

THE ACADEMY OF NATURAL SCIENCES
Philadelphia, Pennsylvania

Financial and Compliance Audit
of
Indirect Costs
For the Year Ended
December 31, 2000

M.D. Oppenheim & Company, P.C.
Certified Public Accountants
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THE ACADEMY OF NATURAL SCIENCES

Table of Contents

	<u>Page</u>
Acronyms	1
Section I - Introduction and Audit Results:	
Background	3
Objective and Scope of Audit	3
Summary of Audit Results	4
Exit Conference	7
Section II - Findings and Recommendations:	
Independent Auditors' Report on Compliance and Internal Control	9
Findings and Recommendations on Compliance	11
Finding and Recommendation on Internal Control	17
Section III - Financial Schedules:	
Independent Auditors' Report	20
Financial Schedules:	
Schedule A -Schedule of Over/(Under) Recovered Indirect Costs on National Science Foundation Awards	22
Schedules B-1 to B-7 - Schedules of Indirect Cost Calculation	23
Schedule C - Schedule of Auditors' Adjustments and Eliminations	30
Notes to Financial Schedules	33
Section IV - Supplementary Information:	
Independent Auditors' Report on Supplementary Information	35
Schedule D-1 to D-7 - Schedule of Over/(Under) Recovered Indirect Costs	36
Schedule E - Listing of NSF Awards Active During Audit Period Not Affected by Indirect Cost Audit	43
Section V - Awardee's Response	44

THE ACADEMY OF NATURAL SCIENCES

Acronyms

<u>Acronym</u>	<u>Explanation of Acronym</u>
AICPA	American Institute of Certified Public Accountants
ANS	The Academy of Natural Sciences
CPO	Division of Contract, Policy and Oversight
DGA	Division of Grants and Agreements
FCTR	Federal Cash Transactions Report
FY	Fiscal Year
FYE	Fiscal Year Ended
MTDC	Modified Total Direct Costs
NSF	U.S. National Science Foundation
OIG	Office of Inspector General
OMB	Office of Management and Budget

SECTION I

INTRODUCTION AND AUDIT RESULTS

SECTION I - INTRODUCTION AND AUDIT RESULTS

BACKGROUND

The Academy of Natural Sciences (ANS) is an international museum of natural history operating since 1812, and undertakes research and public education that focuses on the environment and its diverse species. ANS is a not-for-profit, tax-exempt organization.

ANS generates approximately \$17 million of annual revenues mainly from grants and contracts, contributions, bequests, endowments, museum admissions and museum shop income. Of the approximate \$17 million of annual revenues, federal financial assistance approximates \$3.7 million.

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 ANS for the year ended December 31, 2000 to determine final indirect cost rates (On-Site and Off-Site) for that year. During the period of our audit there were seven NSF awards that included indirect costs based on various maximum provisional rates specified in the award letter and/or award budget. Our audit objectives were: (1) to determine whether ANS complied with federal requirements in computing its indirect costs proposal; (2) to determine whether ANS over or under-recovered indirect costs on each NSF award active during the audit period, based upon the audit determined indirect cost rates (On-Site and Off-Site); and (3) to evaluate the adequacy of ANS's 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 maximum provisional 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 ANS's 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 ANS's control environment.
- 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 internal

controls in 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 pools and the direct cost base.
- Performed testing procedures to determine whether the indirect cost proposals and the resultant indirect cost rates comply 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

We identified significant deficiencies in ANS's calculation of its indirect cost rates for the year ending December 31, 2000. ANS submitted an indirect cost proposal for FY 2000 proposing on- and off-site indirect cost rates of [REDACTED] percent and [REDACTED] percent, respectively. The proposed rates, however, are higher than the audited rates by approximately [REDACTED] percent and resulted in a \$[REDACTED] over-recovery of indirect costs. Further, the total audit adjustments and eliminations necessary to correct inaccuracies in the rate calculations amount to \$136,185 in total reductions in the indirect cost pool and \$181,111 in total additions in the direct cost base. The deficiencies and internal control weaknesses that caused the over-recovery could affect future ANS indirect cost rates.

Material Non-Compliance

- ANS over-claimed fringe benefit costs in the indirect cost pool. ANS proposed \$[REDACTED] of fringe benefits applicable to its research group. However, this amount included \$[REDACTED] for the cost of sick, vacation, holiday and personal days, which were already included in the gross payroll amounts recorded in salaries and wages expense. This adjustment represents 4.5 percent of the total proposed indirect cost pool.
- The ANS Biodiversity department did not track, document, and certify the labor effort of staff who allocate their time to both direct and indirect activities. ANS proposed as indirect costs unsupported salaries of \$[REDACTED], or [REDACTED] percent of total proposed indirect costs. The labor costs were undocumented because the Biodiversity department did not adhere to a Finance department request to document their activity on a daily basis.
- ANS was not in compliance with federal property standards because asset records did not include information such as location, serial number, and whether assets were

purchased with federal or non-federal funds. For the year ended December 31, 2000, depreciation expense in the indirect cost pool totaling \$726,486 was related to restricted fund assets. As a result, we were unable to determine what equipment, if any, had been purchased with federal funds and therefore whether depreciation on this equipment was included in the indirect cost pool, which is unallowable. ANS did not maintain adequate records because it was not knowledgeable of the federal regulations.

Non-Material Non-Compliance

- ANS included \$12,690 of unallowable costs including alcohol and an awards dinner in the indirect cost pool. This problem occurred because the chart of accounts and general ledger did not segregate allowable and unallowable expenses. ANS believed that both the chart of accounts and general ledger were sufficient for its needs.
- ANS did not appropriately value the cost of volunteer services totaling \$62,476. Although ANS tracked the hours provided by each volunteer, it did not track the type of services provided and the hourly rate attributable to that activity. We noted in our audit that the hourly rate applied to volunteers was inconsistent with the rate paid to ANS employees with similar job responsibilities. Therefore, volunteer service costs may be misstated in the indirect cost proposal, resulting in an improper calculation of the indirect costs rates. ANS did not maintain adequate records because it was not knowledgeable of the federal regulations.

Material Internal Control Weakness

ANS does not have adequate control procedures related to the preparation and submission of its indirect cost proposal. We identified material errors in the ANS's calculation of its indirect cost rate for the year ended December 31, 2000, that resulted in an audited indirect cost rate ■ percentage points lower than the proposed rate. We found that the ANS staff did not completely understand federal regulations related to the preparation and submission of indirect cost proposals and did not have written policies and procedures documenting this process.

