



**Office of Inspector General**

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**Audit Report**

**Procurement Practices  
Under Grant No. X825532-01  
Awarded to MBI International**

**Report Number 2002-2-00008**

**January 29, 2002**

**Resource Center  
Conducting the Audit:**

**Mid-Atlantic Division,  
Philadelphia, PA**

**Headquarters Program Offices  
Involved:**

**Grants Administration Division**

**Office of Policy, Economics,  
and Innovation**

**Contributors:**

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January 29, 2002

**MEMORANDUM**

SUBJECT: Audit Report:  
Procurement Practices Under Grant No. X825532-01  
Awarded to MBI International  
Report Number 2002-2-00008

A handwritten signature in black ink, which appears to read "Carl A. Jannetti", is written over the subject line.

FROM: Carl A. Jannetti  
Divisional Inspector General  
Mid-Atlantic Division (3AI00)

TO: Martha Monell, Director  
Grants Administration Division (3903R)

At the request of the U.S. Environmental Protection Agency's (EPA's) Grants Administration Division, we performed an audit to determine whether contracts awarded by MBI International under the subject grant were executed in accordance with Title 40 of the Code of Federal Regulations, Part 30.

This audit report contains findings that describe problems the EPA Office of Inspector General (OIG) has identified and corrective actions the OIG recommends. This audit report represents the opinion of the OIG and the findings contained in this audit report do not necessarily represent the final EPA position. Final determination on matters in this audit report will be made by EPA managers in accordance with established EPA audit resolution procedures.

**ACTION REQUIRED**

In accordance with EPA Order 2750, you are required to provide a final determination on the costs questioned and the findings contained in this report within 120 days of the report date. This will assist us in deciding whether to close the report. Should your position on the questioned costs differ from our

recommendations, we would appreciate the opportunity to discuss the Grants Administration Division's position before the determination is issued to MBI International. Please provide us with a copy of the final determination when it is issued.

We have no objection to the further release of this report to the public. If you or your staff have any questions regarding this report, please contact me or Richard Howard at (215) 814-5800.

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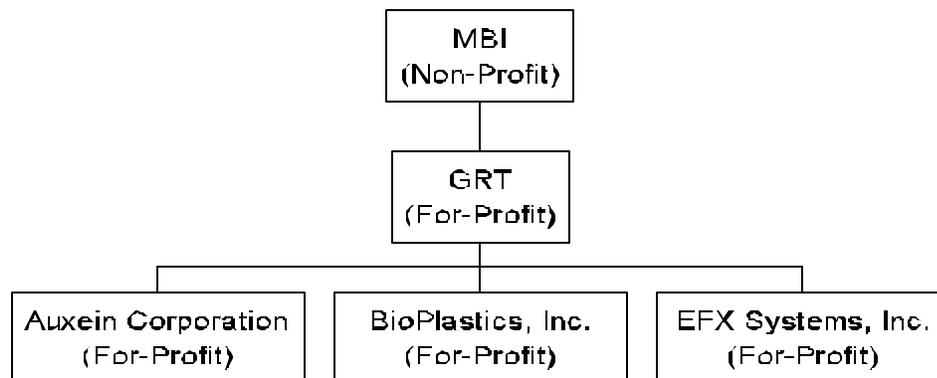


## Purpose

We performed this audit at the request of the EPA Grants Administration Division (GAD), which was concerned over the award of a contract by MBI International (MBI) to its subsidiary, Grand River Technologies, Inc. (GRT). Specifically, GAD asked that we determine whether MBI, the recipient of funding under EPA grant X825532-01, had adhered to the procurement procedures stipulated in Title 40 of the Code of Federal Regulations (CFR), Part 30, as required by the grant agreement.

## Background

MBI is a private, non-profit corporation in Lansing, Michigan, that seeks to develop and market technology through processes that are “biobased,” i.e., environmentally friendly and safe. To that end, in April 1997, EPA awarded MBI a grant that as of May 1999 amounted to \$6 million. MBI in turn awarded a \$250,000 sole source contract to GRT, its for-profit subsidiary, to market MBI-developed technology. GRT itself created three for-profit companies, as shown in the following flow chart:



Noting that MBI proposed to award another sole source contract to GRT under a new grant, GAD requested information on June 1, 2000, relating to compliance with the procurement provisions of 40 CFR Part 30. Specifically, MBI was requested to:

- Explain how the two GRT contracts complied with the Codes of Conduct described in the Code of Federal Regulations (40 CFR § 30.42);
- Provide information on the competition process regarding the award of the GRT contracts (40 CFR § 30.43); and
- Provide a cost or price analysis for the two GRT contracts (40 CFR § 30.45).

MBI responded on July 13, 2000, and asserted that: (a) it had not violated the Codes of Conduct, because it had disclosed to EPA its relationship with GRT in the grant proposal; and (b) no competition was attainable because the contracts were for “highly specialized procedures.” MBI did not provide the requested cost or price analysis.

GAD requested the Office of Inspector General (OIG) to review the sole source contract award to GRT under EPA grant X825532-01. We expanded this review upon learning that: (a) GRT had created three for-profit companies; and (b) MBI had awarded 23 contracts under EPA grant X825532-01 and 20 of those 23 awards were sole source. In the meantime, GAD had imposed special conditions upon the new \$1.9 million grant to MBI (EPA grant X828670-01) to preclude procurement procedure violations.

