

**MEMORANDUM**

Date: January 31, 2003

To: Donna Fortunat, Director  
Division of Acquisition and Cost Support

Mary Santonastasso, Director  
Division of Grants and Agreements

From: Deborah H. Cureton  
Associate Inspector General for Audit

Subject: Audit Report 03-1003: Financial and Compliance of Indirect Costs for the Year Ended June 30, 2000, of the Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine

Attached is the final Financial and Compliance Audit of Indirect Costs for the Year Ended June 30, 2000 of Bigelow Laboratory for Ocean Sciences (BLOS). M.D.Oppenheim & Company, P.C., an independent public accounting firm under contract to the Office of the Inspector General, performed the audit.

NSF is the agency responsible for negotiating and approving indirect cost rates for BLOS on behalf of the Federal government. As of June 30, 2000, BLOS had nine active awards for which it had received \$5.86 million in NSF funding and had claimed \$333,113 in indirect costs.

For fiscal year 2000, the audit found that BLOS generally has an adequate system to prepare indirect cost rate proposals. The audit did identify three reportable internal control weaknesses and two compliance deficiencies. The most serious internal control weakness is that BLOS excluded \$40,704 of indirect costs from the pool used to calculate its proposed rate to make its actual rate closer to its [REDACTED]

[REDACTED] In addition, the audit found that contrary to standard accounting practice, BLOS did not require employees to sign for received goods and services or mark invoices "Paid" when paid because BLOS thought it was too small an organization to need these procedures. As a result, BLOS had no documentation to demonstrate that

payments for goods and services were valid, and no procedures to prevent duplicate payments. The compliance findings were that BLOS included unallowable travel costs of \$8,949 in the indirect cost pool, because it did not use the Federal per diem restrictions, and unallowable entertainment expenses of \$5,759 because it mistakenly thought some of these costs were allowable as employee morale exceptions to the cost principle stating that entertainment expenses are not allowable.

In response to the audit, BLOS agreed with all findings, except for the finding that it manipulated the rate by excluding indirect costs from the indirect cost pool. We therefore, reiterated our recommendation that the Directors of NSF's DACS and DGA require BLOS to submit indirect cost proposals using actual costs in its general ledger.

In accordance with OMB Circular A-50, *Audit Followup*, and NSF's Standard Operating Guidance 2001-4, *Policies and Procedures to Audit Reports Issuance and Resolution of Audit Findings Contained in Audits of NSF Awardees*, we request that NSF submit a written corrective action plan to our office identifying the specific actions and milestone dates for addressing our recommendations. To ensure that all findings are resolved within six months, we ask that you submit the plan to us within 60 days of the date of this letter. We are, of course, available to work with you during the next 60 days to ensure the submission of a mutually agreeable corrective action plan.

We thank you and your staff for the cooperation extended to us during this audit. If you have any questions about this report, please contact James Noeth on extension 5005, or Emily Woodruff, on extension 5019.

**BIGELOW LABORATORY FOR OCEAN SCIENCES**  
West Boothbay Harbor, Maine

Financial and Compliance Audit  
of  
Indirect Costs  
For the Year Ended June 30, 2000

M.D. Oppenheim & Company, P.C.  
Certified Public Accountants  
485 U.S. Highway 1, Building C  
Iselin, New Jersey 08830-4100

# BIGELOW LABORATORY FOR OCEAN SCIENCES

## Table of Contents

	<u>Page</u>
Acronyms	1
Section I - Introduction and Audit Results	3
Background	3
Objective and Scope of Audit	3
Summary of Audit Results	5
Exit Conference	6
Section II - Findings and Recommendations:	
Independent Auditors' Report on Compliance and Internal Control	8
Findings and Recommendations on Compliance	10
Findings and Recommendations on Internal Control	12
Section III - Financial Schedules:	
Independent Auditors' Report	15
Schedule A - Schedule of Over/(Under) Recovered Indirect Costs on National Science Foundation Awards	17
Schedule B - Schedule of Indirect Costs	19
Schedule C - Schedule of Auditors' Adjustments and Eliminations	21
Notes to Financial Schedules	25
Section IV - Supplementary Information:	
Independent Auditors' Report on Supplementary Information	27
Schedule D- I to D-15 -Detailed Schedule of Over/(Under) Recovered Indirect Costs by NSF Award	28
Schedule E - Listing of NSF Awards Active During Audit Period Not Affected by Indirect Cost Audit	43
Section V - Awardee's Response	44

## BIGELOW LABORATORY FOR OCEAN SCIENCES

### Acronyms

<u>Acronym</u>	<u>Explanation of Acronym</u>
AICPA	American Institute of Certified Public Accountants
BLOS	Bigelow Laboratory for Ocean Sciences
DACS	Division of Acquisition and Cost Support
DGA	Division of Grants and Agreements
FCTR	Federal Cash Transactions Report
FY	Fiscal Year
FYE	Fiscal Year Ended
MTDC	Modified Total Direct Costs
NSF	National Science Foundation
OIG	Office of Inspector General
OMB	Office of Management and Budget
PI	Principal Investigator

**SECTION I**

**INTRODUCTION AND AUDIT RESULTS**

## **SECTION I - INTRODUCTION AND AUDIT RESULTS**

### **BACKGROUND**

Bigelow Laboratory for Ocean Sciences (BLOS) is a not-for-profit, tax-exempt, organization established to provide scientific and educational research services to governmental, industrial, and educational entities. BLOS receives approximately \$4.6 million of annual revenues, mainly from Federal and non-Federal financial assistance and contributions. Of the \$4.6 million of annual revenues, Federal financial assistance approximates \$3.8 million. The National Science Foundation (NSF) provides \$1.4 million of this Federal financial assistance to BLOS, and is its cognizant agency for setting indirect cost rates.<sup>1</sup> During the time period of our audit BLOS had 17 NSF active awards, 15 of which had indirect costs.

### **OBJECTIVE AND SCOPE OF AUDIT**

At the request of the NSF Office of the Inspector General (OIG) M. D. Oppenheim & Company, P.C. conducted a financial and compliance audit of the indirect cost proposal prepared by BLOS for the year ended June 30, 2000 to determine the final indirect cost rate for that year. During the period of our audit, the 15 active awards included indirect costs based on a rate negotiated between NSF and BLOS or an indirect cost rate in the award letter. Our audit objectives were: (1) to determine whether BLOS complied with Federal requirements in computing its indirect cost proposal; (2) to determine whether, based upon audit-determined indirect cost rates, BLOS over or under-recovered indirect costs on each NSF award active during the audit period; and (3) to evaluate the adequacy of BLOS' internal controls to administer, account for, and monitor indirect cost charges to Federal awards.

To accomplish the objectives of the audit, we:

- Conducted an on-site audit survey with sufficient observations, interviews, and examinations of documents to make an initial determination whether the predetermined rates were based on allowable indirect costs and whether controls to administer, account for, and monitor indirect costs are adequate to ensure compliance with Federal cost principles and administrative requirements.
- Prepared an audit planning document for OIG review and approval. The planning document included a description of BLOS' organizational structure and the process used to administer, account for, and monitor indirect cost charges to Federally sponsored awards. As part of the planning process we performed an assessment of audit risk and obtained an understanding of BLOS' control environment.

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<sup>1</sup> OMB Circular A-122, *Cost Principles for Non-Profit Organizations*, defines a cognizant agency as "the Federal agency responsible for negotiating and approving indirect cost rates for a non-profit organization on behalf of all Federal agencies." OMB Circular A-122, Attachment A, Section E 1 a.

