OPERATION, MAINTENANCE, AND REHABILITATION PLAN FOR THE ATCHAFALAYA SEDIMENT DELIVERY PROJECT (AT-02)

May 5, 2004
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OPERATIONS, MAINTENANCE, AND REHABILITATION PLAN
FOR THE
ATCHAFALAYA SEDIMENT DELIVERY
(AT-02)

The Louisiana Department of Natural Resources (LDNR) and the United States Department of Commerce National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS) agree to carry out the terms of this plan for the Operation, Maintenance, Repair and Rehabilitation Plan (hereinafter referred to as the “Plan”) of the accepted completed project features in accordance with the U.S. Department of Commerce NOAA Cooperative Agreement No. NA47FZ0477 dated July 28, 1994, with amendments effective August 1, 1996 (Amendment No.1), October 1, 1997 (Amendment No.2), January 1, 1998 (Amendment No.3) and December 1, 1997 (Amendment No.4). The Memorandum of Agreement between LDNR, NOAA and the U.S. Corps of Engineers fully executed February 19, 1999 specifies the arrangement between parties to execute and fund long-term project activities, i.e. operation and maintenance, and monitoring is shown in Attachment II.

Construction of the Atchafalaya Sediment Delivery Project was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended. The Atchafalaya Sediment Delivery Project was approved on the second (2nd) Priority Project List.

The project features covered by this plan are inclusive of and are identified as the Atchafalaya Sediment Delivery Project (AT-02). The intention of the provisions of this Plan is to maintain this project in a condition that will generally provide the anticipated benefits that the project was based on. There is no requirement that this project function to any standard beyond the 20-year economic life; except that it is not left as a hazard to navigation or a detriment to the environment.

The property associated with the Atchafalaya Sediment Delivery Project is owned by the Atchafalaya Delta Game Management - La Department of Wildlife and Fisheries and Louisiana Land and Exploration.

1. PROJECT DESCRIPTION, PURPOSE, AND LOCATION

The Atchafalaya Sediment Delivery Project is a distributary channel maintenance and delta-lobe creation project consisting of approximately 2,182 acres of freshwater wetlands and shallow open water. The project is located within the Louisiana Department of Wildlife and Fisheries Atchafalaya Delta Management Area and is bounded on the north by Mille Island, the west by East Pass, and to the east and south by the Atchafalaya Bay. (Attachment III)

The Atchafalaya Delta is bisected by the Lower Atchafalaya River which is maintained by
the U.S. Corps of Engineers for navigation purposes. The continued dredging and placement of spoil material along the banks of the river has caused sediment deprivation in adjacent delta environments. The Sediment Delivery Project was designed to enhance the natural delta-building process by restoring the Natal Channel and Castille Pass to a functional tertiary distributary channels and utilizing the dredge material to create delta lobe island suitable for establishment of emergent marsh.

The principle project features include:

- Natal Channel - 5,100 linear ft. dredge channel w/ 170 ft. wide bottom width and with a branch channel of 1500 linear feet oriented to the northeast from Station 71+00. Bottom width of these branch channel was 150 feet.
- Castille Channel - 2,000 linear ft. dredge channel w/ 125 ft. wide bottom.
- Marsh Creation - 668,683 cu. yds. of dredge material from Natal Channel placed at 4 sites creating approximately 25 acres of wetlands.
- Marsh Creation - 32,242 cu. yds. of dredge material from Castille Pass placed at on location creating approximately 20.5 acres of wetlands.

2. CONSTRUCTION COMPLETION

The Atchafalaya Sediment Delivery Project As-built Drawings and Project Completion Report was prepared by Brown Cunningham and Gannuch Engineers and is included in Attachment IV of this Plan. This report is intended to describe project construction progress, problems encountered during construction and solutions, project quantities and costs, final total volumes of material dredged from channels, total acreage at disposal areas and before and after surveys for verification of dimensions and volumes and as-built drawings.

3. PROJECT PERMITS

Project permit applications were completed and submitted to appropriate agencies and permits were received prior to construction. These permits and permit amendments are included within Attachment V.

4. ITEMS REQUIRING MAINTENANCE AND REHABILITATION

The following completed project features jointly accepted by LDNR and NMFS will require operation, maintenance, repair, and/or rehabilitation throughout the 20 year life of the project.

1. Natal Channel: dredged from its head at East Pass and extends approximately 5,100 linear ft. with a bottom width of 170 ft. at an elevation of -10.0' NGVD. NGVD.
2. Castille Pass: dredged channel extends approximately 2,200 linear ft. from its
head at East Pass with a bottom width of 125 ft. at an elevation of -10.0' NGVD.

3. **Navigational Aids** - Where applicable, project navigation aids and warning signs shall be inspected and maintained for the twenty year (20) project life.

Maintenance Assumptions: Sediment material will fill the channel from the -10.0' bottom elevation to an elevation of -6.0' NGVD. Natal and Castille channels will require dredging at year 10.

Year 10 - Dredge approximately 5,000 linear ft. of channel removing 4 ft. of material.

5. **OPERATION AND MAINTENANCE BUDGET**

Cost associated with the Operation and Maintenance of project features outlined in Section 4 of this plan for the twenty year (20) project life is included and summarized in Attachment VI.

6. **RESPONSIBILITIES-MAINTENANCE AND REHABILITATION**

A. LDNR will:

1. In accordance with the U.S. Department of Commerce NOAA Cooperative Agreement No.NA47EZ0477, assume all responsibilities for maintenance and rehabilitation of the accepted completed project features identified in Section 4.

2. Conduct joint site inspections with NMFS of the project site at least annually and after major storm events if determined to be necessary by LDNR and/or NMFS. LDNR will submit to NMFS, a report detailing the condition of the project features and recommendations for any corrective action. If LDNR recommends that corrective actions are needed, the report will include the entire estimated cost for engineering and design, supervision and inspection, construction, contingencies, and the urgency of such action.

3. Perform or have performed any corrective actions needed, if such corrective actions have been approved by LDNR or NMFS. NMFS will participate with LDNR, or its appointed representative, in the engineering and design phases of the corrective actions for the project. Oversight engineering and construction of the corrective actions for the project will
be the responsibility of LDNR or its appointed representative. At least thirty (30) calendar days prior to the date of formal request for construction bids, LDNR or its appointed representative shall provide NMFS with final copies of all project corrective action designs and specifications for review and concurrence by NMFS. LDNR or its appointed representative shall approve the final designs and specifications prior to proceeding with bid solicitations on all project corrective action construction contracts in coordination with NMFS. Any plan and/or specification changes both before and after award of construction contracts, shall be approved by LDNR in coordination with NMFS.

4. The DNR and NMFS representatives shall meet as necessary during the periods of construction to address any corrective actions needed and shall make such recommendations as they deem necessary.

5. Provide a total contribution equal to the amount outlined in the Memorandum of Agreement for the maintenance and rehabilitation cost needed for the twenty (20) year life of the project.

B. NMFS will:

1. Conduct joint site inspections with LDNR of the project site at least annually and after major storm events if determined to be necessary by LDNR or NMFS.

2. Provide guidance for the development of plans and implementation of the project, review final copies of any maintenance and rehabilitation project designs and specifications and provide review and approval of all planning and construction details, prior to formal request for construction bids or any corrective actions for the project.

3. Facilitate the Federal contribution towards operation and maintenance activities as specified in the Memorandum of Agreement between LDNR, NMFS and the U.S. Corps of Engineers.
The undersigned parties, acting on behalf of their respective agencies, agree to operate, maintain, and rehabilitate the Atchafalaya Sediment Delivery Project (AT-02) according to this document, referenced Cooperative Agreement, plans, and all applicable permits and laws.

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

By: [Signature]  Date: 4/26/04
Title: Program Officer

LOUISIANA DEPARTMENT OF NATURAL RESOURCES

By: [Signature]  Date: 4/14/04
Title: Director / CEO
ATTACHMENT I

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

COST SHARE AGREEMENT
AMENDMENT TO
FINANCIAL ASSISTANCE AWARD

RECIPIENT NAME
Louisiana Department of Natural Resources

ADDRESS
P.O. Box 94396

CITY, STATE, ZIP CODE
Baton Rouge, Louisiana 70804

DEPARTMENT OF COMMERCE OPERATING UNIT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

COST ARE REVISED AS FOLLOWS:

<table>
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<tr>
<th>PREVIOUSLY ESTIMATED COST</th>
<th>ADD</th>
<th>TOTAL ESTIMATED COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEDERAL SHARE OF COST</td>
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<td>$ 661,402</td>
</tr>
<tr>
<td>RECIPIENT SHARE OF COST</td>
<td>$ 2,252,464</td>
<td>$ -0-</td>
</tr>
<tr>
<td>TOTAL ESTIMATED COST</td>
<td>$ 8,639,365</td>
<td>$ 661,402</td>
</tr>
</tbody>
</table>

REASONS FOR AMENDMENT

1. To provide additional funds in the amount of $661,402, and reallocate the federal/state cost share ratio from 75/25% to 85/15%, for the project entitled, 'Coastal Wetlands Planning, Protection, and Restoration Act (PL 101-646) Big Island Mining (XAT-7) and Atchafalaya Sediment Delivery (XAT-2)', as requested in the Recipient's application dated September 16, 1998, and budget revisions dated May 4, 1999, which are incorporated into this award by reference.

2. To revise the statement of work by excluding long term monitoring and to (CONTINUED ON NEXT PAGE FOR ADDITIONAL REASONS FOR AMENDMENT)

This Amendment approved by the Grants Officer is issued in triplicate and constitutes an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Amendment provisions checked below and attached, as well as previous provisions incorporated into the Award. Upon acceptance by the Recipient, two signed Amendment documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned by the Recipient within 15 days of receipt, the Grants Officer may declare this Amendment null and void.

☐ Special Award Conditions  (ATTACHMENT B [X] ADMINISTRATIVE [ ] PROGRAMMATIC)
☐ Line Item Budget  (ATTACHMENT A)
☐ Other(s):  

U.S. DEPARTMENT OF COMMERCE
NOAA GRANTS OFFICER

OAR21/JAJ/1AJ

ACCOUNTING CODE
MULTI ACC CODES (see att B)

AWARD NUMBER
NA47FZ0477

AMENDMENT NUMBER
4

EFFECTIVE DATE
DECEMBER 1, 1997

EXTEND WORK COMPLETION TO
FEBRUARY 28, 1999

[Signature]
NOAA GRANTS OFFICER
DATE: JUN 11 1999

[Signature]
Secretary
DATE: 6/30/99

(Continued on next page for additional reasons for amendment)
REASONS FOR AMENDMENT:

1. Approve a retroactive reprogramming of funds in the amount $160,450 from Task 3 to Task 2, as requested in the Recipient's letter dated May 5, 1999, which is incorporated into this award by reference.

3. To decrease the Recipient's share of funds in the amount of $879,154, for the project stated above, as requested in the referenced application, stated above.

4. To revise and add NOAA Administrative Special Award Conditions.
AMENDMENT TO
FINANCIAL ASSISTANCE AWARD

RECIPIENT NAME
Louisiana Department of Natural Resources

ADDRESS
P.O. Box 94396

CITY, STATE, ZIP CODE
BATON ROUGE, LOUISIANA 70804

DEPARTMENT OF COMMERCE, OPERATING LINE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

COSTS ARE PROVIDED AS FOLLOWS:

<table>
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<th></th>
<th>PREVIOUS ESTIMATED COST</th>
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<th>DEDUCT</th>
<th>TOTAL ESTIMATED COST</th>
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</thead>
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<td>$7,039,365</td>
<td>$1,600,000</td>
<td></td>
<td>$8,639,365</td>
</tr>
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</table>

To provide supplemental funding in the amount of $1,200,000, for the project entitled 'Coastal Wetland Planning, Protection, and Restoration Act (PL 101-646), Big Island (XAT-7) and Atchafalaya Sediment Delivery (PAT-2), as requested in the Recipient’s application dated November 26, 1997, and revision by letter dated January 7, 1998, incorporated by reference.

1. To revise and add NOAA Administrative Special Award Conditions.

This Amendment approved by the Grants Officer is issued in triplicate and constitutes an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Amendment provisions checked below and attached, as well as previous provisions incorporated into the Award. Upon acceptance by the Recipient, two signed Amendment documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned by the Recipient within 15 days of receipt, the Grants Officer may declare this Amendment null and void.

[X] Special Award Conditions  (ATTACHMENT B) [X] ADMINISTRATIVE [ ] PROGRAMMATIC

[X] Line Item Budget  (ATTACHMENT A)

[X] Other(s): OMB Circular A-133, 82 Fed. Reg. 35275 (June 30, 1997)

Signature of department of commerce grants officer

Employee ID: [Redacted]

Title: NOAA GRANTS OFFICER

Date: JAN 13 1998

Signature of authorized recipient official

Title: [Redacted]

Date: Jan 13 1998
# BUDGET INFORMATION — Construction Programs

**NOTE:** Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified.

<table>
<thead>
<tr>
<th>COST CLASSIFICATION</th>
<th>a. Total Cost</th>
<th>b. Costs Not Allowable for Participation</th>
<th>c. Total Allowable Costs (Column a-b)</th>
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<td>Administrative and legal expenses</td>
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<td>$0</td>
<td>$500</td>
</tr>
<tr>
<td>Real estate, structures, rights-of-way, appraisals, etc.</td>
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<td>$0</td>
<td>$0</td>
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<tr>
<td>Relocation expenses and payments</td>
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<td>Architectural and engineering fees</td>
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<td>Other architectural and engineering fees</td>
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<td>Project inspection fees</td>
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<tr>
<td>Site work</td>
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<td>$0</td>
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<td>Demolition and removal</td>
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<td>Construction Phase II</td>
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</tr>
<tr>
<td>Equipment</td>
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<td>$0</td>
</tr>
<tr>
<td>Miscellaneous</td>
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<tr>
<td>SUBTOTAL</td>
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<td></td>
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<tr>
<td>Contingencies (sum of lines 1-11)</td>
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<td>$0</td>
<td>$0</td>
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<tr>
<td>SUBTOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project (program) Income</td>
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<td>$0</td>
<td>$0</td>
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<tr>
<td>TOTAL PROJECT COSTS (subtract #15 from #14)</td>
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<td>$0</td>
<td>$1,200,000</td>
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**FEDERAL FUNDING**

Federal assistance requested, calculate as follows: Enter eligible costs from line #16 Multiply X 75% %

Consult Federal agency for Federal percentage share. Enter the resulting Federal share.

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<th>Phase I</th>
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<th>Phase III</th>
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</thead>
<tbody>
<tr>
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**Authorized for Local Reproduction**

Standard Form 4443 (Rev. 07-16)
<table>
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<tr>
<th>COST CLASSIFICATION</th>
<th>a. Total Cost</th>
<th>b. Costs Not Allowable for Participation</th>
<th>c. Total Allowable Costs (Column a-b)</th>
</tr>
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<td>Administrative and Legal Expenses</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>And, structures, rights-of-way, appraisals, etc.</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Operation expenses and payments</td>
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<td>Architectural and engineering fees</td>
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<td>Other architectural and engineering fees</td>
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<td>$0.00</td>
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<tr>
<td>Field inspection fees</td>
<td>$0.00</td>
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<td>$0.00</td>
</tr>
<tr>
<td>Labor</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Abatement and removal</td>
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<td>$0.00</td>
</tr>
<tr>
<td>Construction</td>
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<tr>
<td>Equipment</td>
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</tr>
<tr>
<td>Miscellaneous</td>
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<td>$0.00</td>
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<tr>
<td>Total</td>
<td>$400,000</td>
<td>$0.00</td>
<td>$400,000</td>
</tr>
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</table>

**FEDERAL FUNDING**

Federal assistance requested, calculate as follows:

Enter eligible costs from line 14c Multiply by 75.0% Calculate federal share.

<table>
<thead>
<tr>
<th>Phase I</th>
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<th>Phase III</th>
<th>Total</th>
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</thead>
<tbody>
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<td>$0.00</td>
<td>$400,000</td>
<td>$0.00</td>
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</table>

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NOAA ADMINISTRATIVE
SPECIAL AWARD CONDITIONS

(Rev) 1. *Multiple Accounting Codes:
       8F0K300/RL1A7D00/4119 - $ 900,000
       8F0K300/RL1A7K00/4119 - $ 300,000
       Total - $1,200,000

(Rev) 3. The Budget Period for this amendment is

(Rev) 4. Since this award requires the Recipient to provide
       $2,252,464 (26%) in project-related matching costs from
       non-Federal sources, the Recipient must maintain in its
       official accounting records an accounting for
       $8,639,365.

(Rev) 27. Office of Management and Budget Circular A-133, Audits
       of Institutions of Higher Education and Other Non-
       Profit Institutions (June 30, 1997) applies to this
       award notwithstanding section D.01 of the Department of
       Commerce Financial Assistance Standard Terms and
       Conditions.

(Add) 30. All financial and progress reports shall be submitted
        in triplicate (one original and two copies). Financial
        Reports are to be submitted to the NOAA Grants Officer
        and Performance (technical) reports to the NOAA Program
        Officer.

Notwithstanding Department of Commerce Financial
Assistance Standard Term and Condition B.01a, the
Recipient may submit performance (technical) reports on
a different frequency.

All reports will be submitted for the periods shown
below.

1 [10/97]
matters: estimates of reporting burden; comments on the data collection form; data collection form duplicative other reported information; data elements in the data collection form; augmented additional data elements for inclusion in the form; who should sign the data collection form for the audit; level of farmer's specificity provided in the circular and supplemental forms; data collection form sent only in the Federal citizen; applicability of Freedom of Information Act and other Federal laws; report copies; report submission and distribution; Federal citizen responsibilities; requirement for the auditor to prepare and sign the data collection form; increased costs for auditors to prepare and sign form; retention of audit workpapers; school's list of expenditures of Federal awards; summary schedule of prior audit findings; summary of the auditor's results; auditor's schedule of findings and questioned costs; report due date; and effective date for the data collection form requirement.

Readers of this Notice should especially note the discussion of the requirement for the auditor to prepare and sign the data collection form due to its impact on the use of the Circular but are not repeated in this Notice.

II. Public Comments

Overall Reaction to the Proposed Revision to Circular A-133

Comment

Most commenters overwhelmingly supported the proposed revisions and generally believe that the revisions will greatly increase the efficiency and effectiveness of the single audit process. Several State auditors commented that the proposed revision to Circular A-133 was similar to what they expected, particularly in light of the changes included in the Single Audit Act Amendment of 1996 (Public Law 104-166). Several commenters were pleased with some of the major significant changes, such as: (i) the increased threshold that triggers an audit requirement from $32,900 to $300,000; (ii) the risk-based approach to determining major programs and the uniformity of audit requirements; (iii) the elimination of the requirement to sort virtually all audit findings and questioned costs. A few commenters requested that the audit threshold remain at $32,900. Although most commenters supported these significant revisions, many commenters expressed concern about other proposed changes included in the proposed revision, which OMB specifically requested public comment, such as the audit coverage for the allowability of charges to cost pools and whether the auditor should prepare and sign the data collection form.

Response: The final significant provisions included in the proposed revision to Circular A-133 that commenters strongly supported are included in the final revision to Circular A-133. Several proposed changes, such as the audit threshold of $300,000, are based in the 1996 Amendments and, therefore, are included in the final Circular. Each of the proposals on which OMB requested public comment are addressed in the following sections or accompanying Notice. Some of the comments received in changes to the final revision.

Consolidation of Circular A-128 into Circular A-133

Comment

All but one comment strongly supported the proposed to consolidate Circular A-128 into Circular A-133, and rescind Circular A-128, reasons cited include less confusion for auditors and auditees, uniformity of audit requirements for non-Federal entities that administer Federal awards, and consistency with concepts included in the 1996 Amendments. One Federal agency that oversees Indian tribal governments expressed concern about rescinding Circular A-128 because many Indian tribal governments have not yet submitted audit reports required by Circular A-128 for audits of fiscal years beginning on or before June 30, 1996.

Response: Pursuant to the 1996 Amendments, which establish uniform audit requirements for non-Federal entities that administer Federal awards, the final revision to Circular A-133 extends its coverage to include State and local governments. In response to the Federal agency's concern about Indian tribal governments, it should be noted that States, including Indian tribal governments for purposes of the Circular, and local governments are subject to the requirements of Circular A-128, issued April 22, 1996, for audits of fiscal years beginning on or before June 30, 1996. Sanctions are provided in Circular A-128 and are applicable for use by Federal agencies, as considered necessary, in instances of continued inability or unwillingness to comply with the requirements of Circular A-128. The rescission of Circular A-128 applies to audits of State and local governments for fiscal years beginning after June 30, 1996.