To address the compliance and internal control deficiencies identified in our audit, we recommend that the Directors of NSF's Division of Acquisition and Cost Support (DACs) and the Division of Grants and Agreements (DGA) require that ANS (1) maintain detailed time and attendance records to document the actual time worked by project/award and administrative time at least monthly for all departments, (2) develop and implement policies and procedures to document its property records in accordance with federal guidelines, (3) develop and implement policies and procedures to prepare a chart of accounts and general ledger that identifies and segregates accounts between allowable and unallowable costs, (4) develop and implement policies and procedures to ensure that the valuation of volunteer services complies with federal regulations, and (5) develop and implement written policies and procedures documenting its indirect cost calculation process and require that the ANS financial staff receive training on how to properly and accurately prepare an IDCP.

Summary of Auditee's Responses

With respect to the compliance issues presented in the report, ANS has indicated their concurrence with all findings except the finding related to volunteer services (which they believe is conservatively accurate). ANS also indicated what procedures have been instituted to correct the compliance issues with which they concur.

With respect to the internal control weakness presented in the report, ANS concurred with the weakness and presented steps they will institute to correct these deficiencies in the future.

Exit Conference

An exit conference was held on June 21, 2002 at the Auditee's office located at 1900 Benjamin Franklin Parkway, Philadelphia, Pennsylvania. The findings on compliance and internal control along with the adjustments and eliminations related to the indirect cost proposals were discussed by the following individuals.

For The Academy of Natural 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 schedules of indirect/direct costs (B-I to B-7) which summarize the indirect cost proposal prepared by Academy of Natural Sciences for the year ended December 31, 2000, and have issued our report thereon dated June 21, 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 Academy of Natural 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 Academy of Natural 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 a certain matter involving internal control over financial reporting and its operation that we consider to be a reportable condition. Reportable conditions involve matters coming to our attention relating

National Science Foundation
Office of Inspector General
Arlington, Virginia

Internal Control Over Financial Reporting (Cont.)

to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect Academy of Natural Science's ability to record, process, summarize and report financial data consistent with the assertions of management in the financial schedules. The reportable condition noted is 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 the reportable condition described above is a material weakness.

This report is intended solely for the information and use of Academy of Natural 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.

June 21, 2002

THE ACADEMY OF NATURAL SCIENCES
Findings and Recommendations on Compliance
For the year ended December 31, 2000

Material Deficiencies

1. **Over-Claim on Fringe Benefit Costs**

OMB Circular A-110, Subpart C, paragraph 21(b)(1) requires the accurate, current and complete disclosure of the financial results of each program. This would include the proper reporting of actual fringe benefit expenses included in an indirect cost pool.

ANS over-claimed fringe benefit costs in the indirect cost pool. ANS proposed \$[REDACTED] of fringe benefits applicable to its research group. However, this amount included \$164,526 for the cost of sick, vacation, holiday and personal days which were already included in the gross payroll amounts recorded in salaries and wages expense. This adjustment represents [REDACTED] percent of the total proposed indirect cost pool.

ANS in preparing their indirect cost proposal included the cost of sick, vacation, holiday and personal days in their belief that those were fringe benefits of employment at ANS. These days are part of a fringe benefit package available to employees, however, the cost of these fringe benefits are all part of the compensation to an individual employee and are included in salary and wage costs.

Recommendation

We recommend that the Directors of NSF's Division of CPO and DGA require ANS to develop and submit for NSF approval written policies and procedures in conformance with OMB Circulars A-110 and A-122 for the classification of direct and indirect costs; and ensure that ANS future indirect cost rate proposals do not include fringe benefit costs for sick, vacation, holiday and personal days in their indirect cost pools.

Auditee's Response

Academy of Natural Sciences (ANS) staff responsible for preparing the indirect cost proposal mistakenly included the cost of sick, vacation, holiday and personal days as fringe benefit costs of employment at ANS. They did not correctly analyze indirect cost methodology and realize that the costs of these fringe benefits are part of the compensation to employees included in salary and wage costs.

Future ANS indirect cost rate proposals will not include fringe benefit costs for sick, vacation, holiday and personal days in the indirect cost pool. ANS is developing a procedure manual and template to prevent these types of errors in the future.

Auditors' Response to Auditee's Response

Since ANS concurs with the finding a response is not deemed necessary.

2. **Timekeeping System Inadequate**

OMB Circular A- 122 specifies that salaries and wages chargeable to an award must be supported by personnel activity reports. In addition, the Circular states that to support the allocation of indirect costs to federal awards, activity reports must be maintained for employees who split their time between both direct and indirect cost activities. In either case, the reports must reflect "an *after-the-fact* determination of the actual activity of each employee," be signed by the employee or the employee's supervisor, and be prepared at least monthly.

ANS did not have an adequate system to track, document, and certify the labor effort of staff working in the Biodiversity Department, who allocated their time to both direct and indirect activities. We found that ANS could not support its allocation of indirect salary and wages costs amounting to \$249,322, or █ percent of proposed indirect costs. Instead of documenting these allocations using monthly time reports, ANS arbitrarily determined the allocation of these amounts once a year when it prepared its annual indirect cost allocation plan. Without the reliability of proper documentation or the establishment of a reasonable allocation policy, ANS's direct cost base and indirect cost pool in proposals submitted to NSF may be misstated resulting in an improper calculation of its indirect costs rates.

Recommendation

We recommend that the Directors of NSF's DACS and DGA require ANS to submit for NSF's review and approval a process track, document, and certify monthly labor distribution reports documenting the time employees of its research departments spend on both direct and indirect cost activities.

Auditee's Response

ANS has an adequate system to track, document, and certify the labor efforts for its staff. As noted in the audit findings only Biodiversity department was at issue, none of the other departments within the science division were affected. Until October 2001, the Biodiversity department personnel were not enforced by their management to participate in this system as this peculiar staff interpreted the documentation as "1984-esque".

ANS administration staff did not "arbitrarily" determine time allocations for the indirect cost plan; instead, it had established what it thought was a reasonable allocation policy in determining the amount of time Biodiversity staff spent on administrative activities.

In October 2001 procedures were introduced, which force the Biodiversity employees to document time on a bimonthly basis. Compensation is tied directly to the documentation and senior management has clearly communicated that noncompliance will not be tolerated.

Auditors' Response to Auditee's Response

Since new procedures have been instituted effective October 2001 a response is not deemed necessary.