- Prepared an internal control audit planning document, for OIG review and approval. The internal control planning document included the proposed audit programs/procedures for testing the significant internal controls necessary to accurately administer, account for, and charge indirect cost charges to Federally sponsored awards. As part of the internal control process, we assessed the areas of control environment, risk assessment, information and communication, monitoring, and control activities.
- Prepared a substantive audit testing planning document for OIG review and approval. The substantive planning document included the preliminary results of the internal control phase of the audit, including any findings and recommendations and the proposed audit program, which included the tests on compliance with applicable laws and regulations and substantive testing procedures to be applied to the indirect cost pool and the direct cost base.
- Performed testing procedures so as to determine whether the indirect cost proposal and the resultant indirect cost rate complies with OMB Circulars A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations*, and A-122, *Cost Principles for Non-Profit Organizations*.

We conducted our audit in accordance with AICPA auditing standards generally accepted in the United States of America, the Comptroller General's *Government Auditing Standards* and the provisions of the *NSF Grant Policy Manual*, and included tests of the accounting records and other auditing procedures that we considered necessary to fully address the audit objectives.



## SUMMARY OF AUDIT RESULTS

NSF and BLOS negotiated a predetermined fixed rate of 46 percent for indirect costs to be applied to Federal awards in Fiscal Year (FY) 2000.<sup>2</sup> In November 2000, BLOS submitted an indirect cost rate proposal to NSF to establish an actual rate of 46.82 percent for FY 2000. Our audit found that the actual rate for that fiscal year was 47.75 percent, a rate NSF can use in negotiating BLOS' future indirect cost rates. The small differences among the negotiated, proposed actual, and audit recommended rates provides assurance to NSF that BLOS had an adequate system to prepare indirect cost rate proposals, and it did not over-recover indirect costs. In fact, we found that based on the indirect costs allowable under the awards, BLOS under-recovered \$6,017 on 11 of the 15 awards included in our audit.<sup>3</sup>

Although BLOS had an adequate system to prepare indirect cost rate proposals, we found that it incorrectly excluded \$40,704 of its indirect costs from its proposal so that its actual rate would be closer to its 46 percent predetermined rate. BLOS believed that such rate consistency would make its award proposals more competitive. However, by not using actual indirect costs in its indirect cost proposal, BLOS' proposals for indirect cost rates can be either artificially reduced or inflated, depending on what costs BLOS decides to put into the proposal. In addition to this reportable condition, we also found that BLOS had inadequate internal control procedures for documenting receipt of goods to ensure that payments are for valid purchases, and for canceling invoices after they have been paid to prevent duplicate payments. We also found certain compliance deficiencies. Specifically, because staff overlooked or misinterpreted Federal requirements for unallowable costs, BLOS incorrectly included \$8,949 in excessive travel costs and \$5,759 of unallowable entertainment costs in its indirect cost proposal.

To address the internal control weaknesses and compliance deficiencies, we recommended that the Directors of NSF's Division of Acquisition and Cost Support (DACS) and the Division of Grants and Agreements (DGA) require that BLOS (1) submit indirect cost proposals using actual costs, (2) utilize a signed receiving report to document receipt of satisfactory goods and services, (3) mark "Paid" or otherwise cancel invoices when they are paid, (4) train its employees to follow Federal cost principles regarding unallowable entertainment costs, and (5) ensure that its staff follows its travel limitations in charging travel costs. Except for our recommendation that BLOS submit indirect cost proposals using actual costs, it agreed to implement the recommendations.

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<sup>2</sup> According to NSF's *Grant Policy Manual (GPM) (02-151)*, section 633.1 b 2, a predetermined fixed rate "is a permanent funding rate established for an award based on an estimate of costs for that period."

<sup>3</sup> See Schedule A.

**EXIT CONFERENCE**

An exit conference was held on May 31, 2002 at the Auditee's office located at McKown Point, West Boothbay Harbor, Maine. The findings on compliance and internal control along with the adjustments and eliminations related to the indirect cost proposal were discussed by the following individuals.

For Bigelow Laboratory for Ocean Sciences:

[REDACTED]

For M.D. Oppenheim & Company, P.C.:

[REDACTED]

**SECTION II**

**FINDINGS AND RECOMMENDATIONS**

National Science Foundation  
Office of Inspector General  
4201 Wilson Boulevard  
Arlington, Virginia 22230

**INDEPENDENT AUDITORS' REPORT ON COMPLIANCE  
AND INTERNAL CONTROL**

We have audited the summary schedule of over/(under) recovered indirect costs (Schedule A) and the schedule of indirect/direct costs (Schedule B) which summarizes the indirect cost proposal prepared by Bigelow Laboratory for Ocean Sciences for the year ended June 30, 2000, and have issued our report thereon dated May 31, 2002. We conducted our audit 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 *National Science Foundation Audit Guide* (September 1996).

**Compliance**

As part of obtaining reasonable assurance about whether Bigelow Laboratory for Ocean Science's financial schedules are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, and policies, noncompliance with which could have a direct and material effect on the determination of the financial schedules amounts. 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 the instances of noncompliance, as reported in the accompanying Findings and Recommendations on Compliance and the adjustments and eliminations noted in Schedule C, that are required to be reported under *Government Auditing Standards* and the *National Science Foundation Audit Guide*.

**Internal Control Over Financial Reporting**

In planning and performing our audit, we considered Bigelow Laboratory for Ocean Science's internal control over financial reporting in order to determine our auditing procedures for the purposes of expressing our opinion on the financial schedules and not to provide assurance on the internal control over financial reporting. However, we noted certain matters involving internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control

National Science Foundation  
Office of Inspector General  
Arlington, Virginia

Internal Control Over Financial Reporting (Cont.)

over financial reporting that, in our judgment, could adversely affect Bigelow Laboratory for Ocean Science's ability to record, process, summarize and report financial data consistent with the assertions of management in the financial schedules. The reportable conditions noted are described in the accompanying Finding and Recommendation on Internal Control.

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial schedules being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we believe that the above reportable conditions described in Finding Numbers I through 3 are not material weaknesses.

This report is intended solely for the information and use of Bigelow Laboratory for Ocean Sciences and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

*M.D. Oppenheim & Company, P.C.*

May 31, 2002

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Findings and Recommendations on Compliance  
For the Year ended June 30, 2000

**1. Unallowable Entertainment Costs Included in the Indirect Cost Pool**

OMB Circular A-122, Attachment B, section 14, states that costs of "amusement, diversion, social activities, ceremonials, and costs relating thereto, such as meals, lodging, rentals, transportation, and gratuities" are unallowable. BLOS included \$5,759 of unallowable entertainment costs in its indirect cost pool, because its accounting staff mistakenly believed these costs were allowable.

**Recommendation**

We recommend that the Divisions of DACS and DGA require BLOS to train its staff to understand and comply with Federal requirements regarding the unallowability of certain entertainment costs.

**Auditee's Response**

At the time of the occurrences, we mistakenly believed that these costs were allowable as employee morale expenses. We now understand that the definition of employee morale is extremely limited and have adjusted our records to properly record the costs of any local employee gathering, such as social activities and ceremonials, as unallowable costs.

**Auditors' Response to Auditee's Response**

Since BLOS concurs with the finding and recommendation, a response is not deemed necessary.

