | 746,095       | 631,417       | 554,398      | 595,112      | 573,626      | 557,420      |
| Contribution deficiency (excess)                                     | \$ -          | \$ -          | \$ -         | \$ -         | \$ -         | \$ -         |
| SDSTA's covered-employee payroll                                     | \$ 12,193,592 | \$ 10,237,119 | \$ 8,995,993 | \$ 9,596,007 | \$ 9,256,007 | \$ 9,042,866 |
| Contributions as a percentage of covered-employee payroll            | 6.12%         | 6.17%         | 6.16%        | 6.20%        | 6.20%        | 6.16%        |

\* Until a full 10-year trend is compiled, the SDSTA will present information for those years for which information is available.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY  
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION  
Schedule of the Proportionate Share of the Net Pension Liability (Asset) and  
Schedule of the SDSTA Contributions

**Changes of benefit terms:**

No significant changes.

**Changes of assumptions:**

Legislation enacted in 2017 modified the SDRS COLA. For COLAs first applicable in 2018, the SDRS COLA will equal the percentage increase in the most recent third calendar quarter CPI-W over the prior year, no less than 0.5% and no greater than 3.5%. However, if the Fair Value Funded Ratio assuming the long-term COLA is equal to the baseline COLA assumption (currently 2.25%) is less than 100%, the maximum COLA payable will be limited to the increase that if assumed on a long-term basis, results in a FVFR equal to or exceeding 100%. That condition existed as of June 30, 2018 and exists again this year as of June 30, 2019. Future COLAs are assumed to equal the current restricted maximum COLA which was 2.03% as of June 30, 2018 and is 1.88% as of June 30, 2019.

The changes in actuarial assumptions increased the Actuarial Accrued Liability by 1.5% of the Actuarial Accrued Liability based on the 2.03% COLA, reflecting the current and assumed future restricted maximum COLA of 1.88%.

Actuarial assumptions are reviewed in depth periodically, with the next experience analysis anticipated before the June 30, 2022 Actuarial Valuation and any recommended changes anticipated to be first implemented in the June 30, 2022 Actuarial Valuation.

## SUPPLEMENTARY INFORMATION

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

**SCHEDULE OF OPERATING EXPENSES  
FOR THE YEAR ENDED JUNE 30, 2020**

**Personal Services**

|                   |    |            |
|-------------------|----|------------|
| Employee Salaries | \$ | 11,127,817 |
| Employee Benefits |    | 7,645,635  |

|                                |  |                   |
|--------------------------------|--|-------------------|
| <b>Total Personal Services</b> |  | <b>18,773,452</b> |
|--------------------------------|--|-------------------|

**Travel**

|                              |        |
|------------------------------|--------|
| Meals and Lodging            | 42,328 |
| Auto and Fleet Services      | 52,622 |
| Air - Commercial and Charter | 28,741 |
| Incidentals to Travel        | 2,941  |
| Non-Employee Travel          | 50,114 |
| Meals (Not Overnight)        | 192    |

|                     |                |
|---------------------|----------------|
| <b>Total Travel</b> | <b>176,938</b> |
|---------------------|----------------|

**Contractual Services**

|   |           |
|---|-----------|
| Equipment Rental                          | 214,827   |
| Contractual - Other                       | 3,244,791 |
| Insurance                                 | 765,281   |
| Lobbying                                  | 215,000   |
| Computer Services                         | 443,773   |
| Telecommunications                        | 65,829    |
| Monitoring and Programming                | 24,024    |
| Legal Consultant                          | 67,514    |
| Training                                  | 94,483    |
| Consultant Fees - Accounting and Auditing | 45,010    |
| Promotion and Advancement                 | 36,353    |
| Dues and Memberships                      | 12,078    |
| Utilities                                 | 2,271,426 |
| Maintenance and Repairs                   | 699,100   |

|                                   |                  |
|-----------------------------------|------------------|
| <b>Total Contractual Services</b> | <b>8,199,489</b> |
|-----------------------------------|------------------|

**Supplies, Materials and Other Operating Expenses**

|                                |           |
|--------------------------------|-----------|
| Maintenance and Repairs        | 1,352,985 |
| Other Supplies and Equipment   | 2,213,709 |
| Other Expenses                 | 6,360     |
| Office Supplies and Equipment  | 29,349    |
| Licenses and Permits           | 47,458    |
| Workshop and Registration Fees | 14,860    |
| Postage                        | 5,325     |
| Bank Charges                   | 1,927     |

|   |                  |
|---|------------------|
| <b>Total Supplies, Materials and Other Operating Expenses</b> | <b>3,671,973</b> |
|---|------------------|

|                             |                  |
|-----------------------------|------------------|
| <b>Depreciation Expense</b> | <b>2,006,147</b> |
|-----------------------------|------------------|

|                                 |                      |
|---------------------------------|----------------------|
| <b>Total Operating Expenses</b> | <b>\$ 32,827,999</b> |
|---------------------------------|----------------------|

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
FOR THE YEAR ENDED JUNE 30, 2020**

|   | Pass-Through<br>Numbers | CFDA<br>Numbers | Amount               |
|---|-------------------------|-----------------|----------------------|
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through the Regents of the University of California<br>LUX/Zeplin (LZ) Cryogenic System Integration and Installation   | 7255146                 | 81.7255146      | \$ 1,074,302         |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through the Regents of the University of California<br>LUX/Zeplin (LZ) Infrastructure Construction - Davis Lab         | 7351116                 | 81.7351116      | 2,636                |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through the Regents of the University of California<br>LUX/Zeplin (LZ) Engineering Support Experiment Operations       | 7355157                 | 81.7355157      | 507,617              |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through the Regents of the University of California<br>LUX/Zeplin (LZ) Experiment Operations - Engineer/Research Supp. | 7525117                 | 81.7525117      | 430,426              |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through the Regents of the University of California<br>LBNL SIGMA-V Project  | 7371823                 | 81.7371823      | 95,305               |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through Oak Ridge National Laboratory<br>Experiment Support for Majorana Demonstrator                                  | 4000144149              | 81.4000144149   | 24,891               |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through Fermi National Accelerator Laboratory<br>SURF (Sanford Underground Research Facility) Operations Support       | 629760                  | 81.629760       | 6,868,908            |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through Fermi National Accelerator Laboratory<br>SURF (Sanford Underground Research Facility) Ross Shaft Rehab         | 630223                  | 81.630223       | 2,905,767            |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Pass-Through Fermi National Accelerator Laboratory<br>SURF (Sanford Underground Research Facility) Ross S.Logistics         | 654406                  | 81.654406       | 2,834,224            |
| <i>National Science Foundation:</i>   |                         |                 |                      |
| Pass-Through South Dakota School of Mines & Technology<br>Mathematical and Physical Sciences Research Grant                 | PHY-1615197             | 47.049          | 18,042               |
| <i>U.S. Department of Energy</i>  |                         |                 |                      |
| Office of Science - Chicago Office of Acquisition/Assistance  | DE-SC0020216            | 81.049          | 15,055,850           |
| <b>Total</b>  |                         |                 | <b>\$ 29,817,968</b> |

Note: The schedule of expenditures of federal awards is presented on the cash basis of accounting.

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY  
AUTHORITY**

**NOTES TO SCHEDULE OF EXPENDITURE OF FEDERAL AWARDS  
JUNE 30, 2020**

**Note 1: *Basis of Presentation***

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") includes the federal award activity of the SDSTA under programs of the federal government for the year ended June 30, 2020. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of the SDSTA, it is not intended to and does not present the financial position, changes in net position, or cash flows of the SDSTA.

**Note 2: *Summary of Significant Accounting Policies***

Expenditures reported on the Schedule are reported on the cash basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. The SDSTA has elected not to use the 10-percent indirect cost rate as allowed under the Uniform Guidance.

**Note 3: *Federal Surplus Property***

There were no federal surplus property items received by the SDSTA for the year ended June 30, 2020.



**Financial Report—Mr. Mike Headley**

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The Financial Summaries report for February 2021 is attached. (A duplicate of the report can also be found in the Executive Director's quarterly report, Item 8B)

*See recommended motion below.*

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**Recommended Action:**

*7A. Motion to accept the Financial Report as presented.*

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DIVISION: ALL

## BALANCE SHEET

## ASSETS

AS OF  
02/28/21

## CURRENT ASSETS

|                           |    |               |
|---------------------------|----|---------------|
| First Interstate Checking | \$ | 3,393,070.06  |
| First Interstate Other    |    | 1,420.64      |
|                           |    | -----         |
| Total in Local Checking   |    | 3,394,490.70  |
| SD Treas: Indemnification |    | 7,500,000.00  |
| SD Treas: Mine Closure    |    | 1,497,441.53  |
| SD Treas: Operating       |    | 1,116,445.61  |
| SD Treas: Sanford Gift #2 |    | 6,569.97      |
| SD Treas: Spec Sess - Lab |    | 2,175,759.00  |
| SD Treas: Experiments     |    | 919,001.75    |
|                           |    | -----         |
| Total with SD Treasurer   |    | 13,215,217.86 |
| Billed A/R                |    | 2,664,561.75  |
| Unbilled A/R              |    | 132,006.31    |
| Other A/R                 |    | 814,642.00    |
| Inventory - Supplies      |    | 3,337,210.59  |
| Inventory - Warehouse     |    | 27,330.13     |
| Other Current Assets      |    | 965,683.90    |
|                           |    | -----         |
| Total Current Assets      |    | 24,551,143.24 |

## FIXED ASSETS

|                           |                 |
|---------------------------|-----------------|
| Land, Underground & Other | 12,633,473.13   |
| Bldgs & Infrastructure    | 9,707,365.56    |
| Improvements              | 64,637,443.82   |
| Computer Equipment        | 570,932.90      |
| Equipment & Fixtures      | 10,640,819.96   |
| DOE Property Transfer     | 1,471,727.33    |
| Accum Depr & Amort        | (19,274,959.28) |
| DOE Prop. Accum Deprec.   | (104,196.77)    |
|                           | -----           |
| Total Fixed Assets        | 80,282,606.65   |

## OTHER ASSETS

|                           |               |
|---------------------------|---------------|
| Work in Process           | 3,029,340.38  |
| Pension Deferred Outflows | 2,995,814.75  |
| Xenon Purchased           | 8,930,401.09  |
|                           | -----         |
| Total Other Assets        | 14,955,556.22 |

## TOTAL ASSETS

=====

\$ 119,789,306.11

=====

REPORT DATE 03/08/21

SOUTH DAKOTA SCIENCE &amp; TECHNOLOGY

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DIVISION: ALL

## BALANCE SHEET

## LIABILITIES &amp; EQUITY

AS OF  
02/28/21

## CURRENT LIABILITIES

|                           |    |              |
|---------------------------|----|--------------|
| Accounts Payable          | \$ | 1,195,781.06 |
| Other Payables            |    | 8,841.84     |
|                           |    | -----        |
| Total Accounts Payable    |    | 1,204,622.90 |
| Accrued Payroll Liab      |    | 1,795,169.22 |
|                           |    | -----        |
| Total Current Liabilities |    | 2,999,792.12 |

## OTHER LIABILITIES

|                          |  |              |
|--------------------------|--|--------------|
| LT Xenon Notes Payable   |  | 6,000,000.00 |
| Pension Deferred Inflows |  | 1,266,585.88 |
|                          |  | -----        |
| Total Other Liabilities  |  | 7,266,585.88 |

## EQUITY

|                           |  |                |
|---------------------------|--|----------------|
| Restricted: Indemnificati |  | 7,500,000.00   |
| Restricted: Lab           |  | 2,175,759.00   |
| Restricted: Mine Closure  |  | 1,497,441.53   |
| Restricted: Sanford Gift2 |  | 6,569.97       |
| Restricted: Pension       |  | 1,729,228.87   |
| Restricted: Experim. Int. |  | 919,001.75     |
| Restricted: Foundation    |  | 219.45         |
|                           |  | -----          |
| Total Restricted Funds    |  | 13,828,220.57  |
| Investment in Gen FA      |  | 80,282,606.65  |
| Unrestricted Funds        |  | 15,412,100.89  |
|                           |  | -----          |
| Total Equity              |  | 109,522,928.11 |

## TOTAL LIABILITIES &amp; EQUITY

=====

\$ 119,789,306.11

=====

ALL

## STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/21

|                                       | YR-TO-DATE       |
|---------------------------------------|------------------|
| REVENUE                               |                  |
| DOE Subcontracts                      | \$ 23,328,288.07 |
| NSF/NASA Subcontracts                 | 1,967.60         |
| State Revenue                         | -                |
| Checking Interest                     | 944.67           |
| Interest Income                       | 95,656.00        |
|                                       | -----            |
| TOTAL REVENUE                         | 23,426,856.34    |
| DIRECT COSTS                          |                  |
| Direct Labor                          | 5,438,664.57     |
| Board of Directors                    | 3,390.56         |
| Capital Outlay >\$5K                  | 2,086,818.62     |
| Contractual Svcs                      | 2,401,832.92     |
| Inventory                             | 114,012.50       |
| Supplies                              | 807,431.14       |
| Travel - Domestic                     | 2,941.62         |
| Travel - Foreign                      | (149.16)         |
| Utilities                             | 1,522,976.14     |
| Other Direct Costs                    | 19,232.45        |
| Unallow/Unbill Costs                  | 198,636.02       |
|                                       | -----            |
| TOTAL DIRECT COSTS                    | 12,595,787.38    |
| INDIRECT COSTS                        |                  |
| Fringe Benefits                       | 4,507,188.60     |
| Overhead                              | 6,079,638.77     |
|                                       | -----            |
| TOTAL INDIRECT COSTS                  | 10,586,827.37    |
|                                       | -----            |
| GROSS PROFIT/LOSS ( ) FROM OPERATIONS | 244,241.59       |
|                                       | -----            |
| OTHER INCOME                          |                  |
| Water Treatment                       | 182,804.08       |
| Miscellaneous Income                  | 17,522.50        |
| Other Operating Income                | 34,117.76        |
|                                       | -----            |
| TOTAL OTHER INCOME                    | 234,444.34       |
| OTHER EXPENSES                        |                  |
| Other Unallowable Expenses            | 104,196.77       |
| Misc. Expenses & Donations            | (1,252,355.79)   |
| Loss (Gain) on Sale of Fixed Assets   | 58,461.30        |
| Reclass Incr Net Assets               | (423,191.63)     |
|                                       | -----            |
| TOTAL OTHER EXPENSES                  | (1,512,889.35)   |
|                                       | =====            |
| NET INCOME/LOSS ( )                   | \$ 1,991,575.28  |

DIVISION: ALL

## COMPARATIVE BALANCE SHEET

## ASSETS

|                           | AS OF<br>02/28/21 | AS OF<br>02/29/20 | \$ CHANGE       | % CHANGE |
|---------------------------|-------------------|-------------------|-----------------|----------|
| <hr/>                     |                   |                   |                 |          |
| CURRENT ASSETS            |                   |                   |                 |          |
| First Interstate Checking | \$ 3,393,070.06   | \$ 2,136,643.77   | \$ 1,256,426.29 | 58.80%   |
| First Interstate Other    | 1,420.64          | 541.73            | 878.91          | 162.24%  |
| <hr/>                     |                   |                   |                 |          |
| Total in Local Checking   | 3,394,490.70      | 2,137,185.50      | 1,257,305.20    | 58.83%   |
| SD Treas: Indemnification | 7,500,000.00      | 7,500,000.00      | -               | 0.00%    |
| SD Treas: Mine Closure    | 1,497,441.53      | 1,462,524.66      | 34,916.87       | 2.39%    |
| SD Treas: Operating       | 1,116,445.61      | 798,647.59        | 317,798.02      | 39.79%   |
| SD Treas: Sanford Gift #2 | 6,569.97          | 15,988.97         | (9,419.00)      | -58.91%  |
| SD Treas: Spec Sess - Lab | 2,175,759.00      | 5,414,701.00      | (3,238,942.00)  | -59.82%  |
| SD Treas: Experiments     | 919,001.75        | 1,100,751.08      | (181,749.33)    | -16.51%  |
| <hr/>                     |                   |                   |                 |          |
| Total with SD Treasurer   | 13,215,217.86     | 16,292,613.30     | (3,077,395.44)  | -18.89%  |
| Billed A/R                | 2,664,561.75      | 2,496,643.16      | 167,918.59      | 6.73%    |
| Unbilled A/R              | 132,006.31        | 610,683.00        | (478,676.69)    | -78.38%  |
| Other A/R                 | 814,642.00        | 464,388.62        | 350,253.38      | 75.42%   |
| Inventory - Supplies      | 3,337,210.59      | 2,309,679.01      | 1,027,531.58    | 44.49%   |
| Inventory - Warehouse     | 27,330.13         | 28,686.32         | (1,356.19)      | -4.73%   |
| Other Current Assets      | 965,683.90        | 1,261,510.84      | (295,826.94)    | -23.45%  |
| <hr/>                     |                   |                   |                 |          |
| Total Current Assets      | 24,551,143.24     | 25,601,389.75     | (1,050,246.51)  | -4.10%   |
| <hr/>                     |                   |                   |                 |          |
| FIXED ASSETS              |                   |                   |                 |          |
| Land, Underground & Other | 12,633,473.13     | 12,633,473.13     | -               | 0.00%    |
| Bldgs & Infrastructure    | 9,707,365.56      | 9,789,145.56      | (81,780.00)     | -0.84%   |
| Improvements              | 64,637,443.82     | 62,907,485.67     | 1,729,958.15    | 2.75%    |
| Computer Equipment        | 570,932.90        | 563,025.07        | 7,907.83        | 1.40%    |
| Equipment & Fixtures      | 10,640,819.96     | 10,928,727.67     | (287,907.71)    | -2.63%   |
| DOE Property Transfer     | 1,471,727.33      | -                 | 1,471,727.33    | 100.00%  |
| Accum Depr & Amort        | (19,274,959.28)   | (17,413,987.57)   | (1,860,971.71)  | 10.69%   |
| DOE Prop. Accum Deprec.   | (104,196.77)      | -                 | (104,196.77)    | 100.00%  |
| <hr/>                     |                   |                   |                 |          |
| Total Fixed Assets        | 80,282,606.65     | 79,407,869.53     | 874,737.12      | 1.10%    |
| <hr/>                     |                   |                   |                 |          |
| OTHER ASSETS              |                   |                   |                 |          |
| Work in Process           | 3,029,340.38      | 1,757,331.05      | 1,272,009.33    | 72.38%   |
| Pension Deferred Outflows | 2,995,814.75      | 3,943,908.40      | (948,093.65)    | -24.04%  |
| Xenon Purchased           | 8,930,401.09      | 8,164,350.39      | 766,050.70      | 9.38%    |
| <hr/>                     |                   |                   |                 |          |
| Total Other Assets        | 14,955,556.22     | 13,865,589.84     | 1,089,966.38    | 7.86%    |
| <hr/>                     |                   |                   |                 |          |
| TOTAL ASSETS              | \$ 119,789,306.11 | \$ 118,874,849.12 | \$ 914,456.99   | 0.77%    |
| <hr/>                     |                   |                   |                 |          |

DIVISION: ALL

## COMPARATIVE BALANCE SHEET

## LIABILITIES &amp; EQUITY

|                            | AS OF<br>02/28/21 | AS OF<br>02/29/20 | \$ CHANGE      | % CHANGE |
|----------------------------|-------------------|-------------------|----------------|----------|
| <hr/>                      |                   |                   |                |          |
| CURRENT LIABILITIES        |                   |                   |                |          |
| Accounts Payable           | \$ 1,195,781.06   | \$ 1,210,161.49   | (14,380.43)    | -1.19%   |
| Other Payables             | 8,841.84          | 28,386.32         | (19,544.48)    | -68.85%  |
|                            | -----             | -----             | -----          | -----    |
| Total Accounts Payable     | 1,204,622.90      | 1,238,547.81      | (33,924.91)    | -2.74%   |
| Accrued Payroll Liab       | 1,795,169.22      | 1,302,349.98      | 492,819.24     | 37.84%   |
|                            | -----             | -----             | -----          | -----    |
| Total Current Liabilities  | 2,999,792.12      | 2,540,897.79      | 458,894.33     | 18.06%   |
| <br>                       |                   |                   |                |          |
| OTHER LIABILITIES          |                   |                   |                |          |
| LT Xenon Notes             | 6,000,000.00      | 6,000,000.00      | -              | 0.00%    |
| Pension Deferred Inflows   | 1,266,585.88      | 783,421.31        | 483,164.57     | 61.67%   |
|                            | -----             | -----             | -----          | -----    |
| Total Other Liabilities    | 7,266,585.88      | 6,783,421.31      | 483,164.57     | 7.12%    |
| <br>                       |                   |                   |                |          |
| TOTAL LIABILITIES          | 10,266,378.00     | 9,324,319.10      | 942,058.90     | 10.10%   |
| <br>                       |                   |                   |                |          |
| EQUITY                     |                   |                   |                |          |
| Restricted: Indemnificati  | 7,500,000.00      | 7,500,000.00      | -              | 0.00%    |
| Restricted: Lab            | 2,175,759.00      | 5,414,701.00      | (3,238,942.00) | -59.82%  |
| Restricted: Mine Closure   | 1,497,441.53      | 1,462,524.66      | 34,916.87      | 2.39%    |
| Restricted: Sanford Gift2  | 6,569.97          | 15,988.97         | (9,419.00)     | -58.91%  |
| Restricted: Pension        | 1,729,228.87      | 3,160,487.09      | (1,431,258.22) | -45.29%  |
| Restricted: Experim. Int.  | 919,001.75        | 947,577.00        | (28,575.25)    | -3.02%   |
| Restricted: Foundation     | 219.45            | -                 | 219.45         | 100.00%  |
|                            | -----             | -----             | -----          | -----    |
| Total Restricted Funds     | 13,828,220.57     | 18,501,278.72     | (4,673,058.15) | -25.26%  |
| Investment in Gen FA       | 80,282,606.65     | 79,407,869.53     | 874,737.12     | 1.10%    |
| Unrestricted Funds         | 15,412,100.89     | 11,641,381.77     | 3,770,719.12   | 32.39%   |
|                            | -----             | -----             | -----          | -----    |
| TOTAL EQUITY               | 109,522,928.11    | 109,550,530.02    | (27,601.91)    | -0.03%   |
| <br>                       |                   |                   |                |          |
| TOTAL LIABILITIES & EQUITY | \$ 119,789,306.11 | \$ 118,874,849.12 | \$ 914,456.99  | 0.77%    |
|                            | =====             | =====             | =====          | =====    |

## COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/21

|                            | YEAR<br>TO DATE  | PRIOR YEAR<br>TO DATE | \$ CHANGE         | % CHANGE |
|----------------------------|------------------|-----------------------|-------------------|----------|
| REVENUE                    |                  |                       |                   |          |
| DOE Subcontracts           | \$ 23,328,288.07 | \$ 20,106,690.66      | \$ 3,221,597.41   | 16.02%   |
| NSF/NASA Subcontracts      | 1,967.60         | 7,161.47              | (5,193.87)        | -72.53%  |
| State Revenue              | -                | 2,500,000.00          | (2,500,000.00)    | -100.00% |
| Checking Interest          | 944.67           | 1,604.80              | (660.13)          | -41.13%  |
| Interest Income            | 95,656.00        | 111,791.25            | (16,135.25)       | -14.43%  |
| TOTAL REVENUE              | 23,426,856.34    | 22,727,248.18         | 699,608.16        | 3.08%    |
| DIRECT COSTS               |                  |                       |                   |          |
| Direct Labor               | 5,438,664.57     | 4,957,843.08          | 480,821.49        | 9.70%    |
| Board of Directors         | 3,390.56         | 8,467.77              | (5,077.21)        | -59.96%  |
| Capital Outlay >\$5K       | 2,086,818.62     | 1,283,926.61          | 802,892.01        | 62.53%   |
| Contractual Svcs           | 2,401,832.92     | 2,127,779.54          | 274,053.38        | 12.88%   |
| Inventory                  | 114,012.50       | 144,883.57            | (30,871.07)       | -21.31%  |
| Supplies                   | 807,431.14       | 833,034.12            | (25,602.98)       | -3.07%   |
| Travel - Domestic          | 2,941.62         | 17,497.54             | (14,555.92)       | -83.19%  |
| Travel - Foreign           | (149.16)         | 44,007.15             | (44,156.31)       | -100.34% |
| Utilities                  | 1,522,976.14     | 1,448,026.19          | 74,949.95         | 5.18%    |
| Other Direct Costs         | 19,232.45        | 42,293.30             | (23,060.85)       | -54.53%  |
| Unallow/Unbill Costs       | 198,636.02       | 274,580.01            | (75,943.99)       | -27.66%  |
| TOTAL DIRECT COSTS         | 12,595,787.38    | 11,182,338.88         | 1,413,448.50      | 12.64%   |
| INDIRECT COSTS             |                  |                       |                   |          |
| Fringe Benefits            | 4,507,188.60     | 3,984,558.74          | 522,629.86        | 13.12%   |
| Overhead                   | 6,079,638.77     | 5,454,270.40          | 625,368.37        | 11.47%   |
| TOTAL INDIRECT COSTS       | 10,586,827.37    | 9,438,829.14          | 1,147,998.23      | 12.16%   |
| GROSS PROFIT/LOSS ( )      | 244,241.59       | 2,106,080.16          | (1,861,838.57)    | 517.81%  |
| OTHER INCOME               |                  |                       |                   |          |
| Water Treatment            | 182,804.08       | 154,343.19            | 28,460.89         | 18.44%   |
| Miscellaneous Income       | 17,522.50        | 19,187.07             | (1,664.57)        | -8.68%   |
| Other Operating Income     | 34,117.76        | 1,883.79              | 32,233.97         | 1711.12% |
| TOTAL OTHER INCOME         | 234,444.34       | 175,414.05            | 59,030.29         | 33.65%   |
| OTHER EXPENSES             |                  |                       |                   |          |
| Misc. Expenses & Donations | (1,252,355.79)   | -                     | (1,252,355.79)    | 100.00%  |
| Loss (Gain) on Sale of FA  | 58,461.30        | 248,072.86            | (189,611.56)      | 0.00%    |
| Other Unallowable Expense  | 104,196.77       | -                     | 104,196.77        | -100.00% |
| Reclass Incr Net Assets    | (423,191.63)     | (1,145,428.48)        | 722,236.85        | -63.05%  |
| TOTAL OTHER EXPENSES       | (1,512,889.35)   | (897,355.62)          | (615,533.73)      | 68.59%   |
| NET INCOME/LOSS ( )        | \$ 1,991,575.28  | \$ 3,178,849.83       | \$ (1,187,274.55) | -37.35%  |

