

South Dakota Science and Technology Authority Board of Directors
Meeting Minutes
Thursday, December 10, 2015
Lead, South Dakota

The Board of Directors of the South Dakota Science and Technology Authority (SDSTA) convened at 9:38 AM Mountain Time (MT) on Thursday, December 10, 2015 in the 2nd Floor Vault Conference Room at the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, South Dakota.

MEMBERS OF THE BOARD IN ATTENDANCE

Mr. Paul Christen (via teleconference)
Secretary/Treasurer Patricia Lebrun
Chairperson Casey Peterson
Vice Chairperson Ron Wheeler
Dr. Robert Wilson (via teleconference)

MEMBERS OF THE BOARD NOT IN ATTENDANCE

Dr. Ani Aprahamian
Vice Chairperson Dana Dykhouse
Dr. Heather Wilson

SDSTA STAFF

Ms. Michelle Andresen, Administrative Assistant
Ms. Billi Bierle, Sanford Lab Homestake Visitor Center Director
Mr. Tim Engel, Legal Counsel
Ms. Nancy Geary, Chief Financial Officer
Mr. Mike Headley, Executive Director
Dr. Jaret Heise, Science Director
Ms. Sharon Hemmingson, Business Services and Contracts Manager
Ms. Mandy Knight, Administrative Services Manager
Mr. KC Russell, Cultural Diversity Coordinator
Mr. Noel A. Schroeder, Environment, Safety and Health (ESH) Director
Ms. Constance Walter, Communications Director
Mr. Walter Weinig, Laboratory Director

ALSO PRESENT DURING ALL OR PART OF THE MEETING

Dr. June Apaza, Education and Outreach Director (BHSU)
Mr. Adam Hurlburt, Black Hills Pioneer
Dr. Ben Sayler, Co-Director, Sanford Science Education Center (BHSU)

ITEM 1. – CALL TO ORDER

Chairperson Peterson called the meeting to order at 9:38 AM (MT). Roll call was held. All members were present in person or by telephone except Dr. Ani Aprahamian, Vice Chairperson Dana Dykhouse and Dr. Heather Wilson.

ITEM 2. – APPROVE AGENDA

Chairperson Peterson asked for a motion to approve the agenda.

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

ITEM 3. – APPROVE MINUTES

Chairperson Peterson asked for comments, changes or corrections to the Minutes of the September 17 and October 9, 2015 meetings. Hearing none, a motion to approve was requested.

Motion by Mr. Wheeler and second by Mr. Christen to approve the Minutes of the September 17 and October 9, 2015 meetings as presented. Motion passed by unanimous roll call vote.

ITEM 4. – AUDIT COMMITTEE REPORT

Audit Committee Chairperson Ms. Patricia Lebrun reported the Audit Report for Fiscal Year Ended June 30, 2015 had not been finalized at the time of the board meeting and requested it be included on the March 17, 2016 meeting agenda for discussion. The report would then be included on the June 16, 2016 agenda for approval. Ms. Lebrun congratulated and thanked Chief Financial Officer Ms. Nancy Geary and her staff for yet another audit with no deficiencies noted. Chairperson Peterson acknowledged the audit committee report as informational and said no motion is necessary.

ITEM 5. – FINANCIAL REPORT

Executive Director Mr. Mike Headley and Ms. Geary provided highlights as the November financial report had not been finalized at the time of the board meeting. Ms. Geary said a few items were capitalized such as new servers to replace aging servers and new teleconferencing equipment was purchased for conference rooms. Mr. Headley said the overall cash flow was good in spite of the federal Continuing Resolution and work continues to move forward. Ms. Geary said additional funding was received to take the budget through January in incremental funding. Dr. Robert Wilson asked about the status of discussions with Fermilab and Berkeley on the transition. Mr. Wheeler said both parties are happy to see this facilitated. Chairperson Peterson acknowledged the financial update as informational and said no motion is necessary.

ITEM 6. – REPORT FROM THE EXECUTIVE DIRECTOR

Mr. Headley discussed the Declarations of Surplus Property: 1) The Autotrol Pilot Rotating Biological Cylinder at the Waste Water Treatment Plant and 2) The Dust Collector at the Yates Crusher room. SDSTA has no further use for these items. Dr. Robert Wilson inquired if there is a protocol on how to receive surplus. Mr. Headley said Policy 3.30 defines surplus and items are bid for a competitive process as well as posted on the Sanford Lab website and other public locations.