3. Incomplete Property Records

OMB Circular A-110 states that awardees must maintain equipment records that are accurate and include information such as a description, acquisition date and cost, and source of the equipment including the award number. In addition, the computation of use allowances or depreciation on equipment will exclude "any portion of the cost of buildings and equipment borne by or donated by the Federal Government irrespective of where title was originally vested or where it presently resides..."

For the year ended December 31, 2000, ANS had depreciation expense in the indirect cost pool totaling \$920,061 for facilities improvement. Of that amount \$726,486 was related to restricted fund assets. However, ANS property records did not specifically identify whether the source of funding for the funded assets was an endowment fund, federal fund, debt-finance fund, or some other type of restricted fund.

Therefore, because ANS property records did not delineate between federal and non-federally-funded assets, we were unable to determine whether the depreciation expense proposed by ANS in its indirect cost proposal included "any portion of the cost of equipment borne by or donated by the Federal Government..." The inclusion of depreciation for federally-funded assets in the indirect cost pool would result in the federal government paying excessive indirect costs. This problem occurred because ANS was not knowledgeable of the federal regulations requiring that such information be documented for their property records.

Recommendation

We recommend that the Directors of NSF's DACS and DGA require ANS to submit for NSF's review and approval property management policies and procedures that are consistent with the requirements of OMB Circular A-110.

Auditee's Response

The Academy developed a database in January 2002 to track and manage all equipment purchased with federal funds. The database cross-references the depreciation schedule by job number, which allows for easy identification and exclusion of all federally funded assets.

Auditors' Response to Auditee's Response

Since ANS concurs with the finding a response is not deemed necessary.

THE ACADEMY OF NATURAL SCIENCES
Findings and Recommendations on Compliance (Cont.)
For the Year ended December 31, 2000

Non-Material Deficiencies

1. **Chart of Accounts and General Ledger Does Not Separately Identify Allowable and Unallowable Costs**

NSF's Prospective New Awardee Guide states that an adequate accounting system, at a minimum, must provide for identification of expenditures as allowable and unallowable. In addition, OMB Circular A-122 states that to be allowable under an award, cost must... conform to any limitation or exclusions set forth in these principles or in the awards as to types or amounts of cost items.

ANS included \$12,690 of unallowable costs including alcohol and an awards dinner in the indirect cost pool (see Schedule B-6 and Schedule C). This problem occurred because the ANS chart of accounts and general ledger did not differentiate between allowable and unallowable costs. Although ANS has an extensive chart of accounts and general ledger, the sheer volume of cost activity makes it more likely that unallowable costs will not be excluded during the annual preparation of the indirect cost proposal.

ANS believed that both their chart of accounts and general ledger were prepared in enough detail that it not only met their needs thoroughly, but also met any required statutes. They were not aware of the NSF and federal regulations requiring that the chart of accounts delineate between allowable and unallowable costs.

Recommendation

We recommend that the Directors of NSF's DACS and DGA ensure that ANS develop and implement policies and procedures to prepare a chart of accounts and general ledger that identifies and segregates its accounts between allowable and unallowable costs.

Auditee's Response

While the ANS chart of accounts, prior to January 2002, did not differentiate between allowable and unallowable costs, every effort was made to exclude unallowable costs during the annual preparation of the indirect cost proposal.

Knowing that alcohol is an unallowable expense, ANS staff preparing the indirect cost proposal deducted a blanket \$3,000 from research administration supplies for any alcohol related expense. Unfortunately, the estimate was short of actual expense. Prior to modifying the chart of accounts the sheer volume of cost activity made it difficult to identify all unallowable costs and the Academy relied on estimates.

ANS modified the chart of accounts and general ledger in January 2002 to identify and segregate allowable and unallowable costs. Staff has been trained as to what costs are allowable and unallowable. Procedures are in place to exclude unallowable costs in the indirect cost proposal.

Auditors' Response to Auditee's Response

Since ANS concurs with the finding a response is not deemed necessary.

2. Appropriate Valuation of Volunteer Service Costs

OMB Circular A-122 states that in order for costs to be allowable under an award, they must be adequately documented. In addition, it also states that pay rates used to calculate the value of volunteers services should be consistent with those regular rates paid for similar work in other activities of the organization.

During the year ended December 31, 2000, ANS included \$62,476 of volunteer service costs in its direct cost base. ANS tracks volunteer service hours that are being donated to the organization and properly records the information in its indirect cost proposal. However, ANS does not track the type of services that are being performed by the volunteers nor do they value the rate of pay based on those services.--The hourly rate of pay assigned to each volunteer was not consistent with the rate of pay applied to an employee with similar functions at ANS and instead was based on prior year rates. The rate assigned to a volunteer hour of service could be higher or lower than an individual performing the same function as a paid employee. Without the reliability of proper documentation or the establishment of a reasonable valuation policy, ANS's direct cost base in proposals submitted to NSF may be misstated resulting in an improper calculation of its indirect costs rates.

ANS believed their records were sufficient to document the services provided by their volunteers. Furthermore, they were not knowledgeable of the federal regulations regarding the proper valuation of volunteer services.

Recommendation

We recommend that the Directors of NSF's Divisions of DACS and DGA require that ANS develop and implement policies and procedures to ensure that the pay rates used to calculate the value of volunteers services are consistent with those regular rates paid for similar work in other activities of the organization.

Auditee's Response

At ANS, services performed by volunteers are generally not consistent with those performed by paid personnel, but rather of an assisting nature. Without a volunteer, no paid help would have been available. Because few volunteers are working at jobs similar to those as paid staff, it becomes difficult in estimating a proper valuation of those volunteer services.

Given this environment, volunteer services are estimated conservatively. The hourly rate of pay assigned to each volunteer is, ANS believes, below that of what a paid individual would demand. Erring on the conservative side, it is unlikely that the methodology of valuing volunteer services made by ANS has led to overstating the indirect cost rate.

Auditors' Response to Auditee's Response

Since ANS does not document how they arrive at a volunteer rate and that rate is applied universally, the finding remains as stated. ANS should group the volunteers by type of work and then compute/assign a rate by each group and document how the rate is arrived at.

THE ACADEMY OF NATURAL SCIENCES
Finding and Recommendation on Internal Control
For the Year ended December 31, 2000

Material Weakness

1. Inadequate Procedures Related to the Preparation of the IDCP

ANS does not have adequate control procedures related to the preparation and submission of its indirect cost proposal (IDCP). In particular, ANS payroll and property records were not in compliance with Federal regulations, and ANS did not have adequate policies and procedures related to the segregation of unallowable costs in its accounting system and the valuation of volunteer services.