**South Dakota Science & Technology Authority**  
**Available Resources**  
**2/28/2021**

|   |                            |
|---|----------------------------|
| Cash Total Checking   | \$ 3,393,070               |
| Cash With State Treasurer   | <u>\$ 13,215,218</u>       |
| Total Cash  | \$ 16,608,288              |
| Less: Restricted Funds  |                            |
| Indemnification/Mine Closure/Special Session Lab                          | \$ (11,173,201)            |
| Experiments (Xenon, Interest,Infrastructure)                              | <u>\$ (919,002)</u>        |
| Total Cash Available for Infrastructure Upgrades and Authority Operations | \$ 4,516,085               |
| Plus: Accounts Receivable Billed  | \$ 2,664,562               |
| Accounts Receivable Unbilled  | \$ 132,006                 |
| Less: Current Liabilities (Accounts Payable & Accrued Payroll)            | <u>\$ (2,545,807)</u>      |
| (not including accts. pay. for Experiment funding)                        |                            |
| Available Cash and Receivables  | <u><u>\$ 4,766,846</u></u> |

SDSTA Operating Budget Summary FY2021  
Actual vs Budget  
Feb. 2021 & YTD

|   | Feb. 2021      | Budget         | \$ Over/Under<br>Budget | % of Budget | Actual YTD      | YTD Budget      | \$ Over/Under<br>Budget | % of Budget | % Remaining<br>100% |
|---|----------------|----------------|-------------------------|-------------|-----------------|-----------------|-------------------------|-------------|---------------------|
| SDSTA (Authority) Direct Charges          |                |                |                         |             |                 |                 |                         |             |                     |
| Board of Directors                        | \$18,320.00    | \$22,166.00    | \$3,846.00              | 82.65%      | \$173,289.00    | \$177,328.00    | \$4,039.00              | 97.72%      | 2.28%               |
| Executive Office                          | \$34,818.00    | \$29,734.00    | -\$5,084.00             | 117.1%      | \$289,390.00    | \$237,872.00    | -\$51,518.00            | 121.66%     | -21.66%             |
| Science Center E & O                      | \$0.00         | \$0.00         | \$0.00                  | 0.0%        | \$36,448.00     | \$34,500.00     | -\$1,948.00             | 105.65%     | -5.65%              |
| Science Liaison                           | \$82.00        | \$0.00         | -\$82.00                | 100.0%      | \$722.00        | \$0.00          | -\$722.00               | 100.00%     | 0.00%               |
| Subtotal                                  | \$53,220.00    | \$51,900.00    | -\$1,320.00             | 102.54%     | \$499,849.00    | \$449,700.00    | -\$50,149.00            | 111.15%     | -11.15%             |
| Federal/State Funding - Direct Charges    |                |                |                         |             |                 |                 |                         |             |                     |
| Fermi P.O.#649934 Prof. Services          | \$0.00         | \$0.00         | \$0.00                  | 0.0%        | \$71,762.00     | \$93,972.00     | \$22,210.00             | 76.37%      | 23.63%              |
| Fermi C#630223 Ross Rehab                 | \$120,375.00   | \$126,662.00   | \$6,287.00              | 95.04%      | \$442,097.00    | \$541,852.00    | \$99,755.00             | 81.59%      | 18.41%              |
| Fermi C#654406 Ross Logist.Supp           | \$0.00         | \$142,500.00   | \$142,500.00            | 0.0%        | \$1,168,033.00  | \$1,549,870.00  | \$381,837.00            | 75.36%      | 24.64%              |
| Fermi C#671265 Prof. St.Services          | \$30,220.00    | \$32,000.00    | \$1,780.00              | 94.44%      | \$94,617.00     | \$111,584.00    | \$16,967.00             | 84.79%      | 15.21%              |
| Fermi Misc. Contracts                     | -\$475.00      | \$15,000.00    | \$15,475.00             | -3.17%      | \$25,968.00     | \$94,000.00     | \$68,032.00             | 27.63%      | 72.37%              |
| Office of Science Coop.Agree              | \$1,679,719.00 | \$1,234,027.00 | -\$445,692.00           | 136.12%     | \$9,941,699.00  | \$10,175,531.00 | \$233,832.00            | 97.70%      | 2.30%               |
| LBNL SIGMA-V C#7371823                    | \$17,862.00    | \$25,000.00    | \$7,138.00              | 71.45%      | \$220,733.00    | \$241,000.00    | \$20,267.00             | 91.59%      | 8.41%               |
| LBNL LZExp.Operat.C#7525117               | \$59,652.00    | \$70,000.00    | \$10,348.00             | 85.22%      | \$622,992.00    | \$715,100.00    | \$92,108.00             | 87.12%      | 12.88%              |
| MJD (Majorana) ORNL144149                 | \$1,460.00     | \$2,000.00     | \$540.00                | 73.0%       | \$15,778.00     | \$16,000.00     | \$222.00                | 98.61%      | 1.39%               |
| BHSU-UGCampus Gen.Serv.                   | \$0.00         | \$200.00       | \$200.00                | 0.0%        | \$0.00          | \$1,600.00      | \$1,600.00              | 0.00%       | 100.00%             |
| SDSM&Tech CASPAR Gen.Serv.                | \$0.00         | \$500.00       | \$500.00                | 0.0%        | \$1,266.00      | \$4,000.00      | \$2,734.00              | 31.65%      | 68.35%              |
| * Kiewit/Alberici JV/Thyssen              | \$4,900.00     | \$4,900.00     | \$0.00                  | 100.0%      | \$21,813.00     | \$21,813.00     | \$0.00                  | 0.00%       | 0.00%               |
| Office of Science IIP Projects            | \$118,517.00   | \$200,000.00   | \$81,483.00             | 59.26%      | \$2,571,414.00  | \$2,683,868.00  | \$112,454.00            | 0.00%       | 0.00%               |
| Subtotal                                  | \$2,032,230.00 | \$1,852,789.00 | -\$179,441.00           | 109.69%     | \$15,198,172.00 | \$16,250,190.00 | \$1,052,018.00          | 93.53%      | 6.47%               |
| Indirect Expenses                         |                |                |                         |             |                 |                 |                         |             |                     |
| Indirect Charges Personnel                | \$434,600.00   | \$437,075.00   | \$2,475.00              | 99.43%      | \$3,625,095.00  | \$3,730,149.00  | \$105,054.00            | 97.18%      | 2.82%               |
| Indirect Charges Other                    | \$428,707.00   | \$489,757.00   | \$61,050.00             | 87.53%      | \$3,762,723.00  | \$4,393,469.00  | \$630,746.00            | 85.64%      | 14.36%              |
| Subtotal                                  | \$863,307.00   | \$926,832.00   | \$63,525.00             | 93.15%      | \$7,387,818.00  | \$8,123,618.00  | \$735,800.00            | 90.94%      | 9.06%               |
| Totals                                    | \$2,948,757.00 | \$2,831,521.00 | -\$117,236.00           | 104.14%     | \$23,085,839.00 | \$24,823,508.00 | \$1,737,669.00          | 93.00%      | 7.00%               |
| * Private Corporations (Commercial Group) |                |                |                         |             |                 |                 |                         |             |                     |

SDSTA CAPEX Budget Summary FY21  
Actual vs Budget  
Feb. YTD FY2021

| <u>Budget Area</u> | FY2021 Monthly |               |                      |             | FY2021 YTD      |                 |                      |             | % Remaining |
|--------------------|----------------|---------------|----------------------|-------------|-----------------|-----------------|----------------------|-------------|-------------|
|                    | Actual Month   | Budget        | \$ Over/Under Budget | % of Budget | Actual YTD      | Budget          | \$ Over/Under Budget | % of Budget |             |
|                    |                |               |                      |             |                 |                 |                      |             | 100.00%     |
| Operational CAPEX  | \$ 453,984.73  | \$ 500,000.00 | \$ 46,015.27         | 90.80%      | \$ 3,029,340.38 | \$ 5,068,074.00 | \$ 2,038,733.62      | 59.77%      | 40.23%      |
| TOTAL CAPEX        | \$ 453,984.73  | \$ 500,000.00 | \$ 46,015.27         | 90.80%      | \$ 3,029,340.38 | \$ 5,068,074.00 | \$ 2,038,733.62      | 59.77%      | 40.23%      |

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

| Project #  | Project Description                        | Feb. FY2021   | Budget        | \$ Over/UnderBudget | % of Budget |
|------------|--|---------------|---------------|---------------------|-------------|
| CAP2014-01 | Sanford Visitor Center Displays/Monitoring | \$ -          | \$ -          | \$ -                | 100.00%     |
| CAP2016-03 | LZ Xenon Gas                               | \$ -          | \$ -          | \$ -                |             |
| CAP2019-01 | Maintenance Support Facility               | \$ 453,984.73 | \$ 500,000.00 | \$ 46,015.27        | 90.80%      |
|            | Monthly Totals                             | \$ 453,984.73 | \$ 500,000.00 | \$ 46,015.27        | 90.80%      |

SD Science & Technology Authority  
Operational CAPEX Budget  
YTD FY2021 Actual vs Budget

| Project #  | Project Description                 | Feb. YTD FY2021 | FY2021 Budget   | \$ Over/UnderBudget | % of Budget | % Remaining |
|------------|-------------------------------------|-----------------|-----------------|---------------------|-------------|-------------|
|            |                                     |                 |                 |                     |             | 100%        |
| CAP2014-01 | Sanford Visitor Center Sign/Display | \$ 422.50       | \$ 54,000.00    | \$ 53,577.50        | 0.78%       | 99.22%      |
| CAP2016-03 | LZ Xenon Gas                        | \$ 75,000.00    | \$ 234,000.00   | \$ 159,000.00       | 32.05%      | 67.95%      |
| CAP2019-01 | Maintenance Support Facility        | \$ 2,953,917.88 | \$ 4,780,074.00 | \$ 1,826,156.12     | 61.80%      | 38.20%      |
|            | Totals                              | \$ 3,029,340.38 | \$ 5,068,074.00 | \$ 2,038,733.62     | 59.77%      | 40.23%      |



**Executive Director's Report—Mr. Mike Headley**

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The Executive Director's Report includes the following:

- 8A. Declarations of Surplus Property (lockers, Flygt pump and Baosteel cylinders)—informational, attached.
- 8B. SDSTA quarterly update—informational.
- 8C. Maintenance Support Facility update—presentation by SDSTA Project Manager Ms. Pam Hamilton.
- 8D. Science update—presentation by SDSTA Science Director Dr. Jaret Heise.

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**Recommended Action:**

*Motion to accept the Executive Director's Report as presented.*

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## **DECLARATION OF SURPLUS PROPERTY**

The South Dakota Science and Technology Authority (SDSTA) owns 18 old lockers (14 with three-locker sets and 4 of the two-locker sets), located in the basement of the Education & Outreach Building. Work is being performed to clean up the space for future use. The lockers will be donated to the Lead-Deadwood Economic Development assisting a local developer to establish a locker room-dry for Thyssen Mining.

Having no further use for this property, I hereby declare the 18 lockers to be Surplus Property.

Dated at Lead, South Dakota this 28<sup>th</sup> day of December, 2020.



Mike Headley  
SDSTA Executive Director



Underground Research Facility

South Dakota Science and Technology Authority

630 E. Summit St. Lead, SD 57754

## DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) owns 18 old lockers (14 with three-locker sets and 4 of the two-locker sets), located in the basement of the Education & Outreach Building. Work is being performed to clean up the space for future use. The lockers will be donated to the Lead-Deadwood Economic Development assisting a local developer to establish a locker room-dry for Thyssen Mining.

Having no further use for this property, I hereby declare the 18 lockers to be Surplus Property.

Dated at Lead, South Dakota this 28<sup>th</sup> day of December, 2020.

A handwritten signature in blue ink, appearing to read "Mike Headley".

Mike Headley  
SDSTA Executive Director

Received by DLEDC

Date: 01/04/21

Sign: A handwritten signature in black ink, appearing to read "K. Wag".

Its: Executive Director

W0 355 73  
Surplus lockers

## DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) owns a Flygt pump (Serial No. 2670.780-1070147), which is valued at less than \$5,000. The pump was used underground on the 2600L but is no longer operable and unrepairable. It will be scrapped.

Having no further use for this property, I hereby declare the Flygt pump to be Surplus Property.

Dated at Lead, South Dakota this 28<sup>th</sup> day of December, 2020.



Mike Headley  
SDSTA Executive Director

## DECLARATION OF SURPLUS PROPERTY

The South Dakota Science and Technology Authority (SDSTA) owns 20 empty Baosteel cylinders initially used to store xenon gas (SDSTA tag numbers and serial numbers referenced in attached spreadsheet). Processing of xenon from the 20 cylinders has been completed and SDSTA has no further use for them. The empty cylinders are not suitable for future use and will be sold for scrap.

Having no further use for this property, I hereby declare the 20 Baosteel cylinders to be Surplus Property.

Dated at Lead, South Dakota this 4<sup>th</sup> day of March, 2021.



Mike Headley  
SDSTA Executive Director

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| Vendor   | Liters | acquisition date | Owner | Inventory S/N | Cylinder S/N     |
|----------|--------|------------------|-------|---------------|------------------|
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-11 | 16A045015        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-12 | 16A013024        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-13 | 16A013027        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-14 | 16A045005        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-15 | 16A0B047         |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-16 | 16A013026        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-17 | 16A013038        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-18 | 16A013051        |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-19 | D2549017         |
| Baosteel | 10000  | 8/10/2017        | SDSTA | P7157-2017-20 | 16A013048        |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-01 | 14A014 096 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-02 | 14A014 100 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-03 | 14A014 114 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-04 | 14A014 110 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-05 | 14A014 104 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-06 | 14A014 103 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-07 | 14A014 097 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-08 | 14A014 102 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-09 | 14A014 098 M0810 |
| Baosteel | 10000  | 3/7/2016         | SDSTA | P7159-2016-10 | 14A014 107 M0810 |



**December 2020 – February 2021 Progress Report**  
*Submitted March 17, 2021*

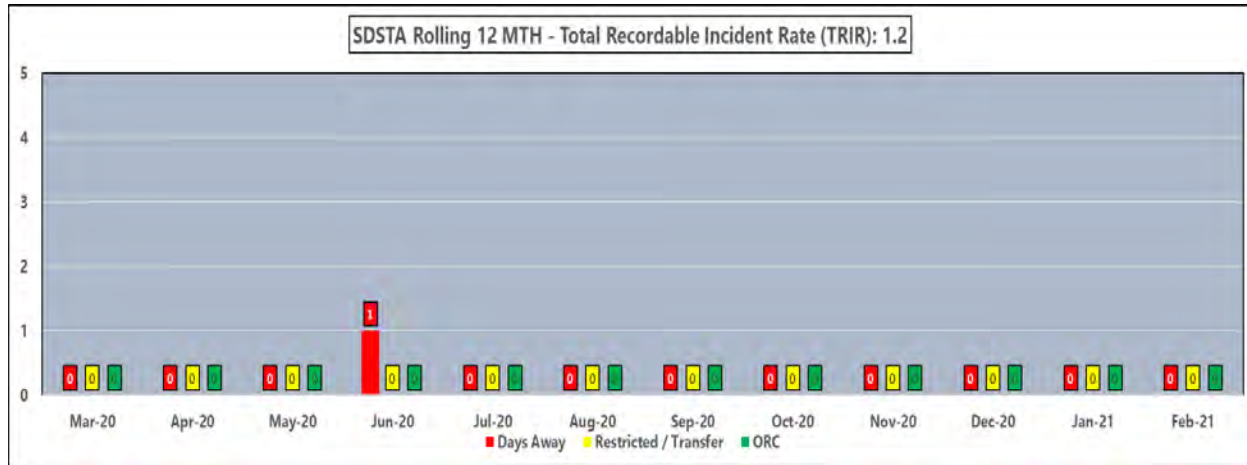
*Submitted to:*  
*South Dakota Science and Technology Authority Board of Directors*

*Mike Headley*  
*SDSTA Executive Director*  
*Sanford Underground Research Facility Laboratory Director*



## **Environment, Safety and Health (ESH) Status**

### **Safety and Health Status**



### **December 2020 - February 2021 DARTS/TRC**

- No events to report.

### **December 2020 - February 2021 First Aid Cases**

- 12/08: Researcher ~ scratch to elbow, medical evaluation by occupational health nurse and a band aid applied.
- 01/19: SDSTA ~ cut on finger and a band aid applied.
- 02/24: Researcher ~ contact injury to the back while assisting with unloading experiment material, medical evaluation by occupational health nurse and an ice pack applied.

### **December 2020 - February 2021 Category 1 or 2 Events**

- No events to report.

### **December 2020 - February 2021 Category 3 Events**

- No events to report.

### **ESH Support**

- Environmental Manager John Scheetz will retire early summer after 13+ years of service with SDSTA. John also worked at Homestake Mine from 1996–2002. The Environmental Manager position has been filled by Timm Comer, and onboarding started on March 8.

### **Work Accomplishments**

- ESH Chapter updates:
  - ESH Training Chapter was approved by the Change Configuration Board.
  - Disablement and Impairment Chapter is in final internal director's review.
  - Severe Weather Chapter is in final internal director's review.
- Updated and implemented the ESH weekly walkthrough process on the 4850L (shared spaces).
- Conducted an internal ISO audit of the Yates Shaft.
- Discussions with Caterpillar (CAT) and their subcontractors Business Acumen Consulting (BAC) and Thyssen Mining Inc (TMI) to align on incident causes/investigations, corrective actions and to maintain greater levels of control with all future activities.
- Performed over 297 respirator fit tests for staff and stakeholders.
- Implemented changes reflecting updated CDC guidance for fully vaccinated persons and quarantine recommendations
- Hosted pre-audit two-day visit by ISO Registrar.

- Procured 45 Ocenco EBA 6.5 Self-Contained Self-Rescuers (SCSR) to replace units at specific underground locations.
- Presented annual Safety and Support Perception Survey at the January 21 All Hands Meeting.
- Continued to develop proposal for application of remote stench release stations.
- Presented SDSTA/ESH Hoisting standards to CERN.

### Upcoming Activities/Trainings

- Provide information to staff at meetings and toolbox talks on COVID-19 vaccines and address any questions; post information to Bridge.
- Finalize new SURF Underground Orientation Training video after review.
- Initiate Emergency Response Team (ERT) Competition Training Program.
- Begin Ross Hoist Operational Training.

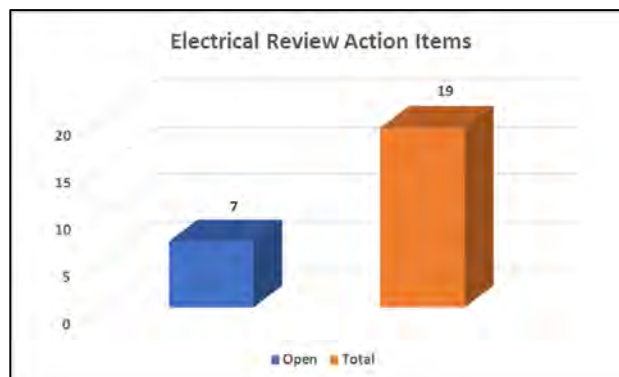
### Wellness Initiatives

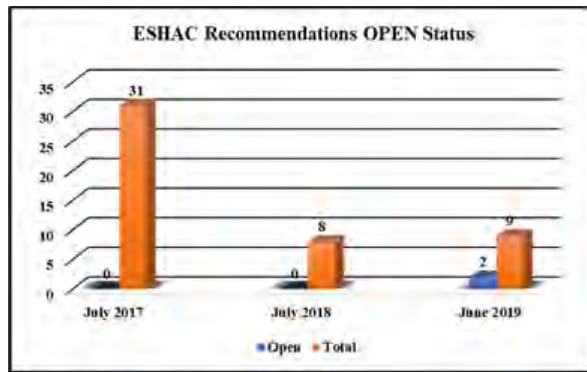
- December 2020 ~ 12 Days of Gratitude Initiative.
- Spring 2021 ~ Preparations underway for onsite Blood Drive.

### Environmental Support

- The Tramway sewer line froze which caused several couplings to fail in the Tramway and released sewer water. Repairs were completed and the contaminated section (approximately 1000-feet) was disinfected. The state and the City of Lead were notified as a courtesy.
- Annual wastewater treatment plant (WWTP) permit, sampling and laboratory compliance training was provided to the WWTP operators.
- The monthly Discharge Monitoring Reports were prepared and submitted to the state. There were no compliance issues. The state is preparing a revised permit that should be issued in February or March 2021.
- The Historical Preservation Annual Report required by the DOE Programmatic Agreement - Stipulation 1 was prepared and submitted to the tribes and other officials.
- ISO Environmental Aspects were prepared for the pre-assessment audit.
- The Tier II report was prepared and submitted to South Dakota Department of Environment and Natural Resources (SD-DENR), the Local Emergency Planning Committee and the Lead Fire Department.
- The Water Rights Annual Report was prepared and submitted to SD-DENR.
- The 1700L (Thyssen work area) was inspected/reviewed for environmental concerns.
- The Thyssen Environmental Plan for the Caterpillar Project was reviewed and comments submitted.
- The Thyssen Environmental Plan for LBNF was reviewed and comments submitted.

### Third Party Review Recommendations Status





(\*No ESHAC Reviews conducted during 2020)

## **Surface and Underground Operations Status**

### **Yates Shaft**

#### **Work Accomplishments**

- A total of 853 loads were handled through the shaft from December 1 through February 28, 2021.
- The crews completed 965 corrections which include guide replacement, bolting of a panel and replacing timber.
- Top Down Maintenance (TDM) activities were halted during this time period due to downtime for the planned Ross hoist upgrade installation.
- Guide replacement took place as time allowed.
- Regular shaft inspections occurred.
- Air door and water wall inspections also took place at every station.
- Due to COVID-19 restrictions, cage capacities continued to be limited.

#### **Upcoming Activities**

- Continue guide replacement and TDM below the 4100L in the cage compartment after MG-set work is complete.
- Install guides in the South cage compartment.

### **Underground Hazard Mitigation**

#### **Work Accomplishments**

- Crews completed work on Phase #1 of the Water Wall Infrastructure Improvement Project.
- Maintenance and legacy pipe removal continued on the 1700L.
- Crews assisted in mobilizing the core driller for SIGMA-V and continued installing remaining ground support.

#### **Upcoming Activities**

- Begin Phase #2 of the Water Wall Infrastructure Improvement project once access is regained in the Ross Shaft.
- Continue maintenance and pipe removal on the 1700L.
- Continue advancing SIGMA-V project on the 4100L.

### **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 and some replaced to ensure any low oxygen events are detected and alarm notifications are sounded.
- CASPAR decommissioning planning continued. Commenced SIGMA-V drilling activities on the 4100L.

#### **Upcoming Activities**

- Support upcoming CASPAR activities.
- Continue support to LZ outfitting.
- Plan for chiller #3 replacement.

## 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, 1,500 pounds of spent batteries were gathered and 26 gaylords of material were shipped off site. An additional 14 gaylords were filled with recycle material.
- The Ross Complex waterline upgrade project is completed.
- The Yates Cage Hoist Motor Generator refurbish project is completed.
- Storm water discharge areas throughout the site were inspected and repaired.
- To date 2,117 items have been added as “assets” to the asset management system (ManagerPlus).

### Upcoming Activities

- Perform preventive maintenance activities—ongoing.
- Assist with logistics associated with Headframe Security Upgrades.
- Continue to support the construction of the new Maintenance Facility.
- Migrate and upgrade ManagerPlus to the cloud.
- Participate in Hoist Operator and maintenance training on new systems at the Ross Hoist.