Mr. Headley then introduced new Sanford Lab Director Mr. Walter Weinig, who started his position in October. Mr. Weinig said he is once again glad to be associated with SDSTA as he was involved with the project in previous years.

Mr. Headley then began his slide presentation with a safety culture milestone noting 13-months with no recordable injuries; however, November had four recordable injuries. Two are Standard Threshold Shifts; specifically, two are hearing degradation and two are musculoskeletal injuries (one was a trip and fall and the other a muscle strain). A mandatory All Hands Safety meeting was conducted on November 30 to discuss strategies to stay focused (emphasizing this timeframe of the year, i.e. the Holidays and associated stresses/distractions).

Mr. Headley provided a status update on the MAJORANA (MJD) and LUX experiments and said both are in physics data-collecting mode. The Ross Shaft Rehabilitation status is 65 percent complete and on schedule for completion in mid-2017.

The SDSTA Business Services and Finance Offices have been working with Lawrence Berkeley National Lab to get a contract in place to obtain Department of Energy (DOE) funding for the Ross Shaft rehabilitation project. Mr. Headley said it had not been finalized in time for the board meeting, and requested a telephonic meeting on December 22 to approve the contract.

The Critical Decision (CD)-3a Director's Review October 27-29 and DOE Independent Project Review December 2-4 for the Long-Baseline Neutrino Experiment and Deep Underground Neutrino Experiment (LBNF/DUNE) were held at Sanford Lab. Mr. Headley stated that the DOE Review was a huge milestone in the process and the Reviews went very well.

The Strategic Plan for the Sanford Underground Research Facility has been distributed to the board, South Dakota Legislature, DOE partners and other stake holders. A total of 286 copies were mailed in the last few days. The report can also be found on the Sanford Lab website.

Mr. Headley then presented slides with the design scope of the 4850L excavations of the LBNF/DUNE experiment detector caverns.

Ms. Lebrun asked if a construction manager for the LBNF/DUNE project will be an SDSTA employee or contracted by Fermilab. Mr. Headley replied the position will be contracted by Fermilab. The DOE will have jurisdiction over the collaboration, but all other areas will be under SDSTA jurisdiction. The lease that will be discussed at this board meeting is the controlling document and a Memorandum of Understanding (MOU) will be outlined to clarify the underground spaces.

He said a workshop was conducted at Sanford Lab in August 2015, and a comprehensive logistics plan report was finalized by ARUP for all underground campuses. The report outlines the next 15 years for all underground operations and identifies comprehensive plans and project risks. Mr. Headley stated if any board member is interested in receiving a copy to let him know.

Mr. Headley discussed a slide representing the onsite headcount numbers of those that would work underground and on the surface during construction of the LBNF/DUNE experiment. Dr. Robert Wilson asked about logistics such as housing accommodations for all future parties arriving in Lead. Mr. Headley said he is a Deadwood Economic Development Committee member and is discussing housing expectations in the area as well as surface warehouse space.

Mr. Headley turned over the discussion to Mr. Weinig who described the Blast Vibration Study that is scheduled to occur this week and next week. He said computer models were created to estimate the resulting vibration over distance to the Ross and Davis Campuses. The calculations are routine except for the sensitivity of the science experiments is unknown. Mr. Weinig said the tests are designed to either confirm the model or identify where perimeters need to be changed within the models to control the excavation. There will be a total of three vibration test blasts conducted in a two-week period. Chairperson Peterson asked how the test blast compares to a full scale blast. Mr. Weinig said it is comparable to a smaller drift blast and the information should be scalable. Chairperson Peterson asked when a previous underground excavation this large was conducted, in general. Mr. Weinig said the blasts are similar to underground powerhouses for electric dams or subways, but the blasts will be deeper at the Sanford Lab. He concluded that the contractors involved are familiar with this type of excavation.

Mr. Headley introduced BHSU Education and Outreach (E&O) Director Dr. June Apaza who provided an update on the Curriculum Development. She said the E&O Department determined how to roll-out their new curriculum and decided on necessary staff for the educational programs. They are utilizing a contracting model with three educators on a part-time basis for periodic day events until they determine future staffing needs. The department is currently determining the availability to contact schools statewide with the curriculum. Ms. Lebrun asked if they could contact a specific area to promote that certain area for a specific time. Dr. Apaza stated they contact certain schools when staff will be in the area and notify them of their presence. Mr. Wheeler asked about a program to train presenters in different locations across South Dakota. Dr. Apaza said it would be ideal to fiscally support and connect with local trainers. Ms. Lebrun asked what the selection process is for teachers who pilot the curriculum units. Dr. Apaza replied teachers who assist with creating the curriculum are first offered an opportunity

and then to those who previously worked with them in the past. Dr. Apaza closed by reporting that the South Dakota Department of Education will be announcing the Davis Bahcall internship applications at 5pm today.