**2. Unallowable Travel Costs Included in the Indirect Cost Pool**

Contrary to BLOS policy, which requires travelers to limit their travel costs to Federal per diem amounts, BLOS included \$8,949 in excessive travel costs in its indirect cost pool. The major portion of the amount was attributable to \$10,005 paid to an architectural firm in June 2000 for travel to BLOS headquarters in West Boothbay Harbor, Maine. The maximum Federal per diem for the firm's five representatives was \$1,940, which BLOS exceeded by \$8,065. BLOS included unallowable travel costs in the indirect cost pool because its accounting staff did not remember to follow Federal per diem limits.

**Recommendation**

We recommend that the Directors of NSF's Divisions of DACS and DGA require that BLOS ensures that its staff follows its policy to utilize Federal per diem travel limitations in charging travel costs.

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Findings and Recommendations on Compliance (Cont.)  
For the Year ended June 30, 2000

**Auditee's Response**

The architect's invoice in question was received at year end and the travel costs were not thoroughly reviewed. We were unable to substantiate that any other expenses were included in the questioned line and thus concurred with the finding. All staff travel vouchers are now reviewed by two people and we will also carefully monitor the travel expenses of our professional services providers.

**Auditors' Response to Auditee's Response**

Since BLOS concurs with the finding and recommendation, a response is not deemed necessary.

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Findings and Recommendations on Internal Control  
For the Year ended June 30, 2000

**1. Indirect Cost Proposal Does Not Use Actual Costs**

Effective internal controls require accurate reporting of the indirect costs included in an indirect cost pool. In its indirect cost proposal to NSF, BLOS did not include in its indirect cost pool costs in two accounts, "Unallocated Overhead" of \$21,412, and "Unallocated Fringe" of \$19,292. Upon discussion with management, we learned that BLOS excluded these costs so that the proposed rate (46.82 percent) would be closer to the predetermined rate (46 percent).

[REDACTED]

[REDACTED] As a result, BLOS submitted an inaccurate indirect cost proposal to NSF, [REDACTED]. By not reporting actual indirect costs in its indirect cost pool, BLOS' annual indirect cost rate proposals can be artificially reduced or inflated, depending on what costs BLOS includes in the pool. Although there is no direct financial harm to the Federal government when a proposed rate is less than the actual rate, the practice of targeting a proposed rate can also result in an inflated indirect cost rate proposal, as found in a prior BLOS audit.<sup>4</sup>

**Recommendation**

We recommend that the Directors of NSF's Divisions of DACS and DGA require BLOS to submit an indirect cost proposal using all actual costs derived from its general ledger.

**Auditee's Response**

These costs were excluded only in our computerized accounting so that the automated posting of indirect costs to grants would not exceed the 46% allowed. Those final grant amounts are then rolled over to the new year as prior year costs. This is done to comply with our indirect rate understanding that amounts over the maximum provisional or predetermined rate cannot be charged to any funding agency. This excess amount was journaled out of administrative/indirect costs into the "unallowed costs" area so that it would not be included in any grant costs or calculations.

We also utilized a budgeting process that makes sure that we do not exceed our target of a 46% indirect cost rate. In addition, research proposals are submitted using a 46% indirect rate. This indirect rate used for submitting proposals has remained at 46% for several years since our maximum provisional rate has not varied.

**Auditors' Response to Auditee's Response**

BLOS has acknowledged that it excluded \$40,704 of indirect costs from its indirect cost pool, but its only explanation for the exclusion is that it wanted to ensure that its proposed rate did not exceed its target rate of 46 percent. It is this practice of "targeting" its proposed rate that is the central finding of our audit report, and BLOS' response does not acknowledge that this kind of manipulation of its proposed indirect cost rate is unacceptable. We reiterate our initial recommendation.

<sup>4</sup> See NSF Office of the Inspector General, Audit Report Number 97-1030.



BIGELOW LABORATORY FOR OCEAN SCIENCES  
Findings and Recommendations on Internal Control  
For the Year ended June 30, 2000

**2. Prior to Payment a Designated Employee(s) Should Verify Receipt**

Effective internal accounting controls require that prior to payment, a designated employee(s) should verify that requisitioned goods and services were received. BLOS did not require employees to sign for received goods and services because it thought that in such a small organization it was easy to verify receipt. Consequently, BLOS had no documentation to demonstrate that payments for these goods and services were for valid purchases.

**Recommendation**

We recommend that the Divisions of DACS and DGA require BLOS to ensure that prior to payment, BLOS designate an employee(s) to sign and document receipt of the applicable goods and services.

**Auditee's Response**

Each science team has a designated person who deals with purchase orders, ordering and approving invoices. Since Bigelow is a fairly small lab, we occasionally allowed authorizations to be made by phone with no written audit trail. We have since changed our method for verifying receipt of goods so that all payments have initials or a signature and approval for payment.

**Auditors' Response to Auditee's Response**

Since BLOS concurs with the finding and recommendation, a response is not deemed necessary.

**3. Invoices Should be Cancelled**

Effective internal accounting controls dictate that an organization should cancel or mark invoices "Paid" when paid to prevent duplicate payments. BLOS did not formally mark invoices "Paid" or cancel them because it thought such a step was unnecessary in its small organization. As a result, BLOS has no procedures to prevent duplicate payments.

**Recommendation**

We recommend that the Divisions of DACS and DGA require BLOS to ensure that it cancels or marks "Paid" all invoices when paid.

**Auditee's Response**

We purchased a "PAID" stamp the week after our NSF audit exit interview and we have used it diligently since.

**Auditors' Response to Auditee's Response**

Since BLOS concurs with the finding and recommendation, a response is not deemed necessary.

**SECTION III**  
**FINANCIAL SCHEDULES**

National Science Foundation  
Office of Inspector General  
4201 Wilson Boulevard  
Arlington, Virginia 22230

### **INDEPENDENT AUDITORS' REPORT**

We have audited the indirect cost proposal, Bigelow Laboratory for Ocean Sciences has proposed as applicable to the National Science Foundation and other Federal awards for the year ended June 30, 2000. This indirect cost proposal, as presented in the schedule of indirect/direct costs (Schedule B) and the summary schedule of over/(under) recovered indirect costs (Schedule A) are the responsibility of Bigelow Laboratory for Ocean Science's management. Our responsibility is to express an opinion on Schedules A and B based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, *Government Auditing Standards* issued by the Comptroller General of the United States, and the *National Science Foundation Audit Guide* (September 1996). Those standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether the financial schedules are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial schedules. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial schedule presentation. We believe our audit provides a reasonable basis for our opinion.

The accompanying financial schedules were prepared for the purpose of complying with the requirements of the *National Science Foundation Audit Guide* as described in Note 1, and are not intended to be a complete presentation of financial position in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the financial schedules referred to above present fairly, in all material respects, the indirect cost proposal (Schedule B) and the resultant over/(under) recovered indirect costs (Schedule A) for the year ended June 30, 2000, in conformity with the *National Science Foundation Audit Guide*, *NSF Grant Policy Manual*, and on the basis of accounting described in Note 1.

National Science Foundation  
Office of Inspector General  
Arlington, Virginia

In accordance with *Government Auditing Standards*, we have also issued our report dated May 31, 2002 on our consideration of Bigelow Laboratory for Ocean Science's internal control over financial reporting and on our tests of its compliance with laws and regulations. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

Schedule C contains indirect costs in the amount of \$16,868 that are reductions to the indirect costs proposed and \$2,670 that are additions to the direct costs proposed for the year ended June 30, 2000. The final determination, as to whether such costs are allowable or unallowable, will be made by the National Science Foundation. The ultimate outcome of this determination cannot presently be determined.