As a result, we identified material errors in the ANS's calculation of its indirect cost rate for the year ended December 31, 2000 (see Summary of Audit Results). ANS's indirect costs were overstated by a net amount of \$136,185, while its direct costs were understated by \$181,111. This resulted in an audited indirect cost rate ■ percentage points lower than the proposed rate. In addition, NSF was over-charged \$19,935, or ■ percent of total claimed indirect costs, on seven NSF awards active in the audit period.

Although OMB encourages the use of predetermined indirect cost rates, these internal control weaknesses suggest that NSF should continue to use a maximum provisional indirect cost rate (MPR) with ANS. An MPR is a "temporary rate established for an award to permit funding and reimbursement of indirect costs pending establishment of a final rate using actual cost data." In cases where an awardee is new to NSF funding or if there are significant audit-reported compliance deficiencies and/or internal control weaknesses, the use of an MPR is warranted because "it limits indirect cost recoveries to the lower of the maximum provisional rate established at the time of the award, or the final rate..."

Recommendation

We recommend that the Directors of NSF's DACS and DGA require that the ANS develop and implement written policies and procedures documenting its indirect cost calculation process and require that the ANS financial staff receive training on how to properly and accurately prepare an IDCP.

Auditee's Response

At least since January 2002 (earlier in some instances), ANS payroll and property records are compliant with Federal regulations. ANS also has adequate policies and procedures related to the segregation of unallowable costs in its accounting system, and will make a concerted effort in properly valuing volunteer services.

As a non-profit organization facing certain financial challenges everyone is forced to multitask. Unfortunately, due to turnover within the department, an individual with no experience or training in Indirect Costs Proposal (IDCP) preparation prepared the IDCP for 2000. We have since taken steps to correct the problem. We have invested in training and have begun documenting the procedure for preparing the IDCP. We are developing a template to use in preparing the IDCP. ANS will continue to seek out training opportunities to keep staff knowledgeable in IDCP preparation.

Auditors' Response to Auditee's Response

Since ANS concurs with the finding 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, Academy of Natural Sciences has proposed as applicable to the National Science Foundation and other federal awards for the year ended December 31, 2000. The indirect cost proposal, as presented in the schedules of indirect/direct costs (Schedules B-1 to B-7) and the schedule of over/(under) recovered indirect costs (Schedule A) are the responsibility of Academy of Natural Science's management. Our responsibility is to express an opinion on Schedules A and B-1 to B-7 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 (Schedules B-1 to B-7) and the resultant over/(under) recovered indirect costs (Schedule A) for the year ended December 31, 2000 on the basis of accounting described in Note 1.

In accordance with *Government Auditing Standards*, we have also issued our report dated June 21, 2002 on our consideration of Academy of Natural 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.

National Science Foundation
Office of Inspector General
Arlington, Virginia

Schedule C contains indirect costs in the amount of \$136,185 that are reductions to the indirect costs proposed and \$181,111 that are additions to the direct costs proposed for the year ended December 31, 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 Academy of Natural 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.

June 21, 2002

THE ACADEMY OF NATURAL SCIENCES
Schedule of Over/(Under) Recovered Indirect Costs on National Science Foundation Awards
For the period January 1, 2000 to December 31, 2000

NSF Award Number	Award Period	Indirect Cost Approved in Award			Year Ended	Indirect Costs Rates Proposed/Audited				Schedule Reference	Indirect Costs				
		Cost Method	Rate			On-Site	Off-Site	On-Site	Off-Site		On-Site	Off-Site	Claimed to NSF	Per Audit	Over/(Under) Recovered
			On-Site	Off-Site											
DBI-9728996	08/01/98-07/31/02	Maximum Provisional (MTDC)	72.33%	N/A	12/31/00	████	N/A	████	N/A	B-1	████	████	\$ 6,387		
OCE-9730416	02/01/98-01/31/03	Maximum Provisional (MTDC)	77.00%	45.00%	12/31/00	████	████	████	████	B-1	████	████	747		
ATM-9809606	08/01/98-07/31/02	Maximum Provisional (MTDC)	72.33%	N/A	12/31/00	████	N/A	████	N/A	B-1	████	████	2,103		
DEB-9870226	07/15/98-12/31/00	Maximum Provisional (MTDC)	72.33%	N/A	12/31/00	████	N/A	████	N/A	B-1	████	████	(802)(A)		
DEB-9870233	09/15/98-08/31/02	Maximum Provisional (MTDC)	72.41%	N/A	12/31/00	████	N/A	████	N/A	B-1	████	████	7,855		
OCE-9901139	05/01/99-04/30/02	Maximum Provisional (MTDC)	72.33%	N/A	12/31/00	████	N/A	████	N/A	B-1	████	████	3,588		
DBI-0084239	06/15/00-05/31/01	Maximum Provisional (MTDC)	64.00%	N/A	12/31/00	████	N/A	████	N/A	B-1	████	████	57		
											████	████	<u>\$ 19,935</u> (B)		

Comments/Notes:

MTDC = Modified total direct costs. (Total direct program costs less equipment and participant support costs).

(A) Financially closed award.

(B) Total over-recovery is \$20,737, which represents all of the over-recovering amounts without regard to the \$802 (which is an under-recovery to a closed award).

THE ACADEMY OF NATURAL SCIENCES
Indirect Cost Calculation
For the year ended December 31, 2000

	Schedule Reference	Proposed Costs	Auditors' Adjustments and Eliminations	Allowable Costs
Direct Cost Base (Research Costs-MTDC)	B-2	██████████	\$ 181,111	██████████
Indirect Cost Pool:				
Facilities – Research Department (Building Operations)	B-3	██████████	\$ 26,009	██████████
General Administration – Research Department	B-4	██████████	15,957	██████████
Library Expenses	B-5	██████████	2,960	██████████
Research Administration	B-6	██████████	(181,111)	██████████
Total Indirect Costs		██████████	\$ (136,185)	██████████
<u>Computation of Indirect Cost Rate – On-Site Rate:</u>				
	<u>Per ANS</u>	<u>Per Audit</u>		
Total indirect costs	██████████	██████████		
Total direct costs	██████████	██████████		
Computed Indirect Cost Rate (On-Site)	██████████	██████████		
<u>Computation of Indirect Cost Rate – Off-Site Rate:</u>				
	<u>Per ANS</u>	<u>Per Audit</u>		
Total indirect costs (No Facilities Costs)	██████████	██████████		
Total direct costs	██████████	██████████		
Computed Indirect Cost Rate (Off-Site)	██████████	██████████		

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Direct Costs (Research Costs)
 For the year ended December 31, 2000

<u>Expenses</u>	<u>Proposed Costs</u>	<u>Auditors' Adjustments and Eliminations</u>	<u>Note No.</u>	<u>Allowable Costs</u>
BioDiversity Group	██████████	\$		██████████
Environmental Group				
Estuarine Research Center (ERC)	██████████			██████████
Patrick Center	██████████			██████████
Mongolia Institute	██████████			██████████
Volunteer services	██████████	_____		██████████
Total research group costs	██████████			██████████
Less: Research administrative costs (Schedule B-6)	██████████	181,111*		██████████
Subcontract costs	██████████	_____		██████████
Modified Total Direct Costs	██████████	<u>\$ 181,111</u>		██████████

(A)

(A) The amounts agree with the indirect cost rate proposal submitted by The Academy of Natural Sciences (ANS). The total costs before auditors' adjustments and eliminations agree with ANS's books of account.

