

Earth Sciences Division

Business Plan (ESD-PLN-002 REV00A-Draft1, April 2004)

1.0 INTRODUCTION – ABOUT EARTH SCIENCES

The Earth Sciences Division (ESD) at Berkeley Lab brings together geoscientists, mathematicians, microbiologists, computer scientists and engineers to address local, national and global problems related to energy resources, environmental remediation, nuclear waste disposal and global change. ESD blends fundamental and applied research to tackle some of the planet's most pressing issues, while building the knowledge base to address future concerns.

The ESD team consists of more than 200 full- and part-time geoscientists, many of whom are affiliated with the University of California at Berkeley. ESD researchers also collaborate with scientists across the nation and around the world, seeking to develop ties and enhance synergy among scientists, disciplines and institutions. In this way, the ESD team can deliver solutions to even the most challenging environmental and energy resource problems.

ESD funding sources are discussed in Appendix A.

2.0 BUSINESS IMPLEMENTATION

The overall philosophy of the Earth Sciences Division (ESD) in regards to business practices is that authority follows money. With that in mind, each level of authority carries with it a certain level of responsibility as outlined below. We will do everything in our power to ensure integrity in every business transaction and have general practices, process, and procedures in place (checks and balances) to make sure we are following all federal and state regulations as laid out in our DOE contract and from the [LBNL Regulations and Procedures Manual](#) (RPM).

Using this Business Plan as guidance, we are continuously developing and improving our business practices, processes and procedures using the following **principles**:

- Clear Lines of Authority – The lines of authority in the Earth Sciences Division are outlined by the Division Organization Chart.
- Spending Authority Tied to Line Management – Authorization to spend funds follows the line management of the Division Organization Chart.
- Exceptions “Authorized” by Memo to File – When the line manager is not available authorization exceptions will be noted in memos to file.
- Appropriate “Checks and Balances” – Procedures in place to make sure all our business practices are being followed.
- Clear Understanding of Property – What are the appropriate uses of government property (phones, computers, etc.)

ESD has developed detailed step-by-step processes/procedures for employees to use as a tool for performing certain operational functions for the purposes of supporting scientific research. The ESD will implement these processes/procedures to the best extent possible; however, it should be noted that in some cases of collaborating with divisions other than ESD, implementation of business practices will be to the best extent possible within the employees' home division. Refer to Appendix B for an overview of business practices where the ESD has assigned a clear line of authority and checks and balances.

2.1 Lines of Authority

From the LBNL Authorized Signatures memo (<http://www.lbl.gov/Workplace/CFO/SAS/sigauth.html>), the Earth Sciences Division Director delegates signature authorizations to Division Staff, who then must also be noted in the Berkeley Lab Signature Authorization System (SAS). ESD will document these authorizations in memorandums to File for the applicable financial transaction.

The current ESD organization is outlined in Figure 1. The ESD Division Management is responsible for overseeing the funding for the Scientific Programs. The Scientific Program Heads are responsible for managing the spending of

funds and interacts with Division “customers” to gain financial support for the Division. They also work with the Department Heads to find support for ESD staff.