This report is intended solely for the information and use of Bigelow Laboratory for Ocean Sciences and the National Science Foundation and is not intended to be and should not be used by anyone other than these specified parties.

*M.D. Oppenheim & Company, P.C.*

May 31, 2002

BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs on National Science Foundation Awards  
 For the Period July 1, 1999 to June 30, 2000

NSF Award Number	Award Period	Indirect Cost Approved In Award		Indirect Cost Rate			Indirect Costs					Comment/Notes
				Proposed Rate	Audited Rate	Schedule Reference	Per Audit	Claimed to NSF	Allowed (Approved Rate x MTDC)	Over/ (Under) Recovered Per Audited Rate	Over/(Under) Recovered Per Allowed Rate	
OCE-9423535	07/1/95-06/30/00	Maximum Provisional	41.30%*	46.82%	47.75%	13-la	\$22,644	\$ 19,585	\$ 19,585	\$ (3,059)	\$ -0-	
OCE-9513846	04/15/96-02/28/01	Maximum Provisional	46.00%	46.82%	47.75%	B-la	71,069	67,703	68,465	(3,366)	(762)	
OCE-9634162	09/15/96-08/31/99	Maximum Provisional	46.00%*	46.82%	47.75%	B-la	10,910	10,345	10,510	(565)	(165)	(A)
OCE-9634165	12/01/96-11/30/00		46.00%*	46.82%	47.75%	B-la	35,097	30,195	33,811	(4,902)	(3,616)	(B)
OCE-9617960	02/15/97-01/31/02	Maximum Provisional	46.00%*	46.82%	47.75%	B-la	2,112	1,912	2,035	(200)	(123)	
OCE-9617680	03/01/97-02/29/00	Maximum Provisional	46.00%	46.82%	47.75%	B-la	25,542	24,474	24,606	(1,068)	(132)	(A)
OPP-9711723	08/15/97-07/31/01	Maximum Provisional	46.00%	46.82%	47.75%	B-la	15,241	14,443	14,682	(798)	(239)	
OCE-9711168	09/15/97-08/31/00	Maximum Provisional	46.00%	46.82%	47.75%	B-la	46,415	44,512	44,714	(1,903)	(202)	
DEB-9806743	09/15/98-08/31/01		46.00%*	46.82%	47.75%	B-la	18,278	17,558	17,608	(720)	(50)	
OCE-9813640	11/01/98-10/31/01		46.00%*	46.82%	47.75%	B-la	16,946	15,604	16,324	(1,342)	(720)	
OCE-9813642	02/01/99-01/31/02		46.00%*	46.82%	47.75%	B-la	29,616	28,524	28,531	(1,092)	(7)	
OPP-9815155	07/01/99-06/30/01	*(C)	46.00%*	46.82%	47.75%	B-la	20,560	19,806	19,806	(754)	-0-	
MCB-9904444	10/01/99-03/31/01	*(C)	46.00%*	46.82%	47.75%	B-la	16,419	15,817	15,818	(602)	(1)	
OCE-9986331	05/01/00-04/30/02	*(C)	46.00%*	46.82%	47.75%	B-la	38	37	37	(1)	-0-	
OPP-9910676	05/15/00-02/28/02	*(C)	46.00%*	46.82%	47.75%	B-la	23,458	22,598	22,598	(860)	-0-	
Grand Totals							\$354,345	\$ 333,113	\$339,130	\$ (21,232)	\$ (6,017)	

Comments/Notes:

MTDC = Modified Total Direct Costs. (Total direct program costs less equipment, participant support costs and subcontract costs).

(A) Financially closed award.

(B) The total direct and indirect costs reflected in BLOS' books of account exceed the total maximum budgeted reimbursable costs.

(C) Negotiated fixed rate for this award.

\* = Award letter did not include a statement as to the indirect cost method or rate. The rate presented above was derived from the approved budget.

See accompanying notes to these financial schedules.

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Schedule of Over/(Under) Recovered Indirect Costs on National Science Foundation Awards  
For the Period July 1, 1999 to June 30, 2000

Four of the awards included in our audit utilized a predetermined fixed rate; and eleven utilized a maximum provisional rate. Of the eleven, four awards did not identify in their award letters what cost method to be used; and we determined that the applicable cost method was a maximum provisional rate either by finding an indirect cost rate schedule listing a maximum provisional cost method in the official NSF file (for Award Number OCE-9634165), or by determining that the negotiated rate in effect at the time the awards were made was a maximum provisional rate (for Award Numbers DEB-9806743, OCE-9813640, and OCE-9813642).

For awards with predetermined fixed indirect cost rates, NSF allows awardees to bill at either the rate established at the time the award was provided for the lifetime of the award or at the rates negotiated for each of the subsequent years of the award. The only requirement NSF imposes on this decision is that the awardee uses the selected method consistently to charge its indirect costs on all its NSF awards. BLOS practice is to use the predetermined indirect cost rate in the award letter for the life of the award. For awards with maximum provisional indirect cost rates, NSF requires an awardee to bill at the lesser of the maximum provisional rate established at the time of the award or the final rate established after the end of an accounting period.<sup>6</sup> Thus, for each year of an award, the awardee must compare the final rate for that year with the maximum provisional rate, and bill for reimbursement of indirect costs at the lower of the two rates.

BLOS billed NSF at rates that were lower than the rates allowed in the award letters, and it under-recovered \$6,017, although it could not recover \$3,913 of that amount due to restrictions notes in A and B above. Thus total recovery would be limited to \$2,104 (\$6,017-\$3,913). Schedule A also shows that the audited rates were generally 1.75 percentage points higher than the rates allowed in the award letters or budgets. The under-recovery that would have occurred using the difference between the rate BLOS used to claim its indirect costs and the rate determined in this audit is \$21,232.

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<sup>5</sup> See GPM (02-151), section 633.1 b 2 for restrictions on the option to use each year's negotiated rate for indirect cost recovery.

<sup>6</sup> According to NSF's GPM (02-151), section 633.1 b 1, a maximum provisional rate is "a temporary rate established for an award to permit funding and reporting of indirect costs pending the establishment of a final rate (the rate determined at the end of an accounting period using "actual" direct and indirect cost data). This type of rate limits indirect cost recoveries to the lower of the maximum provisional rate established at the time of the award, or the final rate established at the end of an accounting period."

<sup>7</sup> In the case of Award Number OCE-9423535, the audited rate was 6.45 percentage points higher than the allowed rate in the award.

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BIGELOW LABORATORY FOR OCEAN SCIENCES  
Schedule of Auditors' Adjustments and Eliminations  
For the year ended June 30, 2000

The amounts as proposed by BLOS in their indirect cost proposals for the year ended June 30, 2000 (Schedules B-1a and B-1b) required various adjustments and eliminations to the indirect cost or direct cost pools. These adjustments and/or eliminations are presented in Schedules C-1a and C-1b. On the following pages in Schedules C-1a and C-1b these adjustments and/or eliminations are detailed. Presented below is a brief summary of the type of adjustment and/or elimination along with the relevant criteria.