Comment

In light of the proposed rescission of Circular A-128, several commenters requested that the title of Circular A-133 be expanded to also include Indian tribal governments.

Response: No change was made as a result of these comments. For single audit purposes, Indian tribal governments are included under the definition of "State" in Circular A-133 based on the statutory definition of "State" in the Single Audit Act of 1984 and the 1996 Amendments.

Effective Date

Comment

Several Federal agencies questioned which audit requirements are effective prior to codification of the revised Circular in a Federal agency's regulations. Paragraph ten of the proposed revision states that the standards set forth in the revised Circular shall be adopted by Federal agencies in modified regulations no later than six months after publication "in the Federal Register," so that they apply to audits of fiscal years beginning after June 30, 1996. ** In the interim period, until the standards in this Circular are adopted and become applicable, the audit provisions of Circular A-128, issued April 22, 1996, shall continue in effect.** Several Federal agencies also requested clarification about how the requirements of Circular A-133 should be codified in Federal agency regulations.

Response: The language regarding the interim period was removed from the revised Circular. The 1996 Amendments (31 U.S.C. 7509(a)) require that "each Federal agency shall promulgate such amendments to its regulations as may be necessary to conform such regulations to the requirements of this chapter and of such guidance (provided by the Director of OMB) to implement the 1996 Amendments." Federal agencies shall adopt the provisions of the revised Circular not later than 60 days after publication of the revised Circular in the Federal Register; OMB is coordinating an effort to facilitate Federal agency compliance with this adoption requirement.
In this situation, the auditor is strongly encouraged to test actual costs charged to cost pools during 1997 as part of the 1997 audit. Since 1975 is the base year, as of the 1997 audit, since 1985 is the year when the proposed rule was finalized, submitted, and negotiated, and if the auditor tests the actual costs charged to the cost pools for the year of either the 1997 or 1998 audit that are appropriately relied on the work performed by other auditors in these years, then the auditor's responsibility in 1999 will relate primarily to determining whether the appropriate rate was applied in 1999. However, if an audit is performed with work was done relating to the actual costs to cost pools used to support the rate used to charge a major program in 1999, then such an audit could be used to determine whether the appropriate rate was applied in 1995. This area is of particular concern to OMB and Federal cost negotiators. Contrary to the views expressed by several commenters, Federal cost negotiators do not typically audit costs charged to cost pools used to support an indirect cost rate or allocated through a CAP in the next few years. OMB and Federal agencies will monitor the coverage of indirect costs under Circular A-133 audits to determine whether the additional guidance or subsequent revisions to the Circular are warranted. OMB may also consider if the coverage of indirect costs should be addressed separately from Circular A-133 audits, possibly as separate engagements using the APCA, if circumstances warrant. However, for States and local governments that need to audit more than $125 million a year in Federal awards but do not have a currently assigned cognizant agency for audit, 43-400(a) shall be used to determine audit cognizance upon the effective date of the Circular. OMB expects to designate specific audit cognizance agencies for audit. The new method of determining the cognizant agency for audit for State and local governments because guidance in and basing cognizance on the Federal Register is for all States. Another Federal auditor requested that the Circular state that agency as the cognizant agency for audit for every State based on the large amount of Federal funding provided by the Federal Register is for all States. Another Federal auditor requested that the Circular state that agency as the cognizant agency for audit for every State based on the large amount of Federal funding provided by the Federal Register is for all States. Another Federal auditor requested that the Circular state that agency as the cognizant agency for audit.
definition of the term "compliance supplement" in 510(h)(1) of the final revision was revised to reflect the compliance supplements included as Appendix B to this revised Circular.

Comment

Several State auditors and one CPA recommended that when changes were made to the compliance requirements, and the changes are not yet reflected in the compliance supplement.

However, minor modifications were made to § 510(h)(1) to conform the language used in the Circular to the compliance supplement.

The requirement in § 510(h)(1) for auditors to consider whether changes were made in the compliance requirements included in the compliance supplement reflects current practice, which is based on two documents: (1) the PCAOB's Position Statement No. 6, titled "Questions and Answers on Circular A-133," and (2) the AICPA's Audit and Accounting Guide, entitled, "Audits of State and Local Governmental Units," dated May 3, 1965.

The PCAOB's document includes a statement that "If these have been changes to the compliance requirements included in the compliance supplement, then the auditor should follow the provisions of the compliance supplement as modified by the changes" (page 14). The AICPA's Accounting and Auditing Guide (paragraph 23.37) notes that the fact that compliance requirements are changed can sometimes be considered in planning tests of compliance.

The prevailing "Circular A-133 Compliance Supplement" provides guidance to auditors regarding existing Government's expectations for auditors to perform reasonable procedures (e.g., inquiry of auditors management, review of applicable contracts and grant agreements) to determine compliance with the compliance requirements included in the compliance supplement.

Fiscal Guidance to Implementing the Risk-Based Approach to Determining Major Programs

Comment

Several State auditors and one State agency requested clarification of the requirements for performing risk assessments of Type B programs under § 520(h)(1) and § 520(h)(2). Many comments questioned if the Circular requires the auditor to perform annual risk assessments of each Type B program (above an amount specified in the Circular) and expressed concern that such a requirement would significantly increase audit costs.

Response: Minor modifications were made to the Circular. Relevance of the percentage of coverage rule was removed from § 520(h)(2) of the final revision because, as two commenters noted, program risk is not a consideration in selecting programs to meet the percentage of coverage rule as described in § 520(h). Also, editorial changes were made to § 520(h)(2) to emphasize when risk assessments should be performed.

The final revision of § 520(h)(1) requires the auditor to identify Type B programs that are high-risk and provide two options for identifying high-risk Type B programs. Under Option 3, the auditor would be expected to perform risk assessments of all Type B programs that exceed the amount specified in § 520(h)(2), and audit at least one half of these high risk Type B programs as major, unless this number exceeds the number of low-risk Type A programs identified under § 520(h)(2) (i.e., the "cap"). In this case, the auditor would be required to audit only those programs of high-risk Type B programs as major. For example, a State has ten low-risk Type B programs and 30 Type B programs above the amount specified in § 520(h)(2). Under Option 1, the auditor would be required to perform risk assessments of all 30 Type B programs. Assume that the auditor determines that there are 25 high-risk Type B programs. One half of the 25 high-risk Type B programs is 12.5, or 13 programs. Under Option 1, the auditor would conduct 13 of the high-risk Type B programs as major; however, the cap in this example is ten (i.e., the number of low-risk Type A programs); therefore, the auditor is only required to audit the ten high-risk Type B programs.

Under Option 2, the auditor is only required to audit major one high-risk Type B program for each Type A program identified as a low-risk under § 520(h)(2). Under this option, the auditor would not be required to "cap" risk assessments for any Type B programs when there are no low-risk Type A programs (i.e., cap is zero).

Continuing with the previous example, under Option 2, the auditor would perform risk assessments of each Type B program until ten high-risk Type B programs are identified. Under Option 2, the auditor would be required to audit ten high-risk Type B programs as major in this example. Depending on the order in which risk assessments of Type B programs are performed, the auditor might only need to perform risk assessments of ten Type B programs determined to be high-risk, or the auditor may need to perform risk assessments until ten high-risk programs are identified.

The auditor may choose either Option 1 or 2. There is no requirement to justify the reasons for selecting either option. The results under Options 1 and 2 may vary significantly, depending on the number of low-risk Type A programs and high-risk Type B programs. The auditor is encouraged to use an approach which provides an opportunity for different high-risk Type B programs to be audited as major over a period of time.
Financial Statements

Comment

Several CPA's commented that §§ 310(a) of the Circular should be modified to recognize that financial statements should reflect the results of operations or changes in net assets. Financial statements prepared in accordance with GAAP for certain types of non-Federal entities reflect changes in net assets rather than result of operations. The comments suggested that some auditors and auditees may interpret this section as imposing a requirement that is not consistent with GAAP.

Response: The Circular (§ 310(a)) was revised to state that financial statements should reflect the results of operations or changes in net assets.

Comment

Several CPA's commented that the requirement included in § 310(b) of the Circular that the financial statements be for the same organizational unit that is chosen to meet the requirements of the Circular, considered in conjunction with § 310(a), could be problematic for certain auditors and may have unintended consequences. The commenters interpreted the Circular as requiring a direct match between the reporting entity and the financial statements and the reporting entity approved by the Circular A-133 audit. The commenters questioned whether an audit, that is designed to meet the Circular's requirements through a series of audits that cover separate departments, agencies, and other organizational units which combined Federal awards, would be required to issue non-GAAP financial statements that contain the portions of the reporting entity which were separately audited. One commenter requested guidance in a situation where a local government has its school districts separately audited if the local government's financial statements exclude the school districts, which is what the commenters believe the Circular requires. The auditor may need to issue a qualified or adverse opinion on the local government's financial statements, which could raise unnecessary red flags and prohibit the auditee from qualifying as a low-risk audit (§ 310). The Circular's requirement that certain requirements of the state-wide single audit be included in the state-wide single audit, if the Circular requires such entities to be included in the state-wide single audit, would result in additional audit costs and complicate the audit process. Response: A change was made to § 310(e) to clarify OMB's expectations in this area. The Circular provides non-Federal entities with an option to meet the audit requirements of the Circular through a series of audits that cover the non-Federal entity's departments, agencies, and other organizational units which combined Federal awards during such fiscal year. If a non-Federal entity elects this option, then separate financial statements and a schedule of expenditures of Federal awards shall be prepared for each such department, agency, or other organizational unit. In these circumstances, a non-Federal entity's organization-wide financial statements may also include departments, agencies, and other organizational units that have separate audits and prepare separate financial statements. In the example provided by the commenter, it would be acceptable for the local government's financial statements to include the school districts, even though the school districts were not included in the local government's Circular A-133 audit, because separate Circular A-133 audit is conducted of the school districts. However, if separate financial statements were not prepared for the school districts, it would be unacceptable (as a separate Circular A-133 audit to be conducted of the school districts (i.e., the local government's organization-wide financial statements could not be used as a substitute for separate financial statements for the school districts).

Schedule of Expenditures of Federal Awards

Comment

One State auditor and one State manager commented that the Circular should not prescribe requirements for the schedule of expenditures of Federal awards beyond the current guidance. Response: A change was made to § 310(b) as a result of these comments. The Circular permits the option of presenting this information either in the schedule of expenditures of Federal awards or in a note to the schedule; however, an additional sentence was included so that it is preferable to present this information in the schedule. It is important to note that, regardless of whether this information is presented in a note or in the schedule, this information must be included in the data collection form.

While the requirements to provide such information is not new, the Federal...
requirements and related audit objectives are included in the
provisional "Circular A-133 Compliance Supplement." The auditor
is expected to determine whether the type of compliance
requirement has been a direct and material effect on each
major program, and to design and conduct tests necessary to render an
opinion on compliance with respect to each major program. Clearly, auditor
judgment must be used in determining the nature, timing, and extent of audit
work to be performed, and in evaluating the audit results. The purpose of the
requirement included to 5.110(x)
(1) and (2) is to advise the auditor of the
criteria against which to measure or evaluate the impact of findings for
reporting purposes. It is important to note that, under the
existing requirements of Circular A-128,
the auditor is required to report all
instances of noncompliance and, under the
1990 version of Circular A-133, the
auditor is required to report all but
insubstantial instances of noncompliance. The requirements for
reporting audit findings included in the
revised Circular are less burdensome
than the existing requirements with
respect to instances of noncompliance.

Comment

Several commentators requested clarification that the requirement in
5.110(x)(1) of the proposed revision to report as an audit finding known
questioned costs which are greater than $10,000 for a type of compliance
requirement relates to the materiality with respect to determining the magnitude of instances of noncompliance relating to a
type of compliance requirement.

Response: No change was made as a result of these comments. However, the following example is provided for clarification of the requirements of this provision. Suppose an auditor: (1) determines that eligibility is one of the types of compliance requirements listed in the compliance supplement could have a direct and material effect on a major program; (2) designs and conducts tests over eligibility relative to this major program; and, (3) discovers two separate instances of noncompliance, in the amount of $9000 each, relating to eligibility. The findings involve two different audit objectives relating to eligibility (which are listed in the compliance supplement): one
finding relates to an individual participant’s eligibility, and the other
finding relates to the eligibility of a
"recipient." Since 5.110(x)(1)
requires the auditor to report known
questioned costs which are greater than $10,000 for a type of compliance
requirement (which is eligible in this
case), the auditor would be expected to report these questioned costs of $18,000 as an audit finding. The auditor would also be expected to consider the impact of these instances of noncompliance when reporting on compliance on each program.

Comment

Some federal agencies strongly object to not requiring known questioned costs which are greater than $10,000 could result in auditors’
reporting of special situations in which the size of a particular
Federal program (e.g., a very large State or major governmental program in which questioned costs of $11,000 are considered insubstantial).

Response: No change was made as a result of these comments. OMB believes that the $11,000 threshold for reporting questioned costs provides an
appropriate balance between reporting all questioned costs (which were previously required for State and local governmental and only reporting substantial questioned costs).

Comment

One Federal auditor requested that OMB require auditors to report an estimate of likely questioned costs when a known or likely questioned cost exceeds $10,000. The commentator stated that capturing the amount of likely questioned costs avoided better enable Federal agencies to assess the nature and magnitude of questioned costs on particular Federal awards and assist in prioritizing the resolution of audit findings. The commentator also suggested that OMB encourage auditors to use statistical means to determine likely questioned costs.

Response: No change was made as a result of these comments. 5.110(x)(1) requires the auditor to report known questioned costs which are greater than $10,000, and known questioned costs when likely-questioned costs are greater than $10,000, for a type of compliance requirement. GAAS require the auditor to project the amount of known questioned costs identified in a sample to the items in the major program and to consider the best estimate of total questioned costs (both known and likely) in determining an opinion on compliance. The auditor is required to document this consideration in the audit working papers. The revised Circular does not require the auditor to report an exact amount or statistical projection of likely questioned costs, but rather to include an audit finding when the auditor's estimate of likely questioned costs is greater than $10,000. In reporting likely questioned costs, it is important that the auditor requires the requirements of 5.110(x)(1) and provides appropriate information for judging the prevalence and consequences of the finding. The use of statistical means of likely questioned costs may be beneficial for auditors but it is not required. During the next few years, OMB expects Federal agencies to monitor auditor compliance in this area to assist OMB in determining whether an expansion of these reporting requirements is necessary in subsequent revisions.

Comment

The CPA's commentators requested guidance regarding the treatment of audit findings that cannot be quantified. The commentators cited as an example a situation where an auditor discovers a pass-through entity consistently failed to provide its subrecipients with Federal award information, including applicable compliance requirements. The commentators stated that 5.114(a)(3) could be read to indicate that such nonsatisfactory findings would not need to be reported.

Response: No change was made as a result of these comments. In the past example provided by the commentators, this noncompliance would be required to be reported as an audit finding. The auditor must consider a finding in light of the type of compliance requirement (subrecipient monitoring, in this case) or an audit objective identified in the compliance supplement. The pertinent audit objective included in the provisional "Circular A-133 Compliance Supplement" relating to this example is for the auditor to "determine whether the pass-through entity identified in the Federal award information and compliance requirements to the subrecipient." Because the pass-through entity failed to provide Federal award information to its subrecipient, the noncompliance is material in relation to the audit objective and, therefore, must be reported as an audit finding. In addition, the auditor must consider whether reportable conditions (and possibly material weaknesses in internal controls) exist and require reporting with respect to subrecipient monitoring.

Audit Follow-up

Comment

Several commentators requested guidance on whether the auditor is required to follow up on all prior
PART ---AUDITS OF STATES, LOCAL GOVERNMENTS, AND NON-PROFIT ORGANIZATIONS

Subpart A---General
 Sec. 150 Purpose.
 Sec. 155 Definitions.

Subpart B---Audits
 Sec. 200 Audit requirements.
 Sec. 205 Basis for determining Federal awards.
 Sec. 210 Subrecipient and vendor determinations.
 Sec. 215 Review of audit requirements.
 Sec. 220 Frequency of audits.
 Sec. 225 Sanctions.
 Sec. 229 Audit of subrecipient.
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 Sec. 310 Financial statements.
 Sec. 315 Audit findings follow-up.
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Subpart D---Federal Agencies and Pass-Through Entities
 Sec. 400 Responsibilities.
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Subpart E---Auditors
 Sec. 500 Scope of audit.
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 Sec. 510 Audit findings.
 Sec. 515 Audit work papers.
 Sec. 520 Major program/organization.
 Sec. 525 Criteria for Federal programs.
 Sec. 530 Criteria for low-risk auditees.

Appendix A to Part 15---Data Collection Form (Form SF-SAC)

Appendix B to Part 15---Circular A-133 Compliance Supplement

Subpart A---General

§ 150 Purpose.

This part sets forth standards for obtaining consistency and uniformity among Federal agencies for the audit of non-Federal entities expending Federal awards.

§ 155 Definitions.

Auditee means any non-Federal entity that expends Federal awards which must be audited under this part.

Auditor means an auditor, that is a public accountant or a State or local government audit organization which meets the general standards specified in generally accepted government auditing standards (GAGAS). The term auditor does not include internal auditors of non-profit organizations.
(1) is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

(2) is not organized primarily for profit;

(iii) Uses it not primarily to maintain, improve, or expand its operations; and

(ii) The term non-profit organization includes non-profit institutions of higher education and hospitals.

Oversight agency for audit assesses the Federal awarding agency that provides the predominant amount of direct funding to a recipient not assigned a cognizant agency for audit. When there is no direct funding, the Federal agency with the predominant indirect funding shall assume the oversight responsibilities. The duties of the oversight agency for audit are described in § 35.600(c).

Pass-through entity means a non-Federal entity that provides a Federal award to a subrecipient to carry out a Federal program.

Program-specific audit means an audit of one Federal program as provided for in § 35.200(c) and § 35.235.

Auditable cost means a cost that is not questioned by the auditor because of an audit finding.

(1) Which resulted from a violation or presumption of a violation of a law, regulation, contract, grant, cooperative agreement, or other agreement or documentation governing the use of Federal funds; or includes funds used to carry out a Federal program;

(2) Which carries out the activities of an audit in accordance with § 35.235.

Program-specific audit that is requested by the auditor of a non-Federal entity that provides a Federal award to a pass-through entity to carry out a Federal program; and does not include a Federal award as provided for in § 35.235.

Subrecipient means a non-Federal entity that expends Federal awards received from a pass-through entity to carry out a Federal program. The subrecipient may be a Federal entity or a non-Federal entity. The Federal awarding agency provides the guidance on distinguishing subrecipient and vendor in § 35.410.

Objections to any clause of this section must be made in writing before the end of the contract period. Any objections not so made are deemed to be accepted by the Government as an implied acceptance of the provisions of the contract.

Subrecipient means a non-Federal entity that expends Federal awards received from a pass-through entity to carry out a Federal program. The subrecipient may be a Federal entity or a non-Federal entity. The Federal awarding agency provides the guidance on distinguishing subrecipient and vendor in § 35.410.

Subrecipient means a non-Federal entity that expends Federal awards received from a pass-through entity to carry out a Federal program. The subrecipient may be a Federal entity or a non-Federal entity. The Federal awarding agency provides the guidance on distinguishing subrecipient and vendor in § 35.410.
evaluations, inspections, or reviews) are made of the auditee's books and records, the auditee shall be given an opportunity to make a detailed, written presentation of their theory of the facts and the reason why the auditor's findings are not in accordance with the definitional or threshold requirements. The auditor shall take the auditee's position into account in reaching a conclusion.

(b) If the auditor concludes that the auditee's presentation is not in accordance with the definitional or threshold requirements, the auditor shall inform the auditee in writing of the finding and the reason for the finding. The auditor shall also provide the auditee with a copy of the written report of the audit, including the auditor's conclusions.

(c) The auditor shall issue the report of the audit within 45 days of the date of the auditor's final letter of transmittal of the findings. The report shall include a statement of the auditor's opinion on the auditee's financial statements and a description of the basis for such opinion. The report shall also include a statement of the auditor's agreement or disagreement with any significant findings or conclusions contained in the report of the audit.

(d) The auditor shall file the report of the audit with the Federal agency, if required by the terms of the contract or agreement.

(e) The auditor shall maintain any records related to the audit for at least six years after the date of the audit.

§ 305.200 Frequency of audits.

(a) The administrative or audit agencies shall conduct the audits on a regular basis. The frequency of the audits shall be determined by the nature and circumstances of the program, the amount of funds involved, and other factors that the auditor deems appropriate.