## Dewatering

### Work Accomplishments

- Performed preventative maintenance on pumps and pumping apparatus.
- Completed installation of the air-lines to three new refuge chambers on the 1250L, 2450L and 5000L; monitoring continues.
- Replaced a sump pump on the 2600L.
- Repaired valves on the pressure reducing stations in both Yates and Ross Shafts.

### Upcoming Activities

- Continue scheduled preventative maintenance activities.
- Continue to work with UMC to install a two-inch air-line to the 4850L Refuge Chamber.
- Continue to assist FRA/KAJV with relocation and temporary installation of water lines.
- Continue planning and preparations for the Yates sump pump vertical discharge line.
- Plan and begin preparations for a pump change out on the 3650L pump room.

## Waste Water Treatment Plant (WWTP)

### Work Accomplishments

- At the end of February, the water level in the underground pool was at 5,958 feet—net gain in water level for the quarter was 68 feet. Underground water infiltration continues to maintain at approximately 230 GPM. A large portion of the infiltration was captured on the 2000L and pumped to the surface thereby reducing the amount of water that normally would report to the deep 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 for the quarter. The WWTP has not discharged any water to the sanitary sewer for over four years. The team continues to balance water sources to manage temperatures.
- In cooperation with Barrick, for ongoing summer operations, the WWTP passed the first quarter Whole Effluent Toxicity (WET) test.
- The WWTP team fabricated and installed an additional filter to pre-clean the water collected from ground infiltration and backwash water from existing filters. This has exceeded expectations and this water is being recirculated into the WWTP with positive effects.
- Last quarter, the WWTP Operators relocated the electro-winning process to another location in the WWTP. It has allowed easier access for the MJD experimenters and relocation has proven to be a success.

### Upcoming Activities

- Continue to monitor and sample the underground wastewater treatment plant located on the 4850L.
- Continue neutralizing acid from the MJD experiment.

- Continue SURF grounds maintenance.
- Enhanced turbidity in the underground water has increased the number of backwashes in the Yardney filters to twice daily.

## **Transportation and Mobile Equipment**

### **Work Accomplishments**

- The team performed vehicle preventative maintenance actions and repairs to fleet vehicles.
- Underground locomotives, support equipment including air compressors, loaders and rail cars were maintained.
- Snow removal equipment has been serviced and inspected for use this winter.

### **Upcoming Activities**

- Continue repairs on the walk behind skid steers and two-yards loader located on the 4850L.
- Disassemble the Fletcher Bolter, relocate to another level and reassemble.
- Monitor the Ingersoll Rand air compressor at the Ross Headframe.

## **Electrical and Cyber Infrastructure**

### **Work Accomplishments**

- The team continues to 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**

- Continue camera replacements to the pump rooms and the WWTP.
- Continue to assist with the Oro Hondo variable frequency drive troubleshooting.
- Replace and install additional fiber optic cable in the Ross and Yates Shafts on the 800L, 1700L and 4100L.
- Plan and develop temporary power for the Ross Headframe area to support air compressor upgrades.

## **Engineering Support**

### **Work Accomplishments**

- Managed the changeout of the Ross Cage and Skips. This completes the upgrades to the Ross Shaft conveyances required to support LBNF construction operations.
- Evaluated respondents to the Yates Shaft Rehabilitation Feasibility Study RFP (Request for Proposal) and made recommendations to DOE for the qualified architecture/engineering (AE) firm to be awarded a contract.
- A draft plan for conducting Yates Shaft NE corner TDM (top down maintenance of the utility and runabout compartments) was generated in late February. Appropriate tools, mobile platform access, utility guarding, project scheduling and updates to Standard Operating Procedures (SOPs) and Job Hazard Analyses (JHAs) are progressing to support starting this work in the Summer 2021.
- Ross/Yates Hoist Room Building Roof Drains & Tuckpointing design package was re-scoped, and awarded to TSP, Inc to perform design work for both the tuckpointing and the hoistroom building roof drain piping. A project design package was submitted to DOE for technical review and approval.
- The contractor for the Ross/Yates Headframe Security project mobilized in late February and work is progressing on door foundations/stoops prior to the arrival of doors later this spring.
- A 4850L Laboratory Expansion Feasibility Assessment RFP package was developed and issued to a qualified AE firm. The scope includes review of SDSTA's 4850L lab expansion plans and to generate recommended next steps coupled with budgetary costs and schedule.
- Yates Cage Hoist Motor Generator Set Refurbishment completed all installation and commissioning.
- Davis Campus Chiller #3 Replacement was awarded and mobilization for late March installation underway.
- Ross Complex water line project completed all alignments and final connections ahead of schedule. The system is fully operational providing code compliant firefighting capabilities on the Ross Complex.
- The new Ross compressor building was delivered onsite. Once hookups and testing are completed, this will become the primary means of supplying compressor air in the Ross Shaft and underground campus.

- 3650L Pump Room Rehabilitation Design Scope Of Work was completed and issued to a local design firm. The cost proposal is under review.
- Brattice repurposing drawings that will provide additional protection around some Ross stations were completed.
- Eleven waterwalls were completed as part of Phase I of the Water Inflow Recap project. Phase II, which will focus on walls located near the Ross Shaft, has been submitted to DOE for execution approval.
- A kick-off meeting was held for the reactivation of the Davis Campus Extensometer Array project. These systems will be used to monitor seismic activity during LBNF blasting and excavations operations.
- A revised E-Cable design standard was prepared and approved to address Low Smoke Zero Halogen (LSZH) requirements for cable used underground.

## **Science Support Status**

- The Snowmass high energy physics strategic planning process has been postponed by one year due to COVID-19. In addition to the initial Letter of Interest, SURF is planning to submit a whitepaper, now due in March 2022.
- The SURF User Association Executive Committee officers were selected in January (chair and secretary) and the first quarterly meeting was held in February. Topics included additional underground laboratory space (aspects of SURF's 15-year strategic plan were presented) as well as SURF's participation in the Snowmass process and how the User Association could help. Other issues related to COVID and additional access were also covered.
- Facility highlights: During the current window of reduced LBNF activities on the 4850L, custodial support resumed at the Ross Campus; orientation/Guide walks were also conducted by Science Department personnel. The full set of LBNF blasting document was uploaded to the SURF electronic document repository. Corrosion levels observed during LBNF 4850L blasting were slightly elevated but similar to some pre-blasting values; regular monitoring continues. Davis Campus radon concentrations were ~3x higher than normal when the Yates Shaft was covered for several days due to cold and risk of ice in the shaft (there were no significant issues with experiments); the Ross Shaft was not covered, and no increase was observed at the Ross Campus.
- Interruptions: There were access interruptions December 15 (due to Yates hoist maintenance) and January 14 (due to high wind). The Davis Campus dehumidifier is operating at ~50% performance while a new motor is being ordered by the service contractor; impacts to experiment groups has been minimal. A Ross Campus chiller outage due to LBNF construction in mid-January was accommodated by CASPAR. Liquid nitrogen supplies dipped low in February due to vendor transportation challenges related to the cold weather.

## **LUX-ZEPLIN—LZ**

- Following a significant number of limited circulation tests and sampling, cooldown of the detector with xenon (Xe) progressed from room temperature to 185K (-88 degrees C) over several weeks. A number of system checks will be performed (including photomultiplier tubes (PMTs) and the inline radon-removal system) before the first Xe liquifying trials begin in about a month.
- In the past quarter, there was significant progress with installation of outer detector systems, including PMT mounting structures ("ladders") and reflective Tyvek. Outer detector PMT installation inside the water tank was 85% complete by the end of February and is expected to finish in early March with all 120 PMTs.
- A shipment of two Xe packs containing 1943 kg of Xe (including SDSTA-purchased Xe) was delivered to SURF and successfully transported underground in late February. Shipments will occur roughly monthly.
- The calibration source injection panel was installed and is largely integrated into the circulation system. Initial calibration activities using the panel with gaseous sources are planned during the Xe gas phase in March.
- The compressor head was re-installed in the Xe recovery compressor at SURF. Quality Assurance checks have been completed and commissioning is underway.
- Final commissioning of the two cryocooler units in the Davis Campus was completed with onsite support from the vendor.

## **MAJORANA DEMONSTRATOR—MJD**

- Shielding improvements were made to the system used to characterize LEGEND-200 enriched germanium detectors at SURF. Characterization work continues using gamma-ray and alpha calibration sources.
- In early March, the collaboration marked the end of production data taking that started in June 2015. Final detector calibrations were performed, detector high voltage was turned off and systems began warming.
- Personnel from a number of institutions will begin the removal of enriched germanium detectors over the course of 3-4 weeks starting in mid-March. In preparation for the work, tests were performed with the compressed air

system used to move modules (with lead shielding) in the laboratory. Once the enriched detectors are removed, background and systematic studies will continue through 2021 with natural germanium detectors.

- Three baths continue copper electroforming, and a new mandrel was set in February to begin new growth.
- Coordination is advancing for the upgrade of the Davis Campus dehumidifier; MJD has the strictest environmental requirements and will be the most affected.
- A virtual tour of MJD was conducted in January for Office of Science Director Chris Fall (re-scheduled from December).

## **Low-Background Counting**

Black Hills State University Underground Campus—BHUC:

- Of the eight germanium crystals tested for six low-background counter (LBC) systems over the past quarter, two crystals remain offsite at their respective vendors for maintenance.
- Coordination between groups in the shared Davis Campus space is working well with significant support from SDSTA custodians. By the end of February, assembly was complete for four LBCs, including construction of the lead shields, which required transport from surface storage. Three systems are currently collecting background data and the fourth is expected to come online by mid-March. Sample counting is expected to begin in March.
- The nEXO Ge-IV LBC was damaged at the vendor. A new endcap (plus a spare) are being fabricated following successful assays of the material. The system is now expected to return to SURF in April. Re-design for a damaged Ge-IV lifting beam used to manipulate shielding components is advancing at the University of Alabama.
- The second of two detectors for the Lawrence Livermore National Lab (LLNL) dual-crystal system may also return to SURF in April.

## **SIGMA-V**

- Mapping, surveying and laser scanning at proposed 4100L drilling locations were performed in late December and early January.
- Drilling contractors began mobilizing equipment underground and started drilling new holes on the 4100L in January. By the end of February, two new holes (60 m deep, 96-mm diameter) were completed at the first of three sites. In early March, equipment was relocated to the second drilling site and drilling resumed. Work to drill nine holes at three locations expected to last until May 2021.
- Emergency egress training was performed for the route between the 4100L and 4850L via the ramp due to Ross hoist maintenance that started in January.
- A local engineering firm has been contracted to help with core logging and upcoming hole logging activities.
- Issues with the pressure monitoring and relief system for the existing 4100L holes led to an unexpected pressure release. There were no injuries, and components being analyzed by engineers at Pacific Northwest National Lab (PNNL).

## **Compact Accelerator System for Performing Astrophysical Research—CASPAR**

- Use of the neon-22 gas target involving the accelerator alpha beam started in February with neutron measurements. Coverage with extra-long shifts to accommodate the required shift overlap was managed under the SURF fatigue management policy.
- Neon-20 gas target data were also collected for background studies supporting the main Ne-22 data analysis.
- With gamma-ray reactions complete, the sodium iodide detector array was transported to the surface in January with SURF assistance, and it ultimately successfully received at the University of Notre Dame.
- The schedule for remaining data-taking activities still points to a March 21 completion date.
- Discussions are underway regarding mothballing equipment in the 4850L Ross Campus laboratory. A modest amount of equipment (including one high-value germanium detector) will be transported via the Ross Shaft starting late March and wrapping up in early April.
- SDSTA personnel developed a cost estimate for a 2300L (2100 m.w.e.) site for the CASPAR/DIANA National Science Foundation (NSF) mid-scale research infrastructure pre-proposal due in January. The collaboration expects to receive feedback in March about whether they will be invited to (re-)submit a full proposal (due April) with a maximum award of \$20M.

## Other Current Research Activities

### Physics

- TESSERACT: Discussions resumed with representatives of this low-mass dark matter project to allow project engineers to begin initial design work for a detector at the Davis Campus (installation timeframe is FY23-24).

### Geology

- GEOX™: In conjunction with SDSTA operations personnel, representatives installed a battery-operated airflow monitor on the 4850L near a raise that connects to the main Oro Hondo ventilation circuit.

### Engineering

- Thermal Breakout: With access to the 4850L West Drift restricted, the group began to focus on 4100L locations, including synergies with SIGMA-V. Heating tests were conducted in existing SIGMA-V holes in early January. Arrangements have been made to drill three additional holes on the 4100L starting in late May. SURF provided support letter for a new DOE funding opportunity to support additional drill holes on 4100L.
- Xilinx: There are no plans for chip array testing at SURF for at least one year.
- Other: A post-blast monitoring proposal from SD Mines is being reviewed by SDSTA and LBNF personnel.

## Contract-to-date Work Plan Variances

- Underun shows \$1.2 million in the first 17 months of the 5-year plan. There is a spend plan in place to address this underrun.

## Financial Status

Included in the Financial Report are the following:

- Cooperative Agreement (CA) SURF Services FY2021 (federal fiscal year) SPA Curve as of February 2021 (included as Appendix B at the end of the report)
- Financial Summary (included as Appendix C at the end of the report)
  - 1) Balance Sheet as of February 2021
  - 2) Comprehensive Statement of Income February 2021
  - 3) Comparative Balance Sheet – February 2021 vs. February 2020
  - 4) Comparative Statement of Income – February 2021 vs. February 2021
  - 5) Available Resources as of February 2021
  - 6) Operating Budget Summary
  - 7) CAPEX February 2021 Budget Summary
  - 8) February 2021 and YTD CAPEX Budget – actual vs. budget

## **CA SURF Services FY2021 Scheduled Performed Actual (SPA) Curve**

- This graph represents an analysis of the CA-SURF Services Award No. DE-SC0020216 scheduled funding compared to actual. The report shows funding through September 2021 along with information related to Funded-to-Date dollars, Scheduled dollars, Performed dollars and Actual dollars by month. Actual dollars represent actual invoices for the months sent to the DOE Office of Science for reimbursement. For February, the invoices totaled \$2,298,803 which is higher than the anticipated reimbursements of \$1,809,569 by \$489,234. Cumulative expenses are at \$29,914,543 which is lower than the budgeted \$31,171,700 by \$1,257,157. The year-to-date underrun is due in part to not hiring as planned and not purchasing supplies and fewer contractual items during the COVID-19 shutdown in March/April 2020. Yet, in the last few months we are on track as to our large projects, purchasing, and hiring as necessary.

## **Balance Sheet Items**

- Cash in Local Checking—Total on hand at February 28, 2021 was \$3,394,491; down from last month by \$215,070. Funds on hand were necessary to pay employee medical/life/vision insurance due March 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 \$13,215,218. This balance has decreased from last month by \$492,911 as that amount was drawn down during February.

- Billed Accounts Receivable (A/R)—Billed A/R represents any open invoices based on contracts from sources such as LBNL, Fermilab, other smaller contracts from other universities and Barrick-Homestake Mining Company. Total is at \$2,664,562; up from last month by \$811,840. Included in the balance are open invoices to LBNL for \$232,004; representing invoices for the LUX-ZEPLIN (LZ) experiment support contract and the SIGMA-V experiment support. Additional open invoices include \$599,058 from Fermilab primarily from the SURF Services subcontract, the Ross Shaft Rehabilitation work and a contract for Ross Shaft Logistics Support. Furthermore, the open balance from the CA is at \$1,810,354. Additionally, there are open invoices for \$5,452 from small university subcontracts, and \$17,694 from Barrick/Homestake and Thyssen Mining.
- Unbilled A/R—Balance at \$132,006. Unbilled A/R represents items that have not been billed on various contracts. February's balance has decreased by \$240,341. The payroll from pay end date February 26, (paid on March 5, 2021) was not invoiced in February on various contracts. The amounts will be invoiced in March.
- Other A/R—Current balance of \$814,642. This balance represents any Interest Receivable and Miscellaneous Accounts Receivable. The balance increased by \$11,013. This balance includes the adjusting entry on the unrealized appreciation on undistributed earnings on the funds held with the State as of June 30, 2020. Activity for this month includes recording the interest accrual for February.
- Inventory/Supplies—Balance at \$3,337,211, for fixed assets being stored but not in service and the warehouse inventory purchased with federal funds. This balance has increased by \$241,665 for the purchase of a replacement Deep Well Pump from Hydro Resources that has not been put into operation.
- Inventory Warehouse/Personal Protective Equipment (PPE)—Current balance of \$27,330. This balance represents the warehouse inventory that was purchased by SDSTA prior to federal funding. The balance has decreased by \$453 for inventory usage during the month.
- Other Current Assets—This listing on the balance sheet represents the balances of both prepaid insurance—\$951,316 and prepaid other—\$14,368. Total balance of \$965,684 is lower from last month by \$108,126. This decrease includes our monthly insurance expense and the expensing of various prepaid items in February.
- Fixed Assets—Current balance of \$80,282,607. Fixed assets activity since my last report includes a decrease of \$339,725 to the category labeled (Equipment & Fixtures). This represents the net costs of the Ross Cage and Ross Work Deck and various small equipment associated with these two items that were recently replaced with new items purchased by Fermi Research Alliance. Additionally, there was an increase of \$383,815 to the category labeled (DOE Property Transfer). This includes a variety of fixed assets that were purchased on federal funds through the CA. The net decrease of \$167,612 since last month includes depreciation. Depreciation for the DOE Property Transfer items is separated as this amount will not be included in our indirect cost recovery on contracts.
- Work in Progress—This balance of \$3,029,340 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 \$453,984 from the previous month due to the construction on the Maintenance Support Facility (MSF).
- 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 \$2,995,815 created by FY2020 final entries. The balance has decreased from the previous year by \$948,093.
- Xenon Purchased—Balance of \$8,930,401 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 2020. The balance decreased from last month by \$3,949 for 730 liters of xenon that escaped from one of the cylinders from Baosteel since it arrived in August 2017. We have received all the xenon shipments that were requested.
- Total Assets—Total of \$119,789,306. This balance has increased from last month by \$290,041 which represents the net activity as listed above.
- Accounts Payable—Our Total Accounts Payable balance of \$1,204,623 at the end of the month compared to last month has decreased by \$290,435. Last month's balance included owing \$164,395 for Prepaid Insurance and \$116,306 to RCS. Construction for the Ross Water Line Project This month's balance no longer has those two liabilities.
- Accrued Payroll Liabilities—Current balance of \$1,795,169 has increased slightly by \$25,301 from last month. This represents the net change between earned vacation and vacation taken and other changes in employee benefit-related liabilities. Also included is the accrued payroll from February 26 that was paid in March.

- 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 was 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 \$1,266,586 represents our portion of the difference between projected and actual earnings on pension plan investments with the South Dakota Retirement System.
- Total Liabilities—Total Liabilities decreased by \$265,134 (from \$10,531,512 to \$10,266,378), which reflects the net activity listed above.
- Total Equity—Increase to \$109,522,928 from the previous month \$108,967,752.
- Total Liabilities & Equity—Increase to \$119,789,306 from the previous month of \$119,499,265.

#### 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), the CA with the DOE Office of Science, as well as a small contract for the Majorana project with Oak Ridge National Laboratory. Total revenue through February is \$23,328,288 (increase from January of \$2,989,876).
- National Science Foundation (NSF)/National Aeronautics & Space Administration (NASA) Subcontracts—Total revenue through February 2021 from this funding is \$1,968 (no increase from February). The balance represents revenue from the South Dakota School of Mines and Technology (SDSMT) for CASPAR.
- Interest income recorded for the current fiscal year on State Funds is at \$95,656. 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 \$12,595,787 for the current fiscal year. Indirect Costs including fringe benefits are at \$10,586,827. Costs are slightly lower than revenue by \$244,241.
- Other Income is at \$234,444 which primarily represents miscellaneous income received from Kiewit/Alberici, Thyssen Mining and small amounts from Barrick.
- Miscellaneous Expenses and Donations is at \$(1,252,356) for the capitalization of the DOE Warehouse inventory of \$238,782 and the fixed assets of \$1,013,574 that were purchased on federal funds through the Cooperative Agreement.
- Net income through February after Reclass Increase in Net Assets is at \$1,991,575.

#### Comparative Balance Sheet

- Total in Local Checking is higher by \$1,257,305 due to receiving more funds from contracts in Accounts Receivable when comparing the two time frames. We are receiving our payments on the CA on a much quicker basis than from our other contracts.
- Total Cash with State Treasurer is lower by \$3,077,395 from this time last year as we have used funds for the construction of the MSF along with using Experiment funds for xenon related expenses.
- Inventory-Supplies is higher by \$1,027,532 when comparing the two time frames, due to including equipment purchased on the CA federal funds that has not been put in service. Also included is the Warehouse Inventory purchased on federal funds. Additionally, various equipment associated with the Ross Cage and Work Deck were put in storage for possible future use.
- Fixed Assets are higher by \$874,737 when comparing the two time frames, particularly due to including the fixed assets purchased on the CA federal funds.
- Work in Process has increased by \$1,272,009 when comparing the two time frames, primarily due to the increase in work performed on building the MSF.
- Pension Deferred Outflows is lower by \$948,094 due to fiscal year 2020 entries.
- Xenon Purchased has increased by \$766,051 for the final purchases of xenon made during fiscal year 2020, along with a small decrease due to the 730 liters of xenon that leaked from one of the vessels.
- In summary, Total Assets have increased by \$914,457.
- Total Current Liabilities are slightly higher by \$458,894 when comparing the two-time frames. Accrued Payroll Liabilities are higher.
- Other Liabilities - Pension Deferred Inflows have also increased for fiscal year 2020 entries; increase of \$483,165.

- Total Restricted Funds are lower due to the use of these funds for related expenses. Restricted: Foundation has been added to our Balance Sheet for funds transferred from the SURF Foundation.
- Unrestricted Funds are higher when comparing the two-time frames. Additionally, Investment in General Fixed Assets is higher than this same time last year.
- Total Equity has decreased slightly by \$27,602 from this time last year.
- In summary, Total Liabilities & Equity have increased by \$914,457.

### **Comparative Profit/Loss**

- Total Revenue for year-to-date February 2021 compared to year-to-date February 2020 has increased by \$699,608. Direct Costs and Indirect Costs for year-to-date February 2021 compared to this time last year show a combined increase of \$2,561,447 (a 12.4 percent increase). This is primarily due to the increase in personnel as well as an increase in projects (IIP). Net Income/Loss for the comparative time periods shows a decrease in income of \$1,187,275, primarily due to not receiving GOED funds this year.

### **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 reflects our available cash and (short term) accounts receivable as compared to our current liabilities including accrued payroll liabilities. After noting our current obligations, \$4,766,846 is available. 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, and Commercial funded activities and Indirect expenses that benefit various activities. Total operating expenses are over budget for February by \$117,236. This is primarily due to receiving approval to invoice for the purchase of the spare Deep Well Pump which was purchased in an earlier month.
- Year-to-date figures are under budget by \$1,737,669.

### **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 FY2021 are budgeted at \$5,068,074.
- 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. All xenon has been received. Remaining expenses relate to interest expense for the three foundations.
- The MSF is progressing with Dean Kurtz Construction. A change order to the contract with Dean Kurtz has been negotiated enabled by a Construction Manager at Risk (CMAR) contract that was signed. On CAPEX projects, \$453,985 was spent in February with a budget for the month of \$500,000. Year-to-date, \$3,029,340 has been spent on all three projects.

### **Human Resources**

There are currently 181 full time employees and 10 temporary staff, primarily Emergency Response Team members. New hires for February include Director for Hoists & Shafts Wendy Straub, Education & Public Relations Director and IDEA Program Manager Debra Wolf, Business Services & Contract Manager William (Bill) Kelly and Multimedia Specialist Adam Gomez. SDSTA Engineer Jacob Davis has been selected to fill the position of Deputy Director for Surface Operations & Utilities. The Environmental Manager position has been filled by Timm Comer who started March 8. He is replacing John Scheetz who will retire in June. Infrastructure Technician Daniel Cornelius started March 8. An additional Infrastructure Technician Justin Streeter and IDEA Program Lead Rochelle Zens will start in late March. Current positions being recruited include: IT Support Technician, Network Engineer and Senior Contracts Specialist. IT Manager Debra Meyer will retire in early summer and the position is also being recruited.

**Ross Shaft Rehabilitation - Subcontract No. 630223  
and  
Ross Shaft Logistics Support – Subcontract No. 654406**

## **Ross Shaft Rehabilitation**

### Work Accomplishments

- Installed and commissioned new cage and skips.
- Installed brattice at stations and in the headframe to support skipping activity.
- Installed new guides in counterweight and skip compartments in the headframe.

### Upcoming Activities

- Complete Tiley punch list items in the Ross Shaft.
- Support hoist and shaft commissioning.
- Transport KAJV for skip loader commissioning.
- Skip rock out of the Ross Shaft for the first time in nearly 20 years!
- TMI Mobilization to the 3650L for raisbore activity.