<u>Adjustment and/or Elimination</u>	<u>Criteria</u>
Direct program costs included in the indirect cost pool for a DNA sequencer that was charged to administrative expenses.	<i>OMB Circular A-122, Attachment A, Part B (1) states that direct costs are those that can be identified specifically with a particular cost objective. In addition, OMB Circular A-122, Attachment A, Part C (1) states indirect costs are those that have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective.</i>
Reimbursed travel vouchers paid to employees in excess of the maximum amount allowable under Federal regulations were included in the indirect cost pool and direct cost base.	<i>Federal regulations state that in order for travel costs to be considered reasonable, costs claimed may be measured against the current per diem or mileage rates approved under Standardized Government Travel Regulations.</i>
Entertainment costs which included celebrations for an employee picnic, 25 <sup>th</sup> anniversary celebration and other similar type expenses were included in the indirect cost pool.	<i>OMB Circular A-122, Attachment B, item 14, states that costs of amusement, diversion, social activities, ceremonies, and costs relating thereto, such as meals, lodging, rentals, transportation, and gratuities are unallowable.</i>
Indirect costs attributable to operations (unallocated fringe benefits and overhead) not reflected in indirect costs proposed.	<i>OMB Circular A-122, Attachment A, Part A(1) requires the composition of total costs of an award is the sum of the allowable direct and allowable indirect costs less any applicable credits.</i>

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Schedule of Auditors' Adjustments and Eliminations (Cont.)  
For the year ended June 30, 2000

**Auditee's Response**

Direct Program Costs Included in Indirect Costs

At the time, we believed that this piece of equipment qualified as an indirect cost. However, upon reexamination of the OMB Circular-122, Attachment A, Part B(1), we realize that this should have been a program cost.

Reimbursable Travel Vouchers - Excess Amounts

All staff travel vouchers are now reviewed by two people to ensure that the proper per diem rate is used. We will also carefully monitor the travel expenses of our professional services providers.

Entertainment Costs in Indirect Cost Pool

At the time of the occurrences, we mistakenly believed that these costs were allowable as employee morale expenses. We now understand that the definition of employee morale is extremely limited and have adjusted our records to properly record the costs of any local employee gathering, such as social activities and ceremonials, as an unallowable cost.

Fringe Benefits and Overhead not Reflected in Indirect Cost Pool

These costs were excluded only in our computerized accounting so that the automated posting of indirect costs to grants would not exceed the 46% allowed. Those final grant amounts are then rolled over to the new year as prior costs. This is done to comply with our indirect rate understanding that amounts over the maximum provisional or predetermined rate cannot be charged to any funding agency. This excess amount was journaled out of administrative/indirect costs into the "unallowed costs" area so that it would not be included in any grant costs or calculations.

We also utilized a budgeting process that makes sure that we do not exceed our target of a 46% indirect cost rate. In addition, research proposals are submitted using a 46% indirect rate. This indirect rate used for submitting proposals has remained at 46% for several years since our maximum provisional rate has not varied.

**Auditors' Response to Audit's Response**

No changes are necessary to the adjustments since the auditee either concurs (the first three listed adjustments) or explains why the understated costs were not included in the indirect cost pool.

BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Auditors' Adjustments and Eliminations - Indirect Costs  
 For the year ended June 30, 2000

<u>Adjustment and Elimination Explanation</u>	Category of Expense					
	Total Amount	Travel	Profess. Fees	Other	Unallocated Fringe Benefits	Unallocated Overhead
Reimbursable travel costs in excess of Federal guidelines.	\$ (8,949)	\$ (344)	\$(8,605)	\$	\$	\$
Various unallowable expenses erroneously charged to indirect costs from the Other Account.	(5,759)			(5,759)		
DNA sequencer charged to administrative expenses, should be a direct program cost.	(2,160)			(2,160)		
Costs attributable to operations not reflected in indirect costs proposed.	40,704				19,292	21,412
Totals	\$23,836	344)	8 605)	L(7,9-1-9)	\$ 19,292	\$21,412

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Schedule of Auditors' Adjustments and Eliminations - Direct Costs  
For the year ended June 30, 2000

<u>Adjustment and Elimination Explanation</u>	<u>Category of Expense</u> <u>Other</u>
DNA sequencer charged to administrative expenses, should be a direct program cost.	<u>\$2,160</u>

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Notes to Financial Schedules  
For the year ended June 30, 2000

1. Summary of Significant Accounting Policies:

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions. Schedule B has been prepared from the indirect cost proposal prepared by Bigelow Laboratory for Ocean Sciences and Schedule A, has been prepared based upon the results of the audit of Schedule B. The schedules do not present the complete financial position of Bigelow Laboratory for Ocean Sciences. In accordance with NSF instructions, there are no schedules of financial position, statement of activities or statement of cash flows.

2. Income Taxes:

Bigelow Laboratory for Ocean Sciences is a private nonprofit corporation, incorporated under the laws of the State of Maine. Bigelow Laboratory for Ocean Sciences is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. It is also exempt from State of Maine franchise or income tax.

**SECTION IV**

**SUPPLEMENTARY INFORMATION**

National Science Foundation  
Office of Inspector General  
4201 Wilson Boulevard  
Arlington, Virginia 22230

INDEPENDENT AUDITORS' REPORT ON SUPPLEMENTARY INFORMATION

Our report on our audit of the schedule of over/(under) recovered indirect costs and schedules of indirect and direct costs (the basic financial schedules) of Bigelow Laboratory for Ocean Sciences for the year ended June 30, 2000, appears in Schedule A and Schedule B. The audit was made for the purpose of forming an opinion on the basic financial schedules taken as a whole. The supplementary information presented in Schedules D-1 to D-15 and Schedule E are presented for purposes of supplementary analysis and are not a required part of the basic financial schedules. The supplementary information has not been subjected to the auditing procedures applied in the audit of the basic financial schedules and, accordingly, we express no opinion on it.

*M.D. Oppenheim & Company, P.C.*

May 31, 2002

National Science Foundation Award Number OCE-9423535  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over / (Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Final  
 (Unaudited)

Cost Category	<u>FYE</u> <u>06/30/00</u>
Personnel costs	██████████
Equipment	
Participant support costs	
Subawards	
Fee for service	██████████
Other direct costs	██████████
Total direct costs	49,794 (B)
Exclusions:	
Equipment	
Participant support	
Fee for service	(2,372)
Subawards	_____
Modified total direct cost base	47,422
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	22,644
Less: adjustment for indirect costs in excess of 41.3%	<u>(3,059)</u>
Indirect costs as adjusted	19,585
Claimed indirect costs (C)	<u>19,585 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ -0-</u>

- (A) The award period is to July 1, 1995 to June 30, 2000.
- (B) The total direct costs plus the claimed indirect costs totals \$69,379 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$232,744, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a maximum provisional rate of 41.30%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).



National Science Foundation Award Number OCE-9513846  
 Awarded To  
**BIGELOW LABORATORY FOR OCEAN SCIENCES**  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 06/30/00
Personnel costs	██████████
Equipment	██████
Participant support costs	██████
Subawards	
Fee for service	
Other direct costs	██████████
Total direct costs	154,994 (B)
Exclusions:	
Equipment	(4,839)
Participant support	(1,319)
Fee for service	
Subawards	
Modified total direct cost base	148,836
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	71,069
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	<u>(2,604)</u>
Indirect costs as adjusted	68,465
Claimed indirect costs (C)	<u>67,703 (B)</u>
Over/(Under) recovered indirect costs	; <u><u>(762)</u></u>

(A) The award period is April 15, 1996 to February 28, 2001.

(B) The total direct costs plus the claimed indirect costs totals \$222,697 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$892,712, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.

(C) Indirect costs were claimed based upon the application of a maximum provisional rate of 46%.