## **Scope and Methodology**

EPA awarded \$6 million to MBI under grant X825532-01 on April 25, 1997. The scope of our work was limited to the award of contracts and consulting agreements totaling \$1.3 million. We performed our audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States. This audit included tests of the program records and other auditing procedures we considered necessary.

Our review of MBI’s procurement procedures was limited to assuring compliance with the requirements in 40 CFR Part 30, which is the regulatory authority governing grant X825532-01. We did not evaluate contract administration or contract provisions. Our audit began on September 14, 2000 and ended on June 15, 2001. To accomplish our objective, we interviewed the EPA project officer and various personnel within GAD. We also reviewed their files, as well as documents supplied by MBI, including an external report on MBI’s purchasing system.

On September 18, 2000, we sent a letter to MBI requesting information on the contracts and consulting agreements funded under the grant. MBI's response of October 6, 2000, did not provide all of the requested information. The incompleteness of the response generated further questions, which we submitted on October 31, 2000. MBI promised to respond to our questions by year's end but did not. Instead, on February 13, 2001, MBI informed us that it had engaged the services of a law firm to review its purchasing system. MBI submitted the law firm's report of this review to us on April 11, 2001.

## **Prior Audit Coverage**

MBI has not been previously audited by the OIG. We are not aware of any other government audits of MBI's procurement system.

## **Results of Review**

MBI did not have adequate justification to support the award of sole source contracts. Also, MBI's procurement practices did not meet federal requirements. As a result, \$1,301,365 is not eligible for federal reimbursement. Further, there were apparent conflicts of interest between MBI, its subsidiary (GRT), and companies created by GRT.

### ***Inadequate Sole Source Justifications***

In its October 6, 2000 response, MBI provided us with justifications for 23 contracts, 20 of which were for sole source procurements. Although MBI's Vice President of Operations had signed these documents, none of them were dated. Moreover, none of these documents actually justified any sole source procurements, nor did MBI provide any cost or price analyses as required by 40 CFR § 30.45. Our subsequent requests for this information yielded no response, except to be informed that the Vice President had decided to reduce his employment to part time, and that MBI had hired a law firm to review its purchasing system. According to this law firm:

- The purchasing procedures "... can be improved, especially in the areas of 'writing down' some of the 'understood' policies so that as personnel change, there is a greater likelihood of seamless compliance."
- The contracts can be improved by including provisions that "MBI feels were 'understood' but are better made an express part of the Agreement."

- ❑ Contractor and consultant invoices “... should indicate the hours worked, the rates charged, and the services performed.”
- ❑ “MBI has made a cost or price analysis with every subcontract or consulting agreement it has entered in support of its EPA work. In addition, MBI has prepared a written justification for the award and included it in the file. Although the process used by MBI contained in an Affidavit of MBI’s Vice President for Operations, [name deleted] explains the Company’s effort in this regard in greater detail than the written justifications, for future awards the written justifications need to be expanded .... From my interview of MBI personnel, most notably [the Vice President for Operations], it is clear the Company was going through the process in prudently spending assistance funds, but the documentation does not always evidence this effort.”
- ❑ In his affidavit, the Vice President for Operations stated, “It was our practice to get competitive bids whenever possible, however, due to the unique nature of our work and the object of our grant, major subcontracting efforts were done with MBI affiliates. Our intent to subcontract such work was included in our proposal to EPA and we believed our intent to enter into such agreements was clear in our proposal and furthermore that by awarding MBI the grant, EPA was consenting to the subcontract awards identified in the proposal.”

The Vice president also noted that while he knew MBI performed a cost or price analysis for every contract “... I now realize we were not as diligent in documenting our cost/price analysis as we were in performing it, or in retaining the documentation of this work.”

We agree with the attorneys that MBI’s purchasing procedures and contracts need improvement, but do not necessarily agree with all the other conclusions. It should be pointed out that, despite repeated requests, MBI never submitted cost or price analyses. Also, as previously mentioned, the justifications submitted by MBI were not dated and did not actually justify any sole source procurement. Finally, EPA’s award of a grant does not constitute approval of a contract – simply naming a contractor in a proposal does not exempt a grantee from adhering to Federal procurement regulations.

## **Costs Questioned**

We determined that MBI incurred \$1,201,857 in ineligible contract costs and \$99,508 in ineligible consultant costs, for a total of \$1,301,365 in ineligible costs.

According to 40 CFR § 30.45, some form of cost or price analysis shall be made and documented in the procurement files in connection with every procurement action. Price analysis may be accomplished in various ways, including the comparison of price quotations submitted, market prices, and similar indicia, together with discounts. Cost analysis is the review and evaluation of each element of cost to determine reasonableness, allocability, and allowability.

According to 40 CFR § 30.46, procurement records and files for purchases in excess of \$100,000 shall include at a minimum: (a) the basis for contractor selection; (b) the justification for lack of competition when competitive bids or offers are not obtained; and (c) the basis for award cost or price.

According to 40 CFR § 30.27(b), EPA is to limit its participation in the salary rate (excluding overhead) paid to individual consultants retained by recipients to the maximum daily rate for level 4 of the Executive Schedule unless a greater amount is authorized by law.

We found that MBI generally failed to adhere to the above criteria when awarding contracts and consulting agreements under EPA grant X825532-01. The results of our review are presented in detail in Exhibit A.