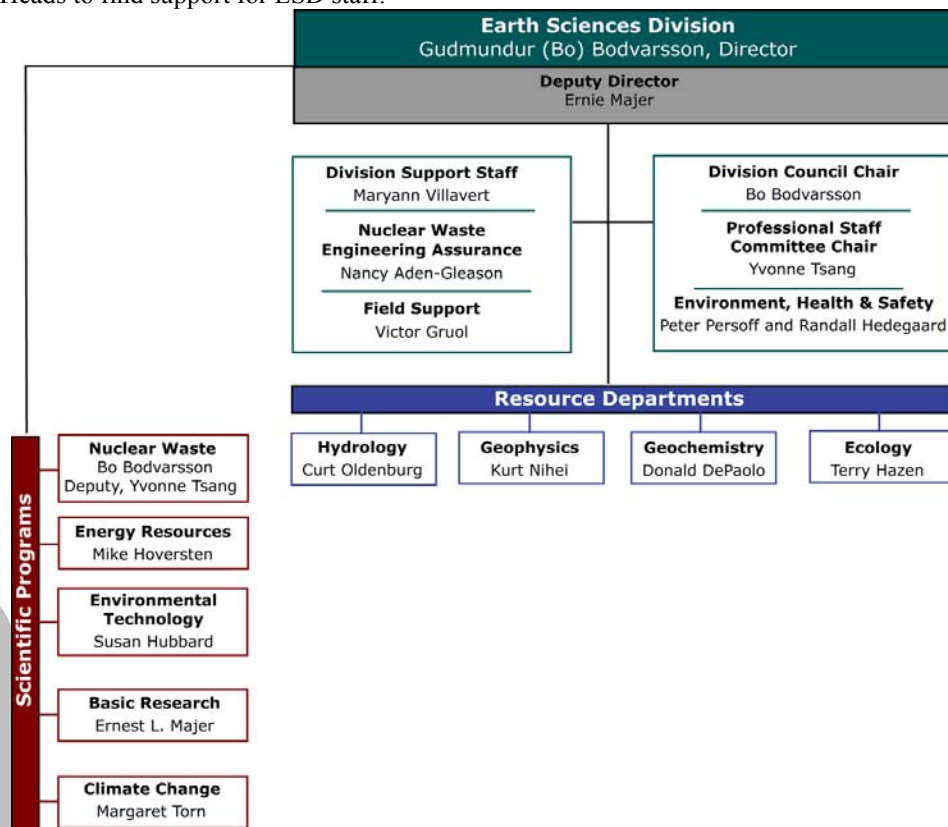


Figure 1. Current Earth Sciences Division Organizational Chart

2.2 Spending Authority

This section discusses the roles of each manager/employee in the ESD with regards to signature and spending authority. It details responsibilities as well as limitations of authority.

Role of Principle Investigator: the PI formulates the budget and authorizes expenditures of the project. The PI is responsible for keeping the project on time and on budget and for preventing cost overruns. Each PI has signature authority for procurement up to \$10K.

Role of the Department Head: The Department Head works with the Program Heads to meet staffing needs of the ESD programs. They are responsible for hiring, promoting, mentoring, oversight of performance appraisals and disciplinary actions. The Department Heads have signature authority up to \$50K.

Role of the Program Head: The Program Head interacts with Division “customers” to gain financial support for the Division. They also work with the Department Heads to find support for ESD staff. Each Program Head has signature authority up to \$50K.

Role of the Division Director: Scientific leadership of the Division. Director develops the strategy for and oversees organization burden. Director prioritizes and champions LDRD proposals and investments. Director supervises Department, Program, and Center Heads and manages performance appraisals and salary setting. The Division Director has signature authority for all ESD functions.

Business Manager: Oversees administrative functions and staff, budget and business services. The Business Manager is also responsible for making sure all ESD business practices are followed and appropriate checks and

balances are in place. The Business Manager may sign procurements up to \$5,000 in the absence of the Principle Investigator. The Business Manager also signs reimbursement requests up to \$500.

Principle Resource Analyst: Responsible for all budget functions of the Division including proposal preparation, cost estimating, budget schedules and reporting to DOE and other agencies. The PRA may sign procurements up to \$5,000 in the absence of the PI. PRA also signs reimbursement requests up to \$500.

Role of Procurement Inputters and Buyers: The Division “inputters” take requests for procurements and input them into the Lab system. After the request is electronically approved by the PI, the buyer then proceeds with purchasing. Buyers track purchases and research problems with vendors. Inputters and Buyers have no signature authority.

Role of Supervisor: Supervisors are responsible for approving employee time in the LETS system, making sure their employees are current on all EH&S training, have ergonomic workstations, and educate employees on Lab/Division policies and procedures. Supervisors per se do not have any signature authority unless they are one of the above personnel.

2.3 Exceptions for authorizations

When necessary, an exception for authorizing any operation transaction shall be documented in a memo to file or in an email to the appropriate individuals as outlined in the previous section.

2.4 Integrated Model for “Checks and Balances”/Internal Audit

The Division has in place mechanisms to make sure that our business practices are being followed. The line management of the Division Organization Chart ensures that only employees directly managing funds can authorize expenditures, unless “memos to file” authorize exceptions. The Business Manager and Principle Resource Analyst perform periodic audits of divisional expenses such as phones, computer usage, space charges, stores items, property, and all expenses tied to the Organization Burden to ensure proper usage and control of these Laboratory assets. The Business Manager periodically reviews all resource adjustments for appropriateness and must sign resource adjustments greater than \$5000.