* The amount reflects the cumulative adjustments on Schedule B-6. Since the adjustments on Schedule B-6 are reductions to the research administrative costs they reduce these costs on this schedule. The \$181,111, therefore, has to be a positive amount to arrive at the final adjusted research administrative costs (per B-6) of \$██████████.

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Facilities (Building Operations) Expenses
 For the year ended December 31, 2000

<u>Expenses</u>	<u>Proposed Costs</u>	<u>Auditors' Adjustments and Eliminations</u>	<u>* Note No.</u>	<u>Allowable Costs</u>
Salaries and wages	██████████	\$		██████████
Fringe benefits	██████████			██████████
Supplies	██████████			██████████
Travel	██████████			██████████
Guard services	██████████			██████████
Membership dues	██████████			██████████
Postage	██████████			██████████
Photography	██████████			██████████
Books	██████████			██████████
Office equipment rental	██████████			██████████
Office equipment repair	██████████			██████████
Photocopy expenses	██████████			██████████
Insurance expense	██████████			██████████
Depreciation	██████████			██████████
Depreciation (facilities improvements)	██████████	64,571	(1)	██████████
Telephone	██████████			██████████
Facilities maintenance expenses	██████████			██████████
Building improvements expense	██████████			██████████
Maintenance supplies	██████████			██████████
Janitorial supplies	██████████			██████████
Duct work	██████████			██████████
Heat	██████████			██████████
Electricity and gas	██████████			██████████
Water service	██████████			██████████
Other transfers	██████████			██████████
Other expenses	██████████			██████████
 		_____		██████████
Total facilities expenses	██████████	\$ 64,571		\$ ██████████
	(A)			
<u>Allocation of facilities expenses (B):</u>				
Research	██████████	\$ 26,009		██████████
Administrative	██████████	8,013		██████████
Library	██████████	7,309		██████████
Other departments	██████████	23,240		██████████
Total expenses	\$ ██████████	\$ 64,571		\$ ██████████

(A) The amounts agree with the indirect cost rate proposal submitted by The Academy of Natural Sciences (ANS). The total costs before auditors' adjustments and eliminations agree with ANS's books of account.

(B) Allocations based upon the square footage for each department as a percentage of the total square footage.

* See Schedule C.

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
Schedule of General and Administrative Expenses
For the year ended December 31, 2000

<u>Expenses</u>	<u>Proposed Costs</u>	<u>Auditors' Adjustments and Eliminations</u>	<u>* Note No.</u>	<u>Allowable Costs</u>
Salaries and wages	██████████	\$		██████████
Fringe benefits	██████████			██████████
Supplies	██████████			██████████
Equipment	██████████	14,315	(2)	██████████
Professional/consultant fees	██████████			██████████
Travel	██████████			██████████
Membership dues	██████████			██████████
Postage and printing	██████████			██████████
Advertising and publication costs	██████████			██████████
Office equipment rental	██████████			██████████
Photocopy expenses	██████████			██████████
Data processing	██████████			██████████
Insurance expense	██████████			██████████
Depreciation	██████████			██████████
Telephone	██████████			██████████
Catering	██████████			██████████
Training and accreditation costs	██████████			██████████
Special events	██████████			██████████
Other expenses	██████████	_____		██████████
Subtotal-prior to Network Management				
Costs (computer services) and facilities allocation(C)	██████████	14,315		██████████
Network management costs (C)	██████████			██████████
Facilities allocation (Schedule B-3)	██████████	8,013		██████████
Total general and administrative	<u>\$ ██████████</u>	<u>\$ 22,328</u>		<u>\$ ██████████</u>
	(A)			
<u>Allocation of G&A Expenses (B):</u>				
Library	██████████	\$ (990)		██████████
Research (B)	██████████	(15,957)		██████████
Other Departments	██████████	(5,381)		██████████
Total expenses	<u>\$ ██████████</u>	<u>\$ (22,328)</u>		<u>\$ ██████████</u>

(A) The amounts agree with the indirect cost rate proposal submitted by The Academy of Natural Sciences (ANS). The total costs before auditors' adjustments and eliminations agree with ANS's books of account.

(B) The basis of the allocation is as follows:

Total ANS expenses (per audited financial statements)	\$ ██████████
Less: Building Operations Expenses (as adjusted) (Schedule B-3)	██████████
Less: Administration (as adjusted)	██████████ (C)
Total Basis for Allocation	<u>\$ ██████████</u>

* See Schedule C.

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Library Expenses
 For the year ended December 31, 2000

<u>Expenses</u>	<u>Proposed Costs</u>	<u>Auditors' Adjustments and Eliminations</u>	<u>Note No.</u>	<u>Allowable Costs</u>
Salaries and wages	[REDACTED]	\$		[REDACTED]
Fringe benefits	[REDACTED]			[REDACTED]
Supplies	[REDACTED]			[REDACTED]
Equipment	[REDACTED]			[REDACTED]
Travel	[REDACTED]			[REDACTED]
Membership dues	[REDACTED]			[REDACTED]
Postage	[REDACTED]			[REDACTED]
Photography	[REDACTED]			[REDACTED]
Binding	[REDACTED]			[REDACTED]
Books/periodicals	[REDACTED]			[REDACTED]
Electronic services	[REDACTED]			[REDACTED]
Photocopy expenses	[REDACTED]			[REDACTED]
Special events/exhibits	[REDACTED]			[REDACTED]
Insurance expense	[REDACTED]			[REDACTED]
Telephone	[REDACTED]			[REDACTED]
Depreciation	[REDACTED]			[REDACTED]
Data processing	[REDACTED]			[REDACTED]
Other expenses	[REDACTED]			[REDACTED]
Total Expenses	[REDACTED]			[REDACTED]
Less: grant funded expenses	[REDACTED]			[REDACTED]
Sub-total prior to facilities and G&A Allocation	[REDACTED]			[REDACTED]
Facilities allocation (Schedule B-3) (B)	[REDACTED]	4,073		[REDACTED]
G & A Allocation (Schedule B-4) (B)	[REDACTED]	552		[REDACTED]
Sub-total	[REDACTED]	4,625		[REDACTED]
Less: outside use of Library (C)	[REDACTED]	(1,665)		[REDACTED]
Net Library Costs	\$ [REDACTED]	\$ 2,960		\$ [REDACTED]

(A) The amounts agree with the indirect cost rate proposal submitted by The Academy of Natural Sciences (ANS). The total costs before auditors' adjustments and eliminations agree with ANS's books of account.