Mr. Headley introduced SDSTA Science Director Dr. Jaret Heise, who provided Science Integration highlights. He reviewed the following: LUX Data Taking, Operations and Maintenance, and Safety and Decommissioning in 2016. Dr. Robert Wilson asked if the transition to LZ will require additional personnel. Dr. Heise said the number of personnel will be very similar, with perhaps a slight increase. He then provided MJD highlights of Electroforming and Module Development. The MJD experiment will begin producing physics data in 2016.

Dr. Heise provided an overview of the new Ross Campus laboratories commissioned for the Compact Accelerator System for Performing Astrophysical Research (CASPAR) and Black Hills State University Underground Campus (BHUC). He said CASPAR is currently installing equipment and BHUC received authorization in September for initial occupancy and equipment installation. Dr. Heise then reviewed the Low-Background Counters (LBC) recent and upcoming accomplishments as well as current and near-term research efforts of ten other experiments onsite.

ITEM 7. – EXECUTIVE SESSION

Motion by Mr. Lebrun and second by Mr. Wheeler to enter into executive session to discuss personnel matters and to consult with legal counsel concerning contractual matters. By roll call vote, the motion passed unanimously.

The board recessed at 11:11 AM for Executive Session and reconvened at 12:29 PM.

ITEM 8. – REPORT FROM EXECUTIVE SESSION

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

Motion by Mr. Wheeler and second by Ms. Lebrun to approve the executive session report. By roll call vote, the motion passed unanimously.

ITEM 6E. – LBNF/DUNE LEASE AGREEMENT

Mr. Engel discussed the LBNF/DUNE Lease Agreement, which will cover specific, limited surface and underground properties. He said access to the underground will be handled in a different agreement. The agreement spells out the following: the SDSTA is the Lessor and the DOE is the Lessee; the initial term is twenty years, ending in 2035 and renewable from year to year thereafter; and the rent payable by the government is \$1 for the first 20 years and \$1 for each year thereafter. He said the DOE construction contractor will comply with SDSTA insurance requirements which are Exhibits A & B in the board packet. Exhibit D is a standard Acknowledgement of Risk and Release, Agreement Not to Sue and Waiver required to be signed by those going underground. He said the SDSTA is responsible for maintenance and repair of common areas. There is a requirement for the SDSTA to indemnify the DOE if any claims arise of pre-existing environmental conditions. Management will work with the insurance consultants and legal counsel to mitigate financial risk to the SDSTA resulting from the obligation to indemnify. The SDSTA is responsible for disposal of waste rock from the underground. He concluded the DOE is required to provide a Decommissioning Plan. Mr. Engel asked if there were any questions. There were none.

Motion by Mr. Wheeler and second by Mr. Christen to approve the lease as presented; to authorize the chairperson, in consultation with the laboratory director and legal counsel, to negotiate the final terms of the insurance requirements; and to authorize the chairperson to sign. By roll call vote, the motion passed unanimously.

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

ITEM 9. – REVIEW OF SDSTA POLICIES

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

The following policies were recommended for approval:

- Manual Contents Page (*updated*)
- Policy 2:3 Drug and Alcohol Testing Policy (*“and” spelled out in title, reworded for clarity*)
- Policy 2:13 Open Door Policy (*reworded for clarity*)
- Policy 2:18 Whistleblower (*reformatted and revised language to reflect current changes-additions Conflict of Interest Mitigation Plan*)
- Policy 2:19 Americans with Disabilities Act (ADA) (*formatting changes only*)
- Policy 3:8 Salary and Hourly Payroll Policy (*reference to Employment Policy 4:5 added for clarification*)
- Policy 3:26 Management and Control of Certain Funds (*reformatted, revised Indemnification Fund language*)
- Policy 3:27 Financial Conflict of Interest Policy (*“Financial” added to title; reference corrected in first paragraph*)
- Policy 3:30 Surplus Property Disposal Policy (*added “Policy” to title and updated wording*)
- Policy 6:1 Underground Personnel Access Control Policy (*“SDSTA” updated, reformatted and minor changes to wording*)

The following policies were recommended for retirement:

- Policy 2.8 Permit Certification Logs (*procedural, should not be a policy*)

The following procedures were presented for informational purposes only.