(b) The audit shall be conducted at least once every three years, unless the auditor determines that the frequency of the audit should be increased. The auditor shall provide a written report to the administrative or audit agency, indicating the reasons for any change in the frequency of the audit.

§ 305.205 Program-specific audits.

(a) Program-specific audits are audits that are performed on a program-by-program basis. The audits are designed to provide assurance that the program is being conducted in accordance with the regulations and guidelines applicable to the program.

(b) The auditor shall design and perform program-specific audits to determine whether the auditee is complying with the requirements of the program. The program-specific audits shall be conducted on a regular basis, at least once every three years, unless the auditor determines that the frequency of the audit should be increased.

(c) The auditor shall provide a written report to the administrative or audit agency, indicating the reasons for any change in the frequency of the audit.
Section applies to the base year used in the preparation of the indirect cost proposal or cost allocation plan and any subsequent years in which the resulting indirect cost agreement or cost allocation plan is used to recover costs. To minimize any disruption in existing contracts for audit services, the paragraphs apply to audits of fiscal years beginning after June 30, 1990.

(2) Use of Federal auditors. Federal auditors may perform all or part of the work required under this part if they comply fully with the requirements of this part.

§ 310 Financial statements.

(1) Financial statements. The auditee shall prepare financial statements that reflect its financial position, results of operations or changes in net assets, and, where appropriate, cash flows for the fiscal year audited. The financial statements shall be for the same organizational unit and fiscal year that is chosen to meet the requirements of this part. However, organization-wide financial statements may also include agencies, departments, and other organizational units that have separate audits in accordance with §300(a) and prepare separate financial statements.

(2) Schedule of expenditures of Federal awards. The auditee shall also prepare a schedule of the expenditures of Federal awards for the period covered by the auditee’s financial statements, while not required to prepare financial statements of non-Federal awards. This schedule shall include only Federal awards and shall be consistent with any audited financial statements of the auditee that are required by Federal law or regulation. The schedule shall be included as part of the audit report and shall be signed by the auditor as an integral part of the audit. The auditor shall include in the schedule an identification of the Federal awards included and shall describe the basis for the inclusion of each award.

§ 315 Audit findings follow-up.

(a) General. The audittee is responsible for follow-up and corrective action on all audit findings. As part of this responsibility, the audittee shall prepare a summary schedule of prior audit findings. The audittee shall also prepare a corrective action plan for current year audit findings. The summary schedule of prior audit findings and the corrective action plan shall include the reference numbers associated with the audit findings and the anticipated completion dates.

§ 320 Report submission.

(a) General. The audittee shall submit the audit report and the data collection form, described in paragraph (b) of this section and reporting package described in paragraph (c) of this section, shall be submitted within the earlier of 30 days after receipt of the auditor’s report, or nine months after the end of the audit period, unless a longer period is agreed to in advance by the cognizant or appropriate agency for audit. (For fiscal years beginning on or before June 30, 1998, the audit shall be completed and the data collection form and reporting package shall be submitted within the earlier of 30 days after receipt of the auditor’s report, or 13 months after the end of the audit period. Unless restricted by law or regulation, the audittee shall make copies available for public inspection. (b) Data Collection. The auditor shall submit a data collection form which states whether the audit was completed in accordance with this part and provides information about the audit, the Federal program, and the results of the audit. The form shall be approved by OMB, available from the Federal clearinghouse designated by OMB, and include data elements similar to those presented in this paragraph. A senior level representative of the auditor (e.g., State controller, director of...
keep subrecipient submissions on file for three years from date of receipt.

For OMB responsibility, the Federal clearinghouse designated by OMB shall distribute the reporting package received in accordance with paragraph (G)(2) of this section and shall note any lack of completeness of the data base. The auditor must follow up with known auditees who have not submitted the required data collection forms and reports.

(2) Other responsibilities. The address of the Federal clearinghouse designated by OMB is 1301 East Street, Suite 100, Jeffersonville, IN 47130. The Federal clearinghouse may also direct how to submit the Federal clearinghouse to ensure that the information received is complete. OMB has established an electronic filing system to allow subrecipients and federal agencies to submit information electronically.

Support D—Federal Agencies and Pass-Through Entities

§ 200.400 Responsibilities.

(a) Cognizant agency for audit responsibilities. FIs requiring more than $25 million a year in Federal awards shall have a cognizant agency for audit. The cognizant agency for a Federal agency shall be the Federal agency for which the predominant amount of direct funding is directed to the recipient. Subrecipients of Federal awards are responsible for selecting an appropriate entity to conduct their audit.

(b) Audit requirements for pass-through entities. Audits by Federal agencies and applicable Federal awarding agencies of pass-through entities for cost reimbursement agreements shall be conducted by a Federal government agency, or an independent public accounting firm, as described in the Federal award.

(c) Audit requirements for pass-through entities. Audits by pass-through entities for non-reimbursable agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(d) Audit requirements for pass-through entities. Audits by pass-through entities for social services agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(e) Audit requirements for pass-through entities. Audits by pass-through entities for cost reimbursement agreements shall be conducted by a Federal government agency, or an independent public accounting firm, as described in the Federal award.

(f) Audit requirements for pass-through entities. Audits by pass-through entities for non-reimbursable agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(g) Audit requirements for pass-through entities. Audits by pass-through entities for social services agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(h) Audit requirements for pass-through entities. Audits by pass-through entities for cost reimbursement agreements shall be conducted by a Federal government agency, or an independent public accounting firm, as described in the Federal award.

(i) Audit requirements for pass-through entities. Audits by pass-through entities for non-reimbursable agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(j) Audit requirements for pass-through entities. Audits by pass-through entities for social services agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(k) Audit requirements for pass-through entities. Audits by pass-through entities for cost reimbursement agreements shall be conducted by a Federal government agency, or an independent public accounting firm, as described in the Federal award.

(l) Audit requirements for pass-through entities. Audits by pass-through entities for non-reimbursable agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.

(m) Audit requirements for pass-through entities. Audits by pass-through entities for social services agreements shall be conducted by an independent public accounting firm, or other qualified entity, as described in the Federal award.
section. The auditor’s report(s) shall state that the audit was conducted in accordance with this part and include the following:

(1) An opinion (or disclaimer of opinion) as to whether the financial statements are presented fairly in all material respects in conformity with generally accepted accounting principles and an opinion (or disclaimer of opinion) as to whether the schedule of expenditures of Federal awards is presented fairly in all material respects in relation to the financial statements taken as a whole.

(2) An opinion (or disclaimer of opinion) as to whether the financial statements and major programs are, in all material respects, presented in accordance with Federal accounting standards and rules.

(3) An identification of major programs.

(4) The dollar threshold used to distinguish between Type A and Type B programs, as described in § 350(b).

(5) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(h).

(6) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(7) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(8) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(9) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(10) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(11) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(12) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(13) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(14) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(15) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(16) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(17) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(18) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(19) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(20) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(21) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(22) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(23) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(24) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(25) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(26) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(27) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(28) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(29) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(30) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(31) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(32) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(33) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(34) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(35) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(36) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(37) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(38) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(39) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(40) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(41) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(42) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(43) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(44) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(45) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(46) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(47) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(48) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).

(49) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(f).

(50) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(e).

(51) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(d).

(52) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(c).

(53) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(b).

(54) A statement as to whether the audit disclosed any audit findings which the auditor is required to report under § 351(a).
(2) The auditor is not expected to perform risk assessments on relatively small Federal programs. Therefore, the auditor is only required to perform risk assessments on Type B programs that exceed the larger of:
(i) $500,000 or three-tenths of one percent (0.003) of total Federal awards expended when the auditee has less than or equal to $190 million in total Federal awards expended;
(ii) $300000 or three-hundredths of one percent (0.0003) of total Federal awards expended when the auditee has more than $190 million in total Federal awards expended.

(f) Step 4. At a minimum, the auditor shall audit all of the following as major programs:
(i) All Type A programs, except the auditor may exclude any Type A program identified as low-risk under Step 2 (paragraph (d) of this section).
(ii) High-risk Type B programs as identified under either of the following two options:
(A) Option 1. At least one-half of the Type B programs identified as high-risk under Step 3 (paragraph (d) of this section), except this paragraph (h)(2)(A)(a) does not require the auditor to audit major high-risk Type B programs as a number of low-risk Type A programs identified as low-risk under Step 2.
(B) Option 2. One high-risk Type B program for each Type A program identified as low-risk under Step 2.
(iii) When identifying which high-risk Type B programs to audit as major, under either Option 1 or 2 in paragraph (h)(2)(A)(a) or (b) of this section, the auditor is encouraged to use an approach which provides an opportunity for different high-risk Type B programs to be audited at major over a period of time.

(g) Such additional programs as may be necessary to comply with the percentage of coverage rule discussed in paragraph (i) of this section. This paragraph (h)(2)(A)(a) may require the auditor to audit more programs as major than the number of Type A programs.
(h) Percentage of coverage rule. The auditor shall audit B major programs Federal programs with Federal awards expended that, in the aggregate, encompass at least 50 percent of total Federal awards expended. If the auditee meets the criteria in § 330.530 for a low-risk auditor, the auditor need only audit major programs Federal programs with Federal awards expended that, in the aggregate, encompass at least 25 percent of total Federal awards expended.
(i) Documentation of risk. The auditor shall document in the working papers the risk analysis process used in determining major programs.

(a) Auditor's judgment. When the program determination was performed and documented in accordance with this part, the auditor's judgment in applying the risk-based approach to determine major programs shall be presumed correct. Challenges by Federal agencies and pass-through entities shall only be for clearly improper use of the guidance in this part. However, Federal agencies and pass-through entities may provide auditing guidance about the risk of a particular Federal program and the auditor shall consider this guidance in determining major programs in audits not yet completed.

(b) Deviation from use of risk criteria. For the first year audits, the auditor may elect to determine major programs as all Type A programs plus any Type B programs as necessary to meet the percentage of coverage rule discussed in paragraph (f) of this section. Under this option, the auditor would not be required to perform the procedures discussed in paragraphs (c), (d), and (e) of this section.

(i) A first-year audit is the first year the entity is audited under this part or the first year of a change of auditors.

(ii) To determine that a frequent change of auditors would not exclude audit of high-risk Type B programs, the selection for first-year audits may not be used by an auditor more than once in every ten years.

§ 330.525 Criteria for Federal programs risk.

(a) General. Thoroughness and determination should be based on an overall evaluation of the risk of noncompliance occurring which could be material to the Federal program. The auditor shall use judgment and consider criteria, such as described in paragraphs (b)(i), (c), and (d) of this section, to identify risk.

(b) Percentage of coverage rule. The auditor shall audit B major programs Federal programs with Federal awards expended that, in the aggregate, encompass at least 50 percent of total Federal awards expended.

(c) Current and prior audit experience. (1) Weaknesses in internal controls over Federal programs would indicate higher risk. Consideration should be given to the current environment over Federal programs and such factors as the expectation of management's adherence to applicable laws and regulations and the provisions of contracts and grant agreements and the competence and experience of personnel who administer the Federal programs.

(d) A Federal program administered under multiple internal control structures may have higher risk. When assessing risk in a large single audit, the auditor shall consider whether weaknesses are isolated in a single operating unit (e.g., one college campus) or pervasive throughout the entity.

(e) When significant parts of a Federal program are passed through to subrecipients, a weak system for monitoring subrecipients would indicate higher risk.

(f) The extent to which computer processing is used to administer Federal programs, as well as the complexity of that processing, should be considered by the auditor in assessing risk. New and recently modified computer systems may also indicate risk.

(g) Prior audit findings would indicate higher risk, particularly when the situations identified in the audit findings could have a significant impact on a Federal program or have not been corrected.

(h) Federal programs not recently audited as major programs may be of higher risk than Federal programs recently audited as major programs without audit findings.

(i) Oversight exercised by Federal agencies and pass-through entities.

(A) Oversight exercised by Federal agencies or pass-through entities could indicate risk. For example, recent monitoring or other reviews performed by an oversight entity which disclosed no significant problems would indicate lower risk. However, monitoring which disclosed significant problems would indicate higher risk.

(B) Federal agencies, with the concurrence of OMB, may identify Federal programs which are higher risk. OMB plans to provide this certification in the compliance supplement.

(j) Inherent risk of the Federal program. (1) The nature of a Federal program may indicate risk. Consideration should be given to the complexity of the program and the extent to which the Federal program constrains for goods and services. For example, Federal programs that disburse funds through third party contracts or have eligibility criteria may be of higher risk. Federal programs primarily involving staff payroll costs may have a higher risk when funds are for employees, but otherwise be of lower risk.

(2) The phase of a Federal program in its life cycle at the Federal agency may indicate risk. For example, a new Federal program with new or interim regulations may have higher risk than an established program with time-tested regulations. Also, significant changes in Federal programs, laws, regulations, or
accountants (CPAs), non-profit organizations (including colleges and universities), professional organizations, and others. All comments were considered in preparing OMB's
responses presented below and in developing the final revision to Circular A-133, which is published in a companion Notice in today's Federal Register. The comments received relating to the information collection and OMB's responses are summarized below:

Estimates of Reporting Burden
Comments
In the preamble of the proposed revision, OMB stated that the reporting burden per audit will increase from 25 hours under the existing requirements of Circles A-128, "Audits of States and Local Governments," and A-133, "Audits of Institutions of Higher Education and Other Non-Profit Institutions," to 34 hours under the proposed revision. OMB stated that the increase in hours was due, in part, to the new requirement to prepare the data collection form, which would take four hours, if prepared by the auditor, and two hours, if prepared by the auditee. Most commenters—primarily State auditors and CPAs—stated that OMB's estimates regarding the preparation of the data collection form are too low. Several State auditors commented that, while the estimates may be appropriate for larger governments, they are greatly understated for smaller governmental entities. Some State auditors provided estimates to prepare the form for smaller entities ranging from two to four hours but no estimates were provided by State auditors to prepare the form for larger entities. One State agency stated that, "Tackling the size and complexity of New York State, the preparation and review of a data collection form would take at least 15 hours and could take up to 40 hours. For smaller entities where New York State serves as the pass-through entity, the estimates range from 3 to 15 hours." One State auditor questioned how realistic any time estimate can be unless someone actually prepares the form. One CPA commenter stated that "OMB's estimate that auditor preparation of the data collection form would take two hours appears to be low. Most firms, including ours, have implemented policies that require reviews of work performed and reports issued, whether involving formal reports or preparation of governmental forms. Depending on the size and complexity of an entity, the preparation and review of a data collection form could take anywhere from 5 to 10 hours."

Response: Based on the comments received, OMB revised the reporting burden and cost estimates, as presented in Table 1. Several modifications were made in determining the revised estimates. First, OMB estimated reporting burden hours and costs separately for large auditees (i.e., those with a large number of Federal awards) and all other auditees. For estimation purposes, OMB separately estimated burden for 200 large auditees, consisting of the 50 States, 50 largest counties in the country, and 100 largest non-profit organizations (including colleges and universities). The reporting burden for both auditees and auditors increased significantly for entities that administer a large number of Federal awards because the length of time required to prepare both the schedule of Federal awards and the data collection form increases with the number of Federal awards administered by the auditee. Second, the revised estimates reflect the modified requirements included in the final revision to Circular A-133 whereby the auditor will prepare and sign sections of the data collection form that relate to the audit results and Federal awards, and the auditee will review and sign the form certifying its completeness and accuracy. Third, the cost estimates are now based on an average rate per hour of $25 per hour for auditors and $50 per hour for auditees.

The 1996 Amendments increased the threshold that triggers an audit requirement from $25,000 to $300,000, thereby reducing the number of entities subject to the A-133 requirements from approximately 35,000 entities under the existing requirements to approximately 25,000 entities under the 1996 Amendments. As a result, the overall burden hours of this information collection decreased by 43,280 hours (from 910,000 burden hours under the existing requirements to 566,800 under the new requirements). However, the total annualized cost of this information collection increased by $1.6 million (from $3.8 million under the existing requirements to $5.4 million under the new requirements), due to an increase in the number of hours incurred by auditors (versus auditees) under the new requirements at a higher hourly rate. The average reporting burden per respondent increased 7.8 hours under the new requirements (from an average of 26 hours per respondent under the existing requirements of Circles A-128 and A-133 to an average of 34 hours per respondent under the new requirements) primarily due to requirements to prepare and submit to the Federal Government for the first time two new documents: (1) the auditor's summary of audit findings and (2) the data collection form. The auditor's summary of audit findings is required by the 1996 Amendments. The data collection form is required by Circular A-133 and will be used to capture information about Federal awards in a government-wide database that will be accessible by the Congress, Federal Government, non-Federal entities, and the public. These data are not currently available, yet they are essential for making decisions about Federal awards, including program design and delivery and audit requirements.

OMB estimates that approximately 80 percent of the annualized reporting burden cost results from statutorily imposed requirements included in the 1996 Amendments, while the remaining 20 percent of the annualized reporting burden cost results from the new OMB-imposed requirement included in Circular A-133 to prepare a data collection form.

Necessity of the Data Collection Form
Comments:
Federal auditors and Federal agencies supported the use of a data collection form as an efficient and effective means to capture government-wide information about Federal awards administered by non-Federal entities that expend $50,000 or more annually in Federal awards. One Federal auditor stated that the information collection is necessary for the Federal agency to carry out its grant management responsibilities. College and university commenters had mixed reactions, including some supporting the form and some not. Many State auditors and State managers strongly opposed the requirement to prepare a data requirement form because it is viewed as being unnecessary, duplicative of information included in other reports, and especially burdensome for large entities. One State auditor commented that "Making single audit information available to Federal agencies is too time-consuming for State agencies to have been the primary consideration in the drafting of the requirements, with less concern for the preparation time and costs of auditors and especially auditees." Another State auditor noted that the Federal Government should be responsible for categorizing audit findings by using the reporting package as the sole source of this information. One local government manager stated that the burden of "spoon-feeding"...
data and that information in the auditor’s reports be cross-referenced to the schedule of expenditures of Federal awards to achieve the equivalent of the data collection form without creating another form.” Another commentator stated that “The Federal Register’s Domestic Assistance (CPDA) number and name of each program is centrally maintained. So it is our understanding that individual awards within a cluster if the information is needed, it should be separately gathered by the authorization of Federal agencies. So, this information is available for each recipient.”

One Federal auditor encouraged OMB to explore the possibility of incorporating the schedule of expenditures of Federal awards in the data collection form to reduce redundancy.

One Federal auditor, one State manager, and one CPA, commented that it was duplicative and included a summary of the auditor’s results in the schedule of findings and questioned costs prepared by the auditor (required by Section 505(b)(1) of the Circular) and to present essentially the same information in the data collection form. One commenter recommended that, if the auditor prepares the data collection form, the auditor’s summary that is included in the data collection form and the requirement to include the auditor’s summary in the schedule of findings and questioned costs can be stricken from the Circular. OMB commented that “Elimination of the summary of auditor’s results (data collection form) would serve as the requirement by which OFA could potentially reduce auditor time spent on these forms.”

Several commenters suggested combining the data collection form to be prepared only when there are no audit findings and submitting it in lieu of the complete reporting package.

Response: OMB acknowledges that there are many duplicative aspects of the proposed data collection form. OMB has already begun working with the Federal clearhouse to implement some of the suggestions provided by commenters, such as providing for the electronic submissions of the data collection form information through the internet and the electronic submission of the entire reporting package. OMB is fully committed to reducing or eliminating duplications in the future through electronic means. However, the Federal Government needs the information provided by the data collection form currently. Therefore, in the next term, reporting required by the Circular will be submitted initially to the Federal Government in “hard copy.” The proposed revision states that the form will use a “machine-readable format.” This term was removed from the Circular to provide the Federal clearhouse flexibility in processing the initial data collection. OMB expects future developments in the data submission process which will evolve from initial hard copy submissions to electronic submissions.

Section 325(b) of Circular A-133 states that “Nothing in this part shall preclude electronic submissions to the Federal clearhouse in such manner as may be approved by OMB.” With OMB approval, the Federal clearhouse may pilot test methods of electronic submissions.” The first phase of this pilot test has already begun and it is concentrating on providing audit with the means to electronically submit the data collection form information through the Internet to the Federal clearhouse for fiscal years beginning after June 30, 1997. In addition, the Federal clearhouse is working with various states to develop a mechanism whereby auditors may submit the required information to the Federal clearhouse in a computerized format or diskette for fiscal years beginning after June 30, 1997. The objective of the second phase will be to develop the capability to electronically submit the complete reporting package or key components of it, such as the auditor’s schedule of expenditures of Federal awards and the auditor’s schedule of findings and questioned costs. It is expected that, when audits submit their reporting packages electronically, there will no longer be a need for the data collection form. However, the Federal clearhouse will continue to process data collection forms for audits that are unable or choose not to submit their reporting packages electronically.