Integrated Model for Reporting: Periodic financial reporting to Division management is performed by the Business Manager and Principle Resource Analyst. Monthly budget reports are provided to all PIs and Division Management, quarterly reports are provided to Laboratory Management and DOE. The annual budget forecast is provided to the Laboratory Director by the Division Director. PIs are responsible for periodic reports to their respective DOE program managers regarding their individual funding.

2.5 Clear Understanding of Property

Facilities, tools, supplies, materials, and equipment used by the Laboratory are United States government property. As such, their use on or off the Laboratory site for any purpose other than official Laboratory business constitutes a type of conflict of interest and is illegal and prohibited. Additional discussion is outlined in Appendix B.

Appendix A
Funding Sources

Department of Energy (DOE) - The U.S. Department of Energy funds the Earth Sciences Division through competitive, peer reviewed single researcher grants ranging from \$10,000 to millions of dollars.

Work for Others (WFO) – Funds are also received in the form of “work for others” where other federal and state agencies, and private industries fund research that does not come through the DOE.

Laboratory Directed Research Development (LDRD) – Funds allocated by the Laboratory Director through a process of peer reviewed proposals for up to three years to advance forefront areas of science.

Gifts – Private donations to fund research.

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Appendix B

The discussion in this Appendix is tied to the document number by section of LBNL's RPM and each section can be linked back to the RPM with the same number.

4.01 Travel

Domestic (and Local) and Foreign Travel:

Official travel undertaken on behalf of Ernest Orlando Lawrence Berkeley National Laboratory must be accomplished in a manner that meets business needs and minimizes cost to the government. You should manage your travel to maximize the use of your project funds.

It is the policy of the **Laboratory** that all official travel shall be properly authorized, reported, and reimbursed in accordance with this document in a timely manner (**30 days after completion of travel**). Laboratory travelers are expected to exercise good judgment in the use of funds. Personal travel is not to be charged to, or temporarily funded by, the Laboratory. When an employee travels under the sponsorship of another organization, travel expenses may not be charged to a Laboratory account.

All official Laboratory travel must have prior approval. If approval is not obtained before departure, travelers may be liable for the expenses incurred.

Foreign

All foreign travel requests, regardless of funding source, must have prior written approval by the division director or designee. When foreign travel expenses and/or salary while on foreign travel are paid with Department of Energy (DOE) funds, travel requests must be submitted no later than 21 days prior to departure (30 days for travel to **sensitive countries**) for approval under DOE Order 551.1A.

Signature Authority

Travel authorizations will be signed by the applicable Program Head for the project that they are traveling for. In the event that the Program Head is unavailable, the Division Director or person designated by the Division Director will authorize the travel (Refer to Signature Authorization for: Travel).

Checks and Balances

All foreign travel will be reviewed by the Laboratory Travel Office and thus will not require any additional checks and balances here at Earth Sciences Division. The Earth Sciences Division holds the Program Heads responsible for all domestic and local travel. It is the Program Head's responsibility to ensure that all travel and expenses are appropriate and applicable. A fiscal year review, of randomly selected domestic and local travel, will be carried out by the ESD Travel Coordinator, Marie Butson with the assistance of the Laboratory Travel Office. The findings will be reported in the business report.

6.01 Obtaining Goods and Services

Procurement

The procurement process starts with good planning. The level of procurement planning is dependent on the dollar value and complexity of a proposed subcontract. Procurement planning is an essential tool for both requisitioning organizations and the Financial Services Department/Procurement because it provides a method for early notification of intended requirements and an understanding of the entire procurement process from inception through completion. The information gathered at this stage can also be used for budgeting and scheduling purposes.

Please follow the Earth Sciences Division Procurement procedure to place your orders.

Periodic review of select procurements will be carried out by Peter Lau and the findings will be reported in the annual business report

6.02 Property

Facilities, tools, supplies, materials, and equipment used by the Laboratory are United States government property. As such, their use on or off the Laboratory site for any purpose other than official Laboratory business constitutes a type of conflict of interest and is illegal and prohibited.