We were also concerned that six MBI contracts were signed *after* work began. For one contract, work had been performed up to a year prior to actual contract signing. These six contracts were with: GRT; EFX Systems, Inc.; BioPlastics, Inc.; Auxein Corporation; Jacobs Engineering Group, Inc.; and Michigan State University. According to MBI:

*This is not a normal practice for MBI but was done in these cases to continue project work and preserve project timelines during the lengthy process of finalizing agreement language. In these cases, work did, in fact, start prior to signature due to the length of time necessary to finalize agreement language. However, MBI did not disburse and it was made clear we would not disburse for work performed until the agreements were signed. Contractors*

*recognized they were working at their own risk on the assumption the agreement would be finalized. In only one instance was an invoice paid in error prior to signature. That error was resolved and the contract signed within 3 weeks.*

**Apparent Conflicts of Interest**

According to 40 CFR § 30.42, “No employee, officer, or agent shall participate in the selection, award, or administration of a contract supported by Federal funds if a real or apparent conflict of interest would be involved. Such a conflict would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in the firm selected for an award.”

MBI, a non-profit company, created GRT, a for-profit subsidiary. GRT then created Auxein Corporation, BioPlastics Inc., and EFX Systems, Inc., all for-profit companies. MBI awarded two sole source contracts to GRT, under the EPA grant. Likewise, MBI awarded sole source contracts to the three companies created by GRT (Auxein, BioPlastics, and EFX) to market technology developed by MBI. As seen in the chart at right, apparent conflicts of interest existed because officers of MBI and GRT served on the Boards of Directors of subsidiary companies.

Officer	Board Member
President of MBI	MBI GRT
Vice President of MBI	EFX
President of GRT & Interim President of BioPlastics	MBI Auxein BioPlastics
Chairman of GRT	MBI Auxein BioPlastics
Director of GRT	MBI

MBI stated conflicts of interest did not exist because its Board members were only involved in the approval of contracts that exceed \$500,000, and no such contracts were made to a subsidiary. However, even if the Board members were not *formally* involved in a decision, at a minimum, there was the appearance of a conflict of interest. In addition to having officers intermixed among the various Boards of Directors, the President of GRT, who was also the Interim President of BioPlastics, awarded sole source contracts on behalf of MBI with GRT and BioPlastics on the same day. Moreover, MBI’s Vice President for Operations, a member of the EFX Board of Directors, also

awarded a sole source contract to EFX. Regardless of the dollar amount, if a board member is involved in the approval of a contract and also serves on the board of the company receiving the contract, there is an apparent conflict of interest.

### ***Conclusions***

It was inappropriate for board members to award each others' companies sole source contracts, especially without adequate justification and without cost or price analyses, as prescribed in 40 CFR § 30.45 and § 30.46. In addition, the absence of "arms length" bargaining in the award of contracts by these board members constituted an apparent conflict of interest as defined in 40 CFR § 30.42.

### **Recommendations**

We recommend that the Director, Grants Administration Division disallow the \$1,301,365 of ineligible costs incurred under EPA grant X825532-01 at the time of our review.

### **MBI Response and OIG Evaluation**

MBI strongly disagreed with the draft report and maintained that all costs questioned by the OIG, other than those noted as ineligible in MBI's own external review report, should have been accepted. MBI also provided some additional documentation as part of their response to the draft report. We reviewed MBI's response and our position has not changed.

We have summarized MBI's overall comments below, followed by our evaluation of the response. MBI's specific comments to individual notes are included with each note, along with our evaluation. Due to volume, we did not include MBI's entire response as an attachment to this report. However, the response is available for review upon request.

## **Sole Source Awards to GRT and EFX**

### ***MBI Response***

MBI disagreed with the OIG's evaluation of its sole source awards to GRT, Inc. and EFX Systems, Inc. MBI stated that since these awards were clearly explained and identified in its grant proposal and part of the approved award, it was reasonable for MBI to conclude EPA agreed with these sub-awards, and since EPA had approved MBI's pricing it likewise had reviewed and approved the pricing of the proposed awards to GRT and EFX.

### ***OIG Evaluation***

We disagree with MBI's response. Regardless of whether MBI disclosed its intentions to hire GRT and EFX as contractors in its grant application, EPA's award of grant funds to MBI did not constitute approval of its contractors, nor did the award of funds grant MBI an exception from the procurement requirements of 40 CFR Part 30.

## **Cost or Price Analysis**

### ***MBI Response***

According to MBI, the most significant aspect of the Draft Report concerned the requirement to conduct and document some form of cost or price analysis for every procurement action. MBI disagreed with the OIG's finding that it did not perform cost or price analyses. Per MBI, Office of Management and Budget (OMB) Circular A-110 does not prescribe any form or format for a cost or price analysis other than it be done and documented. MBI claimed the guidance does not require that this analysis be signed or dated, or that it be done prior to an award being made. MBI claimed that in every instance it conducted at least a price analysis and documented its decision, and that the OIG is demanding a cost or price analysis in a format not required by OMB Circular A-110 or 40 CFR Part 30.

### ***OIG Evaluation***

We disagree with MBI's response. MBI claimed that in every instance it conducted at least a price analysis and documented its decision. However, MBI did not provide this information for its GRT contracts when GAD first requested it in a letter dated June 1, 2000. Based on MBI's failure to provide

this information, it appeared that MBI did not perform a cost or price analysis for its contracts with GRT. Moreover, when we asked MBI for the same information for GRT and MBI's other contracts in September 2000, MBI provided the OIG written "justifications" that were identical in format, contained little information, and did not contain any cost or pricing data. They also did not contain adequate sole source justifications for those contracts greater than \$100,000. Further, none of the justifications were dated. Based on the appearance and content of the justifications, and because MBI did not provide justifications for GRT when GAD requested them, we question whether the justifications were prepared prior to MBI's procurements rather than after we requested them.