National Science Foundation Award Number OCE-9634162  
 Awarded To  
**BIGELOW LABORATORY FOR OCEAN SCIENCES**  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to August 31, 1999 (A)  
 Final  
 (Unaudited)

Cost Category	FYE 06/30/00
Personnel costs	██████████
Equipment	
Participant support costs	
Subawards	
Fee for service	
Other direct costs	██████████
Total direct costs	22,848 (B)
Exclusions:	
Equipment	
Participant support	
Fee for service	
Subawards	_____
Modified total direct cost base	22,848
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	10,910
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	<u>(400)</u>
Indirect costs as adjusted	10,510
Claimed indirect costs (C)	<u>10,345 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (165)</u>

- (A) The award period is September 15, 1996 to August 31, 1999.
- (B) The total direct costs plus the claimed indirect costs totals \$33,193 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$227,834, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended September 30, 1999.
- (C) Indirect costs were claimed based upon the application of a maximum provisional rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).

National Science Foundation Award Number OCE-9634165  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 06/30/00
Personnel costs	████████
Equipment	██████
Participant support costs	
Subawards	
Fee for service	
Other direct costs	████████
Total direct costs	79,083 (B)
Exclusions:	
Equipment	(5,581)
Participant support	
Fee for service	
Subawards	_____
Modified total direct cost base	73,502
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	35,097
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	<u>(1,286)</u>
Indirect costs as adjusted	33,811
Claimed indirect costs (C)	<u>30,195 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (3,616) (D)</u>

- (A) The award period is December 1, 1996 to November 30, 2000.
- (B) The total direct costs plus the claimed indirect costs totals \$109,278 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$280,595, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended 6/30/00.
- (C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).
- (D) The total costs (direct and indirect) were claimed up to the budget maximum. The under recovered indirect costs cannot be recovered on this award.

National Science Foundation Award Number OCE-9617960  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	<u>FYE</u> <u>06/30/00</u>	
Personnel costs	██████████	
Equipment		
Participant support costs		
Subawards		
Fee for service		
Other direct costs	██████████	
Total direct costs	4,424	(B)
Exclusions:		
Equipment		
Participant support		
Fee for service		
Subawards	_____	
<hr/>		
Modified total direct cost base	4,424	
Final audited indirect cost rate	<u>47.75%</u>	
Calculated indirect costs per audit	2,112	
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	____(77)	
Indirect costs as adjusted	2,035	
Claimed indirect costs (C)	<u>1,912</u>	(B)
Over/(Under) recovered indirect costs	<u>\$ (123)</u>	

(A) The award period is February 15, 1997 to January 31, 2002 .

(B) The total direct costs plus the claimed indirect costs totals \$6,336 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$232,828, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.

(C) Indirect costs were claimed based upon the application of a maximum provisional rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).

See accompanying independent auditors' report.

National Science Foundation Award Number OCE-9617680  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to February 29, 2000 (A)  
 Final  
 (Unaudited)

Cost Category	FYE <u>06/30/00</u>
Personnel costs	██████████
Equipment	██████████
Participant support costs	██████████
Subawards	██████████
Fee for service	██████████
Other direct costs	██████████
Total direct costs	85,240 (B)
Exclusions:	
Equipment	(29,696)
Participant support	(1,809)
Fee for service	(243)
Subawards	██████████
Modified total direct cost base	53,492
<u>Final audited indirect cost rate</u>	<u>47.75%</u>
Calculated indirect costs per audit	25,542
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	<u>(936)</u>
Indirect costs as adjusted	24,606
Claimed indirect costs (C)	<u>24,474 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (132)</u>

(A) The award period is March 1, 1997 to February 29, 2000.

(B) The total direct costs plus the claimed indirect costs totals \$109,714 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$197,349, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.

(C) Indirect costs were claimed based upon the application of a maximum provisional rate of 46%.

National Science Foundation Award Number OCE-9711723  
 Awarded To  
**BIGELOW LABORATORY FOR OCEAN SCIENCES**  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 06/30/00
Personnel costs	██████████
Equipment	
Participant support costs	
Subawards	
Fee for service	
Other direct costs	██████████
Total direct costs	31,918 (B)
Exclusions:	
Equipment	
Participant support	
Fee for service	
Subawards	_____
Modified total direct cost base	31,918
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	15,241
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	_____(559)
Indirect costs as adjusted	14,682
Claimed indirect costs (C)	<u>14,443 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (239)</u>

- (A) The award period is August 15, 1997 to July 31, 2001.
- (B) The total direct costs plus the claimed indirect costs totals \$46,361 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$93,592, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a maximum provisional rate of 46%.

National Science Foundation Award Number OCE-9711168  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

<u>Cost Category</u>	<u>FYE</u> <u>06/30/00</u>
Personnel costs	██████████
Equipment	██████████
Participant support costs	
Subawards	
Fee for service	
Other direct costs	██████████
Total direct costs	99,809 (B)
Exclusions:	
Equipment	(2,604)
Participant support	
Fee for service	
Subawards	_____
Modified total direct cost base	97,205
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	46,415
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	<u>(1,701)</u>
Indirect costs as adjusted	44,714
Claimed indirect costs (C)	<u>44,512 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (202)</u>

(A) The award period is September 15, 1997 to August 31, 2000.

(B) The total direct costs plus the claimed indirect costs totals \$144,321 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$166,718, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.

(C) Indirect costs were claimed based upon the application of a maximum provisional rate of 46%.

National Science Foundation Award Number OCE-9806743  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 06/30/00
Personnel costs	██████████
Equipment	
Participant support costs	
Subawards	██████████
Fee for service	
Other direct costs	██████████
 Total direct costs	 40,393 (B)
Exclusions:	
Equipment	
Participant support	
Fee for service	
Subawards	(2,114)
 Modified total direct cost base	 38,279
 Final audited indirect cost rate	 <u>47.75%</u>
 Calculated indirect costs per audit	 18,278
Less: adjustment for indirect costs in excess of the maximum provisional rate of 46%	 <u>(670)</u>
 Indirect costs as adjusted	 17,608
Claimed indirect costs (C)	<u>17,558 (B)</u>
 Over/(Under) recovered indirect costs	 <u>\$ (50)</u>

- (A) The award period is September 15, 1998 to August 31, 2001.
- (B) The total direct costs plus the claimed indirect costs totals \$57,951 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$16,163, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).



National Science Foundation Award Number OCE-9813640  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 06/30/00	
Personnel costs	██████████	
Equipment		
Participant support costs		
Subawards		
Fee for service	██████████	
Other direct costs	██████████	
Total direct costs	41,488	(B)
Exclusions:		
Equipment		
Participant support		
Fee for service	(6,000)	
Subawards	_____	
Modified total direct cost base	35,488	
Final audited indirect cost rate	_____ 47.75%	
Calculated indirect costs per audit	16,946	
Less: adjustment for indirect costs in excess of 46%	_____ (622)	
Indirect costs as adjusted	16,324	
Claimed indirect costs (C)	_____ 15,604	(B)
Over/(Under) recovered indirect costs	_____ \$ (720)	

- (A) The award period is November 1, 1998 to October 31, 2001.
- (B) The total direct costs plus the claimed indirect costs totals \$57,092 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$60,275, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).

National Science Foundation Award Number OCE-9813642  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 06/30/00
Personnel costs	██████████
Equipment	██████████
Participant support costs	
Subawards	
Fee for service	
Other direct costs	██████████
Total direct costs	64,027 (B)
Exclusions:	
Equipment	(2,003)
Participant support	
Fee for service	
Subawards	_____
Modified total direct cost base	62,024
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	29,616
Less: adjustment for indirect costs in excess of 46%	<u>(1,085)</u>
Indirect costs as adjusted	28,531
Claimed indirect costs (C)	<u>28,524 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (7)</u>

(A) The award period is February 1, 1999 to January 31, 2002.