- Procedure 2:13A Open Door Procedure (*formatting changes only*)
- Procedure 2:3A Drug and Alcohol Testing Policy (*“and” spelled out in title, reworded for clarity*)

Mr. Headley thanked Administrative Services Manager Mandy Knight and Contracts Specialist Lea Mathis for their work on the policies. He then asked if there were any questions or comments. Dr. Robert Wilson asked why policies were retired. Mr. Headley stated the retired policies were either outdated, irrelevant or were rolled into procedures. Dr. Robert Wilson asked about the Underground Personnel Access Control Policy and if a violation occurred, is there a right of appeal. Mr. Headley said that facts would be gathered and a review conducted before denying underground access. It would be decided on a case by case basis. Dr. Robert Wilson said strong consequences are fine but asked if it is too restrictive. Mr. Engel advised to take this under advisement and to handle case by case. Chairperson Peterson asked if there were any questions. There were none.

Motion by Ms. Lebrun and second by Dr. Robert Wilson to approve the new, updated and retired policies as presented. By roll call vote, the motion passed unanimously.

ITEM 10. – LOBBYIST REGISTRATION

Mr. Engel advised the board there are no SDSTA legislative initiatives this year. He recommended the board designate and register lobbyists for the 2016 Legislative Session.

Motion by Mr. Christen and second by Ms. Lebrun to designate Mr. Mike Headley, Mr. Ron Wheeler, Mr. Walter Weinig and Mr. Tim Engel as lobbyists for the SDSTA. By roll call vote, the motion passed unanimously.

ITEM 11. – CONFIRM DATE AND TIME OF NEXT MEETING

Chairperson Peterson said there will be a telephonic board meeting on December 22 at 9:30 AM (MT). Ms. Knight shall poll members of the board not present on the proposed date and time.

Chairperson Peterson asked if there were any concerns with the board meeting scheduled for Thursday, March 17, 2016 at 9:00 A.M. (MT). There were none.

Chairperson Peterson informed the board that Dr. Ani Aprahamian was reappointed to the Board for another six-year term.

ITEM 12 – BOARD COMMENTS

Ms. Lebrun said she appreciates the updates during the meetings from different SDSTA Departments. The Audit Committee is discussing having an audit of the internal controls of the SDSTA as it would be appropriate to get a bench mark (of internal controls). She requested this be included on the agenda for the next meeting. Ms. Lebrun welcomed Mr. Weinig to the SDSTA and wished Happy Holidays to all.

Mr. Wheeler reiterated his thanks to Mr. Headley and staff for a great job during the CD-3a Reviews. He said it is fun to see SDSTA moving forward. He wished everyone a Merry Christmas.

Mr. Christen said this was a very informative meeting. He congratulated Mr. Headley on the impressive CD-3a Reviews. Mr. Christen also congratulated Ms. Geary and her team on a clean audit. He wished Happy Holidays to everybody.

Dr. Wilson said he attended the CD-3a Review in December and stated the attendees were uniformly impressed with the performance of the SDSTA. He congratulated Mr. Headley and SDSTA staff. Dr. Wilson also commented that the international participants were impressed with their underground tour and said it was a positive experience. He wished Happy Holidays to everyone.

Mr. Weinig thanked the board for the warm welcome. He said it was nice to be back at the Sanford Lab as he was involved with earlier phases of the project; it is nice to be here once again.

Mr. Headley thanked Ms. Knight for organizing the board meeting. He stated it has been an incredible year and amazing to see the project move forward. The Sanford Lab Homestake Visitor Center has been up and running since this summer and is doing very well. Mr. Headley is proud of the SDSTA team as well as the partnership with the board. He wished everyone a safe and Happy Holidays.

Mr. Engel appreciated the opportunity to be part of the SDSTA board and said this is one of the biggest milestones in his career.

Chairperson Peterson asked if anyone in the room had any final comments. Ms. Constance Walter invited everyone to attend the Nobel Day event at the Visitor Center beginning at 5:00 PM (MT) today.

Chairperson Peterson thanked the entire SDSTA team. He said looking back, it is phenomenal what has happened, how the process has accelerated and the people handling it. He said he is proud to be associated with SDSTA and congratulated the SDSTA on the CD-3a Reviews. He is interested in seeing how the strategic plan aligns in 2016. He wished everyone a Merry Christmas.

ITEM 13. – ADJOURN

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

Motion by Mr. Wheeler and second by Ms. Lebrun to adjourn. Motion passed unanimously.

Meeting adjourned at 12:56 PM.