In addition, MBI's response to the draft audit report claims that OMB Circular A-110 does not specify that a cost or price analysis be done **prior** to an award being made. We question MBI's interpretation of the Circular, along with MBI's logic. Performing a cost or price analysis **after** hiring a contractor serves no purpose in determining whether the contractor is providing a fair and reasonable price.

### **Conflicts of Interest**

#### ***MBI Response***

MBI stated that the OIG makes allegations concerning the appearance of a conflict of interest between Board members and Officers of MBI, GRT and other companies with which MBI or GRT have some ownership interest. MBI claims that 40 CFR § 30.42 does not address a Director or Trustee, either as an individual or as a Board. MBI also claims that OMB Circular A-110 does not apply to Directors, yet the audit report attempts to extend these rules to Directors. Further, MBI states that its Directors are only involved in the award of contracts when the award exceeds \$500,000, and MBI has made no such awards. MBI claims that every subcontract or consulting agreement was awarded on its own merit and upon the recommendation of the project manager.

#### ***OIG Evaluation***

We disagree with MBI's response. Members of MBI's and GRT's Boards served on each others' Boards, as well as the Boards of companies created by GRT. MBI's failure to compete these contracts and to perform required cost or price analyses, along with having officers intermixed among the various

companies' Boards of Directors, gives at a minimum the appearance of conflicts of interest.

We also disagree with MBI's interpretations of 40 CFR § 30.42 and OMB Circular A-110. MBI is attempting to claim exemption from these regulations since the regulations do not specifically address Directors or Trustees. However, these regulations do not discuss **any** specific positions. Rather, they set the standards for conduct that must be followed by **all** employees, including officers and agents of a firm. Therefore, regardless of title, all MBI employees, officers, and agents are governed by these regulations.

# Exhibit A

## Statement of Incurred and Questioned Costs

For EPA Agreement X825532-01 Awarded to MBI International  
for the Period of May 1, 1997 to April 30, 2001

Cost Category	Incurred	Ineligible	Note
Contracts	\$1,221,432	\$1,201,857	1
Consultants	99,508	99,508	2
Totals	\$1,320,940	\$1,301,365	

MBI entered into 23 contracts, 20 of which were awarded sole source, under EPA grant X825532-01. The 23 contracts totaled \$2,138,322 of which \$1,320,940 was incurred, according to the invoices submitted by MBI at the time of our review. We found \$1,301,365 of these incurred costs to be ineligible.

### Note 1: Contract Costs

(a) Grand River Technologies, Inc. (GRT)

MBI awarded two sole source contracts in the amounts of \$100,000 and \$250,000 to GRT, its for-profit subsidiary. MBI and GRT representatives did not sign the \$100,000 contract until nearly 3 months after the period of performance began. GRT billed MBI \$95,000 under the first contract and \$250,000 under the second contract. Although MBI asserted the costs of these contracts were competitive, it provided no documentation to support this assertion as required by 40 CFR § 30.46. Also, MBI did not submit a cost or price analysis as required by 40 CFR § 30.45. Thus, the costs billed were ineligible.

Ineligible Costs \$345,000

MBI Response

MBI's initial grant proposal to EPA dated January 1997 included a subcontract award to MBI in the amount of \$50,000. The subsequent proposal of December 1997 included an award of \$250,000. During performance, part of the work originally subcontracted to EFX was transferred to GRT at a value of \$50,000. MBI's proposal clearly identified GRT as MBI's for-profit subsidiary, and highlighted the role GRT would play in performing the grant. As stated in MBI's written price analysis, "Costs were determined to be competitive based on a comparison of consulting services provided by management firms. GRT's knowledge of MBI's technical and physical expertise clearly overrode consideration of other management firms."

OIG Evaluation

Our position remains unchanged. Although MBI included its intentions to award contracts to GRT in its grant proposals, the award of grant funds does not constitute EPA approval of MBI's contractors or an exception to 40 CFR Part 30. The written price analysis referred to in MBI's response was not provided to the OIG. We received only one GRT "justification" that contained a one line "cost analysis" that read: "Based upon the services provided, the cost was determined to be competitive."

(b) Auxein Corporation

GRT created this for-profit company to market MBI-developed technology. MBI awarded a \$50,000 sole source contract for Auxein to conduct field demonstrations of natural plant growth primers. According to MBI, only \$30,000 of the \$50,000 was paid. MBI and Auxein representatives did not sign this contract until nearly 2 months after the period of performance began. Because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45, the costs were ineligible.

Ineligible Costs    \$30,000

MBI Response

MBI provided to the OIG the breakdown of trials, which was used to determine the reasonableness of cost and also documented the amounts being cost-shared by Auxein (roughly half). Auxein billed at agreed upon "task pricing" for particular tests. The justification documented that "based on costs for

other large-scale field tests, the cost of application, labor and supervision were competitive.” GRT created this company to further develop, produce and commercialize technology developed at MBI. Auxein had the rights to the technology being tested.

OIG Evaluation

Our position remains unchanged. The breakdown provided by MBI is neither a cost nor price analysis – it is a project budget that simply lists MBI’s and Auxein’s costs for each test, which equal the cost of the contract. There is no support for how the “agreed upon” costs were determined. Regarding Auxein possessing the technology, MBI did not provide any detail or support for either a market survey of other companies’ technologies or any cost analyses.