## **Professional Staff Services - Subcontract No. 607915**

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

- The Engineering team is Supporting the mobilization and kickoff of the Ross Hoist Drives/Brakes/Clutches rehabilitation project. Technical and project management support is being provided to FRA in performing the extensive upgrade to the hoisting systems.
- Following multiple failures of antiquated systems at the Ross substation including differential protection relays for 12kV transformer, vacuum circuit breaker for Ross cage hoist and 69kV circuit switcher, extensive reverse engineering is being performed to develop a plan of action for repairs.
- A DUNE detector consortium group has been established to design the detector networking, communications, control and data acquisition systems. The Engineering team is participating in bi-weekly meetings to represent SURF and FRA conventional facilities.

**LZ - Subcontract No. 7255146**  
**LZ Operations - Subcontract No. 7355146**

## Other Experiment Support

### LUX-ZEPLIN (LZ)

- Welding of the Xe circulations lines has been completed and circulating Xe through the system began in December. In early February, the cryogenic system was utilized to begin the detector cool down.
- In late February, two additional packs of Xe arrived and were transported to the Xe Storage Room.
- On the Outer Detector, a Tyvek “teepee” was constructed on top of the detector to help detect any Gadolinium-Loaded Liquid Scintillator (GdLS) leaks and the outer PMT ladder and PMT installation was completed. The water tank was sealed to “light tight” to make this possible and the plumbing for Liquid Scintillator (LS) fill system is completed.

## **Indirect Funded Activities Status**

## **Contracts Status**

### **Department of Energy (DOE) subcontracts to SDSTA**

US Department of Energy, Office of Science

- SDSTA submitted proposals to DOE for supplemental funding for three IIP projects, *Water Inflow Replacement – Phase II, Yates Shaft Feasibility Study* and *Ross/Yates Hoistroom Roof Drain Piping & Tuckpointing*, along with a supplemental proposal for *Ross Shaft Additional 5% Crew Effort*.
- DOE approved a rebudgeting request to accommodate the purchase of a spare Deep Well Pump system. A request to rebudget funds to replace an end-of-life telehandler was submitted to DOE for approval.

Fermi Research Alliance

- SDSTA submitted a proposal in response to RFP No. 7746 – LBNF US Logistics Support. A new contract is expected to begin 4/1/21 to replace the current Logistics Subcontract, which was extended through 3/31/21.
- SDSTA received Supplemental Agreement (SA) No. 9 to extend Subcontract No. 658475, Oro Hondo Fan Reconditioning Support, through 3/31/21. SDSTA also received CARES Act authorization through SA No. 5 to No. 654406, Ross Shaft Logistics and SA No. 35 to Subcontract No. 630223, Ross Shaft Rehabilitation.

Oak Ridge National Laboratory

- SDSTA received modifications No. 10 and 11 to the Majorana Subcontract No. 4000144149, adding final costs and incorporating SDSTA's new indirect cost and fringe rates prior to close-out. This subcontract was replaced with a new Subcontract No. 4000185715.

Lawrence Berkeley National Laboratory

- SDSTA received funding modifications for Subcontract No. 7371823, SIGMA-V and Subcontract No. 752117, LZ.

### **Summary of Contracts Awarded by SDSTA in December 2020 – February 2021:**

| <b>Contract No.</b> | <b>Contractor/Vendor</b>       | <b>Type</b> | <b>Project</b>                              |
|---------------------|--------------------------------|-------------|---|
| <b>2015-13</b>      | Stone Land                     | CO#11       | Extend contract to 12.30.2021               |
| <b>2015-30</b>      | Baker Timber                   | CO#6        | Extend contract to 12.30.2021               |
| <b>2019-37</b>      | Hydro Resources                | CO#3        | Extend contract to 12.18.2021               |
| <b>2019-29</b>      | CVD                            | CO#28       | Disposal of 6 barrels                       |
| <b>2019-44</b>      | Ventilation Innovation         | CO#2        | Extend contract to 12.15.21                 |
| <b>2020-08</b>      | L&L Insulation                 | CO#2        | Extend contract 6.21.21                     |
| <b>2019-40</b>      | Silver State Wire Rope         | CO#2        | Socket installation                         |
| <b>2020-27</b>      | Johnson Controls               | Contract    | Davis Campus Chiller #3                     |
| <b>2020-38</b>      | Design Works                   | Contract    | Ethnobotanical Garden 60% Design            |
| <b>2020-12</b>      | True Clean Carpet & Janitorial | Contract    | Custodial Services                          |
| <b>2013-39</b>      | G.L. Tiley                     | CO#23       | Extend contract to 12.31.21                 |
| <b>2020-10</b>      | RCS Construction               | CO#2        | Added paving deducted sewer line encasement |
| <b>2020-26</b>      | Anderson Economic Group        | CO#1        | Extend contract to 1.31.21                  |
| <b>2019-41</b>      | TSP                            | CO#2        | Extend contract to 5.1.21                   |
| <b>2020-05</b>      | West Plains Engineering        | TASK#2      | Davis Campus Extensometer Array             |
| <b>2015-29</b>      | Amick Sounds                   | CO#8        | Add funds extend contract to 12.31.21       |
| <b>2019-29</b>      | CVD                            | CO#29       | Skip transport Ross Shaft                   |
| <b>2019-07</b>      | Dean Kurtz                     | CO#21       | Fan controls                                |
| <b>2019-07</b>      | Dean Kurtz                     | CO#22       | Furniture Electrical                        |
| <b>2018-31</b>      | Williams & Associates          | CO#3        | Furniture Electrical                        |

| Contract No. | Contractor/Vendor            | Type     | Project  |
|--------------|------------------------------|----------|--|
| 2019-29      | CVD                          | CO#30    | Rope Hoist Blankets                                    |
| 2019-29      | CVD                          | CO#31    | Ladder E&O Building                                    |
| 2019-29      | CVD                          | CO#32    | Yates Hoist Rope Flaps                                 |
| 2020-26      | Anderson Economic Group      | CO#3     | Extend contract to 3.15.2021                           |
| 2019-46      | MineArc                      | CO#1     | Extend contract to 9.21.2022                           |
| 2019-07      | Dean Kurtz                   | CO#23    | Additional Monitors                                    |
| 2020-16      | Western States Fire          | CO#3     | Fire Suppression Valve Surface Lab                     |
| 2019-29      | CVD                          | CO#33    | Hoist personal onto Yates crusher bag roof for repairs |
| 2020-10      | RCS Construction             | CO#3     | Add asphalt and remove steel bollards                  |
| 2019-31      | Wolff's Plumbing and Heating | CO#3     | Water Softener Yates Ramp locker room                  |
| 2019-30      | Wolff's Plumbing and Heating | CO#3     | Pump motor spare for chiller #1                        |
| 2021-03      | Carl Barchet                 | Contract | SURF Facility Advisor Committee                        |
| 2019-28      | Jacobs Welding               | CO#3     | Yates bonnet repair                                    |
| 2019-33      | M&M Sanitation               | CO#2     | Pump Ross hoist slip regulation tanks                  |
| 2021-01      | Blue Cosmo Sat Communication | Contract | Satellite phones and service plan                      |
| 2019-29      | CVD                          | CO#34    | Frozen sewer line Tramway                              |

**Purchase Orders (POs):** 566 POs were issued December 1-February 28 totaling **\$252,502**.

**Warehouse Inventory:** Warehouse inventory as of February 28, 2021 totaled **\$275,431**.

### **Inclusion, Diversity, Equity and Access (IDEA) Status**

- The IDEA office was established in February 2021 with the creation of the Director of Education and Public Relations and IDEA Project Manager position. Deb Wolf was hired for that position and started February 8.
- Rochelle Zens was hired as IDEA Project Lead. Rochelle will start on March 22.
- The established Cultural Strategic Planning Committee met on March 1 with the goal of reviewing the previously written cultural strategic plan, identifying the major areas of work for the next three quarters and establishing priorities for the office.
- Work on the ethnobotanical garden has increased this quarter. Efforts include identifying Native sculptuers that may be interested in creating art for the garden, review of the 30% architectural design, and communication with Tribal and Bureau of Land Management (BLM) personnel for gathering of plant ideas for the garden.

### **Cultural Coordinator Updates**

- Continued work with STARBASE board to provide science education to 5<sup>th</sup> grade students and expand STARBASE 2.0 for middle school students.
- Plans for the next Cultural Advisory Committee meeting are underway. The Cultural Advisory Committee (CAC) will meet on March 16.
- Continued to work with Tribal Secretary Dave Flute and tribal leadership to promote employment opportunities at Sanford Lab and updates on the progress of SURF projects.
- Completed required National Historical Preservation Act (NHPA) online coursework.
- Continued to participate and support the work of the Hagen-Harvey Tribal Scholarship Program.
- Participated in the SD Established Program to Stimulate Competitive Research (EPSCoR) Track 1 External Advisory Board review that was held on March 5.

## **Education and Outreach (E&O) Status**

### **Changes**

- Nicol Reiner has been hired by BHSU to take over from Deb Wolf as the Director of Education and Outreach for SURF. A job listing has been posted at BHSU for a new Science Education Specialist to backfill Nicol's position.

### **K-12 Education and Outreach**

#### Curriculum units

- Table 1 lists the schools that used curriculum units in the last three months. Nine hundred forty-eight students participated from 14 schools.
- The new K-2 unit *Move It!* is being piloted in two Spearfish elementary schools.
- Parts of the middle school waves unit (*Sound and Light*) is being piloted in two middle schools and one elementary school.
- The E&O team is shepherding the development of five more EPSCoR biofilm units being written by ten teacher leaders. The units are scheduled to be ready for use during professional development workshops this summer.

**Table 1. Curriculum Units Completed  
December 2020 – February 2021**

| <b>Unit</b>                   | <b>School</b>      | <b>City</b>   | <b>Grade or Course (high school)</b> | <b>Total No. of students</b> |
|-------------------------------|--------------------|---------------|--------------------------------------|------------------------------|
| Argon Transfer Challenge      | Stagebarn Middle   | Piedmont      | 8                                    | 120                          |
| As a Matter of Fact           | West Elementary    | Spearfish     | 2                                    | 156                          |
| May the Force Be With You     | Atall School       | Atall         | 5-8                                  | 5                            |
|                               | Medary Elem        | Brookings     | 3                                    | 50                           |
|                               | Whitewood          | Whitewood     | 4                                    | 8                            |
| It's Electric                 | Ellendale High     | Ellendale, ND | Physics                              | 1                            |
|                               | Bison High         | Bison         | Physics                              | 40                           |
| Move It (Pilot)               | West Elementary    | Spearfish     | 2                                    | 19                           |
| Sound & Light (Pilot)         | Big Horn Middle    | Big Horn, WY  | 6                                    | 40                           |
|                               | St Elizabeth Seton | Rapid City    | 4                                    | 40                           |
| Stuck on You, Stuck Like Glue | Douglas Middle     | Box Elder     | 7                                    | 200                          |
| The Search for Dark Matter    | Edison Middle      | Sioux Falls   | 8                                    | 80                           |
| Too Much Too Little           | Whitewood          | Whitewood     | 4                                    | 8                            |
| Waterworks                    | Douglas Middle     | Box Elder     | 7                                    | 100                          |
| We are Made of Starstuff      | Lead-Deadwood High | Lead          | Chemistry                            | 45                           |
|                               | Montrose High      | Montrose      | Chemistry                            | 11                           |
|                               | Northwestern High  | Mellette      | Chemistry                            | 25                           |
|                               | <b>14 schools</b>  |               | <b>20 teachers</b>                   | <b>948 students</b>          |

#### Classroom presentations (includes virtual field trips)

- Table 2 lists all school that had presentations this quarter, for a total of 865 students. All presentations this quarter have been done using virtual platforms synchronously.
- The E&O Department has 360° virtual field trip options for the Yates Hoistroom, Waste Water Treatment Plant (WWTP) and the 4850L Davis Campus underground, adapted from the field trips made by the Communications Department for Virtual Neutrino Day in 2020.
- Monthly sessions for the afterschool program at Isna Wica Owayawa (Loneman School) have continued this semester. In January, former SDSTA intern Ida Clarke (2015), an alumnus of Isna Wica, joined as a guest for the WWTP tour for middle school students. Ida is now in graduate school at UC Boulder.

**Table 2. Classroom Presentations / Virtual Field Trips  
December 2020 – February 2021**

| School/City                               | Presenter | Grade(s) | No. of presentations | Total No. of students |
|---|-----------|----------|----------------------|-----------------------|
| Huron Middle / Huron                      | JD        | 8        | 4                    | 180                   |
| Black Hills Home Educators                | BB        | K-12     | 2                    | 32                    |
| Northwestern High / Mellette              | PN        | 11-12    | 1                    | 20                    |
| Spearfish Middle / Spearfish              | PN        | 6        | 3                    | 62                    |
| Columbus Catholic / Marshfield, WI        | PN        | 12       | 1                    | 5                     |
| Loneman / Oglala                          | JD, PN    | 3-8      | 4                    | 44                    |
| Teen Science Café / Sioux Falls           | BB        | 9-12     | 1                    | 9                     |
| Brandon Valley Intermediate / Brandon     | PN        | 6        | 4                    | 98                    |
| Rapid Valley Elem / Rapid City            | JD        | 5        | 4                    | 110                   |
| Memorial Middle / Sioux Falls             | BB        | 6        | 4                    | 99                    |
| Montrose Elem / Montrose                  | BB        | 3        | 1                    | 13                    |
| Tea Area High / Tea                       | PN        | 11-12    | 1                    | 24                    |
| Hot Springs Elem / Hot Springs (Starbase) | JD        | 4-5      | 3                    | 72                    |
| Douglas Middle / Box Elder                | BB, PN    | 7        | 2                    | 67                    |
| South Park Elem / Belle Fourche           | JD        | K-4      | 1                    | 30                    |
| <b>13 schools / 2 informal</b>            |           |          | <b>36 programs</b>   | <b>865 students</b>   |

BB = Becky Bundy      JD = Julie Dahl      PN = Peggy Norris

#### Professional Development (PD)

- The annual South Dakota Science, Technology, Engineering and Math (STEM) Conference was canceled this year, but a group of science teachers organized a one-day virtual science conference. Science Education Specialist Julie Dahl presented *A Day in the Life of a Sanford Lab Scientist*.
- The SDMath/SDSci program continued in a virtual format this year. Both Cohort 3 and Cohort 4 met over a weekend in February.
- Nicol and Deb gave inservice workshops for the Lennox School District (one day, 130 educators) and Spearfish School District (two 1-day sessions, 346 educators).
- Nicol is giving an online class for mathematics teachers this semester.

#### Undergraduate

- Nicol, Deb and Julie presented a lesson to 17 students in a BHSU elementary education classroom management class.
- The virtual WWTP tour was given for 54 students in two BHSU biology classes. Jim Whitlock, who worked for SDSTA in 2007 to help rehabilitate the WWTP, joined the group to talk in more detail about bioremediation.
- Selection processes are in progress for the 2021 Summer Intern and Davis-Bahcall programs.

#### Other

- The E&O group gave the January Deep Talks. The group used the water presentation and WWTP tour as models for how to provide place-based education in a virtual environment.

#### Communications Status

- The surface and underground safety videos were completed.
- Communications filled the multimedia specialist open position with Adam Gomez, a former SDSTA Communications intern and BHSU graduate.
- Communications assisted the SURF Foundation in developing a Donor Recognition Program.
- Communications continues to meet with Fermilab communications and the LBNF/DUNE communications group.
- SURF documentary proposal was completed and submitted for review.

- Neutrino Day has been successfully trademarked—both nationally and internationally.
- The Economic Impact Study is nearing completion.
- Communications continued to work on Sanford Lab Homestake Visitor Center (SLHVC) exhibit updates.
- Communications is writing an RFP for a new SURF website.

#### **Community Outreach/Media/Site Visits/Presentations/Site Visit.**

- Neutrino Day will be held July 10 in a virtual environment. Annette Lee, astrophysicist and founder of Native Skywatch Initiative, will be the keynote speaker.
- Three virtual Deep Talks presentations were given with more than 300 people participating:
  - Nobel Day brought in Dr. Art McDonald—December 10
  - E&O gave a presentation on virtual learning—January 14
  - Dr. Brianna Mount gave a live tour of the low background counting facility—February 11.
- SURF partnered with SD Mines on a live tour of the CASPAR experiment in February. More than 500 attended (most were K-12 students).
- Phoenix Television was on site to film for the Discovery Channel program “Underground Worlds.”
- Communications is working with LBNF to document progress on underground construction and the Ross Hoistroom.
- A photo by Matthew Kapust was featured in Engineering News Record as one of the top 20 construction photos of 2020.

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

- Communications will give a talk to a Tri-State Kiwanis group.
- Deep Talks:
  - March 11—Pi Day features Dr. Travis Kowalski, an artist-turned-mathematician from SD Mines.
  - April 8—Deep Talks will focus on updates at SURF and on LBNF. Executive Director Mike Headley and LBNF FSCF Project Manager Joshua Willhite will give presentations and a tour of the Ross Hoistroom.
  - May 13—Deep Talks will focus on the EGS Collaboration (SIGMA-V) move to the 4100L.

#### **Video, Web, Graphics**

- Communications continues to create new video and animations to illustrate a variety of topics and for a variety of platforms, including social media, PowerPoint Presentations and the website.
- 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>.
- General web maintenance, digital signage content, media assistance to science collaborations and educational institutions are ongoing.

Photos of recent events/milestones are included as Appendix A.

#### **News Coverage**

- [Experience Seven Minutes of Terror in New Perseverance Mars Rover Landing Video](#), by Lee Billings, Scientific American, Feb. 22, 2021
- [More restaurants and rentals!](#), by Wendy Pitlick, Black Hills Pioneer, Feb. 13, 2021
- [Geothermal energy is least land-use intense source of the renewable energy technologies](#), Think GeoEnergy, by Alexander Richter, Jan. 22, 2021
- [Fermilab's Integrated Engineering Research Center Is 'Future Flexible'](#), by Jeff Yoders, Engineering News Review Midwest, Jan. 18, 2021
- [RANKIN: Investment in mining and materials education will show huge returns](#), by Jim Rankin, Jan. 13, 2021
- [Sanford Underground Research Facility promotes STEM in South Dakota classrooms](#), by Blake Joseph, KEVN Black Hills Fox, Jan. 4, 2021
- [SURF funds provide school supplies, activities](#), by Erin Lorraine Broberg, Rapid City Journal, Dec. 31, 2020

## **Information Technology Status**

### **Projects**

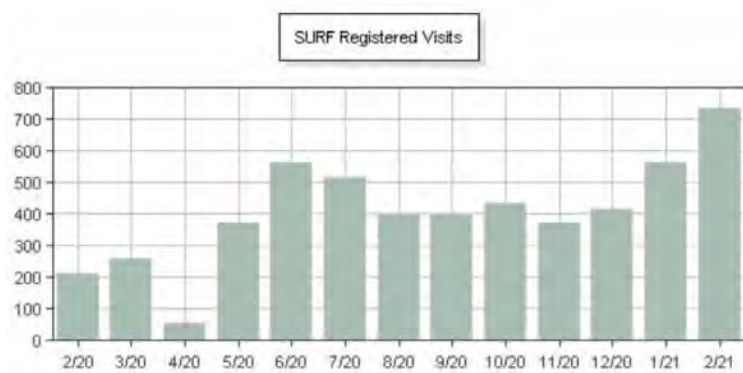
- New networking hardware has been procured for the new Maintenance Support Facility in preparation for occupancy in early May.
- Interviews for two open positions were conducted and selections were made. Offers are pending for the Network Engineer and Technical Support positions.
- The Network Administrator was onsite in both November and February to complete networking upgrades for all the surface and underground. Older switches and core switches were removed and fiber connections rerouted. All server/client network connections were moved from older gear to a new network gear and the wiring racks were organized. Work was also done to upgrade SIGMA-V and BHUC.
- The Blasting Communications project was completed with the last two Digital Signage screens installed at the 4100L and 4850L.
- Switches, phones and wireless application protocols (WAPs) were setup for the CAT project on the 1700L. Deployment is waiting on excavation and cleanup of the level.
- IT began scoping a new phone system to be implemented by the end of the year.
- The IT manager Deb Meyer announced her retirement date of June 1, 2021.

### **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.

### **December 2020 – February 2021 Events**

- The Administrative Services team registered 1,716 visits December 1 through February 28—primarily contractors and users.
- The Visitor Registration Monthly Reports were submitted electronically to the SD Fusion Center/Homeland Security utilizing the SURF database reporting tool.
- The Monthly SURF Foreign National Visits Reports and Restricted Party Screening Audits were generated and distributed.



**Number of New Visitors, Users and Contractors On-Site**

### **Administrative Services Activities**

- Lab Receptionist Amelia Pearson continued staffing the front desk during normal business hours. Monthly Researcher hours were tracked and Science training records entered; purchase orders were invoiced and closed in ManagerPlus; monthly office supply order was received and sorted; documents were scanned and laminated for various departments; safety waivers were logged into the ESH database; new hire packets for HR were assembled; several working lunches were arranged for onsite SDSTA candidate interviews.
- Administrative Assistant Natasha Wheeler continued to scribe for several department leadership weekly meetings (L10s); continued to assist ESH to review SURF Bridge training courses, add new learners to the system and review ESH Chapters; assisted QA/QC to review ISO documents; recorded board meeting minutes for SDSTA

and SURFF board quarterly meetings, and continued to serve as backup to front desk reception. Administrative support continued to assist SURF Foundation Director Staci Miller to update donor information in Bloomerang, identify potential grant opportunities, draft grant applications, and draft several donor communication materials including tax receipt letters and employee giving campaign emails.

- SDSTA Technical Writer Caroline Amelse transferred from the ESH Department to join the Administrative Services team. She will write and edit documents and presentations in support of the SDSTA mission. These documents and presentations will generally include 1) management and technical reports and plans, 2) policies, procedures and work instructions, 3) training documentation, 4) presentations and 5) web content. Caroline will also serve as a resource for other SDSTA staff on writing-related issues including grammar usage and style guides.
- Administrative Services Manager Mandy Knight continued to assist with the Entrepreneurial Operating System (EOS) workshops with EOS Implementor Mike Roth and the SDSTA Executive Leadership team (Mike Headley, Will McElroy, Jaret Heise, Nancy Geary and Larry Jaudon. New to the team is Debra Wolf). The January 7 Quarterly Session was informative and well-received; the next quarterly session will be held on March 31. Administrative and logistical support continued to be provided—zoom meetings and onsite activities were hosted including the ISO Orion pre-audit assessment held on site January 26-27; organizational charts and phone lists are being updated; and miscellaneous documents were copyedited for various departments.
- The five-year Managed Print Services Agreement between SDSTA and A&B Business Equipment will expire April 2. An RFP for Copiers and Managed Print Services was released in early February. Bids are currently under review—the successful bidder will be awarded a contract in late March.
- A listening post was set up for an SDSTA Board of Directors Telephonic Special Board meeting held on January 25 to approve Amendment No. 01 of the Land Lease between the SDSTA and Caterpillar Global Mining, LLC. Preparations began for the SDSTA Board of Director regularly scheduled quarterly meeting to be held on March 25.