Until such time as electronic submission is available, OMB’s intent is to simplify the preparation of the data collection form by only requesting information in the form that is already required to be included in the reporting package. While this approach results in some duplication, it is intended to facilitate the ease of completing the form and the accuracy of the information provided.

With respect to the numbering of lines 5, 6, 7, 8, 9, and 10 of the data collection form, OMB believes that it is necessary to capture Federal awards information at this level of detail. The Governmentwide data collection form must contain information at the Federal program level so that future decisions about Federal awards and related audit policies (e.g., audit thresholds, the risk-based approach to determining major programs) can be made. Some commenters appeared to misunderstand the intended level of detail. For instance, one commenter indicated that it was unusual to list individual awards within a cluster of programs. Other State Research and Development (R&D) clusters of programs include only about two or three Federal programs (CPDA numbers). OMB believes that the Federal clearhouse should include all Federal awards, not just those Federal awards with findings. This form must reflect each Federal award to ensure the completeness of the database, which will be important for future decisionmaking.

OMB does not support the comments suggesting that the schedule of expenditures of Federal awards be expanded to include a line of the data collection form and that the Federal Government input the data into the reporting package. Similarly, OMB does not support the suggestion that the form be submitted only when there are no audit findings and in lieu of submitting the existing reporting package. OMB’s long-term goal is to eliminate the data collection form for audits that report electronically. However, in the near term, when hard copy reports are submitted, OMB proposes expanding the minimum reporting requirements on audits beyond those included in 310(b) of the Circular and having the Federal Government input the data.
information on the form is accurate and complete. The requirement was modified to clearly indicate that a senior official from State or local government shall sign the form, as appropriate. The intent of this requirement is to ensure that the form is signed by a senior or executive level representative of the entity that is authorized to, and can be held accountable for, representations made to the Federal Government on behalf of the entity. The certifying official should be knowledgeable about the Federal awards administered by the entity. The requirements of Circular A-133, and the actual audit results. In a State-wide single audit, it is expected that a State official (e.g., State controller, State treasurer) would sign the form.

Level Of Form’s Specificity Provided in the Circular and Supplemented by Federal Register

Comment

One Federal auditor stated that, while it was necessary to include specific certification language on the form to provide reviewers with sufficient detail to understand the proposal, the Circular should not contain such language that is so detailed that it precludes amending the data collection form without rewriting the Circular. The commenter recommended removing the certification language at § 330(b)(9) of the Circular and including a provision authorizing OMB to add or remove elements, as needed. A CPA commented that the final revised Circular A-133 should provide specific guidance on preparing the form, but that the form itself and the standard wording to be developed by OMB and the audit community to appropriately characterize the auditor’s and auditee’s responsibility for information included in the form. One college and university commenter recommended that OMB clearly state that the data collection form is the only form that can be used by Federal agencies and pass-through entities to gather information related to the audit and that entities may not develop their own supplemental forms.

Response

Circular A-133 § 330(b)(9) identifies the data elements to be included in the data collection form and provides a general description of the auditee’s certification and auditor’s statement that will accompany the form. The data collection form to be used by the Federal clearinghouse will be presented as an Appendix to the final revised Circular A-133. The form, developed cooperatively by a Federal interagency task force, is the only form that may be used by a Federal agency for the purpose of collecting single audit data.

However, OMB expects that the standard form may be modified in the future, as circumstances warrant. Any revisions require approval from OMB’s Office of Information and Regulatory Affairs and the revised form, or a notice of its revision, will be published in the Federal Register.

Data Collection Form Sent Only to the Federal Clearinghouse

Comment

The CPA community’s support for the provision requiring the auditor to prepare and sign the form was based on the understanding that the data collection form would be sent only to the Federal clearinghouse designated by OMB and not to Federal agencies and pass-through entities. Also, several college and university commentators urged OMB to permit a subcontractor to simply send a letter to a pass-through entity when there are no audit findings that relate to the Federal awards provided by the pass-through entity.

Response

Several modifications were necessary to reflect this understanding in the final version of Circular A-133. First, Circular A-133 now reflects that the data collection form will no longer be a required component of the reporting package submitted in accordance with § 330(c)(3) and § 330(c)(5) of the Circular. Also, the requirement for subcontractors to send copies of the data collection form to pass-through entities was removed from § 330(c)(5) and § 330(c)(6) of the Circular.

When there are no audit findings that relate to a Federal award provided by a pass-through entity, the subcontractor is not required to send the reporting package to that pass-through entity. In this situation, without receiving the data collection form, the pass-through entity would not otherwise receive any audit report information about the Federal awards it provides to the subcontractor. Therefore, § 330(c)(3) and § 330(c)(5) of Circular A-133 requires a subcontractor in this situation to inform the pass-through entity that no audit of the subcontractor was conducted in accordance with Circular A-133 and that no audit findings relative to the Federal awards provided by the pass-through entity were reported.

OMB believes that the benefits to be achieved through expert audit resources and streamlined audit reporting outweigh the possible inconveniences that may result for some Federal agencies and pass-through entities from having to report these audit data. Therefore, changes to the proposed streamlined report distribution process were made.

Comment

One local government agency commented that savings may result from...
Several State auditors suggested alternatives to their approach for the auditor to prepare and sign the form including (1) requiring the auditor to prepare and sign the form and have the auditor review the form and the auditor's financial statements taken as a whole, with the auditor's financial statements taken as a whole, (2) requiring the auditor to prepare the form and have the auditor sign a separate letter of assurance on the form regarding its completeness; (3) removing the requirement to prepare the form and requiring the auditor to send a "compliance letter along with the audit report to the Federal Government.

Stating that the audit was completed in accordance with the single audit requirements; (4) presenting certain summary information on the form with no signature by either the auditor or auditor, and having the auditor sign a separate form stating that an audit in accordance with Circular A-133 was performed; (5) adding a proviso to the financial reporting section of the compliance supplement stating that the auditor to verify the completeness and accuracy of the form; and, (6) requiring the auditor to prepare the form and have the auditor sign it, provided that the auditor's signature is accompanied by a standard language specifically describing and limiting the assurance the auditor is providing by signing the form.

Several State auditors opposing the proposal for the auditor to sign the form, provided that the form included "liability limiting statements" similar to the wording suggested by the CPA comments and indicated it would be more efficient for auditors to prepare the form. Two college and university commenters opposed the proposal stating that the same colleges and universities could readily modify the form similar to other documents they are required to prepare (e.g., the schedule of federal awards and corrective action plans) and that the additional cost for the auditor to prepare the form is not justified compared to the benefit received. However, one college and university commenter also indicated that having the auditor prepare the form would add to its accuracy and greatly assist many auditors and suggested a more flexible solution to permit either the auditor or auditor to prepare the form at the option of the auditor) and require the auditor to sign the form as a review. One college and university commenter indicated that neither the auditor nor auditors want to prepare the form.
Schedule of Expenditures of Federal Awards

Comment

One State auditor commented that the State's accounting system could not capture Federal award expenditure information and requested that the Circular permit alternatives methods of reporting Federal award information, such as an auditor's report. The requirement in the Circular that the budget for a Federal award be reported in the budget is critical to every State's accounting system. This requirement is important to Federal agencies and to the National Academy of Public Administration's systems requirements of 520 in the Government Management (COMAR) Rule, published March 11, 1988 (53 FR 8034) and amended April 15, 1988 (53 FR 12281), whereby States' systems should permit accounting for expenditures to a level sufficient to demonstrate compliance with applicable laws and regulations.

Comment

Several comments opposed the proposal to require that the schedule of expenditures of Federal awards include information about the amount of Federal funds awarded (rather than Federal awards expended), and that such information be presented by award year. One commenter asked whether the information required by Federal agencies and pass-through entities to be included on the schedule was limited to the minimum requirements. It was suggested that additional information be included on the schedule.

Response: The change was made to § 310(b)(1) to clarify that the schedule requires presentation of the amounts of Federal awards expended, rather than the amounts awarded. The change was also made to § 310(b)(1) to indicate that auditors may choose to provide information requested by Federal agencies and pass-through entities to make the schedule useful to them. However, the auditor is not required by the Circular to provide information beyond the minimum requirements described in § 310(b).

Comment

Section 310(b)(1) of the proposed revision requires that the schedule of expenditures of Federal awards list individual Federal programs, Federal agencies, and major subawards within each Federal agency. Many respondents strongly opposed the requirement to provide the major subawards within the Federal agency. Some cited that this information may not be available to the Federal government through the Federal data system, and that it is particularly necessary for large entities, such as States, to provide this information for each individual Federal program. The requirement to list such information within each Federal agency was removed from § 310(b)(1) of the Circular, except for the R&D program cluster. This revision reduces reporting burden for many auditors that administer a large number of Federal awards. For the R&D program cluster, small funds are provided for reporting Federal awards expended either by individual Federal agencies, or Federal subawards within the Federal agency. This option reduces burden on auditors to administer a large number of Federal awards, such as certain colleges and universities, by permitting summary reporting at the Federal agency and major subawards level. Federal awarding agencies and pass-through entities providing R&D awards should assist auditors in identifying major subawards within the Federal agency responsible for such awards.

Comment

Several comments opposed the proposal included in § 310(b)(1), which required, to the extent practical, pass-through entities to identify on the schedule of expenditures of Federal awards the total amount provided to subrecipients from each major program and each type B program audited as major. The final revision in the Circular includes this information for each Federal program. This change was made to simplify the requirement, but does not necessarily increase burden on auditors because the information is not mandatory. This information should be included on the schedule, to the extent possible. In response to a CPA's concern, the schedule of expenditures of Federal awards includes information about each of the Federal awards administered by the auditor, not just those audited as major. OMB does not believe that presenting information about amounts provided to subrecipients is different from other information included in the schedule relating to programs that were not audited as major.

Summary Schedule of Prior Audit Findings

Comment

Several State auditors and State agencies questioned the need for a separate schedule reporting the status of prior audit findings. One State auditor noted that requiring the auditor to report any material misrepresentations made by the auditee in the schedule will increase pressure on auditors and strain their relationship with the auditees. A State agency commented that the information in the new summary schedule of prior audit findings is also included in other required reports and recommended that the cognizant agency consider removing this information from the corrective action plan. One Federal auditor noted the importance of corroborating to report deficiencies until the finding is adequately resolved and suggested that the schedule also include a description of the means used to substantiate the audit finding resolution.

Response: No change was made to § 315 of the Circular as a result of these comments. It is important for the auditor to report on the status of prior audit findings in a consistent and systematic manner. It is also important that the auditor assess the fairness of management's representations included in the schedule, as required by § 306(e) of the Circular.

Summary of the Auditor's Results

Comment

One Federal auditor recommended revising the Circular to require the auditor to provide a narrative report at the beginning of the single audit reporting package. One State auditor opposed the requirement to prepare a
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1 Weighted average.
### PART II  GENERAL INFORMATION – Continued

8. Indicate whether the auditee has either a Federal cognizant or oversight agency for audit. (Mark (X) one box)
   - [ ] Cognizant agency
   - [ ] Oversight agency

9. Name of Federal cognizant or oversight agency for audit (Mark (X) one box)
   - [ ] African Development Foundation
   - [ ] Agency for International Development
   - [ ] Agriculture
   - [ ] Commerce
   - [ ] Corporation for National and Community Service
   - [ ] Defense
   - [ ] Education
   - [ ] Energy
   - [ ] Environmental Protection Agency
   - [ ] Federal Emergency Management Agency
   - [ ] General Services Administration
   - [ ] Health and Human Services
   - [ ] Housing and Urban Development
   - [ ] Institute for Museum Services
   - [ ] Inter-American Foundation
   - [ ] Interior
   - [ ] Justice
   - [ ] Labor
   - [ ] National Aeronautics and Space Administration
   - [ ] National Archives and Records Administration
   - [ ] National Endowment for the Arts
   - [ ] National Endowment for the Humanities
   - [ ] National Science Foundation
   - [ ] Office of National Drug Control Policy
   - [ ] Peace Corps
   - [ ] Small Business Administration
   - [ ] Social Security Administration
   - [ ] State
   - [ ] Transportation
   - [ ] Treasury
   - [ ] United States Information Agency
   - [ ] Veterans Affairs

### PART II  FINANCIAL STATEMENTS (To be completed by auditor)

1. Type of audit report (Mark (X) one box)
   - [ ] Unqualified opinion
   - [ ] Qualified opinion
   - [ ] Adverse opinion
   - [ ] Disclaimer of opinion

2. Is any reportable condition disclosed? (Mark (X) one box)
   - [ ] Yes
   - [ ] No – SKIP to item 4

3. Is any reportable condition reported as a material weakness? (Mark (X) one box)
   - [ ] Yes
   - [ ] No

4. Is a material noncompliance disclosed? (Mark (X) one box)
   - [ ] Yes
   - [ ] No

### PART III  FEDERAL PROGRAMS (To be completed by auditor)

1. Type of audit report on major program compliance (Mark (X) one box)
   - [ ] Unqualified opinion
   - [ ] Qualified opinion
   - [ ] Adverse opinion
   - [ ] Disclaimer of opinion

2. What is the dollar threshold to distinguish Type A and Type B programs? __ $500,000

3. Did the auditee qualify as a low-risk auditee? (Mark (X) one box)
   - [ ] Yes
   - [ ] No

4. Are there any audit findings required to be reported under § 510(a)? (Mark (X) one box)
   - [ ] Yes
   - [ ] No

5. Which Federal Agencies are required to receive the reporting package? (Mark (X) all that apply)
   - [ ] African Development Foundation
   - [ ] Agency for International Development
   - [ ] Agriculture
   - [ ] Commerce
   - [ ] Corporation for National and Community Service
   - [ ] Defense
   - [ ] Education
   - [ ] Energy
   - [ ] Environmental Protection Agency
   - [ ] Federal Emergency Management Agency
   - [ ] General Services Administration
   - [ ] Health and Human Services
   - [ ] Housing and Urban Development
   - [ ] Institute for Museum Services
   - [ ] Interior
   - [ ] Justice
   - [ ] Labor
   - [ ] National Aeronautics and Space Administration
   - [ ] National Archives and Records Administration
   - [ ] National Endowment for the Arts
   - [ ] National Endowment for the Humanities
   - [ ] National Science Foundation
   - [ ] Office of National Drug Control Policy
   - [ ] Peace Corps
   - [ ] Small Business Administration
   - [ ] Social Security Administration
   - [ ] State
   - [ ] Transportation
   - [ ] Treasury
   - [ ] United States Information Agency
   - [ ] Veterans Affairs
   - [ ] None
Instructions for Completion of SF-SAC
Reporting on Audits of States, Local Governments, and Non-Profit Organizations

Office of Management and Budget (OMB) Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," requires non-Federal entities that expend $300,000 or more in a year in Federal awards to have an audit conducted in accordance with the Circular. Circular A-133 (§ 200) requires auditors to submit a data collection form along with other specified reports, to the Federal marketplace designated by OMB (currently the U.S. Treasury's Center) at the completion of each audit. Submission of anything other than a complete data collection form and reporting package as required by Circular A-133 will be returned to the auditor.

Submittal to Federal Marketplace

The data collection form must be completely filled out and signed by both the auditee and auditor. Submission of anything other than a complete data collection form and reporting package as required by Circular A-133 will be returned to the auditor.

Description of the Data Collection Form Items

PART I: GENERAL INFORMATION: The auditee should complete this section and sign the certification statement provided on Item 6 (G).

Item 1: Fiscal Year Ending Date:
Enter the last day of the entity's fiscal period covered by the audit.

Item 2: Type of Circular A-133 Audit:
Check the appropriate box. § 200 of Circular A-133 requires non-Federal entities that expend $300,000 or more in a year in Federal awards to have a single audit conducted in accordance with § 200, except when they elect to have a year-specific audit conducted in accordance with § 205.

Item 3: Audit Period Covered:
Check the appropriate box. Annual audits cover 12 months and Biennial audits cover 24 months. If the audit period covered is neither Annual or Biennial, mark “Other” and provide the number of months covered in the space provided.

Item 4: Date Received by Federal Marketplace:
Federal Government use only.

Item 5: Employer Identification Number (EIN)

(a) Auditee EIN:
Enter the auditee Employer Identification Number (EIN), which is the Taxpayer Identification Number assigned by the Internal Revenue Service (IRS). Also, using the spaces provided, enter the EIN on the top of each page.

(b) Multiple EINs Covered in this Report:
Check the appropriate box to indicate whether the auditee (or components of an auditee covered by the audit) was assigned more than one EIN by the IRS. (Example: A State-wide audit covers many departments, each of which may have its own separate EIN.) If yes, indicate principal EIN under 5 (a).

Item 6: Audit Information

(a) A senior representative of the auditee (e.g., State controller, director of finance, chief executive officer, chief financial officer) shall sign a statement that the information on the form is accurate and complete as required by § 200(b) of Circular A-133. Provide the name and title of the signatory and date of signature.
Column (c) - Amount of Federal Expenditures:
Enter the amount of expenditures included in the Schedule of Expenditures of Federal Awards for each Federal program. It is important to note that amounts shall be provided for the value of Federal awards expended in the form of non-cash assistance, the amount of insurance in effect during the year, and leases or loan guarantees outstanding at year end, regardless of whether such amounts were presented in the Schedule of Expenditures of Federal Awards or in a note to the Schedule.

If additional pages are required, photocopy page 3 of the form and attach additional page(s) to the form. Also, instead of subtotals at the bottom of each page, only include a grand total on the last page in the "TOTAL" block.

Item 7: Audit Findings and Questioned Costs:
The information to complete columns (a), (b), (c), (d) and (e) shall be obtained from the Schedule of Findings and Questioned Costs prepared by the auditor. If additional space is required, photocopy page 3 and attach the additional page(s) to the form.

Column (a) - Major Program:
Indicate whether or not the Federal program is a major program, as defined in § 520 of Circular A-133, by marking (Y) in one box.

Column (b) - Type of Compliance Requirement:
Using the list provided on the form, enter the letter that corresponds to the type(s) of compliance requirements applicable to the Federal program. Mark all that apply or None.

Column (c) - Questioned Costs:
Enter the amount of questioned costs by Federal program. If no questioned costs were reported, enter N/A for 'Not Applicable.'

Column (d) - Internal Control Findings:
Check the appropriate box, using the list provided on the form, that corresponds to the internal control findings that apply to the Federal program. Mark all that apply or None.

Column (e) - Audit Finding Reference Number(s):
Enter the audit finding reference number(s) for audit findings included in the Schedule of Findings and Questioned Costs. If no audit finding reference numbers exist, enter N/A for 'Not Applicable.'
August 5, 1996

Patricia A. Rauch, Team Leader
Grants Management Division
1325 East-West Highway
SSMC2 - GB321 - Fifth Floor
Silver Spring, MD 20910-3283

RE: NOAA Award No. NA47PZ00477
Amendment No. 1

Dear Ms. Rauch:

Enclosed are two (2) signed originals of the above referenced award amendment, as requested in your letter dated July 26, 1996, received in our office July 29, 1996.

We appreciate NOAA staff assistance in obtaining approval of this cooperative agreement amendment.

Sincerely,

Cheryl Y. Bennett
Contracts & Grants Administrator

Enclosures

C: Verlie Wims, Fiscal Officer
Bill Good, Coastal Restoration Division Administrator
AMENDMENT TO
FINANCIAL ASSISTANCE AWARD

RECIPIENT NAME
Louisiana Department of Natural Resources

ADDRESS
P.O. Box 94396

CITY, STATE, ZIP CODE
BATON ROUGE, LOUISIANA 70804

DEPARTMENT OF COMMERCE OPERATING UNIT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

<table>
<thead>
<tr>
<th>COSTS AS REQUIRED</th>
<th>PREVIOUSLY ESTIMATED COST</th>
<th>ADD</th>
<th>DIRECT</th>
<th>TOTAL ESTIMATED COST</th>
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<tr>
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<td>$0</td>
<td>$0</td>
<td>$4,791,800</td>
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To extend the award completion date through September 30, 1997, for the project entitled ‘Coastal Wetland Planning, Protection, and Restoration Act (PL 101-446) Big Island Mining (XAT-7) and Atchafalaya Sediment Delivery (XAT-2)’, as requested in the Recipient’s letter dated June 3, 1996, incorporated by reference, and the Program Officer’s recommendation dated June 7, 1996.

2. To revise NOAA Administrative Special Award Conditions.

3. To incorporate revised OMB Circular A-87, effective September 1, 1995.

This Amendment approved by the Grants Officer is issued in triplicate and constitutes an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Amendment provisions checked below and attached, as well as previous provisions incorporated into the Award. Upon acceptance by the Recipient, two signed Amendment documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned by the Recipient within 15 days of receipt, the Grants Officer may declare this Amendment null and void.