(c) BioPlastics, Inc.

GRT created this for-profit company to market MBI-developed technology. MBI awarded a \$99,450 sole source contract for BioPlastics to provide proprietary film technology. MBI and BioPlastics representatives did not sign the contract until nearly 3 months after the period of performance began. Two days later, BioPlastics billed MBI for the entire contract amount, despite the fact that 7 months remained on the contract. Because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45, the costs were ineligible.

Ineligible Costs     \$99,450

MBI Response

The Statement of Work in the subcontract came directly from the grant proposal to EPA. The demonstration included in the proposal included seven companies. BioPlastics was one of only three companies that were deemed acceptable, and the only known domestic producer of yard waste scale bags. The OIG was provided the written cost breakdown used to determine reasonableness and competitiveness. The written price analysis justification documented “Costs were determined to be competitive in the field based upon the need for labor, materials, and travel to produce the biodegradable resins and then blow them into thin film bags for the demonstration in the collection of yard waste and subsequent composting.”

OIG Evaluation

Our position remains unchanged. The information provided to us by MBI mentions nothing about seven companies being included in the demonstration or BioPlastics being one of three companies deemed acceptable. The written cost breakdown that MBI claims was used to determine reasonableness and competitiveness is nothing more than a project budget that does not provide any detail as to how MBI determined costs to be competitive. As stated before, although MBI included in its grant proposal its intentions to award the contract, the award of grant funds does not constitute EPA approval of MBI's contractor or an exception to 40 CFR Part 30.

(d) EFX Systems, Inc.

GRT created this for-profit company to market MBI-developed technology. MBI awarded a \$307,850 sole source contract to EFX to conduct a field demonstration for the bioremediation of trichloroethylene. MBI's Vice President of Operations, who was also a member EFX's Board of Directors, awarded the contract to EFX, although neither party signed the contract until 3 months after the period of performance began. Although MBI asserted that EFX was the only firm with the necessary technology, it did not provide adequate documentation to justify the sole source assertion as required by 40 CFR § 30.46. Moreover, MBI did not submit a cost or price analysis as required by 40 CFR § 30.45. Thus, the costs were ineligible.

Ineligible Costs    \$307,850

MBI Response

The purpose of the subcontract was to demonstrate innovative environmental treatment of trichloroethylene as indicated in the proposal in detail. EFX is the only known possessor of such technology. The subcontract to EFX was clearly stated in the proposal, and numerous references are made to EFX, including its capabilities and experience. The OIG was provided the detailed written cost breakdown used to determine the reasonableness of cost as well as the justification stating that the costs were determined to be reasonable. The fact MBI's Vice President for Operations signed the contract does not mean he "awarded" it. The award was processed routinely and recommended by the Program Manager.

OIG Evaluation

Our position remains unchanged. MBI did not provide the results of any market surveys or any other type of information to prove that EFX is the only possessor of this technology. The detailed cost breakdown MBI is referring to is nothing more than a project budget that does not include any information as to how MBI determined that costs were reasonable. MBI's "justification" contains a "cost analysis" that merely states, "The costs established were determined competitive for the nature of the work performed." As stated before, although MBI included its intentions to award this contract in its grant proposal, the award of grant funds does not constitute EPA approval or an exception to 40 CFR Part 30.

(e) Tennessee Valley Authority (TVA)

MBI awarded a \$750,000 contract to the TVA for pilot testing of the production of animal feeds. At the time of our review, the Authority had billed MBI for \$166,428 in contract costs. MBI asserted that it had identified three locations for the work but that TVA was the only site able to comply with all of the required technical conditions. MBI also asserted that it had negotiated a rate equal to TVA's internal use. However, we considered these costs to be ineligible because MBI did not provide any documentation to support these assertions or submit a cost or price analysis, as required by 40 CFR § 30.45 and 30.46.

Ineligible Costs    \$166,428

MBI Response

Within the contract there were five tasks that had a high level of uncertainty due to the immaturity of the technology. On June 27, 1998 MBI internally estimated the costs of those tasks to be \$571,837 based on the industry, prior knowledge, and input from sites identified. On August 10, 1998, TVA faxed a detailed cost estimate to MBI for the tasks to be included under the subcontract. This estimate was for \$437,134.95 – well below the MBI estimate and considered reasonable. Of the entities identified, TVA was the only organization with ammonia experience. The other two were in highly populated areas and could not handle the necessary ammonia process for the technology. A fourth entity provided an estimate in excess of \$1 million.

OIG Evaluation

Our position remains unchanged. MBI did not provide any evidence to support that it performed market surveys to determine that the TVA was the only organization that possessed the experience necessary for the project. MBI's "cost estimate" is an estimated budget that it states was submitted in its proposal. However, the budget consists simply of project totals and does not contain a breakdown of the costs, how MBI arrived at the amounts, or how MBI determined that the costs were reasonable. Also, MBI did not provide any cost information for the three additional entities it claims it identified.

(f) University of Illinois

MBI awarded a \$20,000 contract to the University of Illinois, asserting that the costs were competitive. At the time of our review, the University billed MBI for \$16,609 in contract costs. These costs were ineligible because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45.