## APPENDIX





*Top: A new cavern at the 3600 Level is excavated to support the DUNE experiment.*

*Center: Automatic gate controllers located below the rock crushers at the Ross Shaft will load crusher rock onto a conveyor in the tramway.*

*Bottom right: A new cage and work deck installed at Ross Shaft.*

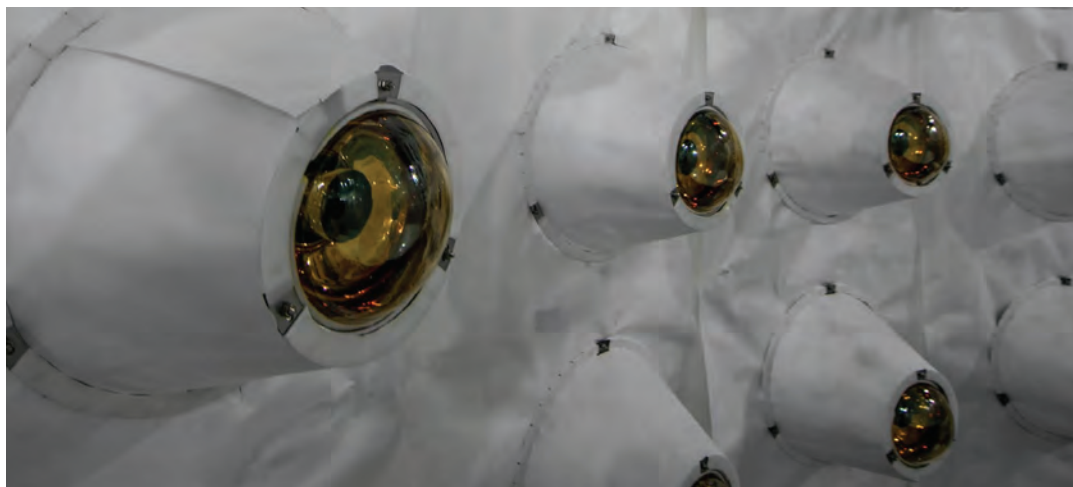
## Communications Department Photo Appendix A



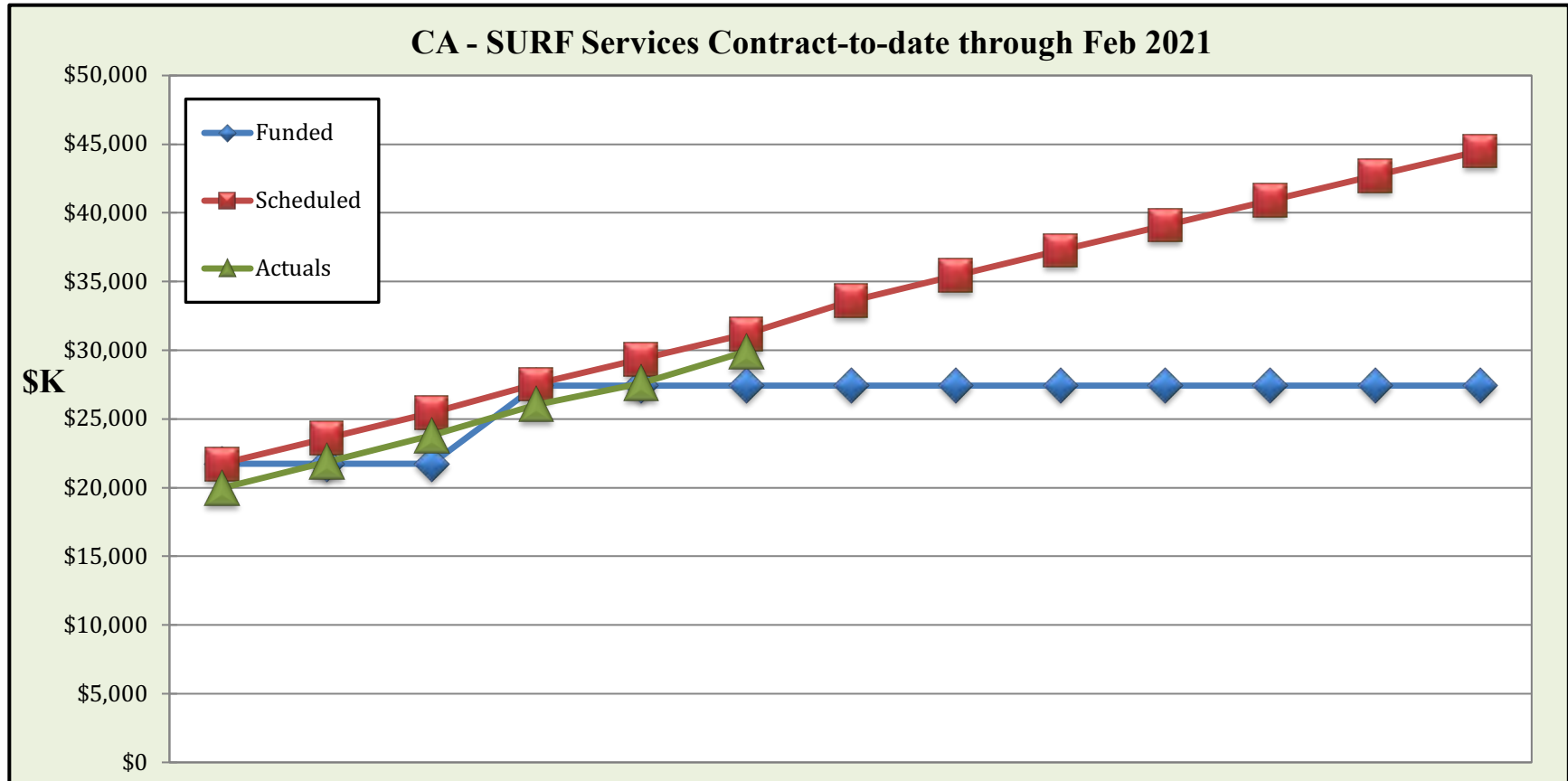
*Top: An aerial view of the new Maintenance Support Facility at the Yates Complex.*

*Center: Workers remove a section of the Ross cage hoist break. They will replace it with a new modern break system.*

*Bottom: A section of PMTs that are installed along the outer edge of the LZ detector. These PMTs are part of the experiment's veto system.*



Finance & HR Department  
Appendix B



DOE SDSTA Fiscal Year 2021 SPA Curve



# Financial Summaries—Appendix C

REPORT DATE 03/08/21

SOUTH DAKOTA SCIENCE & TECHNOLOGY

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DIVISION: ALL

BALANCE SHEET

## ASSETS

AS OF  
02/28/21

### CURRENT ASSETS

|                           |    |               |
|---------------------------|----|---------------|
| First Interstate Checking | \$ | 3,393,070.06  |
| First Interstate Other    |    | 1,420.64      |
|                           |    | -----         |
| Total in Local Checking   |    | 3,394,490.70  |
| SD Treas: Indemnification |    | 7,500,000.00  |
| SD Treas: Mine Closure    |    | 1,497,441.53  |
| SD Treas: Operating       |    | 1,116,445.61  |
| SD Treas: Sanford Gift #2 |    | 6,569.97      |
| SD Treas: Spec Sess - Lab |    | 2,175,759.00  |
| SD Treas: Experiments     |    | 919,001.75    |
|                           |    | -----         |
| Total with SD Treasurer   |    | 13,215,217.86 |
| Billed A/R                |    | 2,664,561.75  |
| Unbilled A/R              |    | 132,006.31    |
| Other A/R                 |    | 814,642.00    |
| Inventory - Supplies      |    | 3,337,210.59  |
| Inventory - Warehouse     |    | 27,330.13     |
| Other Current Assets      |    | 965,683.90    |
|                           |    | -----         |
| Total Current Assets      |    | 24,551,143.24 |

### FIXED ASSETS

|                           |                 |
|---------------------------|-----------------|
| Land, Underground & Other | 12,633,473.13   |
| Bldgs & Infrastructure    | 9,707,365.56    |
| Improvements              | 64,637,443.82   |
| Computer Equipment        | 570,932.90      |
| Equipment & Fixtures      | 10,640,819.96   |
| DOE Property Transfer     | 1,471,727.33    |
| Accum Depr & Amort        | (19,274,959.28) |
| DOE Prop. Accum Deprec.   | (104,196.77)    |
|                           | -----           |
| Total Fixed Assets        | 80,282,606.65   |

### OTHER ASSETS

|                           |               |
|---------------------------|---------------|
| Work in Process           | 3,029,340.38  |
| Pension Deferred Outflows | 2,995,814.75  |
| Xenon Purchased           | 8,930,401.09  |
|                           | -----         |
| Total Other Assets        | 14,955,556.22 |

### TOTAL ASSETS

=====

\$ 119,789,306.11

=====

REPORT DATE 03/08/21

SOUTH DAKOTA SCIENCE &amp; TECHNOLOGY

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DIVISION: ALL

## BALANCE SHEET

## LIABILITIES &amp; EQUITY

AS OF  
02/28/21

## CURRENT LIABILITIES

|                           |    |              |
|---------------------------|----|--------------|
| Accounts Payable          | \$ | 1,195,781.06 |
| Other Payables            |    | 8,841.84     |
|                           |    | -----        |
| Total Accounts Payable    |    | 1,204,622.90 |
| Accrued Payroll Liab      |    | 1,795,169.22 |
|                           |    | -----        |
| Total Current Liabilities |    | 2,999,792.12 |

## OTHER LIABILITIES

|                          |  |              |
|--------------------------|--|--------------|
| LT Xenon Notes Payable   |  | 6,000,000.00 |
| Pension Deferred Inflows |  | 1,266,585.88 |
|                          |  | -----        |
| Total Other Liabilities  |  | 7,266,585.88 |

## EQUITY

|                           |  |                |
|---------------------------|--|----------------|
| Restricted: Indemnificati |  | 7,500,000.00   |
| Restricted: Lab           |  | 2,175,759.00   |
| Restricted: Mine Closure  |  | 1,497,441.53   |
| Restricted: Sanford Gift2 |  | 6,569.97       |
| Restricted: Pension       |  | 1,729,228.87   |
| Restricted: Experim. Int. |  | 919,001.75     |
| Restricted: Foundation    |  | 219.45         |
|                           |  | -----          |
| Total Restricted Funds    |  | 13,828,220.57  |
| Investment in Gen FA      |  | 80,282,606.65  |
| Unrestricted Funds        |  | 15,412,100.89  |
|                           |  | -----          |
| Total Equity              |  | 109,522,928.11 |

## TOTAL LIABILITIES &amp; EQUITY

=====

\$ 119,789,306.11

=====

ALL

## STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/21

|                                       | YR-TO-DATE       |
|---------------------------------------|------------------|
| REVENUE                               |                  |
| DOE Subcontracts                      | \$ 23,328,288.07 |
| NSF/NASA Subcontracts                 | 1,967.60         |
| State Revenue                         | -                |
| Checking Interest                     | 944.67           |
| Interest Income                       | 95,656.00        |
|                                       | -----            |
| TOTAL REVENUE                         | 23,426,856.34    |
| DIRECT COSTS                          |                  |
| Direct Labor                          | 5,438,664.57     |
| Board of Directors                    | 3,390.56         |
| Capital Outlay >\$5K                  | 2,086,818.62     |
| Contractual Svcs                      | 2,401,832.92     |
| Inventory                             | 114,012.50       |
| Supplies                              | 807,431.14       |
| Travel - Domestic                     | 2,941.62         |
| Travel - Foreign                      | (149.16)         |
| Utilities                             | 1,522,976.14     |
| Other Direct Costs                    | 19,232.45        |
| Unallow/Unbill Costs                  | 198,636.02       |
|                                       | -----            |
| TOTAL DIRECT COSTS                    | 12,595,787.38    |
| INDIRECT COSTS                        |                  |
| Fringe Benefits                       | 4,507,188.60     |
| Overhead                              | 6,079,638.77     |
|                                       | -----            |
| TOTAL INDIRECT COSTS                  | 10,586,827.37    |
|                                       | -----            |
| GROSS PROFIT/LOSS ( ) FROM OPERATIONS | 244,241.59       |
|                                       | -----            |
| OTHER INCOME                          |                  |
| Water Treatment                       | 182,804.08       |
| Miscellaneous Income                  | 17,522.50        |
| Other Operating Income                | 34,117.76        |
|                                       | -----            |
| TOTAL OTHER INCOME                    | 234,444.34       |
| OTHER EXPENSES                        |                  |
| Other Unallowable Expenses            | 104,196.77       |
| Misc. Expenses & Donations            | (1,252,355.79)   |
| Loss (Gain) on Sale of Fixed Assets   | 58,461.30        |
| Reclass Incr Net Assets               | (423,191.63)     |
|                                       | -----            |
| TOTAL OTHER EXPENSES                  | (1,512,889.35)   |
|                                       | =====            |
| NET INCOME/LOSS ( )                   | \$ 1,991,575.28  |

DIVISION: ALL

## COMPARATIVE BALANCE SHEET

## ASSETS

|                           | AS OF<br>02/28/21 | AS OF<br>02/29/20 | \$ CHANGE       | % CHANGE |
|---------------------------|-------------------|-------------------|-----------------|----------|
| <hr/>                     |                   |                   |                 |          |
| CURRENT ASSETS            |                   |                   |                 |          |
| First Interstate Checking | \$ 3,393,070.06   | \$ 2,136,643.77   | \$ 1,256,426.29 | 58.80%   |
| First Interstate Other    | 1,420.64          | 541.73            | 878.91          | 162.24%  |
| <hr/>                     |                   |                   |                 |          |
| Total in Local Checking   | 3,394,490.70      | 2,137,185.50      | 1,257,305.20    | 58.83%   |
| SD Treas: Indemnification | 7,500,000.00      | 7,500,000.00      | -               | 0.00%    |
| SD Treas: Mine Closure    | 1,497,441.53      | 1,462,524.66      | 34,916.87       | 2.39%    |
| SD Treas: Operating       | 1,116,445.61      | 798,647.59        | 317,798.02      | 39.79%   |
| SD Treas: Sanford Gift #2 | 6,569.97          | 15,988.97         | (9,419.00)      | -58.91%  |
| SD Treas: Spec Sess - Lab | 2,175,759.00      | 5,414,701.00      | (3,238,942.00)  | -59.82%  |
| SD Treas: Experiments     | 919,001.75        | 1,100,751.08      | (181,749.33)    | -16.51%  |
| <hr/>                     |                   |                   |                 |          |
| Total with SD Treasurer   | 13,215,217.86     | 16,292,613.30     | (3,077,395.44)  | -18.89%  |
| Billed A/R                | 2,664,561.75      | 2,496,643.16      | 167,918.59      | 6.73%    |
| Unbilled A/R              | 132,006.31        | 610,683.00        | (478,676.69)    | -78.38%  |
| Other A/R                 | 814,642.00        | 464,388.62        | 350,253.38      | 75.42%   |
| Inventory - Supplies      | 3,337,210.59      | 2,309,679.01      | 1,027,531.58    | 44.49%   |
| Inventory - Warehouse     | 27,330.13         | 28,686.32         | (1,356.19)      | -4.73%   |
| Other Current Assets      | 965,683.90        | 1,261,510.84      | (295,826.94)    | -23.45%  |
| <hr/>                     |                   |                   |                 |          |
| Total Current Assets      | 24,551,143.24     | 25,601,389.75     | (1,050,246.51)  | -4.10%   |
| <hr/>                     |                   |                   |                 |          |
| FIXED ASSETS              |                   |                   |                 |          |
| Land, Underground & Other | 12,633,473.13     | 12,633,473.13     | -               | 0.00%    |
| Bldgs & Infrastructure    | 9,707,365.56      | 9,789,145.56      | (81,780.00)     | -0.84%   |
| Improvements              | 64,637,443.82     | 62,907,485.67     | 1,729,958.15    | 2.75%    |
| Computer Equipment        | 570,932.90        | 563,025.07        | 7,907.83        | 1.40%    |
| Equipment & Fixtures      | 10,640,819.96     | 10,928,727.67     | (287,907.71)    | -2.63%   |
| DOE Property Transfer     | 1,471,727.33      | -                 | 1,471,727.33    | 100.00%  |
| Accum Depr & Amort        | (19,274,959.28)   | (17,413,987.57)   | (1,860,971.71)  | 10.69%   |
| DOE Prop. Accum Deprec.   | (104,196.77)      | -                 | (104,196.77)    | 100.00%  |
| <hr/>                     |                   |                   |                 |          |
| Total Fixed Assets        | 80,282,606.65     | 79,407,869.53     | 874,737.12      | 1.10%    |
| <hr/>                     |                   |                   |                 |          |
| OTHER ASSETS              |                   |                   |                 |          |
| Work in Process           | 3,029,340.38      | 1,757,331.05      | 1,272,009.33    | 72.38%   |
| Pension Deferred Outflows | 2,995,814.75      | 3,943,908.40      | (948,093.65)    | -24.04%  |
| Xenon Purchased           | 8,930,401.09      | 8,164,350.39      | 766,050.70      | 9.38%    |
| <hr/>                     |                   |                   |                 |          |
| Total Other Assets        | 14,955,556.22     | 13,865,589.84     | 1,089,966.38    | 7.86%    |
| <hr/>                     |                   |                   |                 |          |
| TOTAL ASSETS              | \$ 119,789,306.11 | \$ 118,874,849.12 | \$ 914,456.99   | 0.77%    |
| <hr/>                     |                   |                   |                 |          |

DIVISION: ALL

## COMPARATIVE BALANCE SHEET

## LIABILITIES &amp; EQUITY

|                            | AS OF<br>02/28/21             | AS OF<br>02/29/20             | \$ CHANGE                 | % CHANGE          |
|----------------------------|-------------------------------|-------------------------------|---------------------------|-------------------|
| <hr/>                      |                               |                               |                           |                   |
| CURRENT LIABILITIES        |                               |                               |                           |                   |
| Accounts Payable           | \$ 1,195,781.06               | \$ 1,210,161.49               | (14,380.43)               | -1.19%            |
| Other Payables             | 8,841.84                      | 28,386.32                     | (19,544.48)               | -68.85%           |
|                            | -----                         | -----                         | -----                     | -----             |
| Total Accounts Payable     | 1,204,622.90                  | 1,238,547.81                  | (33,924.91)               | -2.74%            |
| Accrued Payroll Liab       | 1,795,169.22                  | 1,302,349.98                  | 492,819.24                | 37.84%            |
|                            | -----                         | -----                         | -----                     | -----             |
| Total Current Liabilities  | 2,999,792.12                  | 2,540,897.79                  | 458,894.33                | 18.06%            |
| <br>                       |                               |                               |                           |                   |
| OTHER LIABILITIES          |                               |                               |                           |                   |
| LT Xenon Notes             | 6,000,000.00                  | 6,000,000.00                  | -                         | 0.00%             |
| Pension Deferred Inflows   | 1,266,585.88                  | 783,421.31                    | 483,164.57                | 61.67%            |
|                            | -----                         | -----                         | -----                     | -----             |
| Total Other Liabilities    | 7,266,585.88                  | 6,783,421.31                  | 483,164.57                | 7.12%             |
| <br>                       |                               |                               |                           |                   |
| TOTAL LIABILITIES          | 10,266,378.00                 | 9,324,319.10                  | 942,058.90                | 10.10%            |
| <br>                       |                               |                               |                           |                   |
| EQUITY                     |                               |                               |                           |                   |
| Restricted: Indemnificati  | 7,500,000.00                  | 7,500,000.00                  | -                         | 0.00%             |
| Restricted: Lab            | 2,175,759.00                  | 5,414,701.00                  | (3,238,942.00)            | -59.82%           |
| Restricted: Mine Closure   | 1,497,441.53                  | 1,462,524.66                  | 34,916.87                 | 2.39%             |
| Restricted: Sanford Gift2  | 6,569.97                      | 15,988.97                     | (9,419.00)                | -58.91%           |
| Restricted: Pension        | 1,729,228.87                  | 3,160,487.09                  | (1,431,258.22)            | -45.29%           |
| Restricted: Experim. Int.  | 919,001.75                    | 947,577.00                    | (28,575.25)               | -3.02%            |
| Restricted: Foundation     | 219.45                        | -                             | 219.45                    | 100.00%           |
|                            | -----                         | -----                         | -----                     | -----             |
| Total Restricted Funds     | 13,828,220.57                 | 18,501,278.72                 | (4,673,058.15)            | -25.26%           |
| Investment in Gen FA       | 80,282,606.65                 | 79,407,869.53                 | 874,737.12                | 1.10%             |
| Unrestricted Funds         | 15,412,100.89                 | 11,641,381.77                 | 3,770,719.12              | 32.39%            |
|                            | -----                         | -----                         | -----                     | -----             |
| TOTAL EQUITY               | 109,522,928.11                | 109,550,530.02                | (27,601.91)               | -0.03%            |
| <br>                       |                               |                               |                           |                   |
| TOTAL LIABILITIES & EQUITY | <hr/> \$ 119,789,306.11 <hr/> | <hr/> \$ 118,874,849.12 <hr/> | <hr/> \$ 914,456.99 <hr/> | <hr/> 0.77% <hr/> |

## COMPARATIVE STATEMENT OF INCOME

FOR THE PERIOD ENDING 02/28/21

|                            | YEAR<br>TO DATE  | PRIOR YEAR<br>TO DATE | \$ CHANGE         | % CHANGE |
|----------------------------|------------------|-----------------------|-------------------|----------|
| REVENUE                    |                  |                       |                   |          |
| DOE Subcontracts           | \$ 23,328,288.07 | \$ 20,106,690.66      | \$ 3,221,597.41   | 16.02%   |
| NSF/NASA Subcontracts      | 1,967.60         | 7,161.47              | (5,193.87)        | -72.53%  |
| State Revenue              | -                | 2,500,000.00          | (2,500,000.00)    | -100.00% |
| Checking Interest          | 944.67           | 1,604.80              | (660.13)          | -41.13%  |
| Interest Income            | 95,656.00        | 111,791.25            | (16,135.25)       | -14.43%  |
| TOTAL REVENUE              | 23,426,856.34    | 22,727,248.18         | 699,608.16        | 3.08%    |
| DIRECT COSTS               |                  |                       |                   |          |
| Direct Labor               | 5,438,664.57     | 4,957,843.08          | 480,821.49        | 9.70%    |
| Board of Directors         | 3,390.56         | 8,467.77              | (5,077.21)        | -59.96%  |
| Capital Outlay >\$5K       | 2,086,818.62     | 1,283,926.61          | 802,892.01        | 62.53%   |
| Contractual Svcs           | 2,401,832.92     | 2,127,779.54          | 274,053.38        | 12.88%   |
| Inventory                  | 114,012.50       | 144,883.57            | (30,871.07)       | -21.31%  |
| Supplies                   | 807,431.14       | 833,034.12            | (25,602.98)       | -3.07%   |
| Travel - Domestic          | 2,941.62         | 17,497.54             | (14,555.92)       | -83.19%  |
| Travel - Foreign           | (149.16)         | 44,007.15             | (44,156.31)       | -100.34% |
| Utilities                  | 1,522,976.14     | 1,448,026.19          | 74,949.95         | 5.18%    |
| Other Direct Costs         | 19,232.45        | 42,293.30             | (23,060.85)       | -54.53%  |
| Unallow/Unbill Costs       | 198,636.02       | 274,580.01            | (75,943.99)       | -27.66%  |
| TOTAL DIRECT COSTS         | 12,595,787.38    | 11,182,338.88         | 1,413,448.50      | 12.64%   |
| INDIRECT COSTS             |                  |                       |                   |          |
| Fringe Benefits            | 4,507,188.60     | 3,984,558.74          | 522,629.86        | 13.12%   |
| Overhead                   | 6,079,638.77     | 5,454,270.40          | 625,368.37        | 11.47%   |
| TOTAL INDIRECT COSTS       | 10,586,827.37    | 9,438,829.14          | 1,147,998.23      | 12.16%   |
| GROSS PROFIT/LOSS ( )      | 244,241.59       | 2,106,080.16          | (1,861,838.57)    | 517.81%  |
| OTHER INCOME               |                  |                       |                   |          |
| Water Treatment            | 182,804.08       | 154,343.19            | 28,460.89         | 18.44%   |
| Miscellaneous Income       | 17,522.50        | 19,187.07             | (1,664.57)        | -8.68%   |
| Other Operating Income     | 34,117.76        | 1,883.79              | 32,233.97         | 1711.12% |
| TOTAL OTHER INCOME         | 234,444.34       | 175,414.05            | 59,030.29         | 33.65%   |
| OTHER EXPENSES             |                  |                       |                   |          |
| Misc. Expenses & Donations | (1,252,355.79)   | -                     | (1,252,355.79)    | 100.00%  |
| Loss (Gain) on Sale of FA  | 58,461.30        | 248,072.86            | (189,611.56)      | 0.00%    |
| Other Unallowable Expense  | 104,196.77       | -                     | 104,196.77        | -100.00% |
| Reclass Incr Net Assets    | (423,191.63)     | (1,145,428.48)        | 722,236.85        | -63.05%  |
| TOTAL OTHER EXPENSES       | (1,512,889.35)   | (897,355.62)          | (615,533.73)      | 68.59%   |
| NET INCOME/LOSS ( )        | \$ 1,991,575.28  | \$ 3,178,849.83       | \$ (1,187,274.55) | -37.35%  |

**South Dakota Science & Technology Authority**  
**Available Resources**  
**2/28/2021**

|   |                            |
|---|----------------------------|
| Cash Total Checking   | \$ 3,393,070               |
| Cash With State Treasurer   | <u>\$ 13,215,218</u>       |
| Total Cash  | \$ 16,608,288              |
| Less: Restricted Funds  |                            |
| Indemnification/Mine Closure/Special Session Lab                          | \$ (11,173,201)            |
| Experiments (Xenon, Interest, Infrastructure)                             | <u>\$ (919,002)</u>        |
| Total Cash Available for Infrastructure Upgrades and Authority Operations | \$ 4,516,085               |
| Plus: Accounts Receivable Billed  | \$ 2,664,562               |
| Accounts Receivable Unbilled  | \$ 132,006                 |
| Less: Current Liabilities (Accounts Payable & Accrued Payroll)            | <u>\$ (2,545,807)</u>      |
| (not including accts. pay. for Experiment funding)                        |                            |
| Available Cash and Receivables  | <u><u>\$ 4,766,846</u></u> |