☐ Special Award Conditions (ATTACHMENT B [X] ADMINISTRATIVE [] PROGRAMMATIC)
☐ Line Item Budget (ATTACHMENT A)
☐ Other(s): Revised OMB Circular A-87, effective September 1, 1995

[Signatures]

Title: NOAA GRANTS OFFICER
Date: 8/5/96

Title: SECRETARY
Date: 8/5/96
### Table: BIG ISLAND MINING AND ATCHAFALAYA SEDIMENT DELIVERY

<table>
<thead>
<tr>
<th>Phase</th>
<th>Costs (in $)</th>
<th>Percent Remaining</th>
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</thead>
<tbody>
<tr>
<td>Phase 1: Engineering and Design</td>
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<td>Phase 2: Construction and Inspection</td>
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<td>Phase 3: Long Term Monitoring</td>
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<td><strong>Total</strong></td>
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### Table: BIG ISLAND MINING AND ATCHAFALAYA SEDIMENT DELIVERY

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<tr>
<td>Phase 2: Construction and Inspection</td>
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<tr>
<td>Phase 3: Long Term Monitoring</td>
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<tr>
<td><strong>Total</strong></td>
<td>$3,929,200</td>
<td>$242,750</td>
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</table>

### Table: BIG ISLAND MINING AND ATCHAFALAYA SEDIMENT DELIVERY

<table>
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<tr>
<th>Phase</th>
<th>Costs (in $)</th>
<th>Percent Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Engineering and Design</td>
<td>$4,721,090</td>
<td>$337,350</td>
</tr>
</tbody>
</table>

### Note:

The remaining budget will be expended in accordance with the original budget.
NOAA ADMINISTRATIVE
SPECIAL AWARD CONDITIONS

(Revise) 2. The Project Period for this award is August 1, 1994, through September 30, 1997.

(Revise) 3. The Budget Period for this amendment is August 1, 1996, through September 30, 1997.

(Revise) 5. The access code for this award is 21924.

(Revise) 14. If applicable, the Recipient must request prior approval from NOAA for all proposed sole source contracts or where only one bid or proposal is received in which the aggregate expenditure is expected to exceed $100,000.

(Revise) 16. The recipient will be required to obtain approval before making any substantive changes in the project objectives, methods, budget, or schedule, (except provided by Expanded Authorities). Requests for changes shall be submitted in writing to the Program Officer. Final approval will be issued in writing by the Grants Officer. The Recipient is not authorized to proceed with any changes until final written approval is received from the Grants Officer.
TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

FROM: Allen M. Kehoe
Director

SUBJECT: Cost Principles for State, Local, and Indian Tribal Governments

1. Purpose. This Circular establishes principles and standards for determining costs for Federal awards made directly or through grants, cost reimbursement contracts, and other agreements with State and local governments and federally recognized Indian tribal governments (hereafter referred to as "governmental units").


3. Background. An interagency task force was established in 1967 to review existing cost principles for Federal awards made to State, local, and Indian tribal governmental units. The task force studied existing General Accounting Office reports and recommendations, solicited suggestions for changes to the Circular from governmental units, and prepared the recommendation on the provision of OMB cost principles for governmental units, non-profit organizations, and universities. A revised version of this Circular, reflecting the results of these efforts was issued on October 12, 1968. An interagency task force was established in 1970 to review the proposed revisions, discussions with interagency groups, and related developments were considered in developing this revision.


5. Policy. This Circular establishes principles and standards to provide a uniform approach for determining costs and to promote effective program delivery, efficiency, and economy. It will also provide a basis for determining the extent of Federal and governmental unit participation in the financing of a particular Federal award. This Circular applies to all Federal awards, and the provisions for General Services Administration contracts and grants are provided in the Circular on General Services Administration contracts and grants.

6. Definitions. Definitions of key terms used in this Circular are contained in Attachment A, Section 1.

7. Revisions. Agencies responsible for administering programs that involve cost reimbursement contracts, grants, and other agreements with governmental units should amend their regulations to implement the provisions of this Circular.

8. OMB Responsibilities. The Office of Management and Budget (OMB) will review agency regulations and implementation of this Circular, and will provide policy interpretations and samples to assure effective and efficient implementation. Any exception will be subject to approval by OMB. Exceptions will not be made in particular cases where adequate justification is provided.


10. Policy Review Date. OMB Circular A-87 will have a policy review three years from the date of issuance.

11. Effective Date. This Circular is effective as follows:

- For costs charged after October 1, 1967, or otherwise covered by the cost allocation plans described in Attachment C, D and E, the revisions shall be applied from the date of issuance.
- For other costs, the revisions shall be applied to all awards or amendments, including continuations or revisions, made on or after September 1, 1967.

Attachment

OMB CIRCULAR NO. A-87
Revised

COST PRINCIPLES FOR STATE, LOCAL AND INDIAN TRIBAL GOVERNMENTS

TABLE OF CONTENTS

Attachment A - General Principles for Determining Allowable Costs
Attachment B - Selected Issues of Cost
Attachment C - State/Local-Wide Central Service Cost Allocation Plans
Attachment D - Public Assistance OMB Allocation Plans
Attachment E - State and Local Indirect Cost Rate Proposals

GENERAL PRINCIPLES FOR DETERMINING ALLOWABLE COSTS

TABLE OF CONTENTS

A. Purpose and Scope

1. Objectives
2. Policy guides
3. Application

B. Definitions

1. Approval or authorization of the awarding or obligating Federal agency
   2. Award
   3. Awarding agency
   4. Current service cost allocation plan
   5. Claim
   6. Certification
   7. Claimant
   8. Contract
   9. Cost
   10. Cost allocation plan
   11. Cost objective
   12. Federally-recognized Indian tribe
   13. Governmental unit
   14. Greater department or agency
   15. Indirect cost rate proposal
3.

"Climax" means a water demand or water shortage by the governmental unit or greater existing, as a name of right, for payment of interest on a to and from, the acquisition of interpretation of award certain, or other order relating under or relating to the award. A voucher, invoice or other written request for payment that is not a dispute when submitted is not a claim. Appeals, such as those filed by a governmental unit in response to questioned audit costs, are not considered claims until a final management decision is made by the Federal awarding agency.

6. "Coping agency" means the Federal agency responsible for reviewing, evaluating, and approving cost allocation plans or indirect cost proposals developed under this Circular or issued by all Federal agencies. OMB publishes a listing of cognizant agencies.


8. "Acceptance" means a mutually binding legal relationship obligating the writer to furnish the supplies or services (including construction) and the buyer to pay for them. It includes all types of contracts that obligate the government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, contracts include (but are not limited to): awards and notices of award orders or task orders issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance, and, bilateral contract modifications. Contracts do not include grants and cooperative agreements covered by 31 U.S.C. 3302 et seq.

9. "Cost" means an amount as determined on a cash, accrual, or other basis acceptable to the Federal awarding or cognizant agency. It does not include transfers to a general or similar fund.

10. "Cost allocation plan" means general service cost allocation plans, public assistance cost allocation plans, and indirect cost plans. Each of these terms is further defined in this chapter.

11. "Cost objectives" mean a function, organizational subdivision, contract, grant, or other activity for which cost data are needed and for which costs are incurred.

12. "Federally-recognized Indian tribal government" means the governing body or a governmental agency of any Indian tribe, local, state, or other governmental group or community (including any native village as defined in Section 3 of the Alaska Native Claims Settlement Act, 83 Stat. 688) certified by the Secretary of the Interior eligible for the special programs and services provided through the Bureau of Indian Affairs.

13. "Governmental unit" means the entire State, local, or federally-recognized tribal governmental system, including any component thereof. Components of governmental units may function independently of the governmental unit in accordance with the term of the award.

14. "Grantee department or agency" means the component of a State, local, or federally-recognized tribal governmental system which is responsible for the performance or administration of all or some part of a Federal award.

15. "Indirect cost rate proposal" means the documentation presented by a governmental unit or component thereof to substantiate in detail the establishment of an indirect cost rate as described in Attachment B of this Circular.

16. "Local government" means a county, municipality, city, town, township, local public authority, school district, special district, intergovernmental council of governments, defendant or not incorporated as a non-profit corporation under State laws, any other regional or intergovernmental entity, or any agency or instrumentality of a local government.

17. "Public assistance cost allocation plan" means a written description of the procedures that will be used in identifying, measuring and allocating all administrative costs to all of the programs administered or supervised by State public assistance agencies as described in Attachment D of this Circular.

18. "State" means any of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, any territory or possession of the United States, or any agency or instrumentality of a State or the District of Columbia.

C. Basic Guidelines

2. Factors affecting allowability of costs. To be allowability under Federal awards, costs must meet the following general criteria:

a. Be necessary and reasonable for proper and efficient performance and administration of Federal awards.

b. Be allocable to Federal awards under the provisions of this Circular.

c. Be authorized or not prohibited under State or local laws or regulations.

d. Be supported by such evidence or other documentation as are necessary to show the amount of the cost and the relationship of the cost to the work performed under the award.

e. Be consistent with policies, regulations, and procedures that apply uniformly to both Federal awards and other activities of the governmental unit.

f. Be severable. A cost unit may not be assigned to a Federal award as a direct cost if any other cost incurred for the same purpose in like circumstances has been excluded from the Federal award as an indirect cost.

g. Except as otherwise provided for in this Circular, be determined in accordance with generally accepted accounting principles.

h. Not be included as a cost or used to meet cost sharing or matching requirements of any other Federal award to either its current or a prior period, except as specifically provided by Federal law or regulation.

i. Be the net of all applicable credits.

j. Be adequately documented.

2. Reasonable costs. A cost is reasonable if, in its nature and amount, it does not exceed what would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost. The question of reasonableness is particularly important when governmental units or components are predominantly federally-funded. In determining reasonableness of a given cost, consideration shall be given to:

a. Whether the cost is of a type generally recognized as necessary and necessary for the operation of the governmental unit or the performance of the Federal award.
II. Required Certifications. Each cost allocation plan or indirect cost rate proposal required by Attachments C and D must comply with the following:

1. No proposal to establish a cost allocation plan or an indirect cost rate, whether submitted to a Federal agency or submitted on the governmental unit's own behalf, shall be acceptable unless such costs have been certified by the governmental unit using the Certificates of Cost Allocation Plan or Certificates of Indirect Costs as set forth in Attachments C and D. The certification must be signed on behalf of the governmental unit by an individual at a level no lower than chief financial officer of the governmental unit that submits the proposal or component covered by the proposal.

2. No cost allocation plan or indirect cost rate shall be approved by the Federal Government unless the plan or rate proposal has been certified. Where it is necessary to establish a cost allocation plan or an indirect cost rate and the governmental unit has not submitted a certified proposal for establishing such a plan or rate or in accordance with the requirement, the Federal Government may either disallow all indirect costs or unilaterally establish such a plan or rate. Once a plan or rate is thus established, the entity shall be considered to have received the same for the purpose of any further proposals or applications for reimbursement.

Attachment B  SELECTED ITEMS OF COST

TABLE OF CONTENTS

1. Accounting
2. Advertising and public relations costs
3. Advisory council
4. Alcohol beverages
5. Audit services
6. Automatic electronic data processing
7. Bad debts
8. Banking costs
9. Budgeting
10. Communications
11. Compensation for personal services
   a. Salaries
   b. Wages
   c. Unemployment costs
12. Contingencies
13. Contributions and donations
14. Defense and prosecution of criminal and civil proceedings, and claims
15. Depreciation and use allowances
16. Duplicating services
17. Employee awards, health, and welfare costs
18. Entertainment
19. Equipment and other capital expenditures
20. Fringe benefits
21. Fixed asset and investment investments
22. Capital outlays on disposition of unuseable property and other capital assets and administrative realization of Federal programs
23. General government expenses
24. Subsidies
25. Investments and indemnification
26. Interest
27. Lobbying
28. Maintenance, operation, and repairs
29. Materials and supplies
30. Membership subscriptions, and professional entities
31. Motor pools
32. Pre-award costs
33. Professional services costs
34. Proprietary costs
35. Publications and printing costs
36. Public relations activities
37. Reprogramming costs
38. Rental costs
39. Taxes
40. Training
41. Travel costs
42. Undirectable costs under Federal agreements

Sections 1 through 42 provide principles to be applied in establishing the allowability or nonallowability of certain items of cost. These principles apply whether a cost is treated as direct or indirect. A cost is allowable for Federal reimbursement only in the extent of benefits received by Federal awards and in accordance with the general policies and principles stated in Attachment A to this Circular. Failure to mention a particular item of cost in this section is not intended to imply that it is either allowable or nonallowable; rather, determination of allowability in such cases should be based on the terms and conditions provided for similar or related items of cost.

1. Accounting. The cost of establishing and maintaining accounting and other information systems is allowable.

2. Advertising and public relations costs.
   a. The term "advertising costs" includes the costs of advertising media and auxiliary administrative costs. Advertising media include magazines, newspapers, radio and television programs, direct mail, exhibits, and the like.
   b. The term "public relations" includes community relations and items that advertise or publicize activities dedicated to maintaining the image of the governmental unit or maintaining or improving understanding and favorable relations with the community or public at large or any segment of the public.

3. Contributions and donations.
   a. Advertising costs are allowable only when incurred for the procurement of personal, the procurement of goods and services, the disposal of surplus materials, and other expenses incurred on a reasonable basis as specified in the general management common rules.
   b. Public relations costs are allowable when:
(4) The annual base may be used only for those types of leave for which a liability as defined by Generally Accepted Accounting Principles (GAAP) exists when the leave is earned. When a governmental unit uses the annual base of accounting in accordance with GAAP, allowable leave costs are the lesser of the amount accrued or funded.

(5) The cost of fringe benefits in the forms of employee contributions or expenses for social security; employees’ life, health, unemployment and workers’ compensation insurance (except as excluded in sections 22, Assurance and Mandate); sick leave; and other similar benefits are allowable, provided such benefits are provided under established written policies. Such benefits, whether paid as a cash refund or as direct costs, shall be allowed to Federal and/or all other activities in a manner consistent with the terms of benefits attributable to the individual or group of employees whose salaries and wages are comparable to such Federal or other activities.

5. Pension plan costs. Pension plan costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method as adopted with transmitted written policies of the governmental unit.

(1) For pension plans financed on a pay-as-you-go method, allowable costs will be limited to those representing actual payments to insurers or their beneficiaries.

(2) Pension costs calculated using an actuarial cost-based method recognized by GAAP are allowable for a given fiscal year if they are funded for that year within six months after the end of that year. Costs funded after the six month period (or a later period agreed to by the cognizant agency) are allowable in the year funded. The cognizant agency may agree to an extension of the six month period if an appropriate adjustment is made to compensate for the timing of the changes in the Federal Government and related Federal and/or governmental unit’s contributions to the pension funds. Adjustments may be made by cash refund, reduction in current year’s pension costs, or other equitable procedures to compensate the Federal Government for the time value of Federal contributions in excess of contributions to the pension fund.

(3) Amounts funded in excess of the actuarially determined amount for a fiscal year may be used as the government’s contribution in a future period.

5. When a governmental unit contributes to an acceptable actuarial cost method, an acceptable actuarial cost method is determined by GAAP, and funds pension costs in accordance with this method, the unallowed liability at the time of conversion shall be allowable if amortized over a period of years not in excess of 25 years in accordance with GAAP.

(5) The Federal Government shall receive an equitable share of any net surplus derived from pension funds (including earnings thereon) which revert or are paid to the governmental unit in the form of a refund, withdrawal, or other credit.

C. Post-retirement health benefits. Post-retirement health benefits (PREH) costs are costs of health insurance or health services not included in a pension plan covered by subsection A. For plans in operation, dependent, issued, and mature, PREH costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with established written policies of the governmental unit.

(1) For PREH based on a pay-as-you-go method, allowable costs will be limited to those representing actual payments to insurers or their beneficiaries.

(2) PREH costs calculated using an actuarial cost method recognized by GAAP are allowable if they are funded for that year within six months after the end of that year. Costs funded after the six month period (or a later period agreed to by the cognizant agency) are allowable in the year funded. The cognizant agency may agree to an extension of the six month period if an appropriate adjustment is made to compensate for the timing of the changes in the Federal Government and related Federal and/or governmental unit’s contributions to the PREH fund. Adjustments may be made by cash refund, reduction in current year’s PREH costs, or other equitable procedures to compensate the Federal Government for the time value of Federal contributions in excess of contributions to the PREH fund.

(3) Amounts funded in excess of the actuarially determined amount for a fiscal year may be used as the government’s contribution in a future period.

(4) When a governmental unit contributes to an acceptable actuarial cost method and funds PREH costs in accordance with this method, the unallowed liability at the time of conversion shall be allowable if amortized over a period of years not in excess of 25 years in accordance with GAAP, or, if no such GAAP period exists, over a period negotiated with the cognizant agency.

(5) To be allowable in the current year, the PREH costs must be paid either (a) An insurer or other benefits provider as current year costs or premiums, or

(b) In an amount to maintain a trust fund or reserve for the sole purpose of providing post-retirement benefits to retirees and other beneficiaries.

(6) The Federal Government shall receive an equitable share of any net surplus derived from the governmental unit in the form of a refund, withdrawal, or other credit.

b. Severance pay.

(1) Payments in addition to regular salaries and wages made to workers whose employment is being terminated are allowable to the extent that, in each case, they are required by (a) law, (b) employee-employee agreement, or (c) established written policy.

(2) Severance payments (but not necessarily) associated with normal transfer are allowable. Such payments shall be allowable to all activities of the governmental unit as an incident cost.

(3) Alternative or mass severance pay will be considered on a case-by-case basis and is allowable only if approved by the cognizant Federal agency.

C. Support of salaries and wages. These standards regarding time distribution are in addition to the standards for payroll documentation.

(1) Changes in Federal awards for salaries and wages, whether treated as direct or indirect costs, will be based on payroll documentation in accordance with generally accepted practice of the governmental unit and approved by a responsible official(s) of the governmental unit.

(2) No further documentation is required for the salaries and wages of employees who work in a single indirect cost pool.

(3) Where employers are required to work mainly on a single Federal award or cost objective, charges for their salaries and wages will be supported by periodic contributions
b. Legal expenses required in the administration of Federal programs are allowable. Legal expenses for prosecution of claims against the Federal Government are not allowable.

c. Depreciation and use allowances.

1. Depreciation and use allowances are based on the estimated cost of the asset. The estimated cost of the asset is the amount that would reasonably be expected to be paid by a prudent yet not particularly aggressive buyer in a normal arm's length transaction. The estimated cost of the asset includes the fair market value of the asset. Depreciation and use allowances are based on an estimate of the asset's estimated useful life. The estimated useful life of an asset is the period during which the asset is expected to provide service or perform the function for which it was acquired.

2. Depreciation and use allowances are based on the estimated cost of the asset. The estimated cost of the asset includes the fair market value of the asset. Depreciation and use allowances are based on an estimate of the asset's estimated useful life. The estimated useful life of an asset is the period during which the asset is expected to provide service or perform the function for which it was acquired.

3. Depreciation and use allowances are based on the estimated cost of the asset. The estimated cost of the asset includes the fair market value of the asset. Depreciation and use allowances are based on an estimate of the asset's estimated useful life. The estimated useful life of an asset is the period during which the asset is expected to provide service or perform the function for which it was acquired.

4. Depreciation and use allowances are based on the estimated cost of the asset. The estimated cost of the asset includes the fair market value of the asset. Depreciation and use allowances are based on an estimate of the asset's estimated useful life. The estimated useful life of an asset is the period during which the asset is expected to provide service or perform the function for which it was acquired.
(1) "Facilities" means land and buildings or any portion thereof, equipment individually or collectively, or any other tangible or intangible asset, wherever located, and whether owned or leased by the governmental unit.

(2) "The facility" means all necessary facilities that are necessary to the governmental unit's current needs.

(3) "Idle capacity" means the unused capacity of partially used facilities. It is the difference between (a) that which is necessary, minus (b) where at least 100 percent of any fixed capital outlay on a piece of property is being used in a one-time basis, less operating expenses resulting from time has for repairs, repairs, maintenance, replacement, etc., and other actual delays and (b) the extent to which the facility was actually used during the accounting period. A fixed asset basis should be used if it can be shown that the amount of usage would normally be expected for the type of facility involved.