Ineligible Costs    \$16,609

MBI Response

The subcontract was to evaluate a technology owned by the University for possible in-license and development that was believed to represent substantial improvement in the ability to kill undesirable/pathogenic microorganisms that are often present in food processing systems. The cost for this evaluation was typical for a one-student project for one semester at a university and was considered reasonable. A detailed budget was submitted by University of Illinois and, after review, was included as an attachment to the subcontract. The written price analysis concluded that the price quoted was competitive. Also, note that this contract is below the small purchase threshold.

OIG Evaluation

Our position remains unchanged. Although this contract is below the small purchase threshold, MBI is not exempt from performing a cost or price analysis and documenting it in its procurement files as required by 40 CFR § 30.45. MBI's "justification" contains a "cost analysis" that states, "Based upon the work to be completed, the cost was determined to be competitive." MBI did not provide any evidence to show how this determination was made, how the

costs were reasonable, or that the costs were both typical and reasonable for a one-student one-semester project.

(g) Michigan State University

MBI awarded a \$120,000 sole source contract to Michigan State University for “the development of synthetic polymer membranes.” However, MBI and University officials did not sign this contract until nearly 1 year after the period of performance began. Based on invoices provided, the University billed MBI \$59,319 under this contract. MBI asserted that the costs were competitive based upon the scope of work, and that it was able to negotiate a favorable internal rate. However, these costs were ineligible because MBI did not provide any documentation to support the sole source award or submit a cost or price analysis, as required by 40 CFR § 30.45 and 30.46.

Ineligible Costs \$59,319

MBI Response

One of the objectives of the EPA grant to MBI was to “evaluate innovative technologies under development by federal labs, universities, and industries that can be in-licensed.” There is no additional documentation that can be submitted to support the sole source subcontract to the University. The University is the owner of the technology being developed and there are no other entities that could work on a technology patented by the University. The costs budgeted for the contract were again typical of university labor and cost structures. However, MBI was billed less overhead than other external agencies are billed by the University. The overhead rate was 15 percent. This particular work was less as a subcontract to the University than the cost would have been if performed at MBI.

OIG Evaluation

Our position remains unchanged. MBI claims that the costs were typical of a university. However, no evidence was provided to support this statement, such as a comparison of several universities’ costs. MBI’s “justification” contains a “cost analysis” that states, “The cost was determined to be competitive based upon the scope of work.” We do not consider this adequate.

(h) Michigan State University

MBI awarded a \$31,050 sole source contract to Michigan State University for “the continued development of Ammonia Fiber Explosion (AFEX) technology and required support systems.” However, MBI and University officials did not sign the contract until nearly 4 months after the period of performance began. At the time of our review, the University billed MBI for \$6,025 in contract costs. However, these costs were ineligible because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45.

Ineligible Costs      \$6,025

MBI Response

One of the objectives of the EPA grant to MBI was to “evaluate innovative technologies under development by federal labs, universities, and industries that can be in-licensed.” (Name Deleted) was one of the inventors of the ammonia fiber explosion technology in-licensed from the University. The subcontract was provided to continue development of the environmentally friendly technology to convert agricultural by-products into nutritional animal feed.

The costs budgeted for the contract were again typical of university labor and cost structures. However, MBI was billed less overhead than other external agencies are billed by the University. The overhead rate was 15 percent. This particular work was less as a subcontract to the University than the cost would have been if performed at MBI.

OIG Evaluation

Our position remains unchanged. Again, MBI did not provide any “justification” or cost or price analysis for this contract.

(i) Cedarburg Laboratories

Although MBI did not provide a copy of a contract, based on invoices, it paid the contractor \$46,500. MBI asserted that it selected this lab over two other labs based on Cedarburg’s prior knowledge of the process, availability of facilities, and cost. However, these costs were ineligible because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45.

Ineligible Costs      \$46,500

MBI Response

Three companies were considered for the scale up and manufacture of the base polymer – Caymen Chemical, Bridge Organics, and Cedarburg Laboratories. MBI did not have a lab designated and it would have been cost and time prohibitive to try to perform the work internally. Cedarburg Laboratories were chosen primarily for their capabilities and established and proven practices. As the written price analysis justification documented, the costs were determined to be competitive, and Cedarburg was determined to provide the best overall value based on cost, development, and production capabilities.

OIG Evaluation

Our position remains unchanged. The “justification” wording in MBI’s response to the draft report differs from the previous “justification” provided to the OIG by MBI. The first “justification” provides a “cost analysis” that states, “Following the evaluation of the listed facilities, the cost was determined to be competitive.” We do not consider this statement, nor the one made in MBI’s response to the draft report, to be either a cost or price analysis.

(j) U.S. Department of Agriculture, Agricultural Research Service (USDA ARS)

MBI awarded a \$12,870 contract to USDA ARS to evaluate “ammonia fiber exploded rice straw as a fiber and energy source for lactating cows.” MBI asserted that USDA ARS was best suited to conduct the work, and that the cost was one-fourth that of a university. However, these costs were ineligible because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45.

Ineligible Costs     \$12,870

MBI Response

Three entities were identified to possibly conduct the feed trial with the feed produced by MBI’s technology – University of California at Davis, New York Dairy, and USDA ARS. University of California at Davis quoted a cost of \$55,000, and New York Dairy required more feed to conduct the trial than could be produced. USDA ARS quoted a cost of \$12,870, which, as documented in the written price analysis justification, was one-fourth of a University. Note this contract is below the small purchase threshold.