SDSTA Operating Budget Summary FY2021  
Actual vs Budget  
Feb. 2021 & YTD

|   | Feb. 2021      | Budget         | \$ Over/Under<br>Budget | % of Budget | Actual YTD      | YTD Budget      | \$ Over/Under<br>Budget | % of Budget | % Remaining<br>100% |
|---|----------------|----------------|-------------------------|-------------|-----------------|-----------------|-------------------------|-------------|---------------------|
| SDSTA (Authority) Direct Charges          |                |                |                         |             |                 |                 |                         |             |                     |
| Board of Directors                        | \$18,320.00    | \$22,166.00    | \$3,846.00              | 82.65%      | \$173,289.00    | \$177,328.00    | \$4,039.00              | 97.72%      | 2.28%               |
| Executive Office                          | \$34,818.00    | \$29,734.00    | -\$5,084.00             | 117.1%      | \$289,390.00    | \$237,872.00    | -\$51,518.00            | 121.66%     | -21.66%             |
| Science Center E & O                      | \$0.00         | \$0.00         | \$0.00                  | 0.0%        | \$36,448.00     | \$34,500.00     | -\$1,948.00             | 105.65%     | -5.65%              |
| Science Liaison                           | \$82.00        | \$0.00         | -\$82.00                | 100.0%      | \$722.00        | \$0.00          | -\$722.00               | 100.00%     | 0.00%               |
| Subtotal                                  | \$53,220.00    | \$51,900.00    | -\$1,320.00             | 102.54%     | \$499,849.00    | \$449,700.00    | -\$50,149.00            | 111.15%     | -11.15%             |
| Federal/State Funding - Direct Charges    |                |                |                         |             |                 |                 |                         |             |                     |
| Fermi P.O.#649934 Prof. Services          | \$0.00         | \$0.00         | \$0.00                  | 0.0%        | \$71,762.00     | \$93,972.00     | \$22,210.00             | 76.37%      | 23.63%              |
| Fermi C#630223 Ross Rehab                 | \$120,375.00   | \$126,662.00   | \$6,287.00              | 95.04%      | \$442,097.00    | \$541,852.00    | \$99,755.00             | 81.59%      | 18.41%              |
| Fermi C#654406 Ross Logist.Supp           | \$0.00         | \$142,500.00   | \$142,500.00            | 0.0%        | \$1,168,033.00  | \$1,549,870.00  | \$381,837.00            | 75.36%      | 24.64%              |
| Fermi C#671265 Prof. St.Services          | \$30,220.00    | \$32,000.00    | \$1,780.00              | 94.44%      | \$94,617.00     | \$111,584.00    | \$16,967.00             | 84.79%      | 15.21%              |
| Fermi Misc. Contracts                     | -\$475.00      | \$15,000.00    | \$15,475.00             | -3.17%      | \$25,968.00     | \$94,000.00     | \$68,032.00             | 27.63%      | 72.37%              |
| Office of Science Coop.Agree              | \$1,679,719.00 | \$1,234,027.00 | -\$445,692.00           | 136.12%     | \$9,941,699.00  | \$10,175,531.00 | \$233,832.00            | 97.70%      | 2.30%               |
| LBNL SIGMA-V C#7371823                    | \$17,862.00    | \$25,000.00    | \$7,138.00              | 71.45%      | \$220,733.00    | \$241,000.00    | \$20,267.00             | 91.59%      | 8.41%               |
| LBNL LZExp.Operat.C#7525117               | \$59,652.00    | \$70,000.00    | \$10,348.00             | 85.22%      | \$622,992.00    | \$715,100.00    | \$92,108.00             | 87.12%      | 12.88%              |
| MJD (Majorana) ORNL144149                 | \$1,460.00     | \$2,000.00     | \$540.00                | 73.0%       | \$15,778.00     | \$16,000.00     | \$222.00                | 98.61%      | 1.39%               |
| BHSU-UGCampus Gen.Serv.                   | \$0.00         | \$200.00       | \$200.00                | 0.0%        | \$0.00          | \$1,600.00      | \$1,600.00              | 0.00%       | 100.00%             |
| SDSM&Tech CASPAR Gen.Serv.                | \$0.00         | \$500.00       | \$500.00                | 0.0%        | \$1,266.00      | \$4,000.00      | \$2,734.00              | 31.65%      | 68.35%              |
| * Kiewit/Alberici JV/Thyssen              | \$4,900.00     | \$4,900.00     | \$0.00                  | 100.0%      | \$21,813.00     | \$21,813.00     | \$0.00                  | 0.00%       | 0.00%               |
| Office of Science IIP Projects            | \$118,517.00   | \$200,000.00   | \$81,483.00             | 59.26%      | \$2,571,414.00  | \$2,683,868.00  | \$112,454.00            | 0.00%       | 0.00%               |
| Subtotal                                  | \$2,032,230.00 | \$1,852,789.00 | -\$179,441.00           | 109.69%     | \$15,198,172.00 | \$16,250,190.00 | \$1,052,018.00          | 93.53%      | 6.47%               |
| Indirect Expenses                         |                |                |                         |             |                 |                 |                         |             |                     |
| Indirect Charges Personnel                | \$434,600.00   | \$437,075.00   | \$2,475.00              | 99.43%      | \$3,625,095.00  | \$3,730,149.00  | \$105,054.00            | 97.18%      | 2.82%               |
| Indirect Charges Other                    | \$428,707.00   | \$489,757.00   | \$61,050.00             | 87.53%      | \$3,762,723.00  | \$4,393,469.00  | \$630,746.00            | 85.64%      | 14.36%              |
| Subtotal                                  | \$863,307.00   | \$926,832.00   | \$63,525.00             | 93.15%      | \$7,387,818.00  | \$8,123,618.00  | \$735,800.00            | 90.94%      | 9.06%               |
| Totals                                    | \$2,948,757.00 | \$2,831,521.00 | -\$117,236.00           | 104.14%     | \$23,085,839.00 | \$24,823,508.00 | \$1,737,669.00          | 93.00%      | 7.00%               |
| * Private Corporations (Commercial Group) |                |                |                         |             |                 |                 |                         |             |                     |

SDSTA CAPEX Budget Summary FY21  
Actual vs Budget  
Feb. YTD FY2021

| <u>Budget Area</u> | FY2021 Monthly |               |                      |             | FY2021 YTD      |                 |                      |             | % Remaining |
|--------------------|----------------|---------------|----------------------|-------------|-----------------|-----------------|----------------------|-------------|-------------|
|                    | Actual Month   | Budget        | \$ Over/Under Budget | % of Budget | Actual YTD      | Budget          | \$ Over/Under Budget | % of Budget |             |
|                    |                |               |                      |             |                 |                 |                      |             | 100.00%     |
| Operational CAPEX  | \$ 453,984.73  | \$ 500,000.00 | \$ 46,015.27         | 90.80%      | \$ 3,029,340.38 | \$ 5,068,074.00 | \$ 2,038,733.62      | 59.77%      | 40.23%      |
| TOTAL CAPEX        | \$ 453,984.73  | \$ 500,000.00 | \$ 46,015.27         | 90.80%      | \$ 3,029,340.38 | \$ 5,068,074.00 | \$ 2,038,733.62      | 59.77%      | 40.23%      |

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

| Project #  | Project Description                        | Feb. FY2021   | Budget        | \$ Over/UnderBudget | % of Budget |
|------------|--|---------------|---------------|---------------------|-------------|
| CAP2014-01 | Sanford Visitor Center Displays/Monitoring | \$ -          | \$ -          | \$ -                | 100.00%     |
| CAP2016-03 | LZ Xenon Gas                               | \$ -          | \$ -          | \$ -                |             |
| CAP2019-01 | Maintenance Support Facility               | \$ 453,984.73 | \$ 500,000.00 | \$ 46,015.27        | 90.80%      |
|            | Monthly Totals                             | \$ 453,984.73 | \$ 500,000.00 | \$ 46,015.27        | 90.80%      |

SD Science & Technology Authority  
Operational CAPEX Budget  
YTD FY2021 Actual vs Budget

| Project #  | Project Description                 | Feb. YTD FY2021 | FY2021 Budget   | \$ Over/UnderBudget | % of Budget | % Remaining |
|------------|-------------------------------------|-----------------|-----------------|---------------------|-------------|-------------|
|            |                                     |                 |                 |                     |             | 100%        |
| CAP2014-01 | Sanford Visitor Center Sign/Display | \$ 422.50       | \$ 54,000.00    | \$ 53,577.50        | 0.78%       | 99.22%      |
| CAP2016-03 | LZ Xenon Gas                        | \$ 75,000.00    | \$ 234,000.00   | \$ 159,000.00       | 32.05%      | 67.95%      |
| CAP2019-01 | Maintenance Support Facility        | \$ 2,953,917.88 | \$ 4,780,074.00 | \$ 1,826,156.12     | 61.80%      | 38.20%      |
|            | Totals                              | \$ 3,029,340.38 | \$ 5,068,074.00 | \$ 2,038,733.62     | 59.77%      | 40.23%      |



**Ross Pipe & Maintenance Shop Lease Agreement—Mr. Mike Headley**

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Approval of Lease Agreement between SDSTA and Thyssen Mining Inc (TMI) for Ross Pipe and Maintenance Shop, attached.

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**Recommended Action:**

*Motion to approve Lease Agreement between the South Dakota Science and Technology Authority and Thyssen Mining Inc and authorize the chairperson to sign the Agreement.*

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## LEASE AGREEMENT

This Lease Agreement ("Agreement") is hereby made and entered into effective the 6th day of March, 2021 (the "Effective Date") by and between the South Dakota Science and Technology Authority, a body corporate and politic, of 630 E. Summit Street, Lead, SD, 57754 ("Landlord") and Thyssen Mining Inc., a Nevada corporation, 337 Sunshine Lane, Spring Creek, NV, 89815 ("Tenant"). For good and valuable consideration, the receipt and sufficiency of which is acknowledged by each party hereto, the parties AGREE as follows:

1. **Lease.** (a). Landlord hereby leases to Tenant certain real property located within the City of Lead, Lawrence County, South Dakota, known as the Ross Pipe Shop (approximately 1550 square feet) and the Ross Maintenance Shop (approximately 3100 square feet) as generally shown on the drawing attached hereto as Exhibit A, which is a portion of the real estate described as Tract A, Yates Subdivision to City of Lead, as shown on Plat Document No. 2005- 8217, City of Lead, Lawrence County, South Dakota (the "Property") for use for temporary storage and work space in connection with Tenant's work on construction of the Long Baseline Neutrino Facility ("LBNF"). Access to the Property shall be via the Temporary Construction Easement granted by Landlord to the United States of America, acting through the Department of Energy ("DOE"), which easement is dated October 14, 2016, and which was revised and supplemented by a Supplemental Agreement No. 3 dated September 6, 2019, subject, however, to consent to such access being granted by DOE. It shall be Tenant's responsibility to obtain written consent for such access from DOE and to provide a copy of such written consent to Landlord before Tenant accesses the Property.

(b) Tenant's right to use the Property for the purposes stated above are exclusive, but Landlord retains the right to enter the Property and permit others to enter the Property to exercise all of the rights and incidents of ownership not expressly granted to Tenant by this Lease.

(c) RESERVE

(d) Landlord makes no warranty or representation as to Landlord's title to the Property, or the condition of or zoning ordinances concerning the Property for any purpose including but not limited to the purposes for which Tenant enters into this Lease. Without limiting the generality of the foregoing, Landlord hereby discloses the Property is subject to certain rights held by Homestake Mining Company of California ("Homestake") to re-enter and re-take the Property and to require Landlord to discontinue all operations on the Property under certain conditions. Any such action by Homestake, regardless of the cause, shall cause this Lease to immediately terminate and shall not be deemed a breach under of default upon the terms of this Lease by Landlord.

(e) Tenant acknowledges the following:

(i). the buildings shown on the attached Exhibit A which are owned by Landlord may contain asbestos, mold, lead paint, or other substances or materials which may be hazardous to human health; and

(ii). Landlord has performed little to no maintenance on the Property. The buildings may not be structurally sound and may contain trip and fall hazards, low clearances, and other hazards to human health. Such buildings may not be secure against the elements, including wind or rain.

(f). Tenant has inspected the Property, the infrastructure serving the Property, and the access to the Property, and accepts the Property in its "AS IS" condition.

**2. TERM.** The term of this Lease shall commence July 1, 2021, and end upon completion of LBNF construction phase 1B, which is estimated to be February 28, 2024, subject to termination by either party for a material breach of the terms hereof or a material change in the terms and conditions of the construction of LBNF. If the Tenant remains in possession after the end of the stated term of this Lease, this Lease shall continue as a month-to-month lease upon the same terms and conditions as otherwise stated herein until such time as Landlord gives written notice of termination. If such written notice of termination is given, Tenant shall relinquish and return possession of the Property to Landlord no later than sixty (60) days after the date of the notice of termination.

**3. UTILITIES.** Landlord shall be responsible for the cost of all water, sewer, electricity, heat and other utility services to the Property.

**4. RENT - TAXES.** In consideration of the use and occupancy of the Property as described herein, Tenant shall pay to Landlord the sum of \$1,200.00 per month, payable in advance and due on the first day of each month during the term of this Lease. If any installment of rent is not paid within five days of the due date, a \$25.00 per day late fee will accrue for each such installment not paid when due. Rent shall be paid to the Landlord at the address set out below. Any real property or other taxes or assessments incurred on account of Tenant's leasehold interest in the Property shall be the sole and exclusive responsibility of Tenant.

**5. STEWARDSHIP.** (a) Tenant shall at its own expense maintain the Property in good and safe condition in accordance with all applicable law and shall not discard nor allow any other party to discard any garbage, refuse or hazardous substance of any kind on or in the Property, and agrees to operate its affairs on and adjacent to the Property in compliance with all applicable local, state and federal laws and regulations, including those that apply to the environment, air, water, sanitation and fire hazards and as they may from time to time be amended by governmental agencies. Any repairs or improvements made by Tenant shall be made at Tenant's expense and shall become the property of Landlord

(b). As further consideration for the lease provided for herein, Tenant agrees to maintain its property and the adjoining real estate in accordance with Landlord's Storm Water Pollution Prevention and Spill Prevention, Control and Countermeasure Plans as described on the attached Exhibit B, which is incorporated herein by this reference. Tenant is hereby granted a temporary easement over and upon Landlord's real estate adjoining the Property for the sole and exclusive purpose of maintaining Landlord's adjoining real estate in conformity with the requirements set out in the attached Exhibit B. The easement granted in this subsection 6(b) is non-exclusive, and may not be exercised in a manner that interferes with the use of Landlord's property by Landlord or any other easement holders, licensees, or invitees. In the event of competing needs for access

to the easement area, before commencing work Tenant shall coordinate any such work with Landlord's representative. For the purpose of this subsection 6(b), Landlord's representative is William McElroy.

**6. RELINQUISHMENT OF PROPERTY UPON TERMINATION.** Upon termination of this Lease for any reason, including expiration of the term hereof, Tenant shall return the Property to Landlord broom clean, and in at least as good condition as when Tenant took possession, subject however to the terms of section 6 hereof, and further subject to ordinary wear and tear.

**7. INDEMNIFICATION.** To the fullest extent permitted by law, Tenant shall indemnify, defend and hold Landlord, its directors, officers, employees, agents, representatives, contractors and those of its affiliates harmless from any damage, loss, liability, injury or the claim thereof (including attorney's fees) to persons, property, natural resources and the environment, including environmental liability and responsibility of every kind and character arising out of Tenant's use and occupation of the Property, including without limitation the improvements located thereon.

**8. INSURANCE.** During the term of this Lease, Tenant shall obtain and maintain in effect the following insurance:

- (a) Worker's Compensation Insurance in the amounts and with the limitations of liability required by law.
- (b) Employer's Liability Insurance with a limit of liability of not less than \$1,000,000.
- (c) Environmental Liability Insurance with a limit of liability of not less than 5,000,000.
- (d) Commercial General Liability Insurance with a limit of liability of not less than \$5,000,000 combined single limit, per occurrence and annual aggregate, for bodily injury and property damage. Such insurance shall also include Completed Operations and Broad Form Blanket Contractual Liability coverage insuring Landlord against liability for all claims, loss or damage arising from any cause whatsoever arising out of or related to any activities of Tenant and/or its contractors.
- (e) The Commercial General Liability Insurance shall include endorsements or other provisions stating that all insurance of Tenant described in this subsection is the primary insurance and providing for waiver of subrogation by the insurer against Landlord and the Homestake Indemnified Parties (as that term is defined on Exhibit C hereto).
- (f) Certificates evidencing such insurance and naming Landlord as an additional insured (except in the case of the Workers Compensation insurance) shall be delivered to Landlord within ten days of the execution of this Agreement and any subsequent modifications or renewals thereof. Each such certificate shall include a provision that Landlord shall be given not less than 30 days prior written notice by registered mail of any cancellation or reduction of coverage.

**9. LIENS.** Tenant shall keep the Property free of liens, including those resulting from the purchase of labor and materials.

**10. TAXES.** Landlord is exempt from real property taxes. Tenant shall pay any real property taxes that may be assessed against the Property on account of this Lease or Tenant's leasehold interest therein.

**11. INSPECTION.** Landlord reserves the right for Landlord and its representatives to enter the Property at any time for the purpose of exercising all rights not granted to Tenant pursuant to this Lease and Landlord's rights under Section 2 to make reasonable inspections to ensure Tenant's compliance with its obligations under this Lease.

**12. NOTICES.** All notices and other communications to either party shall be in writing and delivered personally or sent by prepaid mail, email, or other means providing for receipt of the communication in written form. Notices sent by email shall be effective as the next business day after the date of transmission, but only if the sender obtains written verification (which may be in the form of an email) from the recipient varying receipt. Notices sent by ordinary mail shall be effective five days after the date of mailing. Notices sent by certified or registered mail shall be effective on the next business day after the date of actual delivery. Until a change of address is so given, notices shall be addressed to Landlord and Tenant as follows:

If to Landlord:  
South Dakota Science and Technology Authority 630  
E. Summit Street  
Lead, SD 57754  
Attention: William McElroy  
[mcelroy@sanfordlab.org](mailto:mcelroy@sanfordlab.org)

If to Tenant:  
Thyssen Mining Inc.  
420 W. Main St.  
Lead, SD 57754  
Attention: Chip Rich, Project Controls Manager  
[CRich@thyssenmining.com](mailto:CRich@thyssenmining.com)

**13. EFFECT OF LEASE; ASSIGNMENT; TRANSFER.** Tenant shall not permit others to use the Property. This Lease may not be assigned or transferred by Tenant without the express prior written consent of Landlord, which consent shall not be unreasonably withheld. All rights, privileges, benefits and expectations created by or pursuant to any previous license, permit or lease to use the Property shall be extinguished and superseded by this Lease.

**14. ENTIRE AGREEMENT.** This Agreement contains the entire agreement of the parties. There are no other conditions, agreements, representations, warranties or understandings, express or implied.

SOUTH DAKOTA SCIENCE AND  
TECHNOLOGY AUTHORITY

By: \_\_\_\_\_  
Casey Peterson  
Chairman of the Board

Thyssen Mining Inc.

By: [Signature]  
Its: Project Controls Manager

STATE OF SOUTH DAKOTA     )  
  ) SS  
COUNTY OF \_\_\_\_\_ )

On this the     day of \_\_\_\_\_, 2021, before me, the undersigned, personally appeared Casey Peterson, known to me to be the Chairman of the Board of the South Dakota Science and Technology Authority that is described in and that executed the within instrument, having authority to execute such instrument and acknowledged to me that such public entity executed the same.

In witness whereof I hereunto set my hand and official seal.

\_\_\_\_\_  
Notary Public  
My Commission Expires: \_\_\_\_\_

(SEAL)

STATE OF SOUTH DAKOTA     )  
  ) SS  
COUNTY OF Lawrence )

On this the 9 day of MARCH, 2021, before me, the undersigned, personally appeared and is, known to me to be Project Controls Mgr of Thyssen Mining Inc., the corporation that is described in and that executed the within instrument, having authority to execute such instrument and acknowledged to me that such corporation executed the same.

In witness whereof I hereunto set my hand and official seal.

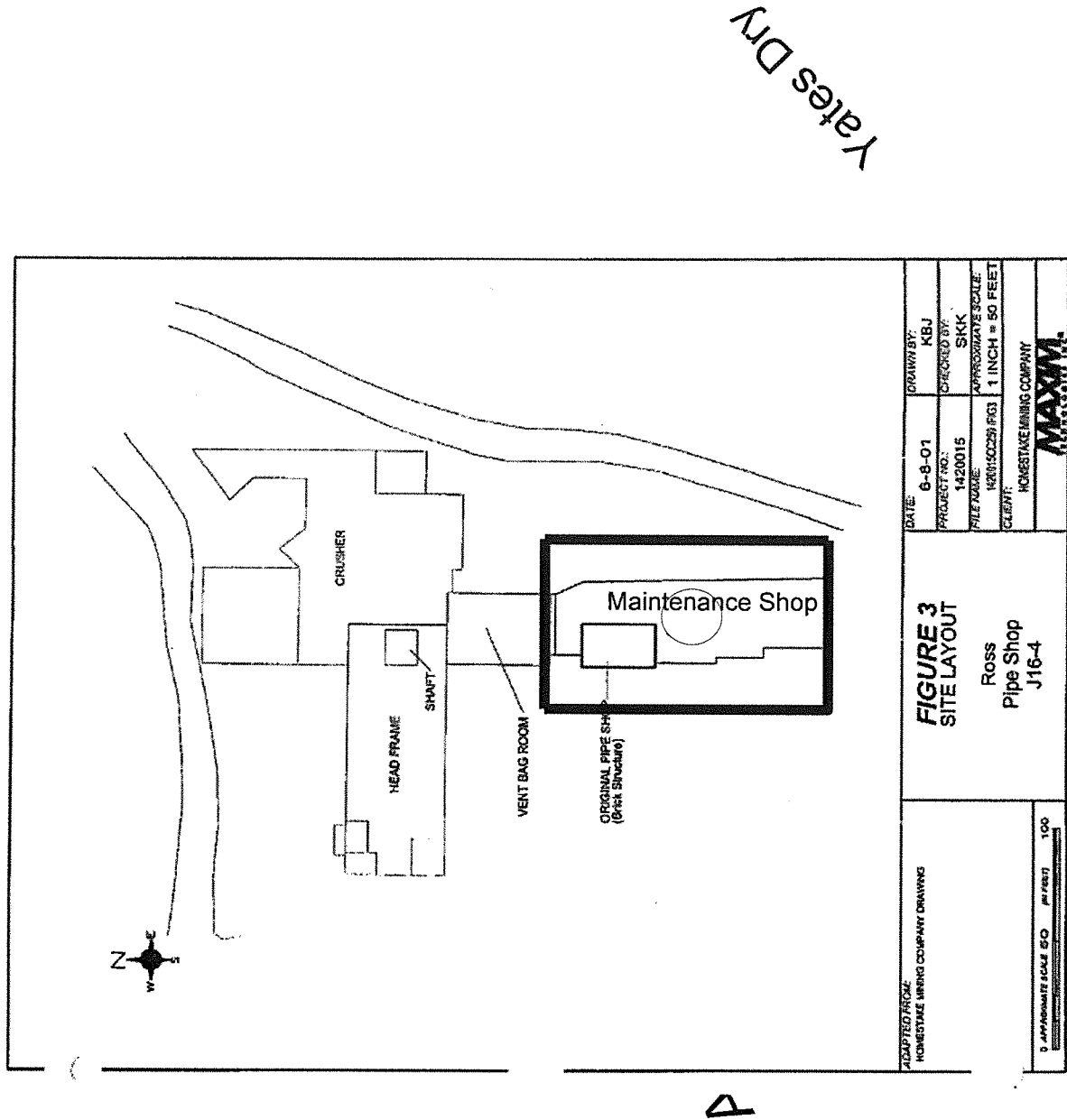
\_\_\_\_\_  
Notary Public  
My Commission Expires: 1-13-2027



My commission  
to expire:  
1/13/2027

[Signature]

# Plan View of Ross Pipe/Maintenance Shop Available to TMI



**Easements with Adjoining Landowners—Mr. Tim Engel**

---

Approval of Easements with adjoining landowners, attached.

---

**Recommended Action:**

*Motion to approve Easements with adjoining landowners and authorize the executive director to sign the Easements.*

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Prepared by:  
Timothy M. Engel  
May, Adam, Gerdes & Thompson LLP  
503 S. Pierre Street  
PO Box 160  
Pierre, South Dakota 57501

## EASEMENT

This Easement is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2021, by and between the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota, 57754 ("Grantor") and Traci L. Kulp, a single person, having an address of 20 Rosebud Avenue, Lead, South Dakota, 57754 ("Grantee"). For and in consideration of the mutual covenants and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Grant of Easement. Subject to the terms and conditions hereof, Grantor hereby grants to Grantee a conditional permanent easement of approximately 25' x 30', irregularly-shaped, over and upon a portion of the real estate described as Tract A, Yates Subdivision to City of Lead, as shown on Plat Document No. 2005-8217 and as generally illustrated on the attached Exhibit "A" (the "Servient Tenement") for the permitted uses described herein.

2. No Representations or Warranties – Contamination. The Servient Tenement may be contaminated with mine tailings containing iron, arsenic, or other minerals, chemicals, or other materials which may be harmful to human health. The property rights described herein are granted on an "as is," "where is" basis, with no representations or warranties, express or implied, concerning the condition of the Servient Tenement or its suitability for the Permitted Uses. Without limiting the generality of the foregoing, Grantor makes no representations or warranties concerning lateral or subjacent support for the Dominant Tenement, and Grantor expressly disclaims any duty to provide for such lateral or subjacent support.

3. Permitted Uses. Grantee may only use the easement provided for herein for the purpose of parking, loading, unloading, and similar uses to benefit the dwelling located on Lot 10 and Lot 11, Belle Addition to the City of Lead (the "Dominant Tenement"). The uses permitted under this section 3 are referred to herein as the "Permitted Use."