(B) The total direct costs plus the claimed indirect costs totals \$92,551 for the period July 1, 1999 to June 30, 2000. This amount, added to the cumulative costs at June 30, 1999 of \$2,422, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.

(C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate. The rate was derived from the approved budget).

National Science Foundation Award Number OCE-9815155  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period July 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	<u>FYE</u> <u>06/30/00</u>
Personnel costs	██████████
Equipment	
Participant support costs	
Subawards	
Fee for service	
Other direct costs	██████████
<b>Total direct costs</b>	<b>43,057 (B)</b>
Exclusions:	
Equipment	
Participant support	
Fee for service	
Subawards	
<hr/>	
Modified total direct cost base	43,057
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	20,560
Less: adjustment for indirect costs in excess of 46%	<u>(754)</u>
Indirect costs as adjusted	19,806
Claimed indirect costs (C)	<u>19,806 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ -0-</u>

- (A) The award period is July 1, 1999 to June 30, 2001.
- (B) The total direct costs plus the claimed indirect costs agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate, however, there was a negotiated fixed rate of 46%).

National Science Foundation Award Number OCE-9904444  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period October 1, 1999 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	<u>FYE</u> <u>06/30/00</u>
Personnel costs	██████████
Equipment	██████████
Participant support costs	
Subawards	
Fee for service	
Other direct costs	██████████
Total direct costs	41,166 (B)
Exclusions:	
Equipment	(6,780)
Participant support	
Fee for service	
Subawards	_____
Modified total direct cost base	34,386
Final audited indirect cost rate	<u>47.75%</u>
Calculated indirect costs per audit	16,419
Less: adjustment for indirect costs in excess of 46%	<u>(601)</u>
Indirect costs as adjusted	15,818
Claimed indirect costs (C)	<u>15,817 (B)</u>
Over/(Under) recovered indirect costs	<u>\$ (1)</u>

(A) The award period is October 1, 1999 to March 31, 2001.

(B) The total direct costs plus the claimed indirect costs agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.

(C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate, however, there was a negotiated fixed rate of 46%).

National Science Foundation Award Number OCE-9986331  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period May 1, 2000 to June 30, 2000 (A)  
 Interim  
 (Unaudited)

Cost Category	FYE 6/30/00	
Personnel costs	█	
Equipment		
Participant support costs		
Subawards		
Fee for service		
Other direct costs	█	
Total direct costs	80	(B)
Exclusions:		
Equipment		
Participant support		
Fee for service		
Subawards	—	
Modified total direct cost base	80	
Final audited indirect cost rate	<u>47.75%</u>	
Calculated indirect costs per audit	38	
Less: adjustment for indirect costs in excess of 46%	—(1)	
Indirect costs as adjusted	37	
Claimed indirect costs (C)	<u>37</u>	(B)
Over/(Under) recovered indirect costs	<u>\$ -0-</u>	

- (A) The award period is May 1, 2000 to April 30, 2002.
- (B) The total direct costs plus the claimed indirect costs agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate, however, there was a negotiated fixed rate of 46%).

National Science Foundation Award Number OCE-9910676  
 Awarded To  
 BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Schedule of Over/(Under) Recovered Indirect Costs  
 For the Period May 15, 2000 to June 30, 2000 (A)  
 Interim (D)  
 (Unaudited)

Cost Category	FYE 06/30/00	
Personnel costs	██████████	
Equipment		
Participant support costs		
Subawards		
Fee for service		
Other direct costs	██████████	
Total direct costs	49,126	(B)
Exclusions:		
Equipment		
Participant support		
Fee for service		
Subawards	_____	
Modified total direct cost base	49,126	
Final audited indirect cost rate	<u>47.75%</u>	
Calculated indirect costs per audit	23,458	
Less: adjustment for indirect costs in excess of 46%	<u>(860)</u>	
Indirect costs as adjusted	22,598	
Claimed indirect costs (C)	<u>22,598</u>	(B)
Over/(Under) recovered indirect costs	<u>\$ -0-</u>	

- (A) The award period is May 15, 2000 to February 28, 2002.
- (B) The total direct costs plus the claimed indirect costs agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended June 30, 2000.
- (C) Indirect costs were claimed based upon the application of a rate of 46%. (The award letter did not include a statement as to the indirect cost method or rate, however, there was a negotiated fixed rate of 46%).
- (D) The award ending date is June 30, 2000, however, BLOS has unexpended budgeted funds to claim on a subsequent FCTR.

See accompanying independent auditors' report.

BIGELOW LABORATORY FOR OCEAN SCIENCES  
Listing of NSF Awards Active During Audit Period  
Not Affected by Indirect Cost Audit  
For the year ended June 30, 2000  
(Unaudited)

There were two NSF awards that were active during the year ended June 30, 2000, that did not include:

- Indirect costs incurred or billed to NSF on an FCTR.

The listing below presents those awards along with an explanation for their exclusion from this audit.

<u>NSF Award Number</u>	<u>Award Period</u>	<u>Explanation</u>
OPP-9905947	02/16/99-02/15/03	(A)
OCE-9907566	12/01/99-11/30/00	(A)

(A) No indirect costs budgeted/approved or claimed under this award.

SECTION V

AWARDEE'S RESPONSE



**BIGELOW LABORATORY FOR OCEAN SCIENCES**

**Detailed ( [REDACTED] ) on  
Schedule C-1**

BIGELOW LABORATORY FOR OCEAN SCIENCES  
 Details of Adjustments to Indirect Costs - Unallowable Costs Charged to the Other Account  
 For the year ended June 30, 2000

<u>Vendor/Payee</u>	<u>Transaction Date</u>	<u>G/L Account Number</u>	<u>Account Name</u>	<u>Indirect Cost Proposal Line Item Name</u>	<u>Indirect Cost</u>
[REDACTED]	08/12/99	[REDACTED]	[REDACTED]	Other	\$ 3,817
[REDACTED]	06/30/00	[REDACTED]	[REDACTED]	Other	1,340
[REDACTED]	12/09/99	[REDACTED]	[REDACTED]	Other	495
[REDACTED]	08/03/99	[REDACTED]	[REDACTED]	Other	<u>107</u>
					<u>\$ 5,759</u>

BIGELOW LABORATORY FOR OCEAN SCIENCES

Details of Adjustments to Indirect Costs - Reclass of Indirect Expense to Direct Expense from the Other Account  
For the year ended June 30, 2000

<u>Vendor/Payee</u>	<u>Transaction Date</u>	<u>G/L Account Number</u>	<u>Account Name</u>	<u>Indirect Cost Proposal Line Item Name</u>	<u>Indirect Cost</u>
[REDACTED]	10/13/99	[REDACTED]	[REDACTED]	Other	<u>\$ 2,160</u>

BIGELOW LABORATORY FOR OCEAN SCIENCES

Details of Adjustments to Indirect Costs - Reimbursable Travel Costs in Excess of Federal Guidelines  
For the year ended June 30, 2000

<u>Vendor/Payee</u>	<u>Transaction Date</u>	<u>G/L Account Number</u>	<u>Account Name</u>	<u>Indirect Cost Proposal Line Item Name</u>	<u>Indirect Cost</u>
[REDACTED]	06/29/00	[REDACTED]	[REDACTED]	Professional Fees	<u>\$ 8,605</u>
[REDACTED]	04/30/00	[REDACTED]	[REDACTED]	Travel	176
[REDACTED]	05/12/00	[REDACTED]	[REDACTED]	Travel	<u>168</u>
					<u>344</u>
					<u>\$ 8,949</u>

**Bigelow Laboratory for Ocean Sciences**

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[www.bigelow.org](http://www.bigelow.org)

207-633-9600

FAX: 207-633-9641



December 13, 2002

████████████████████  
M.D. Openheim & Company, P.C.  
485 US Highway One, Bldg C P.O.  
Box 4100  
Iselin, NJ 08830-4100

Dear ██████████

Enclosed, please find our response to the NSF audit findings of the indirect cost audit of Bigelow Laboratory for Ocean Sciences for the year ended June 30, 2000.