(4) "Cost of idle facilities or idle capacity" means costs such as maintenance, repair, leasing, rent, and other related costs, e.g., insurance, interest, and depreciation, which are allowable.

b. The costs of idle facilities are unavailable except to the extent that:
(1) They are necessary in the normal course of business;
(2) Although not necessary to meet fluctuations in workloads, they were necessary when acquired and are now idle because of changes in program requirements, efforts to achieve more economic operations, reorganization, termination, or other causes which could not be reasonably foreseen. Under the exclusion found in this section, costs of idle facilities are allowable for a reasonable period of time, ordinarily not to exceed one year, depending on the initiative taken to use, lease, or dispose of such facilities.

(5) The costs of idle capacity are actual costs of doing business and are a factor in determining the true cost of running a governmental service. "Idle capacity" means that the capacity is available, that the activity is necessary, that it is available, and that it is available.

(6) Insurance and indemnification:
(a) Costs of insurance required or approved and maintained, pursuant to the Federal award, are allowable.
(b) Costs of other insurance in connection with the general conduct of activities are allowable subject to the following limitations:
(1) Types and extent of coverage are in accordance with the governmental unit's policy and actual financial condition.
(2) Costs of insurance or payments to any insurer covering the risk of loss of, or damage to, Federal Government property are unavailable except to the extent that the awarding agency has specifically required or approved such coverage.
(c) Actual losses which could be covered by permanent insurance (through a self-insurance program or otherwise) are unavailable, unless expressly provided for in the Federal award or as described below. However, the Federal Government will participate in actual losses of a self-insurance fund that are in excess of reserves. Costs incurred because of losses not covered under permanent insurance coverage are reimbursed to the awarding agency to the extent that the Federal Government has been credited for such losses. The Federal Government is not required to provide any reimbursement for self-insurance funds.

d. Contributions to certain self-insurance programs including workers compensation, unemployment compensation, and retirement pay are allowable subject to the following provisions:
(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed and insurance (including premium) would have been purchased to cover the risk. However, provision for known or reasonably anticipated self-insured liabilities, which do not have costs (on an annual basis) to be incurred, shall not exceed the discounted present value of the liability. The rates and premiums for self-insurance would have been allowed.
(e) Contributions to a reserve for certain self-insurance programs including workers compensation, unemployment compensation, and retirement pay are allowable subject to the following provisions:
(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed and insurance (including premium) would have been purchased to cover the risk. However, provision for known or reasonably anticipated self-insured liabilities, which do not have costs (on an annual basis) to be incurred, shall not exceed the discounted present value of the liability. The rates and premiums for self-insurance would have been allowed.
(f) Contributions to a reserve for certain self-insurance programs including workers compensation, unemployment compensation, and retirement pay are allowable subject to the following provisions:
(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed and insurance (including premium) would have been purchased to cover the risk. However, provision for known or reasonably anticipated self-insured liabilities, which do not have costs (on an annual basis) to be incurred, shall not exceed the discounted present value of the liability. The rates and premiums for self-insurance would have been allowed.
(g) Contributions to a reserve for certain self-insurance programs including workers compensation, unemployment compensation, and retirement pay are allowable subject to the following provisions:
(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed and insurance (including premium) would have been purchased to cover the risk. However, provision for known or reasonably anticipated self-insured liabilities, which do not have costs (on an annual basis) to be incurred, shall not exceed the discounted present value of the liability. The rates and premiums for self-insurance would have been allowed.
(h) Contributions to a reserve for certain self-insurance programs including workers compensation, unemployment compensation, and retirement pay are allowable subject to the following provisions:
(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed and insurance (including premium) would have been purchased to cover the risk. However, provision for known or reasonably anticipated self-insured liabilities, which do not have costs (on an annual basis) to be incurred, shall not exceed the discounted present value of the liability. The rates and premiums for self-insurance would have been allowed.
(i) Contributions to a reserve for certain self-insurance programs including workers compensation, unemployment compensation, and retirement pay are allowable subject to the following provisions:
(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed and insurance (including premium) would have been purchased to cover the risk. However, provision for known or reasonably anticipated self-insured liabilities, which do not have costs (on an annual basis) to be incurred, shall not exceed the discounted present value of the liability. The rates and premiums for self-insurance would have been allowed.
commercialization of Federal awards, less costs related to normal taxes and fees, are allowable.

38. Rental costs.
   a. Subject to the limitations described in Subsections h. through j. of this section, rental costs are allowable to the extent that the costs are reasonable in light of such factors as current costs of comparable property, if any, market conditions in the area, availability elsewhere and the type, life expectancy, condition, and value of the property leased.
   b. Rental costs under sublets and leasehold improvements are allowable only up to the amount that would be allowable had the governmental unit continued to own the property.
   c. Rental costs under leases where the lessee is able to control or substantially influence the decisions of the other (1) are allowable only up to the amount that would be allowable had title to the property remained in the governmental unit. For this purpose, less than one-year lease periods include, but are not limited to, leases where:
      (i) One party to the lease is able to control or substantially influence the decisions of the other
      (ii) Both parties are parts of the same governmental unit;
   d. Rental costs under leases which are required to be treated as capital leases under GAAP are allowable only up to the amount that would be allowable had the governmental unit purchased the property on the date the lease agreement was executed. This amount would include expenses such as depreciation or use allowance, maintenance, and insurance.
   e. The provisions of Financial Accounting Standards Board Statement 13 shall be used to determine whether a lease is a capital lease. Interest costs related to capital leases are allowable to the extent they exceed the interest costs that would have been paid under an overall basis, that is the governmental unit's practice to make capital lease payments.
   f. Where a governmental unit has entered into long-term leases or other contracts, the amounts allowed under the provisions of this section shall be considered in the determination of the amount of allowable costs.
39. Taxes.
   a. Taxes that a governmental unit is legally required to pay are allowable, except for self-assessed taxes that disproportionately affect Federal programs or charges in tax policies that disproportionately affect Federal programs. This provision becomes effective for taxes paid during the governmental unit's first fiscal year beginning on or after January 1, 1986, and applies thereafter.
   b. Gasoline taxes, motor vehicle fees, and other taxes that are not to be used for the benefits provided to the Federal Government are allowable.
   c. This provision does not relieve the authority of Federal agencies to identify taxes where Federal participation is inappropriate. Where the identification of the purpose of the self-assessed taxes that would require an allowance amount of offset, the cognizant agency may accept a reasonable approximation thereof.
40. Training. The cost of training provided for employee development is allowable.
41. Travel costs.
   a. General. Travel costs are allowable for expenses for transportation, lodging, subsistence, and related items incurred by employees traveling on official business. Such costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to all employees, and results in charges consistent with those normally allowed in like circumstances in non-Federal-sponsored activities.
   b. Lodging and subsistence. Costs incurred by employees and officers for travel, including costs of lodging, other services, and incidental expenses, shall be considered reasonable and allowable only to the extent such costs do not exceed charges normally allowed by the governmental unit in its regular operations as a result of the governmental unit's policy. In the absence of a written governmental unit policy regarding travel costs, the rates and amounts established under subchapter 1 of Chapter 57 of Title 5, United States Code, "Travel and Subsistence Expenditures; Mileage Allowances," or by the Administrator of General Services, or by the President (for his domestic travels) to any provisions of such subchapter shall be used as guidance for travel under Federal awards.
42. Travel Expenses of Government Contractors.
   a. Commercial air travel. Airfare costs in excess of the customary standard (coach or equivalent) airfare, are allowable except when such accommodations would require commercial air travel, require travel during unreasonable hours, unusually prolonged travel, greatly increase the duration of the flight, result in increased costs that would offset transportation savings, or offer accommodations not reasonably adequate for the medical needs of the traveler. Where a governmental unit can reasonably demonstrate that the travel agency either the inappropriateness of customary standard airfare or Federal Government contract airfare for individual trips or, on an overall basis, that it is the governmental unit's practice to make convention use of such services, specific determinations of unreasonableness will generally not be questioned by the Federal Government, unless a pattern of abuse is detected.
   b. Travel by other than commercial carrier. Cost of travel by governmental unit-owned, leased, or chartered aircraft, as used in this section, includes the cost of lease, charter, operation (including personal costs), maintenance, depreciation, interest, insurance, and other related costs. Costs of travel by governmental unit-owned, leased, or chartered aircraft are allowable only to the extent they exceed the cost of allowable commercial air travel, as provided for in subsection c.
43. Underpayment of costs under Federal agreements. Any excess costs over the Federal contribution under the award agreement are unallowable under other award agreements.

Notwithstanding the provisions of section 33, travel costs of officials covered by that section, where specifically related to Federal awards, are allowable with the prior approval of a grantor agency.
show operations (including the central service activities of the governmental unit) whether or not they are shown as benefiting from central service functions; a copy of the Comprehensive Annual Financial Report (or a copy of the Executive Budget if budgeted costs are being proposed to support the allowable costs of each central service activity included in the plan); and a certification (see subsection 4.) that the plan was prepared in accordance with this Circular, contained only allowable costs, and was prepared in a manner that treated similar costs consistently among the various Federal awards and between Federal and non-Federal awards/activities.

2. Allocation of central services. For each allocated central service, the plan must also include the following: a brief description of the service; an identification of the unit receiving the service and the operating agencies receiving the service; the basis of expense included in the cost of the service; the method used to distribute the cost of the service to benefiting agencies; and a narrative schedule showing the allocation of each service to the specific benefiting agencies. If any self-insurance funds or fringe benefit costs are noted as allocated (other than billed central services, documentation discussed in subsection 3.b. and e.) shall also be included.

3. Billed services. a. General. The information described below shall be provided for all billed central services, including internal service funds, self-insurance funds, and fringe benefit funds.

b. Internal service funds. For each internal service fund or similar activity with an operating budget of $5 million or more, the plan shall include: a brief description of such service; a balance sheet for each fund based on independent accounts maintained in the governmental unit's accounting system; a revenue/expenses statement, with revenue broken down into self-insurance revenues, e.g., regular billings, interest earned, etc., a listing of all non-operating transfers (as defined by Generally Accepted Accounting Principles (GAAP)) into and out of the fund; a description of the procedures (methodology) used to charge the costs of each service to users, including billing rates and a statement of contract rates and, a schedule showing total revenues (including imputed revenues) generated by the service to the allowable costs of the service, a determination under Circular 9 with an explanation of how variances will be handled. If revenues shall consist of all revenues generated by the service, including billed and imputed revenues. If some users were not billed for the service (or were not billed at all for the cost of the service), a schedule showing the full imputed revenues associated with those costs shall be provided. Expenses shall be broken out by object class (e.g., salaries, supplies, etc.).

c. Self-insurance funds. For each self-insurance fund, the plan shall include: the fund balance sheet; a statement of revenue and expenses including a summary of billings and claims paid by agency; a listing of all non-operating transfers into and out of the fund; the types of risks covered by the fund (e.g., automobile liability, workers' compensation, etc.); an explanation of how the level of fund contributions are determined, including a copy of the current annual actuarial report (with the actuarial assumptions used); and a description of the procedures used to charge or allocate fund contributions to beneficiaries. Reserve levels (in excess of claims) (1) submitted but not adjusted, and (2) incurred but not adjusted must be identified and explained.

4. Fringe benefit costs. For fringe benefit costs, the plan shall include: a listing of fringe benefit costs provided to covered employees, and the overall annual cost of each type of benefit; current fringe benefit policies and procedures must be used to charge or allocate the costs of the benefits to beneficiaries. In addition, the plan must include a copy of the current actuarial report (including the actuarial assumptions); the plan must be submitted and a schedule showing the value of the benefit costs associated with the plan.

4. Required certifications. Each central service cost allocation plan will be accompanied by a certification in the following form:

CERTIFICATE OF COST ALLOCATION PLAN

This is to certify that I have reviewed the cost allocation plans submitted herewith and to the best of my knowledge and belief:

(1) All costs included in this proposal (delineated data) to establish cost allocations or billing rates for (identically priced) services (costs covered by the state) are allowable in accordance with the requirements of OMB Circular A-87, "Cost Principles for State and Local Governments," and the Federal awards to which they apply. Unallowable costs have been adjusted for in allocating costs as delineated in the cost allocation plans.

(2) All costs included in this proposal are properly allocable in Federal awards on the basis of a benefit and cost relationship between the services rendered and the awards to which they are allocable in accordance with applicable requirements. Further, the same costs that have been treated as allowable costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently. I declare that the foregoing is true and correct.

Governmental Unit:

Signature:

Name of Official:

Title:

Date of Issuance:

F. Negotiation and Approval of Central Service Plans. 1. All proposed central service cost allocation plans that are required to be submitted will be reviewed, negotiated, and approved by the Federal awarding agency or its delegated agent. The originating agency will review the proposal within six months after receipt of the proposal and either negotiate or approve the plan or advise the governmental unit of the additional documentation needed to support the proposal or for the changes required to make the proposal acceptable. Once an agreement with the governmental unit has been reached, the
Attachment E

STATE AND LOCAL INDIRECT COST RATE PROPOSALS

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  6. Fixed rate
  7. Proportional rate
  8. Final rate
  9. Base period
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A. General,
  1. Indirect costs are those that have been incurred for common or joint purposes. These costs benefit more than one activity and cannot be easiy identified with a particular final cost objective without effect disproportionate to the results achieved. After direct costs have been determined and assigned directly to Federal awards and other activities as appropriate, indirect costs are those remaining to be allocated to be indirect cost objective. A cost may not be allocated to a Federal award at an indirect cost if any other cost incurred for the same purpose, in like circumstances, has been assigned to a Federal award as a direct cost.
  2. Indirect costs include (a) indirect costs originating in each department or agency of the governmental unit carrying out Federal awards and (b) the costs of central governmental services distributed through the central service.
allowable.

2. The distribution base may be (1) total direct costs (including capital expenditures and other disallowing items, such as payroll through funds, major equipment, etc.), (2) direct salaries and wages, or (3) another base which results in an equitable distribution.

3. Multiple allocation bases method.
   a. Where a governmental agency's indirect costs benefit its major functions in varying degrees, each base shall be allocated proportionately by the use of a separate allocation base. Each allocation shall be allocated to the indirect cost function benefitting from a share of the base.
   b. The cost groupings should be established in such manner as to permit the allocation of these costs to the base or bases which they benefit and in terms of the allocation base which best approximates the relative benefits provided to each function. The number of separate groupings should be kept within practical limits, taking into consideration the materiality of the programs involved and the degree of precision desired.
   c. An allocation method may be taken into account in selecting the bases to be used in allocating the expenses in each grouping to benefited functions. When an allocation can be made by assignment of a cost grouping directly to the function benefited, the allocation shall be made in that manner. When the expenses in a grouping are shared equally among the functions, the allocation should be made through the use of a selected base which produces results that are equitable to both the Federal Government and the governmental unit. In general, any cost element or related factor associated with the governmental unit's activity is potentially adaptable for use as an allocation base provided that: (1) it can readily be expressed in terms of dollars or other quantitative measure (total direct costs, direct salaries and wages, staff hours used, square feet used, hours of work, number of activities, population served, etc.); and (2) it is common to the benefited functions during the base period.
   d. Except where a special indirect cost rate is required in accordance with subsection 6, the separate groupings of indirect costs allocated to each major function shall be aggregated and treated as a common pool for the functions. The cost in the common pool shall be distributed to individual Federal awards in accordance with the distribution of a single indirect cost rate.

4. The distribution base used in computing the indirect cost rate for each function may be (1) total direct costs (including capital expenditures and other disallowing items, such as payroll through funds, major equipment, etc.), (2) direct salaries and wages, or (3) another base which results in an equitable distribution. An indirect cost rate should be developed for each separate indirect cost pool developed. The rate in each case should be stated as the percentage relationship between the particular indirect cost pool and the distribution base identified with that pool.

5. Special indirect cost rates.
   a. In some instances, a single indirect cost rate for all activities of a governmental department or agency or for each major function of the agency may be appropriate. It may not be appropriate to allocate the indirect costs applicable to a particular program or group of programs. The factors may include the physical location of the work, the level of administrative support required, the size of the facilities or other resources employed, the organizational arrangements used, and any coordination thereof. Where a particular award carried on in an environment which appears to present a significantly different level of indirect costs, provisions should be made for a separate indirect cost pool applicable to that award. The separate indirect cost pool should be developed during the course of the regular allocation process, and the benchmark cost rate resulting therefrom should be used, provided that: (1) the cost differs significantly from the rates which would have been developed under subsection 2. and 3. and (2) the award to which the rate would apply is material to the award.
   b. Although this Circular adopts the concept of the full allocation of indirect costs, there are some Federal awards which require the reimbursement of certain indirect costs. Where such restrictions exist, it may be necessary to develop a special rate for the awarded award. Where a "prorated rate" is required, the procedure for developing a non-rated rate will be used except for the additional step of the allocation from the indirect cost pool whose costs for which the award prohibits reimbursement.

6. Substitution of Indirect Cost Rate Proposals.
   a. All departments or agencies of the governmental unit claiming to claim indirect costs under Federal awards must prepare an indirect cost rate proposal and related documentation to support those claims. The proposal and related documentation must be retained for audit in accordance with the internal control requirements contained in the Circular Rules.
   b. A governmental unit for which a cognizant agency assignment has been specifically designated must submit an indirect cost rate proposal to its cognizant agency. The Office of Management and Budget (OMB) will periodically evaluate the size of governmental units identifying the appropriate Federal organization. A cognizant agency for all governmental units or agencies not identified by OMB will be determined based on the Federal agency providing the largest segment of Federal funds. In those cases, a governmental unit must develop an indirect cost proposal in accordance with the requirements of this Circular and submit the proposal and related supporting documentation for audit. These governmental units are not required to submit their proposals unless they are specifically requested to do so by the cognizant agency. Where a local government only receives funds as a sub-contractor, the primary recipient will be responsible for negotiating and/or measuring the sub-recipient's claim.
   c. Each Indian tribal government desiring reimbursement of indirect costs must submit its indirect cost proposal to the Department of the Interior (the cognizant Federal agency).
   d. Indirect cost proposals must be developed (and, when required, submitted) within sixty months after the close of the governmental unit's fiscal year, unless an exception is approved by the cognizant Federal agency. If the proposed central service cost allocation plan for the same period has not been approved by the cognizant Federal agency at the time the indirect cost proposal is prepared including an amount for central services that is based on the Indian Federally-approved central service cost allocation plan, the difference between these central service amounts and the amounts ultimately approved will be compensated for by an adjustment in a subsequent period.
allocation methodology should be developed, documented, 
reviewed for audits, or submitted, or approved, to the 
appropriate agency for review, negotiation, and approval.

4. Appeals. If a dispute arises in the negotiation of an 
indirect cost rate (or other rate) between the grantor agency 
and the governmental unit, the dispute shall be resolved in 
accordance with the applicable procedures of the grantor agency.

5. Collection of unallowable costs and reimbursements 
payments. Claims specifically identified as unallowable and 
charged to Federal awards either directly or indirectly will be 
reimbursed (including interest chargeable in accordance with 
applicable Federal agency regulations).

6. OMB assistance. To the extent that problems are 
encountered among the Federal agencies and/or governmental 
units in connection with the allocational and approval process, 
OMB will lend assistance, as required, to resolve such problems 
in a timely manner.
October 7, 1997

Jean B. West, Grants Officer
U.S. Department of Commerce, NOAA
Grants Operations Branch, ATTN: OA321
1325 East West Highway, Room 5416 SSMC2
Silver Spring, MD 20910-3283

RE: U.S. Department of Commerce Agreement No. NA47RZ0477
"Big Island Mining (XAT-7) and Atchafalaya Sediment Delivery (PAT-2)"

Dear Ms. West:

Enclosed are two signed originals of Form CD-451 for the above referenced award
amendment. Also enclosed is our proposed Indirect Cost Rate. The approved rate will be
forwarded to you upon receipt.

Thank you for your assistance in this matter.

Sincerely,
Cheryl Y. Bennett
Contracts & Grants Administrator

CYB/vs

Enclosures

c: Verlie Wims, Fiscal Officer
Van Cook
Phyllis Darenbourg
AMENDMENT TO
FINANCIAL ASSISTANCE AWARD

RECIPIENT NAME: Louisiana Department of Natural Resources

ADDRESS: P.O. Box 94396

CITY, STATE, ZIP CODE: BATON ROUGE, LOUISIANA 70804

DEPARTMENT OF COMMERCE OPERATING UNIT: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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This additional funds in the amount of $1,656,101, for the project entitled 'Coastal Wetland Planning, Protection, and Restoration Act (PL 101-446) Big Island Mining (X-AT-7) and Atchafalaya Sediment Delivery (PAT-2)' as requested in the Recipient's application dated April 28, 1997, and revision by letters dated August 11, and September 24, 1997, incorporated by reference.