4. Further Conditions of the Easement. The easement over and upon the Servient Tenement is subject to the following further terms and conditions:

(a). In the event Grantee or anyone entering the Servient Tenement under the authority of Grantee damages or destroys any existing improvements or facilities located upon the Servient Tenement, Grantee shall promptly repair or replace any such improvements or facilities at Grantee's expense.

(b) The easement granted herein is non-exclusive, and Grantor reserves the right to enter the Servient Tenement. However, Grantor may not unreasonably interfere with the Grantee's Permitted Use under this easement.

(c) Grantee shall secure homeowners insurance that includes general liability insurance with limits of not less than \$1,000,000 applicable to bodily injury, sickness or death in any one occurrence; and not less than \$1,000,000 for loss of or damage to property in any one occurrence.

5. Indemnification by Grantee. To the fullest extent allowed by applicable law, Grantee shall indemnify, defend and hold Grantor harmless from and against any and all claims, causes, actions or causes of action (and including related costs of litigation and a reasonable attorney fee) directly arising from Grantee's activities on and directly related to the Servient Tenement; provided, however, that nothing herein shall require Grantee to indemnify Grantor for any claims, causes, actions or causes of action to the extent they arise out of any negligent or intentional act or omission of Grantor.

6. Term of Easement – Homestake Right to Re-Enter and Re-Take. The Easement provided for herein shall be perpetual and run with the land and be binding upon, and inure to the benefit of, the parties and their successors and assigns. The foregoing notwithstanding, the easement granted hereunder is conditioned upon and subject to the right of Homestake Mining Company of California to re-enter and re-take the Servient Tenement as described in that certain Deed dated effective May 15, 2006, and recorded May 17, 2006, as Doc. 2006-03035.

7. Miscellaneous. The terms of this Easement shall be construed under and governed by the laws of the State of South Dakota without the application of the conflicts of law principles thereof and any applicable federal law. Any lawsuit arising out of related to this Agreement shall be brought in a court of the South Dakota Unified Judicial System.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2021.

GRANTOR  
South Dakota Science and Technology Authority

\_\_\_\_\_  
By: Michael Headley  
Its: Executive Director

STATE OF SOUTH DAKOTA     )  
  )SS  
COUNTY OF LAWRENCE     )

On this \_\_\_\_ day of March, 2021, before me, the undersigned officer, personally appeared Michael Headley, known to me to be the Executive Director of the South Dakota Science and Technology Authority, a body corporate and politic created under the laws of South Dakota, that is

described in and that executed the within instrument, having authority to execute such instrument, and acknowledged to me that such body corporate and politic executed the same.

In witness whereof I hereunto set my hand and official seal.

\_\_\_\_\_  
Notary Public

(SEAL)

Notary Print Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

Dated this \_\_\_\_ day of \_\_\_\_\_, 2021.

GRANTEE

\_\_\_\_\_  
Tracy L. Kulp

STATE OF SOUTH DAKOTA     )  
  ) SS  
COUNTY OF                     )

On this the \_\_\_\_ day of \_\_\_\_\_, 2021, before me, a Notary Public, within and for said County and State, personally appeared Tracy L. Kulp, known to me to be the person who is described in and who executed the within instrument, and acknowledged to me that he executed the same.

In witness whereof I hereunto set my hand and official seal.

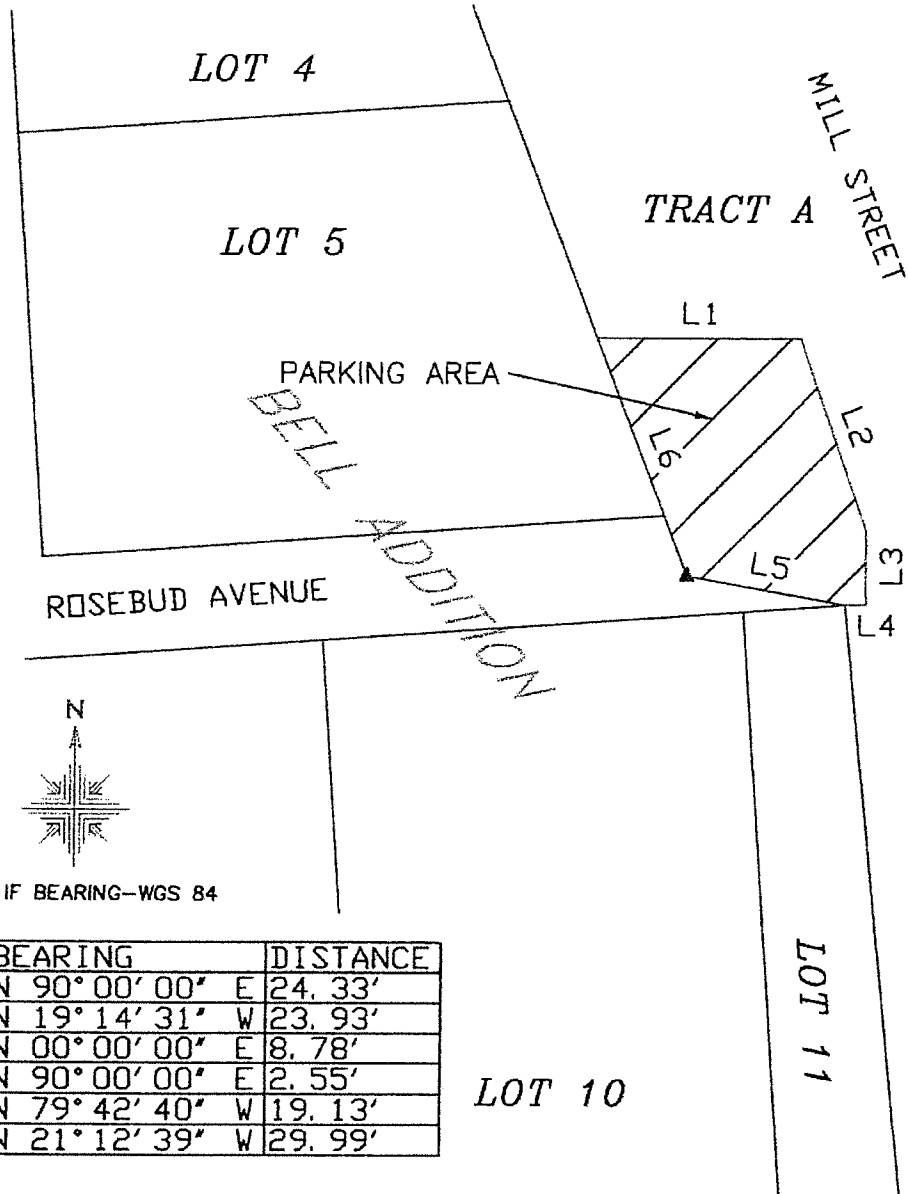
\_\_\_\_\_  
Notary Public

(SEAL)

Notary Print Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

EXHIBIT A  
SHOWING THE LOCATION OF A PARKING EASEMENT LOCATED  
IN TRACT A, YATES SUBDIVISION, CITY OF LEAD  
LAWRENCE COUNTY, SOUTH DAKOTA



YATES SUBDIVISION  
DOC. #2005-8217



BASIS IF BEARING-WGS 84

| LINE | BEARING         | DISTANCE |
|------|-----------------|----------|
| L1   | N 90° 00' 00" E | 24.33'   |
| L2   | N 19° 14' 31" W | 23.93'   |
| L3   | N 00° 00' 00" E | 8.78'    |
| L4   | N 90° 00' 00" E | 2.55'    |
| L5   | N 79° 42' 40" W | 19.13'   |
| L6   | N 21° 12' 39" W | 29.99'   |

LOT 10

▲ REBAR & CAP (NJS LS6117)



SURVEYOR'S CERTIFICATE

I, LOREN D. VREM R.L.S. 6579, DO HEREBY  
CERTIFY THAT THE SURVEY SHOWN HEREON  
WAS SURVEYED UNDER MY SUPERVISION AND THAT  
ALL DIMENSIONS ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

LOREN D. VREM R.L.S. 6579 DATE



Prepared By:  
**PONDEROSA LAND SURVEYS, L.L.C.**  
332A WEST MAIN ST.  
LEAD, SD 57754  
(605) 722-3840

|              |            |
|--------------|------------|
| Date:        | 8/6/2019   |
| Drawn By:    | L. D. Vrem |
| Project No.: | 19-326     |
| Dwg. No.:    | 19-326.dwg |

Prepared by:  
Timothy M. Engel  
May, Adam, Gerdes & Thompson LLP  
503 S. Pierre Street  
PO Box 160  
Pierre, South Dakota 57501

## EASEMENT

This Easement is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2021, by and between the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota, 57754 ("Grantor") and Kristi L. Wilson and Dustin A. Schumacher, joint tenants, having an address of 315 Barclay Avenue, Lead, South Dakota, 57754 (collectively "Grantee"). For and in consideration of the mutual covenants and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Grant of Easement. Subject to the terms and conditions hereof, Grantor hereby grants to Grantee a permanent easement of approximately 15' x 33' over and upon a portion of the real estate described as Tract F, Yates Subdivision to City of Lead, as shown on Plat Document No. 2005-8217 and as illustrated on the attached Exhibit "A" (the "Servient Tenement") for the Permitted Uses described herein.

2. No Representations or Warranties – Contamination. The Servient Tenement may be contaminated with mine tailings containing iron, arsenic, or other minerals, chemicals, or other materials which may be harmful to human health. The property rights described herein are granted on an "as is," "where is" basis, with no representations or warranties, express or implied, concerning the condition of the Servient Tenement or its suitability for the Permitted Uses. Without limiting the generality of the foregoing, Grantor makes no representations or warranties concerning lateral or subjacent support for the Dominant Tenement, and Grantor expressly disclaims any duty to provide for such lateral or subjacent support.

3. Permitted Uses. Grantee may only use the easement provided for herein for the purpose of parking, loading, unloading, and similar uses to benefit the dwelling located on Lot 315 Barclay Avenue, which is a part of the Plat of Lots 315 Barclay Avenue & 216 East Hill St., O.T. and Lots 410, 414 & 418 Barclay Ave. & 310 East High St., Crown Point Addition Located in a Portion of M.S. 180, M.S. 723 & M.S. 514 All Located in the City of Lead, Lawrence County, South Dakota, as shown on the Plat Document No. 88-4332 (the "Dominant Tenement"). The uses permitted under this section 3 are referred to herein as the "Permitted Uses."

4. Further Conditions of the Easement. The easement over and upon the Servient Tenement is subject to the following further terms and conditions:

(a). In the event Grantee or anyone entering the Servient Tenement under the authority of Grantee damages or destroys any existing improvements or facilities located upon the Servient

Tenement, Grantee shall promptly repair or replace any such improvements or facilities at Grantee's expense.

(b) The easement granted herein is non-exclusive, and Grantor reserves the right to enter the Servient Tenement. However, Grantor may not unreasonably interfere with the Grantee's Permitted Uses under this easement.

(c) Grantee shall secure homeowners insurance that includes general liability insurance with limits of not less than \$1,000,000.00 applicable to bodily injury, sickness or death in any one occurrence; and not less than \$1,000,000.00 for loss of or damage to property in any one occurrence.

5. Indemnification by Grantee. To the fullest extent allowed by applicable law, Grantee shall indemnify, defend and hold Grantor harmless from and against any and all claims, causes, actions or causes of action (and including related costs of litigation and a reasonable attorney fee) directly arising from Grantee's activities on and directly related to the Servient Tenement; provided, however, that nothing herein shall require Grantee to indemnify Grantor for any claims, causes, actions or causes of action to the extent they arise out of any negligent or intentional act or omission of Grantor.

6. Term of Easement. The Easement provided for herein shall be perpetual and run with the land and be binding upon, and inure to the benefit of, the parties and their successors and assigns.

7. Miscellaneous. The terms of this Easement shall be construed under and governed by the laws of the State of South Dakota without the application of the conflicts of law principles thereof and any applicable federal law. Any lawsuit arising out of related to this Agreement shall be brought in a court of the South Dakota Unified Judicial System.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2021.

GRANTOR  
South Dakota Science and Technology Authority

\_\_\_\_\_  
By: Michael Headley  
Its: Executive Director

[DOCUMENT CONTINUES ON FOLLOWING PAGES]

[illegible]

On this \_\_\_\_ day of \_\_\_\_\_, 2021, before me, the undersigned officer, personally appeared Michael Headley, known to me to be the Executive Director of the South Dakota Science and Technology Authority, a body corporate and politic created under the laws of South Dakota, that is described in and that executed the within instrument, having authority to execute such instrument, and acknowledged to me that such body corporate and politic executed the same.

In witness whereof I hereunto set my hand and official seal.

Notary Public

(SEAL)

Notary Print Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

GRANTEE

Kristi L. Wilson

STATE OF SOUTH DAKOTA            )  
   ) SS  
COUNTY OF                            )

On this the \_\_\_\_ day of \_\_\_\_\_, 2021, before me, a Notary Public, within and for said County and State, personally appeared Kristi L. Wilson, known to me to be the person who is described in and who executed the within instrument, and acknowledged to me that she executed the same.

In witness whereof I hereunto set my hand and official seal.

Notary Public

(SEAL)

Notary Print Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

Dated this \_\_\_\_ day of \_\_\_\_\_, 2021.

GRANTEE

\_\_\_\_\_  
Dustin A. Schumacher

STATE OF SOUTH DAKOTA     )  
  ) SS  
COUNTY OF                     )

On this the \_\_\_\_ day of \_\_\_\_\_, 2021, before me, a Notary Public, within and for said County and State, personally appeared Dustin A. Schumacher, known to me to be the person who is described in and who executed the within instrument, and acknowledged to me that he executed the same.

In witness whereof I hereunto set my hand and official seal.

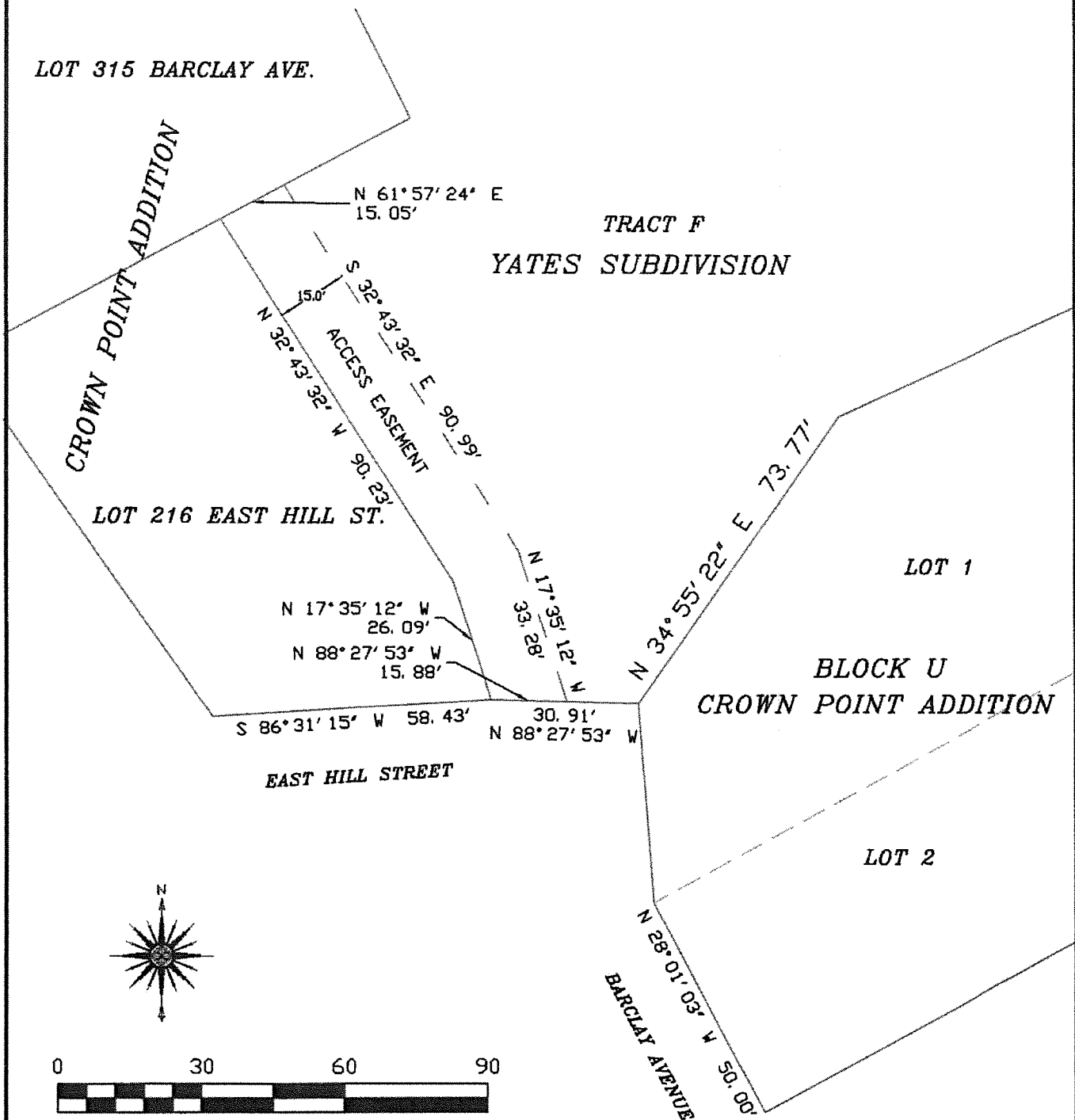
\_\_\_\_\_  
Notary Public

(SEAL)

Notary Print Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

**EXHIBIT A**  
**SHOWING A 15' WIDE ACCESS EASEMENT ACROSS TRACT F,**  
**YATES SUBDIVISION, CITY OF LEAD,**  
**LAWRENCE COUNTY, SOUTH DAKOTA**



Prepared By:  
**PONDEROSA LAND SURVEYS, L.L.C.**  
 332A WEST MAIN ST.  
 LEAD, SD 57754  
 (605) 722-3840

|              |            |
|--------------|------------|
| Date:        | 2/16/2021  |
| Drawn By:    | L. D. Vren |
| Project No.: | 21-86      |
| Dwg. No.:    | 21-86.DWG  |



**SURF Foundation Amended By-Laws—Mr. Mike Headley**

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Approval of SURF Foundation Amended By-Laws, attached.

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**Recommended Action:**

*Motion to approve SURF Foundation By-Laws amended Dec 16, 2020, as presented.*

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# **Sanford Underground Research Facility Foundation**

## **Amended Bylaws (effective March , 2021)**

### **ARTICLE I *Purpose***

The purpose of Sanford Underground Research Facility Foundation (the “Corporation”) is to promote scientific opportunities at and through the Sanford Underground Research Facility and the South Dakota Science and Technology Authority through education, service and advocacy.

### **ARTICLE II *Board of Directors***

**Section 2.1. General Powers:** The Board of Directors (“the Board”) shall be responsible for the general governance of the Corporation. The Board has the power to govern the affairs and property of the Corporation in keeping with policies it establishes that define the scope of authority and limitations of the Officers and employees of the Corporation and of the Board.

**Section 2.2. Composition and Number of Directors:** Board members shall be sought who reflect the qualifications and diversity determined by the Board in its policies. The Board shall consist of at least five (5) and no more than twenty-five (25) members, as determined from time to time by the Board. The sitting Chairperson of the South Dakota Science and Technology and the immediate past Chairperson of the Corporation will serve as a voting Director on an ex officio basis and shall count against the total number of Directors called for by these Bylaws. All Directors, in their capacities as Directors, shall have identical rights and responsibilities.

**Section 2.3. Tenure:** Except for the initial Board, Directors shall serve a term of three (3) years from the date of taking office. The terms of the initial Board of Directors shall be staggered by the drawing of lots such that the terms of office of all Directors will not all expire at the same time. The initial Board as established in the Articles of Incorporation shall take office at the organizational meeting of the Corporation. Thereafter, unless otherwise directed by the appointing authority, Directors shall take office at the beginning of the Board meeting first occurring after their appointment.

**Section 2.4. Nomination and Election:** The Chairperson of the Board of this Corporation shall appoint a Governance Committee as provided below in section 6.3. Prior to April 1 of each year, the Governance Committee shall present a slate of nominees for open Director positions for consideration by the Board of this Corporation. Prior to the earlier of June 15 or the annual meeting of the South Dakota Science and Technology Authority, the Board shall from the slate offered by the Governance Committee present to the Board of Directors of the South Dakota Science and Technology Authority a nominee for each open Director position. During its annual

meeting, the Board of Directors of the South Dakota Science and Technology Authority shall consider and act on the nominees presented by the Board of this Corporation. If the Board of Directors of the South Dakota Science and Technology Authority does not appoint a person or persons recommended by the Board of this Corporation, the Board of this Corporation shall promptly submit one or more substitute nominees for consideration by the Board of Directors of the South Dakota Science and Technology Authority.

Section 2.5. Vacancies: Any vacancy occurring in the Board of Directors or any position to be filled by reason of an increase in the number of Directors may be filled by the Board of Directors of the South Dakota Science and Technology Authority upon the recommendation of a qualified candidate by the Governance Committee and the Board of this Corporation as provided above in section 2.4. A Director appointed to fill a vacancy shall hold office for the unexpired term of his/her predecessor in office.

Section 2.6. Resignation: A Director may resign at any time by filing a written resignation with the Chair of the Board.

Section 2.7. Removal: The Board may remove any Director (except an ex officio member) for cause by a two-thirds (2/3) vote of all Directors then in office, at any regular or special meeting of the Board, provided that a statement of the reason or reasons shall have been mailed by Registered Mail to the Director proposed for removal at least ten (10) days before any final action is taken by the Board. The proposed removal and statement of reasons must be approved by the Executive Committee. This statement shall be accompanied by a notice of the time when, and the place where, the Board is to take action on the removal. If the circumstances so warrant, the Executive Committee may suspend a Director pending removal. The Director shall be given an opportunity to be heard and the matter considered by the Board at the time and place mentioned in the notice. The decision of the Board is final, although a decision not to remove does not preclude subsequent motions to remove for further or different reasons or upon the discovery of substantial new evidence. No member of the Board has any property right in his or her membership on the Board.

### **ARTICLE III**

#### ***Officers of the Board of Directors***

Section 3.1. Positions: There shall be three (3) elected Officers of the Board of Directors: Chair, Vice-Chair, and Secretary-Treasurer, and the office of Immediate Past Chair. The roles and qualifications of these Officers shall be determined by the Board in its policies.

Section 3.2. Nomination and Election: The Governance Committee shall present a slate of elective Officers to the Board of Directors. The nominated Officers shall be drawn from among the members of the Board of Directors. The election of Officers shall be held at the annual meeting of the Board. The newly elected Officers and the Immediate Past Chair shall take office at the close of the annual meeting.

Section 3.3. Tenure: The term for each Officer shall be one year. The Immediate Past Chair shall serve until the then-serving Chair is no longer in office and becomes the Immediate

Past Chair. No elective Officer may hold office for more than two consecutive terms. Partial terms served shall not count against the two consecutive term limit.

Section 3.4. Succession: In cases of a temporary absence of any elected Officer, the succession shall be Vice Chair and then Secretary-Treasurer. In the event of a permanent vacancy in any elected office, the succession shall be the same as noted above for the remaining term of the person succeeded and the Board shall elect a new Secretary-Treasurer to fill the unexpired term of office. If there is a temporary absence of the office of Immediate Past Chair, no temporary replacement will occur. If there is a permanent vacancy in the office of Immediate Past Chair, the Board shall select a replacement from other past Chairs who are still members of the Board; if there are no past Chairs who are still members of the Board, the Board shall select a replacement from the current membership of the Board.

## **ARTICLE IV**

### ***Meetings of the Board of Directors***

Section 4.1. Regular and Annual Meeting: The Board shall meet at least once a year before an annual meeting to be held during the month of June, and otherwise as determined by Board policy. Notice shall be given to each Director at least ten (10) days prior to the date of every regular meeting of the Board. Establishment by Board action of the annual Board calendar shall fulfill the requirement for notice.

Section 4.2. Special Meetings: Special meetings of the Board of Directors may be called by the Chair or by a majority of the Board filing a written request for such a meeting with the Chair and stating the object, date, hour, and place thereof. Except in the case of exigent circumstances, written notice of special meetings shall be given seven (7) days prior to such a meeting.

Section 4.3. Quorum: One-half plus one (1) of the Directors then in office shall constitute a quorum for the transaction of business at any regular or special meeting of the Board of Directors, except where otherwise required by these Bylaws. Voting is by a majority unless otherwise specified in these Bylaws.

Section 4.4. Meeting Format: Except as otherwise provided by these Bylaws, the latest version of Roberts Rules of Order, Revised © shall govern.

Section 4.5. Meeting Notice: Notice of all regular and special meetings of the Board, an agenda of all items to be discussed at such meetings, and agenda support materials shall be delivered to all Directors prior to the meeting. Any Director may waive notice of any meeting. The attendance of a Director at any meeting also shall constitute a waiver of notice of such meeting, except where a Director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Notification may be made through regular mail or electronic transmission.

Section 4.6. Action: Any action required to be taken by the Board of Directors may be taken without a meeting if all Directors consent to said proposed action in writing or by

electronic transmission pursuant to SDCL 47-23-6. The writing(s) or electronic transmission(s) shall be filed with the minutes of proceedings of the Board and maintained in the official files.