- **Property Guide (RPM 1.01)**

Property Coordinators are appointed by Divisions to assist the Property Representatives in the administrative details of property stewardship. Property Representatives and Coordinators work together to support Property Management

Property Custodians are career employees who are assigned one or more items of property to use in the performance of their work. Custodians must follow Laboratory Property Management policies and

procedures and take reasonable measures consistent with the environment in which the property is being appropriately used. They are required to safeguard their assigned property against loss, damage, destruction, or theft and must cooperate in the investigation of lost or stolen items.

- Know every piece of equipment in your name and where to find it.

Periodic review of select property will be carried out by Marie Butson and the findings will be reported in the annual business report

9.01 Computer

Lawrence Berkeley National Laboratory operates this computer system under a contract with the U.S. Department of Energy. It is the property of the United States Government and is for authorized use only. The use of this system may be monitored for computer security purposes. **Any unauthorized access to this system is prohibited and is subject to criminal and civil penalties under Federal Laws including but not limited to Public Laws 83-703 and 99-474. Each time you use this system (from here, from home, or on your personal laptop connected to an LBNL system), you consent to such interception, auditing, and related activity by authorizing personnel; further, LBNL may detain, access, and copy files from a non-LBNL computer when there is reason to believe misuse has occurred.**

- Manage your e-mail accounts so that you are not paying excessive fees to store e-mail on the Lab servers. Learn how to set up files on your hard drive for storage.
- Computer Backup
- Computer Security

9.02 Telephone

Laboratory desktop and cellular telephones are for official business, and the Laboratory pays for each official call. Use of Laboratory telephones for brief personal calls is permitted when required by changes in work plans, emergencies, or coordination of work activities with family members or others who can be reached only during working hours. These calls are also treated as official calls and are paid for by the Laboratory. Telephone use that does not fall under this category will need to be reimbursed to the UC Regents in a timely manner.

Periodic review of select telephone bills will be carried out by Grace Miller and her findings will be reported in the annual business report.

- Other services

Proposal submission

Project/Program Management

- Never overspend your account.
- Review your costs each month and know who and what is being charged to your project.
- Know the proper use of operating funds vs. equipment funds. If you are going to purchase a piece of equipment with a shelf life of over two years that costs more than \$25K, you must get permission from your program manager *in writing* before you make the purchase. They will either authorize separate equipment funding or authorize the expenditure from your project operating funds.
- Never use DOE funds to augment other types of accounts such as work for others or LDRD.
- If you get LDRD funding, know all the regulations for spending those types of funds.

Security / Site Access (1.06 RPM)

Any Laboratory employee may request site access for a prospective visitor on approval of the employee's supervisor and/or with knowledge of the employee's division administrator/director. A Laboratory employee who extends an invitation to a prospective visitor becomes the Laboratory host for that prospective visitor, and the employee's division becomes the hosting division. As Laboratory host, the Laboratory employee must advise the prospective visitor of the Laboratory site-access policies and procedures applicable to the forthcoming visit.

Human Resources

- Hiring (2.01 RPM)

It is the policy of Ernest Orlando Lawrence Berkeley National Laboratory to ensure equal employment opportunity to all employees and job applicants. The Laboratory will not engage in discriminatory practices against any person employed or seeking employment because of race, color, religion, marital status, national origin, ancestry, sex, sexual orientation, physical or mental disability, medical condition (cancer-related or genetic characteristics), age, citizenship, or status as a covered veteran, special disabled veteran, Vietnam-era veteran, veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized, or any veteran during the one-year period that begins on the date of such veteran's discharge or release from active duty. This applies to all personnel actions, including hiring, transfer, training, promotion, termination, and other terms and conditions of employment. The Laboratory's policy is to take affirmative action, through formally written affirmative action plans, for minorities, women, individuals with disabilities, special disabled veterans, Vietnam-era veterans, and any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

Positive efforts to further this Affirmative Action Compliance Program must be vigorously pursued, conform to all current legal requirements and the spirit of the law, be consistent with Laboratory standards of quality and excellence, be specific in identifying areas of underutilization and in prescribing corrective measures, and be consistent with the University of California Affirmative Action Personnel Program — Policy and Guidelines.