2. To revise and add NOAA Administrative Special Award Conditions.

This Amendment approved by the Grants Officer is issued in triplicate and constitutes an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Amendment provisions checked below and attached, as well as previous provisions incorporated into the Award. Upon acceptance by the Recipient, two signed Amendment documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned by the Recipient within 15 days of receipt, the Grants Officer may declare this Amendment null and void.

[ ] Special Award Conditions (ATTACHMENT B)
[ ] Administrative (ATTACHMENT A)

[ ] Line Item Budget (ATTACHMENT A)
[ ] Other(s): CMB Circular A-133 revised June 24, 1997

SIGNATURE OF DEPARTMENT OF COMMERCE GRANTS OFFICER

NOAA GRANTS OFFICER

DATE: SEP 25

SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL

DATE: 11/8/97
**BUDGET INFORMATION — Construction Programs**

**NOTE:** Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified.

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<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Project inspection fees</td>
<td>$134,403</td>
<td>$0.00</td>
<td>$134,403</td>
</tr>
<tr>
<td>Site work</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Demolition and removal</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Construction</td>
<td>$1,465,338</td>
<td>$0.00</td>
<td>$1,465,338</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>UNTOTAL</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Indirect costs (sum of lines 1-11)</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>UNTOTAL</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Project (program) Income</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>TOTAL PROJECT COSTS (subtract #15 from #14)</td>
<td>$1,599,741</td>
<td>$0.00</td>
<td>$1,599,741</td>
</tr>
</tbody>
</table>

**FEDERAL FUNDING**

For Federal assistance requested, calculate as follows: Enter eligible costs from line 16c Multiply .73,0042% Enter resulting Federal share.

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$1,599,741</td>
<td>$0</td>
</tr>
<tr>
<td>RNF Admin. = $884,197</td>
<td>Total = $1,465,338</td>
<td></td>
</tr>
</tbody>
</table>

Authorized for Local Reproduction

Standard Form 424D (4-48) Prepared by OMB Circular A-102
BUDGET INFORMATION — Construction Programs

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified.

<table>
<thead>
<tr>
<th>COST CLASSIFICATION</th>
<th>Grant Amendment</th>
<th>b. Costs Not Allowable for Participation</th>
<th>c. Total Allowable Costs (Column a + b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative and legal expenses</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>and, structures, rights-of-way, appraisals, etc.</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>relocation expenses and payments</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>architectural and engineering fees</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>legal, architectural and engineering fees</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>plot inspection fees</td>
<td>Phase II $ 72,484</td>
<td>$ .00</td>
<td>$ 72,484</td>
</tr>
<tr>
<td>materials and labor</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>skill and labor</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>submittal and removal</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>instruction</td>
<td>Phase II $ 575,340</td>
<td>$ .00</td>
<td>$ 575,340</td>
</tr>
<tr>
<td>setup</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>miscellaneous</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>site improvements (sum of lines 1-14)</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>special purpose (program income)</td>
<td>$ .00</td>
<td>$ .00</td>
<td>$ .02</td>
</tr>
<tr>
<td>ALL PROJECT COSTS (subtract #15 from #14)</td>
<td>$ 647,824</td>
<td>$ .00</td>
<td>$ 647,824</td>
</tr>
</tbody>
</table>

FEDERAL FUNDING

Total Federal assistance requested, calculate as follows:
Federal assistance from line 16c: Multiply $ 72,484 by the Federal percentage share (Phase I = $0, Phase II = $647,824, Phase III = $0).
Federal assistance from line 15b: $ 647,824

TOTAL FEDERAL ASSISTANCE = $ 647,824

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Standard Form 424C (A-39)
ATTACHMENT B
AWARD NO. NA47RX0477
AMENDMENT NO. 2

NOAA ADMINISTRATIVE
SPECIAL AWARD CONDITIONS

(Revise) 1. Accounting Codes:

TPKE300/RHA77D/4113 - $1,178,757 (B1)
TPKE300/RHA77P/4119 - 5 477,344 (A5)
Total - $1,656,101

(Revise) 2. The Project Period for this award is August 1, 1994, through February 28, 1999.

(Revise) 3. The Budget Period for this amendment is October 1, 1997, through February 28, 1999.

(Revise) 4. Since this award requires the Recipient to provide $1,852,464 (26.32%) in project-related matching costs from non-Federal sources, the Recipient must maintain in its official accounting records an accounting for $7,039,365.

(Revise) 5. The access code for this award is 40439.

(Revise) 22. Recipients are hereby notified that they are encouraged, to the greatest extent practicable, to purchase American-made equipment and products with funding provided under this award.

(Add) 26. When issuing statements, press releases, requests for proposals, bid solicitations and other documents describing projects or programs funded in whole or in part with Federal money, all grantees receiving Federal funds, including but not limited to State and local governments and Recipients of Federal research grants, shall clearly state (1) the percentage of the total costs of the project or program which will be financed with Federal money, (2) the dollar amount of Federal funds for the project or program, and (3) percentage and dollar amount of the total...
August 31, 1994

Jean H. West, Chief
Grants Operation Branch
1325 East-West Highway
SSMC2 - OA321- Room 5410
Silver Spring, MD 20910

RE: NOAA Award No. NA47PZ0477

Dear Ms. West:

Enclosed are two (2) signed originals of the above referenced award, as requested in your letter dated August 20, 1994, received in our office August 29, 1994. Also enclosed is a copy of our current approved indirect cost rate.

We appreciate NOAA staff assistance in obtaining approval of this cooperative agreement.

Sincerely,

Cheryl Y. Bennett
Contracts & Grants Administrator

CC: Verlie Wims, Fiscal Officer
    Bill Good, Coastal Restoration Division Administrator
July 28, 1994

Ms. Verlie Wims, Fiscal Officer
State of Louisiana
Department of Natural Resources
P.O. Box 94396
Baton Rouge, LA  70804-9396

Dear Ms. Wims:

Enclosed is a negotiation agreement reflecting an understanding reached between you and Mr. David Buntz of my staff about the indirect cost rates to be used on grants and contracts with the Federal Government.

I have already signed the agreement. Please have the agreement countersigned by a duly authorized representative of your organization. Photocopy the agreement for your files and return the original to me. Please give this matter your immediate attention.

Return the countersigned original agreement as follows:

Mr. John J. Zabretsky, Chief
Cost Policy and Rate Negotiation Branch (R047)
Environmental Protection Agency
Fairchild Building
Washington, D.C. 20460

If you have questions contact David Buntz on (202) 260-2005.

Sincerely yours,

John J. Zabretsky, Chief
Cost Policy and Rate Negotiation Branch

Enclosure
The indirect cost rates contained herein are for use on grants and contracts with the Federal Government to which Office of Management and Budget Circular A-87 applies, subject to the limitations contained in the Circular and in Section II, A below.

### SECTION I: RATES

<table>
<thead>
<tr>
<th>Type</th>
<th>Effective Period</th>
<th>Rate Base</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Division</td>
<td>7/1/94 to 6/30/95</td>
<td>79.09% (a)</td>
</tr>
<tr>
<td>Geological Survey</td>
<td>7/1/94 to 6/30/95</td>
<td>22.01% (a)</td>
</tr>
<tr>
<td>Coastal Management</td>
<td>7/1/94 to 6/30/95</td>
<td>11.86% (a)</td>
</tr>
<tr>
<td>Coastal Restoration</td>
<td>7/1/94 to 6/30/95</td>
<td>22.93% (a)</td>
</tr>
<tr>
<td>Conservation Pipeline</td>
<td>7/1/94 to 6/30/95</td>
<td>16.19% (a)</td>
</tr>
<tr>
<td>Conservation Injection &amp; Mining</td>
<td>7/1/94 to 6/30/95</td>
<td>26.16% (a)</td>
</tr>
<tr>
<td>Mineral Resources</td>
<td>7/1/94 to 6/30/95</td>
<td>30.13% (a)</td>
</tr>
</tbody>
</table>

**Basis for Application**
(a) Direct salaries and wages, including applicable fringe benefit costs.

**Treatment of Fringe Benefits:** Fringe benefits applicable to direct salaries and wages are treated as direct salaries.

### SECTION II: GENERAL

**A. LIMITATIONS:** The rates in this Agreement are subject to any statutory and administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the department/agency or allocated to the department/agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the department/agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct costs.
State of Louisiana  
Department of Natural Resources  
Baton Rouge, LA

(3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the department/agency which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. CHANGES. The fixed rate contained in this agreement is based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in the organizational structure or changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate in this agreement, require the prior approval of the authorized representative of the responsible negotiation agency. Failure to obtain such approval may result in subsequent audit disallowances.

C. THE FIXED RATE contained in this agreement is based on an estimate of the cost which will be incurred during the period for which the rate applies. When the actual costs for such a period have been determined, an adjustment will be made in the negotiation following such determination to compensate for the difference between the cost used to establish the fixed rate and that which would have been used were the actual costs known at the time.

D. NOTIFICATION TO FEDERAL AGENCIES: Copies of this document may be provided to other Federal agencies as a means of notifying them of the agreement contained herein.

E. SPECIAL REMARKS: None

ACCEPTANCE

By the State Agency:

[Signature]

Robert J. Harpaz  
Undersecretary  
LA Dept. of Natural Resources  
August 01, 1994

By the Federal Agency:

[Signature]  
John J. Zabretskey, Chief  
Cost Policy and Rate Negotiation Branch  
U.S. Environmental Protection Agency  
July 28, 1994

Negotiated by: David Buntz  
Telephone: (202) 260-2005
FINANCIAL ASSISTANCE AWARD

DEPARTMENT OF COMMERCE

ACCOUNTING CODE
GRANT COOPERATIVE AGREEMENT

AWARD NUMBER
NA47FD2477

FEDERAL SHARE OF COST
$4,320,800

RECIPIENT'S SHARE OF COST
$1,261,000

TOTAL ESTIMATED COST
$5,791,800

PMT NAME
Louisiana Department of Natural Resources

STREET ADDRESS
P.O. Box 94396, East Baton Rouge Parish

CITY, STATE, ZIP CODE
Baton Rouge, Louisiana 70804

AWARD PERIOD
August 1, 1994, through July 31, 1995

DEPARTMENT OF COMMERCE OPERATING UNIT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

AUTHORITY

PROJECT TITLE
Coastal Weddell Framing, Promotion, and Restoration Act (PL 101-546) Big Island Mining (XAT-7) and Alachafaya Sediment Delivery (PAT-2)

This Award approved by the Grants Officer is issued in triplicate and constitutes an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Award provisions checked below and attached. Upon acceptance by the Recipient, two signed Award documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned by the Recipient within 15 days of receipt, the Grants Officer may declare this Award null and void.

Special Award Conditions (ATTACHMENT C)

Funding Provided by: (ATTACHMENT B)

Administrative X Programmatic

Line Item Budget (ATTACHMENT A)

☐ OMB Circular A-21, Cost Principles for Educational Institutions

☐ OMB Circular A-87, Cost Principles for State and Local Governments

☐ OMB Circular A-110, Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations Uniform Administrative Requirements, dated 11/29/93

☐ OMB Circular A-122 Cost Principles for Nonprofit Organizations

☐ 15 CFR Part 24, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

☐ 15 CFR Part 29a, Audit Requirements for State and Local Governments

☐ 15 CFR Part 29b, Audit Requirements for Institutions of Higher Education and Other Nonprofit Organizations

☐ 48 CFR Part 31, Contract Cost Principles and Procedures

☐ Other:

☐ OMB Circular A-21

☐ OMB Circular A-87

☐ OMB Circular A-110

☐ OMB Circular A-122

☐ 15 CFR Part 24

☐ 15 CFR Part 29a

☐ 15 CFR Part 29b

☐ 48 CFR Part 31

☐ Other:

[Signature]
JAD GRANTS OFFICER

[Signature]
John F. Alas, Secretary

[Signature]
DATE
AUG 26 1994

DATE
August 30, 1994
FINANCIAL ASSISTANCE AWARD

SPENDING AGENCY
Louisiana Department of Natural Resources

ADDRESS
P.O. Box 94936, East Baton Rouge Parish

CITY, STATE, ZIP CODE
Baton Rouge, Louisiana 70894

AWARD PERIOD
August 1, 1994, through July 31, 1996

DEPARTMENT OF COMMERCE OPERATING UNIT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

AUTHORITY

PROJECT TITLE
Oakland Wetland Planning, Protection, and Restoration Act (PL 101-646) Big Island Marsh (XAT-7) and
Abashishay Sediment Delivery (PAT-2)

This Award approved by the Grants Officer is issued in triplicate and constitutes an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Award provisions checked below and attached. Upon acceptance by the Recipient, two signed Award documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned by the Recipient within 15 days of receipt, the Grants Officer may declare this Award null and void.

Special Award Conditions (ATTACHMENT C)

- Department of Commerce Financial Assistance Standard Terms and Conditions (ATTACHMENT C)

- Administrative

- Programmatic

- Line Item Budget (ATTACHMENT A)

- OMB Circular A-21, Cost Principles for Educational Institutions

- OMB Circular A-87, Cost Principles for State and Local Governments

- OMB Circular A-110, Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations Uniform Administrative Requirements, dated 11/29/93

- OMB Circular A-122 Cost Principles for Nonprofit Organizations

- 15 CFR Part 24, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

- 15 CFR Part 24a, Audit Requirements for State and Local Governments

- 15 CFR Part 29b, Audit Requirements for Institutions of Higher Education and Other Nonprofit Organizations


- Other(s):

Approvals

U.S. DEPARTMENT OF COMMERCE

[Signature]

GRANTS OFFICER

[Signature]

JOFA OFFICER

AUG 26 1994

Date

NAME AND SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL

[Signature]

Date

AUGUST 30, 1994
### BUDGET INFORMATION

#### No. Construction Programs

<table>
<thead>
<tr>
<th>Program Function or Activity Number</th>
<th>Estimated Unobligated Funds</th>
<th>New or Revised Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal (c)</td>
<td>Non-Federal (d)</td>
</tr>
<tr>
<td>Basic (XAT-7)</td>
<td>$186,973</td>
<td>$68,777</td>
</tr>
<tr>
<td>Ac. Sediment Cel. (PAT-2)</td>
<td>$83,116</td>
<td>$29,684</td>
</tr>
<tr>
<td>(Both under P.L. 101-646)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>$270,089</td>
<td>$96,461</td>
</tr>
</tbody>
</table>

#### OBJECT Classe Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimated Unobligated Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>$18,667</td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>$9,659</td>
</tr>
<tr>
<td>Travel</td>
<td>$1,648</td>
</tr>
<tr>
<td>Equipment</td>
<td>$2,526</td>
</tr>
<tr>
<td>Supplies (Field Supplies &amp; boat rental)</td>
<td>$3,950</td>
</tr>
<tr>
<td>Contingencies (Engineering &amp; Legal)</td>
<td>$210,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$85,000</td>
</tr>
<tr>
<td>Other (Aerial photography contract)</td>
<td>$5,926</td>
</tr>
<tr>
<td>Total Direct Charges (sum of b-i)</td>
<td>$245,940 $108,743</td>
</tr>
<tr>
<td>Indirect Charges</td>
<td>$7,810 $4,067</td>
</tr>
<tr>
<td>TOTALS (sum of b-j)</td>
<td>$253,750 $112,800</td>
</tr>
</tbody>
</table>

---

Program Income:

- $0

---

*Big Island (XAT-7)*

*Atchafalaya Sed. Delivery (PAT-2)*

Authorized for Local Reproduction 1973-1974
## Budget Information — Construction Programs

<table>
<thead>
<tr>
<th>COST CLASSIFICATION</th>
<th>A. Total Cost</th>
<th>B. Cost Allowable for Participation</th>
<th>C. Total Allowable Costs (Column A x B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Administrative and legal expenses</td>
<td>$110,000</td>
<td>$110,000</td>
<td>$110,000</td>
</tr>
<tr>
<td>2. Land, structure, rights-of-way, appraisals, etc.</td>
<td>$28,000</td>
<td>$28,000</td>
<td>$28,000</td>
</tr>
<tr>
<td>3. Relocation expenses and payments</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>4. Architectural and engineering fees</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>5. Other architectural and engineering fees</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>6. Project inspection fees</td>
<td>$129,950</td>
<td>$129,950</td>
<td>$129,950</td>
</tr>
<tr>
<td>7. Site work</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>8. Demolition and removal</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>9. Construction</td>
<td>$3,556,574</td>
<td>$3,556,574</td>
<td>$3,556,574</td>
</tr>
<tr>
<td>10. Equipment</td>
<td>$266,274</td>
<td>$266,274</td>
<td>$266,274</td>
</tr>
<tr>
<td>11. Miscellaneous (Monitoring Phase III: $217,762 Total)</td>
<td>$217,762</td>
<td>$217,762</td>
<td>$217,762</td>
</tr>
<tr>
<td>12. SUBTOTAL</td>
<td>$4,475,280</td>
<td>$4,475,280</td>
<td>$4,475,280</td>
</tr>
<tr>
<td>13. Contingencies (sum of lines 1-12)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>14. SUBTOTAL</td>
<td>$4,475,280</td>
<td>$4,475,280</td>
<td>$4,475,280</td>
</tr>
<tr>
<td>15. Project (program) Income</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>16. TOTAL PROJECT COSTS (subtotal #15 from #14)</td>
<td>$4,475,280</td>
<td>$4,475,280</td>
<td>$4,475,280</td>
</tr>
</tbody>
</table>

**FEDERAL FUNDING**

- **Big Island**:
  - Ph. I: $283,750
  - Ph. II: $3,666,674
  - Ph. III: $107,872

- **Atchafalaya Sediment**:
  - Ph. I: $112,800
  - Ph. II: $640,924
  - Ph. III: $108,572

**Total Federal Funds Authorized**:
- Non-Construction: $270,089
- Construction: $3,250,711
- Total: $3,520,798

**Authorized for Local Reproduction**:
- Non-Construction: $96,461
- Construction: $1,164,599
- Total: $1,261,060

**Total Funds Authorized**:
- Non-Construction: $366,550
- Construction: $4,425,250

*Note: Federal assistance required. Calculate as follows: Enter eligible costs from line 16c. Multiply by 0.67. Add Federal share.*
ATTACHMENT B

AWARD NO. NA47FS0477

NOAA ADMINISTRATIVE
SPECIAL AWARD CONDITIONS

1. Big Island Mining:
   R1A38/FH5000/4119  179,602.00
   R1I7E/FH5000/4119  2,635,370.00
   R1A43/FH5000/4119  80,225.00

   Atchafalaya Sediment Study:
   R1A43/FH5000/4119  75,749.00
   R1A78/FH5000/4119  479,628.00
   R1A8A/FH5000/4119  80,225.00

2. The Project Period for this award is from August 1, 1994, through July 31, 1996.

3. The Budget Period for this award is from August 1, 1994, through July 31, 1996.

4. Since this grant requires the Recipient to provide $1,261,000 (26%) in project-related matching costs from non-Federal sources, the Recipient must maintain in its official accounting records an accounting for $4,791,600.

5. Award payments shall be made through the NOAA Financial Assistance Disbursement System (FADS). In accordance with 31 C.F.R. 205 (Treasury Circular 1075 "1977") the recipient shall: (1) maintain procedures for fund control to ensure that drawdowns are made only when actually needed for its immediate disbursement needs; (2) comply with timely reporting of cash disbursements and balances as required. If the recipient does not adhere to these provisions, NOAA may revoke the unobligated portion of the federal award funds. Instructions for use of the FADS are attached.

   FADS is an automated system that allows recipients to request funds using a touch-tone telephone. FADS will be made available to recipients and processed by NOAA officials. Once approved, funds will be directly deposited in the recipient organization’s bank account.

   The access code for this award is 18590.

6. This award number NA47FS0477, to the Louisana Department of Natural Resources supports the work described in the Recipient’s proposal entitled “Coastal Wetland Planning, Protection, and Restoration Act (PL 101-646) Big Island Mining (XAT-7) and Atchafalaya Sed. Delivery (PAT-2)” dated June 16, 1994, and letter dated July 11, 1994, which are
retained by the Recipient and shall be added to funds committed to the award and used for the purposes and under the conditions applicable to the use of the award funds.

13. The Recipient is prohibited from expending Federal or non-Federal grant funds, or in-kind goods or services, for purposes of providing transportation, travel, and any other expenses for any Federal employee.

14. The Recipient must request prior approval from NOAA for all proposed sole source contracts or where only one bid or proposal is received in which the aggregate expenditure is expected to exceed $25,000.

15. The Recipient must request prior approval from NOAA to purchase equipment costing in excess of $5,000 per unit and having a useful life of more than one year. This condition applies to equipment not specifically identified and justified in the recipient’s proposal and approved budget.

