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

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

MEMBERS OF THE BOARD IN ATTENDANCE

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

MEMBERS OF THE BOARD ABSENT

Dr. Ani Aprahamian

SDSTA STAFF

Mr. Tim Baumgartner, Facility Infrastructure Director
Mr. Tim Engel, Legal Counsel
Ms. Nancy Geary, Chief Financial Officer
Mr. Pat Hasson, Waste Water Treatment Plant (WWTP) Operator
Mr. Mike Headley, Executive Director
Mr. David Johnson, WWTP Operator
Ms. Mandy Knight, Administrative Services Manager
Mr. Ken Noren, WWTP Foreman
Mr. KC Russell, Cultural Diversity Coordinator
Mr. John Scheetz, Environmental Manager
Ms. Constance Walter, Communications Director
Ms. Natasha Wheeler, Administrative Assistant

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Mr. Brian Bonde, Advanced Certified Fundraising, LLC President
Ms. Julie Dahl, Education and Outreach (E&O) Science Education Specialist (BHSU)
Ms. Elizabeth Freer, dialogue LLC Principal and Owner
Ms. Gina Gibson, Sanford Underground Research Facility Artist-in-Residence (BHSU)
Mr. Cody Honeywell, Legal Counsel Intern (May Adam, Gerdes & Thompson LLP)
Ms. Donna Job, Sanford Lab Homestake Visitor Center Executive Director
Dr. Peggy Norris, E&O Deputy Director (BHSU)
Mr. Alex Portal, Black Hills Pioneer Journalist
Ms. Debra Wolf, E&O Director (BHSU)

ITEM 1. CALL TO ORDER

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

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

Chairperson Peterson then asked audience members to introduce themselves.

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

ITEM 2. APPROVE AGENDA

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

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

ITEM 3. APPROVE MINUTES

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

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

ITEM 4. GENERAL CONFLICT OF INTEREST DISCLOSURE

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

No conflicts of interest were disclosed.

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

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

ITEM 6. REPORT FROM THE NOMINATING COMMITTEE

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

ITEM 7. ELECTION OF OFFICERS

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

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

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

ITEM 8. APPROVAL OF SDSTA MAINTENANCE SUPPORT FACILITY CONTRACT

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

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

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

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

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

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

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

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

ITEM 11. UPDATE ON IMPLEMENTATION OF SURF FOUNDATION

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

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

ITEM 12. UPDATE ON SCOPING STUDY FOR POTENTIAL STEM INSTITUTE

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

ITEM 13. AUDIT COMMITTEE

ITEM 13A. ANNUAL APPOINTMENT OF MEMBERS

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

ITEM 13B. ANNUAL REVIEW OF AUDIT CHARTER

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

ITEM 14. FINANCIAL REPORT

ITEM 14A. UPDATE ON INTERNAL CONTROL AUDIT

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

ITEM 14B. FINANCIAL SUMMARIES

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

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

ITEM 14C. FY2020 BUDGET

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

ITEM 14D. DISCUSS LETTER OF AGREEMENT

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

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

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

ITEM 15. REPORT FROM EXECUTIVE DIRECTOR

ITEM 15A. DECLARATIONS OF SURPLUS (4)

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

ITEM 15B. SDSTA QUARTERLY UPDATE

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

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

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

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

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

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

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

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

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

ITEM 16. SDSTA POLICIES AND PROCEDURES

ITEM 16A. ANNUAL REVIEW OF P&P

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

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

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

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

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

ITEM 17. EXECUTIVE SESSION

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

Mr. Dykhouse left the meeting following the executive session.

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

ITEM 18. REPORT FROM EXECUTIVE SESSION

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

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

ITEM 19. CONFIRM DATE AND TIME OF NEXT MEETING

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

ITEM 20. PUBLIC COMMENTS

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

ITEM 21. BOARD COMMENTS

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

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

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

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

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

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

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

ITEM 22. ADJOURN

Chairperson Peterson called for a motion to adjourn.

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

Meeting adjourned at 10:46 AM.