7.0 Safety

The Earth Sciences Division (ESD) is committed to performing work safely and in a manner that ensures protection of employees, the public, Lab assets, and the environment. ESD's line management, its staff, contractors and guests are responsible and accountable for the safe performance of work, and will exert a reasonable degree of care, and provide resources toward the safe conduct of its operations. ESD will demonstrate by means of its internal ES&H systems that it is performing the five core ES&H functions and achieving the seven Guiding Principles described in the Lab's Integrated Safety Management System (ISMS). ESD is committed to the core function of self-assessment, feedback and continuous improvement.

- **Ergonomics**

The Earth Sciences Division would like to ensure that all work that will be performed at the Laboratory will be conducted in a safe and healthy manner. If necessary, request an Ergonomic Workstation Evaluation and take EHS 60 training so you can perform work with proper ergonomic practices.

- **Safety Manual (1.01 RPM - <http://www.lbl.gov/ehs/pub3000/>)**

- **Emergency Plans (<https://ehswprod.lbl.gov/ep/Login.asp>)**

- **EMERGENCY RESPONSE GUIDE ...** In the event of Fire, Medical Emergency or Danger to Life, Health or the Environment:

- LBNL on and off site buildings (from phones with 486 and 495 prefix) **x7911** -- answered by the LBNL Fire Department dispatcher and is monitored by the LBNL Security dispatch center at Blackberry Gate.
- All non-LBNL campus buildings (642 and 643 prefix) and JGI in Walnut Creek **9-911** -- on-campus answered by UC Police.
- All other phones (including cellular) 911 or (510) 486-6015.

Publications (5.02 RRM)

- LBNL Publishing
- WFO Reporting
- External Publishing

Training (2.04) Education and Employee-Development Policies

- **On Site**

- **Intradepartmental Training.** A division director or department head is responsible for arranging specialized training with a department or division. Assistance or advice in any phase of a desired program may be obtained from the Training Administrator in the [Human Resources Department](#).
- **Interdepartmental Training.** Various organizational units within the Laboratory, including the Environment, Health and Safety Division, Computing Sciences Directorate, and Human Resources Department, are responsible for developing and/or providing training programs to Laboratory employees in their areas of expertise and that are required by law or will enhance employee performance. Procedures for attending interdepartmental training may be found on the [Employee Self Service](#) Web site.
- **Apprenticeship Training Programs and Internships.** The [Workforce Diversity Office](#) is responsible for administering apprenticeship training programs, other special skills training, and internships
- **Off Site**
 - With the approval of his or her supervisor and department head or division director, an employee may attend off-site training (e.g., outside seminars and workshops) that will be of direct benefit to the employee's assignment. The division director or department head will approve attendance at off-site training only when the benefits to the Laboratory will, in his or her judgment, more than offset the costs involved, when the required skill or knowledge is not readily available through Laboratory training resources, and when the employee's time away from the Laboratory will not adversely impact current work demands.
 - The division will pay course fees, travel, and all other expenses as necessary.
 - See HR Employee Development and Training for procedures for requesting off-site training

6.01G EMERGENCY AND UNUSUAL CIRCUMSTANCES

- **Travel Charge Card.** When on travel status, employees are allowed to use their LBNL travel charge card for the purchase of low value items needed in the course of their work. The limit on miscellaneous business expenses while on travel is determined by the traveler's division/department based on business need. Reimbursement requires submittal of a travel expense report approved by the original approver of the trip. Pre-trip approval is required. The required documentation (receipts etc.) and limit are governed by the LBNL travel policies contained in RPM
- **Personal Credit Card or Cash.** In the event of time constraints caused by emergency or unusual circumstances, employees are allowed to purchase goods not available through normal procurement methods using their personal credit card or cash. Such purchases are limited to \$300 and are reimbursable by filling out a "Request for Issuance of Check" (see below), which must be approved by an authorized signer on the Laboratory's Signature Authorization System. The Request for Issuance of Check form requires the employee to certify that the expense is allowable and represents official Laboratory business. Although prior approval is not required, the form must be signed by the employee's group leader or a higher level official. Original receipts are required.
- **Request for Issuance of Check.** The use of Requests for Issuance of Check is restricted to on-site Laboratory locations, where other means of procurement are not possible. Requests for reimbursement for items purchased by a Laboratory employee are prepared on a *Request for Issuance of Check* form, which includes the appropriate authorization from the issuing division/department. The request is then submitted to Financial Services/Accounts Payable for approval and processing.