Section 4.7. Proxy and Alternates: Voting by Directors by proxies shall not be permitted. An absentee Board member may not designate an alternate to represent him or her at a Board meeting.

## **ARTICLE V**

### ***Staff***

The Board of Directors shall have the discretion to appoint a chief executive officer, who may employ staff within a budget established by the Board, and who shall be responsible for carrying out the day-to-day management and operations of the Corporation in accordance with the budget and policies established from time to time by the Board of Directors.

## **ARTICLE VI**

### ***Committees***

Section 6.1. Establishment and Operation of Committees: The Board of Directors shall establish such committees and task forces as it deems advisable to assist with governance, without compromising the Board's authority and in keeping with the policies established by the Board.

Section 6.2. Executive Committee: There is hereby established a standing committee known as the Executive Committee. The membership of the Executive Committee shall consist of the Officers of the Board. When the Board is not in session, the Executive Committee shall have and may exercise all of the powers of the Board except any powers specifically reserved to the Board by resolution of the Board, and except the following powers: to nominate candidates to fill vacancies in the Board; to remove a member of the Board; to appoint, change the membership of, or fill vacancies in any committee appointed by the Board; to adopt, amend, or repeal the Articles of Incorporation or these Bylaws; to amend or repeal any resolution of the Board of Directors which by its express terms is not so amendable or repealable; to fix the compensation of Directors for serving on the Board of Directors or on any committee; to adopt an agreement of merger or consolidation; or to dissolve the Corporation or revoke a determination to dissolve.

Section 6.3. Standing Committees: Standing Committees of the Board of Directors shall be the Executive Committee, Governance Committee, and Audit Committee. These committees shall operate in accordance with the roles and policies established by the Board. The Governance Committee shall consider and propose changes to the Articles of Incorporation and these Bylaws, propose candidates for open Board and Officer positions, and undertake such other duties and responsibilities as determined by the Board or the Chair. The primary functions of the Audit Committee are to assist the Board with its oversight of the Corporation's financial dealings and to independently review and cause the review of the Corporation's books, records, and financial dealings. The Board shall adopt a charter for the Audit Committee to more specifically establish its role and responsibilities. The Board Chair, in consultation with the chief executive officer,

shall appoint committee chairs and committee members annually, except that the person holding the office of Immediate Past Chair shall be the chair of the Governance Committee, and the Secretary-Treasurer may not serve on the Audit Committee.

## **ARTICLE VII**

### ***Fiscal Year***

The fiscal year of this Corporation shall begin on July 1 and terminate on June 30.

## **ARTICLE IX**

### ***Indemnification***

The Corporation shall indemnify its Directors, officers, employees, and volunteers to the fullest extent permitted by the law of the State of South Dakota.

## **ARTICLE X**

### ***Amendments***

These Bylaws may be amended at a regular meeting by a majority vote of all Directors then in office, provided that notice of the proposed amendment, together with a copy thereof, shall be distributed to each Director at least fifteen (15) days prior to the meeting at which the amendment is to be considered. An amendment affecting the power of the South Dakota Science and Technology Authority to appoint members of the Board of this Corporation shall be of no force or effect unless ratified by the South Dakota Science and Technology Authority.

## **ARTICLE XI**

### ***Dissolution***

In the event of the dissolution of this Corporation and after the payment of all debt and return of charitable contributions as appropriate, all assets shall be distributed as provided in the Articles of Incorporation.



**Executive Session—Chairperson Casey Peterson**

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Meeting closed to public during executive session. *See recommended motion below.*

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**Recommended Action:**

*Motion to enter executive session to discuss personnel matters and to consult with legal counsel concerning contractual and legal matters—SDCL 1-25-2(1), (3), and (4).*

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**Report from Executive Session—Chairperson Casey Peterson**

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*See recommended motion below.*

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**Recommended Action:**

*“The board consulted with legal counsel concerning legal and contractual matters. No action was taken.”*

*OR*

*...as discussed and stated otherwise.*

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**Insurance Package for LBNF Logistics Support Contract (Rigging)—Mr. Tim Engel, Mr. Mike Headley**

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Approval of insurance package for the LBNF logistics support contract (rigging).

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**Recommended Action:**

*tbd...Motion to approve insurance package for the LBNF logistics support contract as presented.*

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**LBNF Logistics Support Contract (Rigging)—Mr. Tim Engel, Mr. Mike Headley**

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Approval of the LBNF logistics support contract (rigging).

---

**Recommended Action:**

*tbd...Motion to approve LBNF logistics support contract (rigging) as presented and to authorize the executive director to sign.*

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**Select Nominating Committee—Chairperson Casey Peterson**

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Chairperson to appoint members of nominating committee for election of officers at the June annual meeting.

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**Recommended Action:**

*None.*

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**SURF Institute Science Program Scoping Study—Chair Casey Peterson**

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SURF Institute Science Program Scoping Study—dialogue LLC modified contract attached.

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**Recommended Action:**

*Motion to allocate SDSTA funding and authorize the chairperson to modify the existing contract with dialogue LLC to facilitate the development of a SURF Institute Scoping Document.  
(Follow Financial Conflict of Interest Policy procedures.)*

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creative consulting  
& project management

March 16, 2021

Mr. Casey Peterson  
Chair, SDSTA Board of Directors  
South Dakota Science and Technology Authority  
630 East Summit Street  
Lead, SD 57754

Re: Proposal to provide SURF Institute Scoping Document Development

Dear Mr. Peterson,

This proposal is in response to the SDSTA request for a proposal to provide additional consulting services to complete the required Scoping Document to inform further definition of the SURF Institute in Lead, SD. We are pleased to have the opportunity to submit a proposal for additional work with the South Dakota Science and Technology Authority (SDSTA).

This proposal is in response to the Scope of Work as provided by Michele Baumann, SDSTA Contracts Specialist. This scope of work builds on and is informed by the initial scope of work to study relevant STEM institutes (completed in 2019), and the science program study (completed in 2020).

The requested Scoping Document will address the following topics: Institute vision, staffing approach and requirements, governance model, major facility elements, science program priorities, education and outreach integration, key partnerships, and integration of inclusion, diversity, equity, and access aspects into the Institute's activities. Some elements may address both near-term and longer-term elements of the program and vision.

## Scope and Proposed Work Plan

This work will be completed between March 29, 2021 and June 30, 2021. We will work with the SURF and SDSTA leadership throughout this scope of work. The scope of work is defined in the table below.

| Task Description  | Duration & Timeline                   |
|---|---------------------------------------|
| <b>Project Set-up, Workshop, and Outline</b><br>Review proposed Working Group composition with SURF (up to 6 individuals). As background, provide final reports from two initial studies to the Working Group. Review final reports and develop guiding questions and themes for initial workshop. Facilitate kickoff workshop with the Working Group to review recommendations from previous studies and develop an outline for the Scoping Document. Distribute draft outline and writing assignments (with deadlines) to the Working Group and others as appropriate. Hold follow-up discussions with the Working Group, as appropriate.   | 20 hours<br><br>April                 |
| <b>Draft Scoping Document</b><br>Draft assigned sections of the draft Scoping Document. Coordinate and collect writing assignments from the Working Group and assemble into a complete working draft. Review and edit writing assignments and request additional sections to be drafted, as necessary. The draft Scoping Document will be developed and provided to the Working Group for review. A video conference working session may be held to discuss the draft, as needed. One revision will be made in response to consolidated comments provided by the Working Group before the draft Scoping Document is circulated to SDSTA Stakeholders (identified by SDSTA, not to exceed 10 individuals). Document will be 10-20 pages in length. | 40 hours<br><br>April – mid May       |
| <b>External Review</b><br>The draft Scoping Document will be sent to SDSTA stakeholders who will be invited to review the draft Scope Document (distributed in PDF) and provide comments using an editable comment form (Word or Excel). Comments easily addressed will be incorporated and a consolidated set of all other comments provided will be provided to the Working Group for review and discussion during a final video conference working session. Assignments for edits will be made to the working group, returned, and incorporated into the Scoping Document that will then be edited for clarity. The final Scoping Document will be provided to SDSTA (PDF and Word formats).   | 25 hours<br><br>Late May – early June |
| <b>Presentation of Report to SDSTA and SURF Foundation Boards</b><br>Support the development of a summary of the Final Scoping Document in PowerPoint presentation format to be presented to both the SDSTA and SURF Foundation boards.   | 8 hours<br><br>June                   |

| Task Description   | Duration & Timeline |
|--|---------------------|
| <b>Administrative</b><br>During the duration of the work, this allocation of time covers the requirement for submitting monthly progress reports and other administrative tasks associated with the scope of work. | 3 hours             |

We are prepared to support this effort immediately and work with the SDSTA leadership team on the process described within this proposal. We will do our utmost to support and deliver elements described herewith; the relevance of the final work product is dependent on the responsiveness and participation of the SDSTA team and working group throughout the process.

Our work will primarily be done from our Spearfish, SD office via video- and tele-conference. We will utilize technology (phone, Zoom, e-mail and electronic transfer, collaborative online tools, etc.) to facilitate the process while working from our Spearfish, SD office. Any printing of the reports (draft or final) will be handled by SDSTA or can be printed by dialogue, LLC and submitted as an additional reimbursable expense. No travel is included in this proposal.

The work described in this proposal will be undertaken under the direction of the SDSTA Board Chair and with careful coordination with other members of the SDSTA leadership team.

### **Deliverables**

1. Hold virtual workshop with the Working Group to develop outline of and writing assignments for the draft Scope Document (April)
2. Collaborate with Working Group to develop a complete draft of the Scope Document (May)
3. Collect and assemble comments from SDSTA Stakeholders for review and incorporation by the Working Group (May – early June)
4. Provide final Scope Document report to SDSTA (early to mid-June)
5. Develop and provide summary-level presentation to the SDSTA and SURF Foundation Boards (Week of June 21).

**Fee Structure, Staff, Invoicing and Taxes**

Elizabeth Freer is the key staff member from dialogue, LLC to support this scope of work, and the services provided by Elizabeth in this proposal will be billed at an hourly rate with a not-to-exceed maximum for the defined scope. Her hourly billing rate is \$125/hour and anticipate allocating 96 hours to this proposed scope of work. Estimated hours for each major work task are detailed in the Scope and Proposed Work Plan section above.

Other expenses to support the work effort (phone, occasional printing, etc.) are included in the cost of services provided at the stated rate.

Our hourly rates remain valid through September 30, 2021. The fee for services requested for this scope of work is \$12,000.00, which will be billed on a monthly basis accompanied by a brief report of accomplishments and activities.

Travel expenses, if required, will be billed at cost and are in addition to the fee for services. Any travel will be pre-approved by SDSTA and will be conducted in accordance with the U.S. Government's Federal Travel Regulations.

Invoices will be sent electronically. Payment on all invoices is due according to the established contract terms.

South Dakota (state and local) taxes are specifically excluded from the cost of services defined above. A current Certificate of Exemption for South Dakota Use or Sales Tax will be provided by SDSTA to dialogue, LLC.

If the scope of work requires additional effort, additional travel, or requires more extensive coordination than defined in the Scope of Work, this additional effort will be addressed through a supplemental contract or contract modification.

**Period of Performance and Proposal Validity**

We anticipate the period of performance for this agreement to be March 29, 2021 through June 30, 2021. If services are required beyond this time frame, they will be addressed in a future additional service requests to extend our contract allowance, or through separate contract agreements. This proposal is effective and valid for 30 days from the date of submission.

### **Authorized Contracting Representatives**

This proposal is submitted by Elizabeth Freer, Principal and Owner of dialogue, LLC, who will perform the work described within this proposal.

The services performed will be provided in conformity with generally accepted methods of project management and are based upon opinions expressed and information provided by the Client for this project. The facts presented, and the recommendations made, are believed to be reliable and represent this firm's best professional judgment thereto. However, the processes developed, and work product provided are without warranty, either expressed or implied, and upon the condition that the client/recipient shall review any deliverables and work product for scope of work and content.

Should you have any questions about the scope description and proposal provided above, please do not hesitate to call.

Thank you, in advance, for your consideration of this proposal and we look forward to working with SDSTA on the development of this scope of work.

Respectfully,

A handwritten signature in black ink, appearing to read "Elizabeth Freer", with a stylized flourish at the end.

Elizabeth Freer, Principal and Owner  
dialogue LLC

*dialogue project number: 1807.2*



**SDSTA Policies and Procedures—Mr. Mike Headley**

---

Attached is the following SDSTA policy reviewed by legal counsel and recommended for approval:

- SDSTA Social Media Policy (*updated*)

*Informational (approved by Executive Director):*

- SDSTA Social Media Procedure (*new*)

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**Recommended Action:**

*Motion to approve the updated Procurement Policy, Sole-Source Noncompetitive Procurements Policy, Tobacco-Free Property Policy and new Foreign Access Policy, as presented.*

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## **SDSTA-managed Social Media Policy**

The social media landscape presents many opportunities to promote activities at SURF and to interact with team members, contractors, friends and family. It also creates responsibilities and poses certain risks. Through every interaction on social media, no matter the platform, we ask our team members to remember—and adhere to—SURF's Core Values and be respectful of others at all times.

### **This policy:**

Establishes a framework for use of social media as it relates to SDSTA and the Sanford Underground Research Facility in order to protect the reputation and integrity of the SDSTA and SURF.

Establishes a procedure of best practices for utilizing SURF-approved social media.

Establishes guidelines for best practices when posting content on personal pages and interacting on other non-SURF-related social media platforms.

~~Establish a framework for use of social media as it relates to SDSTA and Sanford Underground Research Facility information and activities.~~

~~Establish a procedure of best practices for posting work-related information on personal social media platforms and provide best practices for utilizing SURF-approved social media tools.~~

~~Protects the image and integrity of the Sanford Underground Research Facility.~~

### **Definitions** (CAW41):

**Hate speech:** Speech that dehumanizes, ridicules, or condones or promotes violence against a protected class of people.

**Social Media:** social media refers to blogs, wikis, microblogs, message boards, chat rooms, electronic newsletters, online forums, social networking sites, and other sites and services that permit users to share information with others in a contemporaneous manner.

## **A. Use of SDSTA-managed Social Media**

Official SURF accounts may be created only under the direction of the Communications Director; employees may not create unofficial SURF-related accounts, fan pages or groups.

Sanford Lab respects different opinions and fosters dialogue through our social media presences. However, comments on social media sites managed by the Sanford Lab Communications Department may be removed if they

- contain obscene, indecent, offensive or profane language;
- contain threats or defamatory statements;
- contain sensitive or personally identifiable information.

## **B. Employee-Managed Social Media**

While employees may choose to participate in social networks to help communicate SURF's work to the public, staff should minimize time spent on social networks for personal use during work hours. Online activities should never interfere with official job responsibilities.

Approved on: 09/18/18 This revision date supercedes all previous versions. Section: 2  
Employee Handbook Page: 146

Employees are encouraged to share content from official SURF social media sites on their personal pages.

Employees may not create content that appears to be sanctioned by SURF for use on personal social media sites. The Communications Director may approve SURF-related material for use on personal pages.

Before posting to social media sites, employees should refer to Use of SDSTA-Owned IT Systems and Protection of Personal Privacy Procedure.

Employees must take annual communications training.

There is no delete button on the Internet and social media is a public stage. Before posting about Sanford Lab, employees should be aware of and consider the following:

#### 1. Personal Disclaimer.

Consider adding a personal disclaimer to accounts. Employees who identify themselves as part of SDSTA, SURF or Sanford Lab on their personal accounts, or discuss SURF-related activities, should make it clear they are speaking for themselves, not on behalf of Sanford Underground Research Facility.

*Example: Opinions are mine, not my employers.*

Be aware that employees are ambassadors of Sanford Lab. Employees are encouraged to share appropriate SURF-related information on their personal social media pages. Employees are expected to conduct themselves with the highest standards of integrity and follow all applicable Sanford Lab policies and procedures when communicating via social media about Sanford Lab, its employees and its programs.

#### 2. Protect confidential SURF-related information.

Posts should include only information that is public. Do not share information that is confidential, proprietary, internal to SURF or could have security implications.

#### 3. Protect personal privacy.

Social media networks request personal information; supplying a date of birth, marital status or contact information could lead to identity theft or provide a means for targeted social engineering attacks that attempt to solicit information or access directly. Employees should be careful what they share and learn how to set privacy protocols.

#### 4. Privacy and Respect.

Respect other employees and their privacy when interacting online. Using social media to post or display comments about coworkers that are vulgar, obscene, threatening, intimidating, harassing or are a violation of other workplace policies against discrimination is prohibited.

~~5. Product endorsement.~~

~~Do not appear to endorse any products or services on behalf of SDSTA, SURF or Sanford Lab.~~

~~6. Crisis/emergency communications.~~

~~Employees are required to obtain approval from the Communications Department before posting any crisis or emergency related content to personal social media accounts or to laboratory owned social media accounts to which they have access.~~

~~Approved on: 09/18/18 This revision date supercedes all previous versions. Section: 2  
Employee Handbook Page: 148~~

~~7. Avoid confusion.~~

~~Provide context and clarity when posting about activities at Sanford Lab. Include the who, what, where, when and why in each post.~~

~~8. Review content.~~

~~Is everyone in the photos following proper safety procedures and wearing the appropriate PPE?~~

~~9. Litigation.~~

~~Never comment on anything related to legal matters or litigation in which SDSTA or SURF may be involved, or concerning parties with whom SDSTA or SURF will be in litigation.~~

~~10. Mistakes happen.~~

~~If you make a mistake, admit it, be upfront and be quick with your correction.~~

~~11. Ask.~~

~~If you are unsure, ask what to post, how to provide context or how to fix a mistake. All statements must be true, not misleading. Contact the SDSTA Communications Office to address any questions.~~

**C. Consequences<sup>[CAW2]</sup> for Violations**

*Violation of the social media policy may result in disciplinary action (see *Progressive Discipline Policy*).*

## **SDSTA-Managed Social Media Policy**

### **Statement:**

The social media landscape presents many opportunities to promote activities at South Dakota Science and Technology Authority (SDSTA)/Sanford Underground Research Facility (SURF) and to interact with team members, contractors, friends and family. It also creates responsibilities and poses certain risks. Through every interaction on social media, no matter the platform, SDSTA asks our team members to remember—and adhere to—SURF's core values and be respectful of others at all times.

### **Purpose:**

The purpose of the SDSTA Social Media Policy is to provide a framework and guidelines for the use of social media as it relates to SDSTA and SURF in order to protect the reputation, image and integrity of the organization– It includes a framework for SDSTA-controlled social media and establishes guidelines for best practices when posting content on personal pages and interacting on other non-SURF-related social media platforms.

### **Related Procedure:**

SDSTA Social Media Procedure

## SDSTA Social Media Procedure

This South Dakota Science and Technology Authority (SDSTA) Social Media Procedure complements the SDSTA Social Media Policy, and includes expectations, responsibilities and instructions for best practices with regard to both SDSTA-managed social media and personal social media accounts. It provides a list of documents that may be useful for reference.

### Definitions

**Hate speech:** Speech that dehumanizes, ridicules, or condones or promotes violence against a protected class of people.

**Social Media:** Social media refers to blogs, wikis, microblogs, message boards, chat rooms, electronic newsletters, online forums, social networking sites, and other sites and services that permit users to share information with others in a contemporaneous manner.

### SDSTA-Managed Social Media Accounts

Official SDSTA accounts are created and managed under the guidance of the Communications Department. Employees may not create unofficial SURF-related accounts, fan pages or groups. Nor should employees create content that appears to be sanctioned by Sanford Underground Research Facility (SURF) for use on personal social media sites.

Official SDSTA accounts shall comply with the best practices set out in this Procedure.

### Personal Social Media Accounts

#### General Recommendations

SDSTA employees are ambassadors of SDSTA and SURF and are encouraged to share the good news about SURF. Although social media can sometimes blur the line between professional and personal lives, responsibility does not end when employees are off the clock. Before posting content, consider the core values of SURF, including respect for others.

How employees say something matters just as much as what they say. Employees should not bully, harass or threaten violence against anyone on or outside of social media. If an SDSTA employee finds themselves in a disagreement on social media, they should use a respectful tone or disengage. Seek assistance from the Communications Department when issues arise that involve SURF, whether on official or personal pages.

It is recommended that employees add a disclaimer to personal accounts. Employees who identify themselves as part of SDSTA, SURF or Sanford Lab on their personal accounts, or discuss SURF-related activities on personal accounts, should make it clear they are speaking for themselves and not on behalf of SURF or the SDSTA.

*Example: Opinions are mine, not my employer's.*

#### Protection of your personal privacy and the privacy of others

Social media networks request personal information. Supplying a date of birth, marital status or contact information could lead to identity theft or provide a means for targeted social engineering attacks that attempt to solicit information or access directly. Employees should be careful about what they share and learn how to set privacy protocols.

Apply these same principles when posting about others. Be respectful and do not share anything about a person that could damage that individual's reputation. Such posts could result in lawsuits.

Do not endorse or appear to endorse any products or services on behalf of SDSTA, SURF or Sanford Lab.

### Protect SURF information

Share only information that is public. Do not post or discuss anything that is confidential, proprietary, internal to SURF or to SURF/SDSTA partners or that could lead to a security breach.

Never comment on anything related to legal matters or litigation in which SDSTA or SURF may be involved or concerning parties with whom SDSTA or SURF will be in litigation.

Employees should leave crisis communications to the Communications Department and official SURF spokespersons.

### Use of social media during work hours

While employees may choose to participate in social networks to help communicate SURF's work to the public, staff should minimize time spent on social networks for personal use during work hours. Online activities should never interfere with official job responsibilities.

Before posting to social media sites, employees should refer to the SDSTA "Use of SDSTA-Owned IT Systems and Protection of Personal Privacy Procedure."

### Be responsible

Think before posting. Everything an individual posts online can be traced back to that individual. Be sure posts are appropriate. Posts that have been shared with others, documented through screenshots or archived do not go away—even if they are deleted at a later date. Disclaimers that say content reflects an individual's opinions only may not stop someone else from complaining about that online activity or noting the individual works for SURF.

Review content before posting. Is everyone in an image following safety protocols? Is context provided? If uncertain about a post, contact the Communications Department for clarification. And remember, mistakes happen. Admit mistakes and make the correction as quickly as possible.

### **Use of private social media accounts that could result in disciplinary action**

In some instances, the use of a private social media account by an employee may result in disciplinary action. Generally speaking, addressing matters of public concern in a respectful way is permitted and will not result in disciplinary action. On the other hand, even when addressing matters of public concern, an employee's manner of communicating the employee's views or concerns may subject the employee to disciplinary action if it results in an actual adverse effect on SDSTA's operations. For example, employee commentary which may be considered discriminatory in nature and which has caused or may cause work relationships to deteriorate or which make it difficult for the employee to perform the employee's duties may be subject to disciplinary proceedings by SDSTA.

The failure to protect SURF confidential information or the overuse of social media during working hours may also result in disciplinary action. Matters subject to whistleblower protections should be addressed through SDSTA's whistleblower policy and procedure.

### **Resources**

Employees are encouraged to discuss any concerns about the Social Media Policy and this Procedure with their immediate manager or the Communications Department.

If matters of compliance or ethics are involved, employees may choose to call the SDSTA Ethics Hotline for assistance, (605) 722-8650, extension 314. This hotline is confidential, except when nondisclosure is prohibited by law or upon employee request.

While there may not be an answer or resolution for every question or issue that arises, the Social Media Policy and Social Media Procedure are intended to provide SDSTA employees guidance on how to respond on all Social Media Platforms.

### **Related Documents**

*Anti-Harassment Policy*

*Inclusion, Diversity, Equity and Accessibility Policy*

*Open Door Policy & Procedure*

*Progressive Discipline Policy*

*SDSTA Social Media Policy*

*Use of SDSTA-Owned IT Systems and Protection of Personal Privacy Policy & Procedure*

*Whistleblower Policy & Procedure*

*Workplace Violence Policy & Procedure*



**South Dakota Science and Technology Authority  
March Board Meeting**

**Agenda Item: 19**

**Confirm date and time of next meeting—Chairperson Casey Peterson**

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The next board meeting will be held on Thursday, June 24 beginning at 8:00 AM (Mountain Time). This is our annual meeting.

| <b>2021 Board Schedule</b>   |                      |
|------------------------------|----------------------|
| Thursday, March 25 2021      | 8:00 am (MT)         |
| Thursday, June 24, 2021      | 8:00 am (MT), annual |
| Thursday, September 23, 2021 | 8:00 am (MT)         |
| Thursday, December 16, 2021  | 9:00 am (MT)         |

*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](mailto:mknight@sanfordlab.org)  
Direct Line: 605.722.4022, Cell: 605.641.0475*

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**Recommended Action:**  
*Informational.*

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**Public Comments—Chairperson Casey Peterson**

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Address public comment forms received, if any.

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**Board Comments—Chairperson Casey Peterson**

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1. Dr. Ani Aprahamian
2. Mr. Dana Dykhous, 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. James Rankin, *ex-officio member*

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**Adjourn—Chairperson Casey Peterson**

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**Recommended Action:**  
*Motion to adjourn.*

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