OIG Evaluation

Our position remains unchanged. MBI claims in its response that it identified three entities, and quotes the cost of two and the requirements of a third, but does not provide any documentation to support this statement. MBI's "justification" does state in a "cost analysis" that, "The USDA cost estimate is roughly one-fourth that of a university," but this statement alone is not a cost analysis. Also, although this contract is below the small purchase threshold, MBI is not exempt from performing a cost or price analysis and documenting it as required by 40 CFR § 30.45.

(k) Jacobs Engineering Group, Inc.

MBI awarded a \$202,800 contract for engineering expertise related to the further development of fiber extrusion. MBI and Jacobs officials did not sign the contract until nearly 1 month after the period of performance began. MBI stated that only \$83,087 was charged to the EPA grant. According to MBI, this firm was the only one with the expertise to conduct the work, and the cost was competitive within the range of current rates charged by other engineering firms. However, these costs were ineligible because MBI did not provide any documentation to support these assertions or submit a cost or price analysis, as required by 40 CFR § 30.45 and 30.46.

Ineligible Costs    \$83,087

MBI Response

The detailed proposal submitted by Jacobs was used to determine the reasonableness of the costs and the level of expertise committed to conducting the work. As shown in the included e-mail, there was discussion between MBI and Jacobs regarding the levels of cost. According to the written price analysis, "The cost was determined to be competitive within the range of current hourly (sic) charged by other comprehensive construction engineering firms."

OIG Evaluation

Our position remains unchanged. MBI included Jacobs' proposal as part of its response, but did not provide any evidence that a cost or price analysis was performed. The e-mail referred to in MBI's response was not part of the

attachment containing Jacobs' proposal. MBI's statement that "the cost was determined to be competitive" is neither a cost nor price analysis.

(l) Auburn University

MBI paid the University \$18,000 for cherry peat meal experiments, asserting its unique capability to perform the work at a lower than normal cost. However, these costs were ineligible because MBI did not submit a cost or price analysis as required by 40 CFR § 30.45.

Ineligible Costs     \$18,000

MBI Response

The cost breakdown used in determining whether the costs were reasonable was provided to the OIG. The justification in the written price analysis documented that, "An analysis of conducting the work as a service provided the opportunity to complete the work at a lower than normal cost due to a discounted rate for greenhouse and small plot nematicide tests." An employee of MBI analyzed the costs proposed by Auburn. His experience was considered more than sufficient for this price analysis. Note this contract is below the small purchase threshold.

OIG Evaluation

Our position remains unchanged. MBI provided a four-line breakdown of the cost of the tests, but did not provide any cost or price analysis to show where the costs came from, or if they were reasonable. MBI's "justification" did not contain a cost or price analysis to support how it determined that the method it was using was lower than normal cost. Further, MBI did not provide the cost analysis it claims was performed. Although this contract is below the small purchase threshold, MBI is not exempt from performing a cost or price analysis and documenting it as required by 40 CFR § 30.45.

(m) Sills, Law, Essad, Fiedler, & Charboneau

MBI awarded a \$30,294 sole source contract to this law firm for commercialization assistance regarding potential licensing issues. In response to our information request, MBI acknowledged that it had charged EPA \$10,719 for services not related to the grant, and that amount was ineligible.

Ineligible Costs \$10,719

MBI Response

In responding to the OIG's inquiry, MBI's Vice President sought the law firm's invoices from MBI's President. When the invoices came to MBI, the detailed explanation was marked "Attorney-Client Privilege" so they were not distributed beyond the President's office. A review of these invoices revealed certain charges (\$10,719) that should have gone into MBI's indirect cost pool (costs incurred for the overall benefit of the Company) as opposed to a direct charge to the EPA grant. As a result, MBI self disclosed this mischarge to EPA.

OIG Evaluation

MBI stated it mischarged the \$10,719. No further action is needed if MBI makes the necessary accounting adjustments and does not charge these costs to the assistance agreement.

**Note 2: Consultant Costs**

(a) Consultant "A"

MBI paid \$12,937 to conduct an industry evaluation of MBI's enzyme technologies. MBI asserted that it selected this consultant over two others based on the ability to deliver and because of cost. However, in response to our request for additional information, MBI acknowledged that it had charged EPA \$6,452 in excess of the allowable daily consulting rate allowed by 40 CFR § 30.27 and by the grant, and we determined that amount to be ineligible. In addition, the remaining \$6,485 was also ineligible because MBI did not submit a cost or price analysis, as required by 40 CFR § 30.45.

Ineligible Costs \$12,937

MBI Response

Although we were unable to locate the original proposals from the different sources, the following is an excerpt from the February 1, 1999 Specialty Enzyme Team Meeting: "(Name Deleted) presented proposals for an enzyme market analysis. (Name Deleted), as well as SRI, and (Name Deleted) quotes are in the \$40,000-\$50,000 range and are considered too expensive by

management. Two remaining quotes, one from (Name Deleted) (\$8,500), and another from Consultant "A" (\$16,000) were discussed. Only Consultant "A's" proposal addressed the specific topics requested. (Name Deleted) proposal did not address the required information. (Name Deleted) said that he had spoken with (Name Deleted) on several occasions and (Name Deleted) had not responded in his proposal to our specific requests. After review of (Name Deleted) proposal, it was believed that he was proposing to supply the same information contained in the (Name Deleted) report already acquired by MBI. Therefore, the team decided to recommend that Consultant "A" be used for this analysis." The justification documented that, "Based upon the search of available organizations and individuals with the required expertise, Consultant "A" was selected based upon a combination of the depth of the desired report product and cost."