(C) The amount agrees with the indirect cost proposal detailing activity used by staff and others for the library facilities. [REDACTED]

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Research Administrative Expenses
 For the year ended December 31, 2000

<u>Expenses</u>	<u>Proposed Costs</u>	<u>Auditors' Adjustments and Eliminations</u>	<u>Note No.</u>	<u>Allowable Costs</u>
Salaries and wages	██████████	\$		██████████
Fringe benefits	██████████	(164,526)	(3)	██████████
Outside help	██████████			██████████
Supplies	██████████	(494)	(4)	██████████
Equipment	██████████			██████████
Membership dues	██████████			██████████
Consultant fees	██████████			██████████
Travel	██████████	(4,617)	(5)	██████████
Postage	██████████			██████████
Publication costs	██████████			██████████
Printing	██████████			██████████
Photography	██████████	(3,503)	(6)	██████████
Books/periodicals	██████████			██████████
Photocopy expense	██████████			██████████
Insurance expense	██████████			██████████
Depreciation	██████████			██████████
Telephone	██████████			██████████
Facilities expense	██████████			██████████
Heat/electric/water	██████████			██████████
Other expenses	██████████	(7,971)	(7)	██████████
Total Expenses	\$ ██████████	\$ ██████████		\$ ██████████
	(A)			
<u>Allocation of research administrative expenses:</u>				
Administrative	\$ ██████████	\$ ██████████		\$ ██████████

(A) The amounts agree with the indirect cost rate proposal submitted by The Academy of Natural Sciences (ANS). The total costs before auditors' adjustments and eliminations agree with ANS's books of account.

* See Schedule C.

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Network Management (Computer Services) Expenses
 For the year ended December 31, 2000

<u>Expenses</u>	<u>Proposed Costs</u>	<u>Auditors' Adjustments and Eliminations</u>	<u>Note No.</u>	<u>Allowable Costs</u>
Salaries and wages	████████	\$		████████
Fringe benefits	████████			████████
Supplies	████████			████████
Equipment	████████			████████
Consultant fees	████████			████████
Travel	████████			████████
Membership dues	████████			████████
Postage and printing	████████			████████
Advertising and publication costs	████████			████████
Repairs and maintenance	████████			████████
Photocopy expenses	████████			████████
Insurance expense	████████			████████
Depreciation	████████			████████
Telephone	████████			████████
Other expenses	████████	_____		████████
Total expenses	\$ ██████	\$ -0-		\$ ██████
	(A)			
<u>Allocation of Network Management:</u>				
General and administrative	\$ ██████	\$ -0-		\$ ██████

(A) The amounts agree with the indirect cost rate proposal submitted by The Academy of Natural Sciences (ANS). The total costs before auditors' adjustments and eliminations agree with ANS's books of account.

See accompanying notes to these financial schedules.

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Auditors' Adjustments and Eliminations
 For the year ended December 31, 2000

The amounts as proposed by ANS in their indirect cost proposal for the year ended December 31, 2000 (Schedules B-1 to B-7) required various adjustments and eliminations to the indirect cost or direct cost pools. These adjustments and/or eliminations are presented in Schedules B-2, B-3, B-4 and B-6. Presented below is the detailed explanation of those adjustments and/or eliminations along with the relevant criteria.

Schedule Ref.	Note No.	Explanation of the <u>Adjustment/Elimination</u>	Reference to Criteria
B-3	(1)	The amount of depreciation expense listed in the indirect cost proposal did not agree with the accounting records. ANS inadvertently reported the incorrect amount on the indirect cost proposal, which was lower than the actual depreciation expense per ANS's financial records.	(A)
B-4	(2)	The negative amount for small (non-depreciable) equipment purchases is incorrect. Based upon the books of account this amount should be zero.	(A)
B-6	(3)	Salary benefits were calculated incorrectly. The amount presented included a calculation for the benefit cost of sick, vacation, holiday and personal days. These amounts were already included in the gross payroll amounts recorded in salaries and wages expense.	(A)
B-6	(4)	Alcoholic beverages were recorded in this expense.	(C)
B-6	(5)	The adjustments to travel expense were for the following: <ol style="list-style-type: none"> 1. Lack of adequate supporting documentation in the form of a vendor invoice for \$1,901. 2. A contribution for \$1,500. 3. The cost of an awards dinner for \$1,187. 4. A penalty charge on an invoice for \$29. 	(B) (D) (E) (F)
B-6	(6)	The adjustment is made to reflect an expense that should be properly charged to the VIREO department. This department is not part of the Research Group department, which is the department that indirect costs are properly computed thereon.	(G)

THE ACADEMY OF NATURAL SCIENCES
 Schedule of Auditors' Adjustments and Eliminations (Cont.)
 For the year ended December 31, 2000

Schedule Ref.	Note No.	Explanation of the Adjustment/Elimination	Reference to Criteria
B-6	(7)	The adjustments to other expense was for the following: 1. Alcoholic beverages for \$4,000. 2. A lump sum payment of \$3,971 to an employee as a bonus. The bonus was not related to any work effort.	(C) (H)

The criteria for the above adjustments/eliminations, as referenced, are as follows:

- (A) OMB Circular A-110, Subpart C, paragraph 21 (b) (1) requires the accurate, current and complete disclosure of the financial results of each federally- sponsored project or program.
- (B) OMB Circular A-110, Subpart C, paragraph 21 (b) (7) requires accounting records that are supported by source documentation.
- (C) OMB Circular A-122, Attachment B, Section 2, states that alcoholic beverages are unallowable.
- (D) OMB Circular A-122, Attachment B, Section 9, states that contributions and donations by the organization to others are unallowable.
- (E) OMB Circular A-122, Attachment B, Section 14, states that costs of amusement, diversion, social activities, ceremonials, and costs relating thereto, are unallowable.
- (F) OMB Circular A-122, Attachment B, Section 16, states that the cost of fines and penalties are unallowable.
- (G) OMB Circular A-122. Attachment A, paragraph D, (1) (b) states that an organization which has several major functions which benefit from its indirect costs in varying degrees, allocation of indirect costs may require the accumulation of such costs into separate cost groupings which then are allocated to benefiting functions.
- (H) OMB Circular A-122, Attachment B, Section 7 (i), states that incentive compensation to employees based on efficient performance is allowable to the extent that the overall compensation is determined to be reasonable and such costs are paid pursuant to an agreement in good faith between the organization and the employee before services were rendered.