Our separate responses are to the findings as found on pages 10, 11, 12 and 20. I have also submitted financial information to explain the one finding that we have questioned. We respectfully request that you reconsider the comment. If any additional paperwork is required, I will be happy to provide it.

If you have any questions, please call me.

Sincerely,

████████████████████

Enclosures

12/13/02

Response to Page No. 10  
Findings and Recommendations on Compliance

1. Unallowable Entertainment Costs in the Indirect Cost Pool.

Response: At the time of the occurrences, we mistakenly believed that these costs were allowable as employee morale expenses, [REDACTED]

[REDACTED]. We now understand that the definition of employee morale is extremely limited and have adjusted our records to properly record the costs of any local employee gathering, such as social activities and ceremonials, as an unallowable cost.

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12/13/02

Response to Page No. 10

### Findings and Recommendations on Compliance

#### 2. Unallowable Travel Costs Included in the Indirect Cost Pool.

Response: The architect's invoice in question was received at year end and the travel costs were not thoroughly reviewed. We were unable to substantiate that any other expenses were included in the questioned line and thus concurred with the finding. All staff travel vouchers are now reviewed by two people to ensure that the proper per diem rate is used. We will also carefully monitor the travel expenses of our professional services providers. We will continue to use the internet access ([www.policyworks.gov](http://www.policyworks.gov)) for per diem rates.

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12/13/02

Response to Page No. 11, 12

### Findings and Recommendations on Internal Control

#### 1. Indirect Cost Proposal Does Not Use Actual Costs

##### Response:

A.

These questioned costs were excluded only in our computerized accounting so that the automated posting of indirect costs to grants would not exceed the 46% allowed. Those final grant amounts are then rolled over to the new year as prior year costs. This is done to comply with our indirect rate understanding that amounts over the maximum provisional or predetermined rate cannot be charged to any funding agency. This excess amount was journaled out of administrative/indirect costs into the "unallowed costs" area so that it would not be included in any grant costs or calculations.

During the financial audit of that year, those unallowed costs were added back into the administrative/management costs and used as a basis for our indirect cost calculation. I have attached some financial information to display that the information sent to NSF did include the questioned costs and our rate, subject to adjustments made in # 1 and #2 Compliance, was complete at 46.8179%.

As per our enclosed financials, the total administration costs including fringe and the unapplied (over 46%) indirect costs are \$1,318,106. The amount posted to grants at 46% was the \$1,126,111. The remaining balance of \$191,995 is made up of the unallowed costs of donated rent (space), of \$169,400, the unallowed interest on an old operating loan-in its final year-of \$1,182, and the excess amount of overhead that is being questioned in the amount of \$21,412. The variance is one dollar. I have also attached the indirect calculations for that year and the computer printout showing the detail.



12/13/02

Response to Page No. 11, 12

Findings and Recommendations on Internal Control

1. Indirect Cost Proposal Does Not Use Actual Costs, page 2

B. "The practice of targeting a proposed rate..."

We go through a detailed process during Bigelow's budgeting each spring so that we can determine how much in grant funds will be available to cover our research salaries and other costs. Part of the process is to determine how much in indirect cost will be available, at our provisional or fixed rate, to meet our administrative budget. The budget process also allows us to identify goals from our long range plan and to fund the policies set by our board. The targeting occurs during the budget process for the lab in that we decide to budget a 46% spending level. As with all things, unexpected events occur and our recent actual rates have varied from 44.73% to 46.8%. This should not indicate targeting of our actual rates.

In addition, research proposals are submitted using a 46% indirect rate. This indirect rate used for submitting proposals has remained at 46% for several years since our maximum provisional rate has not varied. As long as we did not anticipate any major administrative changes, the rate has been adequate and Bigelow did make a decision to keep the research proposal rate at 46% for competitive reasons. For the several years prior to 2000, our indirect rate did not exceed the 46% and this strategy worked. As we look to future years, I expect that our rate will indeed increase and proposals will include a higher indirect rate.

Subsequently, I am resubmitting the actual indirect costs with ledger backup that will support the original 46.8%.

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12/13/02

Response to Page No. 11, 12

Findings and Recommendations on Internal Control

### 2. Prior to Payment a Designated Employee(s) Should Verify Receipt

Response: Each science team has a designated person who deals with purchase orders, ordering and approving invoices. Since Bigelow is a fairly small lab, we occasionally allowed authorizations to be made by phone with no written audit trail. We have since changed our method for verifying receipt of goods so that all payments have initials or a signature and approval for payment.

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12/13/02

Response to Page No. 11, 12

### Findings and Recommendations on Internal Control

#### 3. Invoices Should be Cancelled

Response: We purchased a "PAID" stamp the week after our NSF audit exit interview. The purchase date was June 3, 2002 and we have used it diligently since.

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12/13/02

Response to Page 20  
Schedule of Auditor's Adjustments and Eliminations

Direct program costs included in the indirect cost pool for a DNA sequencer that was charged to administrative expenses.

Response: At the time, we believed that this piece of equipment qualified as an indirect cost. However, upon reexamination of the OMB Circular-122, Attachment A, Part B (1), I realize that this should have been a program cost. We will adjust our equipment records to reflect this change and exercise due diligence in future transactions.



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12/13/02

Response to Page 20  
Schedule of Auditor's Adjustments and Eliminations

Reimbursed travel vouchers paid to employees in excess of the maximum amount allowable under federal relations were included in the indirect cost is of and direct cost base.

Response: All staff travel vouchers are now reviewed by two people to ensure that the proper per diem rate is used. We will also carefully monitor the travel expenses of our professional services providers.



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12/13/02

Response to Page 20

Schedule of Auditor's Adjustments and Eliminations

Entertainment costs which included celebrations for an employee picnic, 25' anniversary celebration and other similar type expense were included in the indirect cost pool.

Response: At the time of the occurrences, we mistakenly believed that these costs were allowable as employee morale expenses [REDACTED]

[REDACTED] We now understand that the definition of employee morale is extremely limited and have adjusted our records to properly record the costs of any local employee gathering, such as social activities and ceremonials, as an unallowable cost.

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12/13/02

Response to Page 20

Schedule of Auditor's Adjustments and Eliminations

Indirect costs attributable to operations (unallocated fringe benefits and overhead) not reflected in indirect costs proposed.

Response: These questioned costs were excluded only in our computerized accounting so that the automated posting of indirect costs to grants would not exceed the 46% allowed. Those final grant amounts are then rolled over to the new year as prior year costs. This is done to comply with our indirect rate understanding that amounts over the maximum provisional or predetermined rate cannot be charged to any funding agency. This excess amount was journaled out of administrative/indirect costs into the "unallowed costs" area so that it would not be included in any grant costs or calculations.

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