This award probably should have been written as a subcontract, not a consulting agreement as evidenced by the other prices quoted. MBI notified GAD of the error in amount charged to the grant (due to the prior decision to write this up as a consulting agreement as opposed to a subcontract) in February 2001 prior to the OIG report. Note this award is below the small purchase threshold.

### OIG Evaluation

MBI states that it was unable to locate the original proposals, and instead quotes an excerpt from a February 1999 meeting. Regardless of whether the award was written as a subcontract or consulting agreement, a cost or price analysis was still required. We do not consider MBI's "justification" to be either a cost or a price analysis because it does not support how Consultant "A" was selected or provide any evidence of the costs reviewed or if they were reasonable. Although the amount incurred is below the small purchase threshold, MBI is not exempt from performing a cost or price analysis and documenting it as required by 40 CFR § 30.45.

### Consultant "B"

MBI paid \$25,111 to provide technical assistance in the development of environmentally friendly inks low in hazardous air pollutants. MBI asserted that this consultant was uniquely qualified as the inventor of the technology, and that it had determined the hourly rate to be competitive. However, in response to our request for additional information, MBI acknowledged that it had charged EPA \$2,615 in excess of that allowable by 40 CFR § 30.27, and

we determined that amount to be ineligible. In addition, the remaining \$22,496 was also ineligible because MBI did not submit a cost or price analysis, as required by 40 CFR § 30.45.

Ineligible Costs     \$25,111

MBI Response

The inventor of the ink technology whom we were originally working with was killed in a car accident. Based upon the recommendation of the team, Consultant “B” was brought on due to his extensive experience in formulation of novel inks and his work with this product. Consultant “B” served as part of the team evaluating this technology and was essential in disproving the usefulness of the technology and, therefore, preventing any further investment into the technology. MBI notified GAD of the error in amount charged to the grant in February 2001 prior to the OIG report. This agreement is significantly below the small purchase threshold.

OIG Evaluation

MBI did not provide any type of market survey or analysis to show how Consultant “B” was “uniquely qualified” to provide the necessary services as stated in MBI’s “justification.” MBI states in a “cost analysis” provided in its “justification” that “the hourly rate was determined to be competitive,” yet provided no evidence to support this statement. Although the amount incurred is below the small purchase threshold, MBI is not exempt from performing a cost or price analysis and documenting it as required by 40 CFR § 30.45.

- (c) Additional Consultant Charges We determined the amounts listed in the following chart to be ineligible because MBI did not submit cost or price analyses for consultants “C” through “I,” as required by 40 CFR § 30.45.

Consultant	Charges
"C"	\$5,000
"D"	26,978
"E"	3,300
"F"	7,630
"G"	754
"H"	16,798
"I"	1,000
Total Ineligible	\$61,460

*MBI Response*

"C" was able to conduct a literature search for less cost than if completed internally at MBI. The written price analysis justification documented that the hourly rate - \$52.08, \$62.50 fully loaded (containing overhead) - was determined to be competitive. Note this award is significantly below the small purchase threshold.

"D" was a former Vice President in the area of the technology being developed for whom a fully loaded hourly rate of \$52.08 was by far extremely reasonable. This consultant has led this project in the development of the technology in several different platforms. A written justification was prepared, but no additional documentation was necessary since the rate was so low, and the total amount significantly below the small purchase threshold.

"E" was used to evaluate, under the objectives of the grant, a material invented by him for MBI to possibly in-license. This consultant did not charge MBI any travel costs for his trips from Russia and charged only \$37.50 per hour (fully loaded) to perform the evaluation as directed by MBI. A written justification was prepared, but no additional documentation was necessary considering the rate was so low, and the total amount billed significantly below the small purchase threshold.

"F" was also an inventor of the technology being developed at MBI. She was used to perform tasks that could not be completed internally. A written justification was prepared, but no additional documentation was necessary

since the rate was so low (\$62.50 per hour, fully loaded). The total of the contract was significantly below the small purchase threshold.

“G” was an original inventor of the technology being examined and was working at a fully loaded rate of \$52.08 per hour. The written justification concluded this cost was reasonable. The total amount billed, less than \$1,000, is way below the small purchase threshold.

“H” was only charging \$25 per hour. In light of his previous experience with respect to analyzing bioactive compounds this was viewed by all as a bargain. A written justification was prepared, but no further documentation was needed. The total amount billed was substantially below the small purchase threshold.

“I” was brought in to assist in closing mass balances for which MBI was having difficulty with interferences. This consultant was also part of the Hazardous Waste Analytical Lab and Michigan State University and was able to answer the necessary questions in the time frame required for only \$62.50 per hour (fully loaded). Due to the specialized skills needed and the expected complexity of the work this price was determined to be reasonable as indicated in the written price analysis. Note the total price is considerably below the small purchase threshold.

### OIG Evaluation

Regarding Consultants “C,” “D,” and “F,” MBI’s “justifications” state that the hourly rates were determined to be competitive. However, we do not consider these statements to be either cost or price analyses because MBI did not provide any evidence to support them.

Regarding Consultants “E,” “G,” “H,” and “I,” MBI’s “justifications” stated that the hourly rates were determined to be competitive based upon the areas of required expertise.” However, we again do not consider these statements to be either cost or price analyses because MBI did not provide any evidence to support them.

Although the amounts incurred for consultants “C” through “I” are below the small purchase threshold, MBI is not exempt from performing cost or price analyses and documenting them as required by 40 CFR § 30.45.

# Appendix 1

## Distribution

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### **Other**

MBI International