THE ACADEMY OF NATURAL SCIENCES
Schedule of Auditors' Adjustments and Eliminations (Cont.)
For the year ended December 31, 2000

Auditee's Response

ANS agrees with the adjustments presented in the report. We have taken appropriate action to correct the causes for these adjustments and will continue to seek out training opportunities to keep staff knowledgeable in IDCP preparation.

Auditors' Response to Auditee's Response

Since ANS concurs with the adjustments a response is not deemed necessary.

THE ACADEMY OF NATURAL SCIENCES
Notes to Financial Schedules
For the year ended December 31, 2000

1. Summary of Significant Accounting Policies:

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions. Schedules B-1 to B-7 have been prepared from the indirect cost proposal prepared by Academy of Natural Sciences and Schedule A, has been prepared based upon the results of the audit of Schedules B-1 to B-7. The schedules do not present the complete financial position of Academy of Natural Sciences. In accordance with NSF instructions, there are no schedules of financial position, statement of activities or statement of cash flows.

2. Income Taxes:

The Academy of Natural Sciences is a private nonprofit corporation, incorporated under the laws of the Commonwealth of Pennsylvania. The Academy of Natural Sciences is exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. It is also exempt from Commonwealth of Massachusetts 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 Academy of Natural Sciences for the year ended December 31, 2000, appears in Schedule A and Schedules B-1 to B-7. 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-7 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 them.

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

June 21, 2002

National Science Foundation Award Number DBI-9728996
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs
 For the period to January 1, 2000 to December 31, 2000 (A)
 Interim
 (Unaudited)

<u>Cost Category</u>	<u>FYE</u> <u>12/31/00</u>
Personnel costs	\$ [REDACTED]
Equipment	
Participant support costs	
Subawards	
Other direct costs	_____
Total direct costs	[REDACTED] (B)
Exclusions:	
Equipment	
Participant support	
Subawards > than \$25,000	_____
Modified total direct cost base	[REDACTED]
Final audited indirect cost rate	<u>62.30%</u>
Calculated allowable indirect costs	[REDACTED]
Claimed indirect costs (C)	[REDACTED] (B)
Over/(Under) recovered indirect costs	<u>\$ 6,387</u>

(A) The award period is August 1, 1998 to July 31, 2002.

(B) The total direct costs plus the claimed indirect costs totals \$ [REDACTED] for the period to January 1, 2000 to December 31, 2000. This amount, added to the cumulative costs at December 31, 1999 of \$ [REDACTED], agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed at a rate of [REDACTED]%. The maximum provisional rate for this award was [REDACTED]%, which is subject to downward adjustment only.

See accompanying independent auditors' report.

National Science Foundation Award Number OCE-9730416
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs (Cont.)
 For the period to January 1, 2000 to December 31, 2000 (A)
 Interim
 (Unaudited)

Cost Category	FYE 12/31/00		
	On-Site	Off-Site	(B) Total
Personnel costs	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Equipment			
Participant support costs			
Subawards			
Other direct costs	_____	_____	_____
Total direct costs	[REDACTED]	[REDACTED]	[REDACTED]
Exclusions:			
Equipment			
Participant support			
Subawards > than \$25,000	_____	_____	_____
Modified total direct cost base	[REDACTED]	[REDACTED]	\$ [REDACTED]
Final audited indirect cost rate	<u>62.30%</u>	<u>44.74%</u>	
Calculated allowable indirect costs	[REDACTED]	[REDACTED]	[REDACTED]
Claimed indirect costs (C)	[REDACTED]	[REDACTED]	[REDACTED]
Over/(Under) Recovered Indirect Costs	<u>\$ 914</u>	<u>\$ (167)</u>	<u>\$ 747</u>

(A) The award period is February 1, 1998 to January 31, 2003.

(B) The total direct costs plus the claimed indirect costs totals \$ [REDACTED] for the period January 1, 2000 to December 31, 2000. This amount, added to the cumulative costs at December 31, 1999 of \$ [REDACTED] agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed at a rate of [REDACTED]% for on-site costs; the maximum provisional rate for this award was 77%. Indirect costs were claimed at a rate of [REDACTED]% for off-site costs; the maximum provisional rate for this award was 45%. The maximum provisional rates are subject to downward adjustment only.

See accompanying independent auditors' report.

National Science Foundation Award Number ATM-9809606
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs (Cont.)
 For the period to January 1, 2000 to December 31, 2000 (A)
 Interim
 (Unaudited)

<u>Cost Category</u>	<u>FYE</u> <u>12/31/00</u>	
Personnel costs	\$ [REDACTED]	
Equipment		
Participant support costs		
Subawards		
Other direct costs	[REDACTED]	
Total direct costs	[REDACTED]	(B)
Exclusions:		
Equipment		
Participant support		
Subawards > than \$25,000	[REDACTED]	
Modified total direct cost base	[REDACTED]	
Final audited indirect cost rate	<u>62.30 %</u>	
Calculated allowable indirect costs	[REDACTED]	
Claimed indirect costs (C)	[REDACTED]	(B)
Over/(Under) Recovered Indirect Costs	<u>\$ 2,103</u>	

(A) The award period is August 1, 1998 to July 31, 2002.

(B) The total direct costs plus the claimed indirect costs totals \$ [REDACTED] for the period to January 1, 2000 to December 31, 2000. This amount, added to the cumulative costs at December 31, 1999 of \$ [REDACTED], agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed based upon the application of a maximum provisional rate of [REDACTED]%, subject to downward adjustment only.

See accompanying independent auditors' report.

National Science Foundation Award Number DEB-9870226
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs (Cont.)
 For the period to January 1, 2000 to December 31, 2000 (A)
 Final
 (Unaudited)

<u>Cost Category</u>	<u>(B)</u> <u>FYE</u> <u>12/31/00</u>	
Personnel costs	\$ [REDACTED]	
Equipment		
Participant support costs		
Subawards		
Other direct costs	[REDACTED]	
Total direct costs	[REDACTED]	(B)
Exclusions:		
Equipment		
Participant support		
Subawards > than \$25,000	[REDACTED]	
Modified total direct cost base	[REDACTED]	
Final audited indirect cost rate	[REDACTED]	62.30 %
Calculated allowable indirect costs	[REDACTED]	
Claimed indirect costs (C)	[REDACTED]	(B)
Over/(Under) recovered indirect costs	[REDACTED]	\$(802) (D)

(A) The award period is July 15, 1998 to December 31, 2000.

(B) The total direct costs plus the claimed indirect costs totals \$ [REDACTED] for the period to January 1, 2000 to December 31, 2000. This amount, added to the cumulative costs at December 31, 1999 of \$ [REDACTED], agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed at a rate of [REDACTED]%. The maximum provisional rate for this award was 72.33%.

(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.

See accompanying independent auditors' report.

National Science Foundation Award Number DEB-9870233
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs (Cont.)
 For the period to January 1, 2000 to December 31, 2000 (A)
 Interim
 (Unaudited)

<u>Cost Category</u>	<u>(B)</u> <u>FYE</u> <u>12/31/00</u>
Personnel costs	\$ ██████
Equipment	█████
Participant support costs	
Subawards	
Other direct costs	█████
Total direct costs	█████ (B)
Exclusions:	
Equipment	█████
Participant support	
Subawards > than \$25,000	_____
Modified total direct cost base	█████
Final audited indirect cost rate	<u>62.30%</u>
Calculated allowable indirect costs	█████
Claimed indirect costs (C)	█████ (B)
Over/(Under) recovered indirect costs	<u>\$ 7,855</u>

(A) The award period is September 15, 1998 to August 31, 2002.

(B) The total direct costs plus the claimed indirect costs totals \$ ██████ for the period to January 1, 2000 to December 31, 2000. This amount, added to the cumulative costs at December 31, 1999 of \$ ██████, agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed at a rate of ██████%. The maximum provisional rate for this award was 72.41%, which is subject to downward adjustment only.

See accompanying independent auditors' report.

National Science Foundation Award Number OCE-9901139
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs (Cont.)
 For the period to January 1, 2000 to December 31, 2000 (A)
 Interim
 (Unaudited)

<u>Cost Category</u>	(B) FYE <u>12/31/00</u>	
Personnel costs	\$ [REDACTED]	
Equipment		
Participant support costs		
Subawards		
Other direct costs	[REDACTED]	
Total direct costs	[REDACTED]	(B)
Exclusions:		
Equipment		
Participant support		
Subawards > than \$25,000		
Modified total direct cost base	[REDACTED]	
Final audited indirect cost rate	<u>62.30%</u>	
Calculated allowable indirect costs	[REDACTED]	
Claimed indirect costs (C)	[REDACTED]	(B)
Over/(Under) recovered indirect costs	<u>\$ 3,588</u>	

(A) The award period is May 1, 1999 to April 30, 2002.

(B) The total direct costs plus the claimed indirect costs totals \$ [REDACTED] for the period to January 1, 2000 to December 31, 2000. This amount, added to the cumulative costs at December 31, 1999 of \$ [REDACTED], agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed at a rate of [REDACTED]%. The maximum provisional rate for this award was 72.33%, which is subject to downward adjustment only.

See accompanying independent auditors' report.

National Science Foundation Award Number DBI-0084239
 Awarded To
 The Academy of Natural Sciences
 Schedule of Over/(Under) Recovered Indirect Costs (Cont.)
 For the period to June 15, 2000 to December 31, 2000 (A)
 Interim
 (Unaudited)

<u>Cost Category</u>	(B) FYE <u>12/31/00</u>	
Personnel costs	\$ [REDACTED]	
Equipment		
Participant support costs	[REDACTED]	
Subawards		
Other direct costs		
Total direct costs	[REDACTED]	(B)
Exclusions:		
Equipment		
Participant support	[REDACTED]	
Subawards > than \$25,000	[REDACTED]	
Modified total direct cost base	[REDACTED]	
Final audited indirect cost rate	<u>62.30%</u>	
Calculated allowable indirect costs	[REDACTED]	
Claimed indirect costs (C)	[REDACTED]	(B)
Over/(Under) recovered indirect costs	<u>\$ 57</u>	

(A) The award period is June 15, 2000 to May 31, 2001.

(B) The total direct costs plus the claimed indirect costs totals \$ [REDACTED] for the period to June 15, 2000 to December 31, 2000. This amount agrees with the cumulative net disbursements reported on the FCTR as of the quarter ended December 31, 2000.

(C) Indirect costs were claimed based upon the application of a maximum provisional rate of 64%, subject to downward adjustment only.

See accompanying independent auditors' report.

THE ACADEMY OF NATURAL SCIENCES
 Listing of NSF Awards Active During Audit Period
 Not Affected by Indirect Cost Audit
 For the year ended December 31, 2000
 (Unaudited)

There were six NSF awards that were active during the year ended December 31, 2000, that did not include:

- Indirect costs incurred or billed to NSF on an FCTR; or,
- Indirect costs based upon the application of a rate.

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

NSF Award Number	Award Period	Explanation
DEB-9707776	08/15/97-01/31/00	(A)
DEB-9708330	09/01/97-02/29/00	(A)
DEB-9726986	06/01/98-07/31/00	(A)
DBI-9731886	06/15/98-05/31/01	(B)
DEB-9815919	08/15/98-07/31/00	(A)
DBI-9871363	11/01/98-10/31/01	(C)

(A) No direct or indirect costs claimed to NSF during the year ended December 31, 2000.

(B) A flat amount of indirect costs in lieu of an amount based upon a rate.

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

See accompanying independent auditors' report.

SECTION V

AWARDEE'S RESPONSE

THE ACADEMY OF NATURAL SCIENCES
DETAILED (PERSONAL IDENTIFYING INFORMATION) ON
SCHEDULE C

THE ACADEMY OF NATURAL SCIENCES
 Details of Adjustments to Indirect Costs - Personal Identifying Information
 For the year ended December 31, 2000

Schedule C Adjustment Reference	Name of Vendor/Payee	Check No.	Check Date	General Ledger Acct. No.	Total Invoice Amount	Amount of Adjustment
(4)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(5)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(5)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
						[REDACTED]
(5)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(5)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(5)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
						[REDACTED]
(7)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(7)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
						<u>\$ 7,971</u>

[REDACTED]