16. The Recipient will be required to obtain the approval of the Grants Officer prior to making any substantive changes in project objectives or methods.

17. If applicable, cost sharing is to be calculated on the basis of the total financial award to the recipient. The Government does not recognize funds made in overmatch subsequent to making an award.

18. Two copies of all publications or reports printed with grant or cooperative agreement funds and intended for public distribution will be furnished to the Government (one to the Program Officer and one to the Grants Officer). The financial assistance award number will be acknowledged as the basis for funding the publication.

Such publications or reports shall bear the NOAA logo on the cover or first page, and the following: “A publication (or report) of the Louisiana Department of Natural Resources pursuant to National Oceanic and Atmospheric Administration Award No. NA47PS00477.”

If the recipient or its employee(s) use NOAA financial assistance to publish a paper based in whole or in part on the work funded by this grant/cooperative agreement, the author shall assure that the paper bears the following notation: “This paper is funded (‘in part’ if appropriate) by a grant/cooperative agreement from the National Oceanic and Atmospheric Administration. The views expressed herein are those of the author(s) and do not necessarily reflect the views of NOAA or any of its sub-agencies.”
submission of an indirect cost proposal, indirect cost reimbursement will be limited to the indirect costs applicable to the period after the date the proposal is submitted. No indirect costs will be allowed for recipients who do not have an approved rate and fail to submit a proposal during the budget period.

The amount of indirect costs shown in the award document is a ceiling for indirect cost recoveries. Even if a higher rate is subsequently approved during the budget period, recipients are limited to recovery of the lesser of these two amounts: (a) indirect costs cited in the award, or (b) indirect costs computed using the approved indirect cost rate.

22. Recipients are hereby notified that they are encouraged, to the extent feasible, to purchase American-made equipment and products with funding provided under this program in accordance with Congressional intent as set forth in the resolution contained in Public Law 103-121, Sections 606 (a) and (b).

23. Pursuant to Executive Order 12889, the Department of Commerce, (DoC) is required to notify the owner of any valid patent covering technology whenever the DoC or its financial assistance Recipients, without making a patent search, knows (or has demonstrable reasonable grounds to know) that or will be used without a license from the owner. To ensure prior notification, if the Recipient uses or has used patented technology under this award without a license or permission from the owner, the Recipient must notify the DoC Patent Counsel at the following address, with a copy to the Grants Officer:

Department of Commerce
Office of Chief Counsel for Technology
Patent Counsel
14th Street and Constitution Avenue, N.W. Room H-4610
Washington, D.C. 20230

The notification shall include the following information:

- the award number
- the name of the DoC awarding agency
- a description of how the patented technology was used
- the name of the Recipient contact, including an address and telephone number

5
1. The recipient shall comply, and require each of its contractors and subcontractors employed in the completion of the project to comply, with all applicable Federal, State, Territorial, and Local laws, and in particular the following, and Executive Orders and Office of Management and Budget (OMB) Circulars:

a. The Davis-Bacon Act as amended (40 U.S.C. 276a to 276a (5); 42 U.S.C. 3222);

b. The Contract Work Hours Standards Act, as amended (40 U.S.C. 327-333);

c. The Cuylerland "Anti-Kickback" Act, as amended (40 U.S.C. 276 (c); 18 U.S.C. 874);

d. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-2000d-4); Executive Orders 11114, 11246, and 11375; 13 CFR Part 311 imposing civil rights requirements on recipients; regulations issued pursuant to the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.); 15 CFR Part 30; Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and the implementing regulations of the Department of Commerce in 15 CFR 8d, prohibiting discrimination against or providing fair equitable treatment or the handicapped under programs or activities receiving Federal financial assistance, and such other civil rights legislation as is applicable;

e. The Clean Air Act, as amended (42 U.S.C. 7401, et seq.);

f. The Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, et seq.);

g. The Endangered Species Act, as amended (16 U.S.C. 1531, et seq.);

h. The Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451, et seq.);

i. The Safe Drinking Water Act of 1972, as amended (42
3. Following applies where applicable:

The Recipient agrees that, for the expected useful life of the facility assisted with this award, the project will be properly and efficiently administered, operated and maintained, for the purpose authorized by this award and in accordance with terms, conditions, requirements and provisions of the award. If the Government determines at any time during the useful life of the facility, that the project is not being properly and efficiently administered, the Government will have a right to cancel the Federal Assistance portion of this award for any costs of the award and pursue any other remedies allowed by law.
ATTACHMENT II

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

MEMORANDUM OF AGREEMENT
DEPARTMENT OF NATURAL RESOURCES

March 9, 1999

MEMORANDUM

TO: Randy Hanchev, Assistant Secretary
    Diane Smith, Assistant Administrator
    Gerry Dwyer, Assistant Administrator
    Rachel Wilson Sweeney, Special Projects Coordinator
    Carrol Clark, Engineer Manager
    George Bodda, Engineer Manager
    Van Cook, Engineer Manager
    Greg Steyer, Program Manager
    Steve Underwood, Program Manager
    Phil Pittman, Program Manager
    Helen Hoffbauer, Real Estate Manager

FROM: Chef Prong, Program Manager

RE: MOA Between the COE, DNR and NMFS, Long Term O,M & M CWPPRA Projects

Attached is the MOA between the COE, DNR and NMFS for long term reimbursement to DNR for expenditures related to O,M & M of CWPPRA Projects. Item III of the MOA provides that the DNR will submit invoices to the NMFS for certification and approval. The NMFS will forward the approved invoices to the COE which will make direct payments to the DNR.

Carrol, George, and Van please forward copies to all project managers for NMFS CWPPRA projects.

CF

cc: Verlie Wims, OMF
    Karen Lewis, Contracts and Grants
    Lara Humphries, OMF

Coastal Restoration Division
P.O. Box 94396 . Baton Rouge, Louisiana 70804-9396 . Telephone (225) 342-7598 . Fax (225) 342-9417
An Equal Opportunity Employer
March 1, 1999

Mr. Tim Osborn
National Marine Fisheries Service
NOAA/NMFS Restoration Center (F/H5)
Office of Habitat Conservation
1315 East-West Highway
Silver Spring, Maryland 20910

Dear Mr. Osborn:

Enclosed for your records is a signed original of the Memorandum of Agreement between the National Marine Fisheries Service, the Louisiana Department of Natural Resources, and the U.S. Army Corps of Engineers.

Sincerely,

[Signature]

Encl

Steve Mathies
Chief, CWPPRA Branch
A Memorandum of Agreement between
National Oceanic and Atmospheric Administration,
The National Marine Fisheries Service;
The U.S. Army Corps of Engineers, New Orleans District;
and
The State of Louisiana, Department of Natural Resources;
regarding Monitoring, Operations and Maintenance Billing under

I. Parties and Scope

This Memorandum of Agreement (MOA) between the National Marine
Fisheries Service (NMFS), the U.S. Army Corps of Engineers
(USACE), and the State of Louisiana Department of Natural
Resources (LDNR) recognizes these three parties' cooperation and
participation in the Coastal Wetlands Planning, Protection, and
Restoration Act (CWPPRA), (16 U.S.C. 777c, §§ 3931-3936). As
members of the Task Force, established by CWPPRA, the agencies
that are parties to this MOA are responsible for among other
things, the long-term monitoring of certain coastal wetland
restoration project areas and reference sites associated with
such projects, as well as the long-term operation, maintenance,
repair and rehabilitation (O&M) of authorized project features,
where applicable.

This MOA describes the financial instrument and processes to be
used to finance long-term monitoring and O&M activities which are
outside of the scope of NMFS' Cooperative Agreement and Joint
Funding Agreement mechanisms.

II. Purpose

The types of funding instruments currently used by NMFS are not
suitable for activities exceeding three to five years (e.g.,
Cooperative Agreements) unless the agreement is cost shared
equitably (e.g., Joint Funding Agreements). Monitoring, as well as O&M activities are generally scheduled to last for 20 year periods, except for demonstration projects. Federal/non-federal cost-shares for these activities within CWPPRA are at ratios of 85/15% or 90/10%. Therefore, neither cooperative agreements nor joint funding agreements are appropriate for monitoring or O&M activities.

III. Alternative Funding Instrument

There is an alternative funding instrument, employed between USACE and other Federal agencies for similar activities called a "Government Purchase" Military Interdepartmental Purchase Request (MIPR). A Government Purchase MIPR can be used for long-term activities without cost-shares percentage limitation. It differs from conventional MIPRs in that the sponsoring Federal agency receives no direct reimbursable funding. A Government Purchase MIPR stipulates that invoices for monitoring or O&M activities performed by the state agency (LDNR) will be submitted by the state agency to the sponsoring Federal agency (NMFS) for certification. Approved invoices will be forwarded by NMFS to USACE. The USACE will make direct payments to the State.

IV. Actions of the Parties

Within the CWPPRA program, NMFS, USACE and LDNR will work cooperatively in the implementation of the overall CWPPRA program.

As Chair of the CWPPRA Task Force, USACE is responsible for the administration and disposition of funding for the CWPPRA Program. USACE will continue to provide reimbursable MIPRs to NMFS for short-term activities such as Engineering and Design, or Construction which can be awarded to LDNR through the current cooperative agreement process. USACE will provide "Government Purchase" MIPRs to NMFS for long-term activities when requested.
As a sponsoring Federal agency, NMFS is responsible for implementing a number of wetland restoration projects approved for funding by the Task Force. Within all projects sponsored by NMFS, it is NMFS' and LDNR's joint responsibility to administer, short-term activities such as engineering and design and construction; and long-term activities such as monitoring, and O&M of authorized project features. To carry out long-term responsibilities, NMFS will request from the Chair of the Task Force, USACE, funding in the form of a Government Purchase MIPR. Using this funding instrument NMFS will certify invoices from LDNR as approved for payment, and forward the approved invoices to USACE for payment directly to LDNR, subject to the availability of funds and satisfactory performance.

LDNR, as the non-federal partner, will conduct long-term monitoring, and O&M activities of authorized project features. LDNR will submit invoices to NMFS on a regular basis after monitoring and O&M work is conducted. Invoices will clearly specify whether the bill is for monitoring activities, or O&M activities.

Upon re-authorization of CFPRA, or any other legislative or administrative changes to the program, this MOA may be amended, modified or terminated as mutually agreed upon by the signatory parties.

The undersigned individuals attest that they are authorized to bind their respective agencies to this MOA. On behalf of their respective agencies, they have signed this MOA on the day and year appearing with the signature of each authorized representative.
U.S. ARMY CORPS OF ENGINEERS

Colonel William Conner
District Engineer
U. S. Army Corps of Engineers
Department of Defense

NATIONAL MARINE FISHERIES SERVICE

Holland A. Schmyser
Assistant Administrator
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
Department of Commerce

STATE OF LOUISIANA, DEPARTMENT OF NATURAL RESOURCES

Jack C. Caldwell
Secretary
Department of Natural Resources
State of Louisiana
ATTACHMENT III

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

PROJECT FEATURES
ATTACHMENT IV

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

PROJECT COMPLETION REPORT

&

AS-BUILT DRAWINGS
ENGINEERING CLOSURE REPORT
BIG ISLAND MINING (XAT-7)
AND
ATCHAFALAYA SEDIMENT DELIVERY (PAT-2)

AS-BUILT CONSTRUCTION PHASE

Prepared For:
STATE OF LOUISIANA
DEPARTMENT OF NATURAL RESOURCES
AND
NATIONAL MARINE FISHERIES SERVICE
DNR CONTRACT NO. 25045-95-04
DECEMBER 1998

Brown Cunningham Gannuch
ENGINEERS ARCHITECTS CONSULTANTS
9181 Interline Ave. Suite 100 Baton Rouge, LA 70809
ENGINEERING CLOSURE REPORT
BIG ISLAND MINING (XAT-7) AND ATCHAFALAYA SEDIMENT DELIVERY (PAT-2) CWPPRA PROJECTS

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ENGINEERING CLOSURE REPORT
BIG ISLAND MINING (XAT-7)
AND
ATCHAFALAYA SEDIMENT DELIVERY PROJECTS
DECEMBER 1998
BY: BROWN CUNNINGHAM & GANNUCH, INC.
EMMETT J. MAYER, JR., P.E.

ABSTRACT:

This is the third and final engineering report submitted by BCG on the Big Island Mining (XAT-7) and Atchafalaya Sediment Delivery (PAT-2) C.W.F.R.A. projects. These two projects are designed to enhance the east-west sub-delta development of the emerging Lower Atchafalaya River into Atchafalaya Bay in St. Mary Parish, Louisiana. This report describes the construction and presents the as-built channel alignments, disposal area configurations, final dredged quantities and costs of the project. Also presented and discussed are the engineering field changes made during construction to better fit the in-situ field conditions encountered.

Construction commenced on January 28, 1998 and was completed on October 27, 1998. The actual construction cost of $7,238,449.36; was $258,351.54 below the awarded contract price of $7,496,801.00; and, the project was completed in 273 days; 27 days ahead of the contract time. Some 51,250 linear feet of conveyance channels were dredged and 1202.57 acres of new marshlands were created by strategically placing dredged disposal to mimic a natural delta configuration. Accompanying this report and delivered to the LDNR under separate cover are hard copies and electronic diskettes of before and after dredging surveys to verify the dredged quantities and final channel sections as well as final disposal area fill elevations.

The two previous reports prepared by BCG on this project are:

Report No. 1: ENGINEERING SUMMARY REPORT:
BIG ISLAND MINING AND ATCHAFALAYA SEDIMENT DELIVERY - PROJECT REVIEW PHASE (JANUARY 1995)

Report No. 2: ENGINEERING DESIGN REPORT:
BIG ISLAND MINING AND ATCHAFALAYA SEDIMENT DELIVERY - PRELIMINARY DESIGN PHASE REVIEW (MARCH 1995)
ENGINEERING CLOSURE REPORT
BIG ISLAND MINING (XAT-7) AND ATCHAFALAYA
SEDIMENT DELIVERY (PAT-2) CWPPRA PROJECTS

AUTHORIZATION:

The Louisiana Department of Natural Resources (LDNR) approved Brown Cunningham & Gannuch, Inc. (BCG)'s plans and construction documents for both of the subject CWPPRA projects and authorized BCG to provide construction engineering management and resident project inspection during construction of the projects. LDNR awarded one construction contract for both projects to RiverRoad Construction, Inc. of Mandeville LA (RRCC) in the amount of $7,498,801.00; and issued Notice to Proceed on January 28, 1998. The contract time was established as 300 days, with an ending date of November 24, 1998.

INTRODUCTION:

Project Location:

Both Subject CWPPRA projects are located in the Lower Atchafalaya River Delta, near latitude N 29° 27' 00" and longitude W 91° 17' 30", at its entrance to Atchafalaya Bay in St. Mary Parish, LA. The Big Island Mining project is located in the west delta lobe and the Atchafalaya Sediment Delivery is in the east delta lobe.

Project Coordination:

Both locations are within the Atchafalaya Delta Wildlife Game Management Area under the control of the LA Department of Wildlife and Fisheries (LDWF). The federal sponsor for this project is the National Marine Fisheries Service (NMFS). In addition, the U.S. Army Corps of Engineers (COE) maintains a navigation channel in the Atchafalaya River at this location.

BCG was responsible for directing and monitoring all field activities performed by RRCC to assure that the intent of the plans and specifications were achieved. BCG established the following teams and activities to keep all impacted government agencies informed of the daily construction in progress.

1. Establish a Key People Team representing all of the impacted agencies as follows:
   a. LDNR: Contract Owner
      1) Mr. Van Cook - Project Manager for Owner
      2) Mr. Herbert Juneau - Field Engineer
b. LDWP: Atchafalaya Delta Management  
1) Mr. Greg Lincombe - Program Manager  
2) Mr. Mike Carlos - Assistant Program Manager  

c. NMFS: Federal CWPPRA Sponsor  
1) Dr. Erik Zobrist - Project Manager  
2) Mr. Rickey Ruesman - Local Area Supervisor  

d. RRCC: Construction Contractor  
1) Mr. Chris Rayner - Project Manager  
2) Mr. Tom Windes - Job Superintendent  

e. BCG Project Consulting Engineers  
1) Mr. Emmett J. (Ike) Meyer, Jr. - Construction Engineer Manager  
2) Project Inspectors (two) - Ira Neadire and Mark Dowsey  

2. Perform Weekly Job Inspections  
   a. Review daily reports for progress and problems.  
   b. Perform site inspections and monitor contractor's methods.  
   c. Identify and resolve field contingencies with contractor.  
   d. Have owner's representative present.  
   e. Have LDWP's manager present.  

3. Prepare Periodic Progress Reports to all Owners  
   a. Completed construction progress.  
   b. Review and recommend Contractor's invoices for payment.  
   c. Review before and after dredging surveys.  

4. Prepare Field Changes for Owners review and approval prior to issuance to Contractor  

5. Prepare As-Built Plans upon project completion and a final construction closure report.  

Project Closure Report  

This report is intended to describe project construction progress, problems encountered and solutions made, present the project quantities and costs, present the final total volume of material dredged from channels, total acreage at Disposal Areas, and include the listing of before and after dredging surveys used to verify the project volumes and dimensions.  

GENERAL:  
The Atchafalaya Sediment Delivery Project included re-opening the silted in Natal Channel for some 8800 linear feet with a 1500 foot branch channel at station 75+00; and re-opening the Castille Pass from its entrance for 2000 linear feet, both are distributary channels from East Pass.
Some 668,683 cubic yards of material was dredged from Natal Channel and four disposal areas creating some 257 acres of new coastal marshland was constructed. On Castille Pass, some 32,242 cubic yards of material was dredged and 20.5 acres of new marshland was created. The ASD project volumes were approximately 17% of the Big Island Mining project volumes.

The Big Island Mining project consisted of creating a new west delta lobe behind Big Island to enhance the accretion of land beyond the west bank of the Atchafalaya River. The BIM project consisted of a main stem and five branch channels designed to mimic nature by aligning the branch channels at 45° to the main stem and developing delta lobe land masses between the bifurcations. The main stem, called Channel A, extended from the Atchafalaya River's west bank for a distance of 20,600 linear feet and required dredging 2,470,427 cubic yards of material.

The five branch channels dredging and lengths are as follows:

- Channel B @ 310,958 cubic yards and 5500 feet
- Channel C @ 89,595 cubic yards and 2400 feet
- Channel D @ 174,000 cubic yards and 4000 feet
- Channel E @ 217,462 cubic yards and 4156 feet
- Channel F @ 100,033 cubic yards and 2300 feet

Five Disposal Areas were created with the channel dredged material to form some 916 acres of new marshlands, strategically placed and configured to resemble a river delta.

The project started on January 28, 1998 with the Contractor mobilizing his plant which consisted of the 20 inch hydraulic cutterhead Dredge Katrina and the 20" North Carolina, two dredge tenders, two anchor barges, floating fine and plastic load line, three marsh backhoes, a quarter barge, office barge and crewboat. The Contractor also utilized an 8 cy bucket dredge. The Contractor began working the ASD project first, starting at Castille Pass (Feb. 2, 1998) and ending with Natal Channel on March 30, 1998.

The Contractor re-mobilized his plant to the BIM project and began dredging Channel A with the North Carolina on March 29, 1998. The Contractor continued dredging Channel A, utilizing both dredges to expedite the dredging in the 450 and 400 wide bottom segments of Channel A, since the 20 inch dredge's nominal swing capacity is 170 feet wide cut without an idler barge. Disposal Area 1 was constructed first. The Contractor was able to manage construction progress efficiently by dredging the branch channels and the main stem to minimize the distance between the dredge and discharge point within the various disposal areas. Due to changed field conditions encountered, Channel D was realigned and Disposal Area No. 3 was eliminated. Disposal Area 4/5 was enlarged to partially offset the loss of DA No. 3. Areas, No. 6, and No. 9 were built as designed. DA No. 8 was enlarged to receive material from Channel F, which was not part of the original design, but was added as a field change. Channel D was the first branch channel dredged and Channels B, E, C and F followed, respectively.

The BIM/ASD project was accepted substantially completed (physical work) on October 27,
1998. The Contractor temporarily demobilized due to weather conditions only once during construction, and that was from September 1, 1998 to September 3, 1998 due to Tropical Storm Earl.

All five disposal areas in the BIM project utilized perimeter containment dikes. The project design called for substantial front dikes contiguous with the channel banks and minor diking around the rear boundaries to contain the dredged solids. The front dikes were constructed with an eight cubic yard bucket dredge, Capt. Bufford Barry, that met specification with a 140 foot boom reach.

Due to the extremely soft nature (low shear resistance) of the bottom clays the front dikes averaged 100' to 150' feet wide by 3' to 5' high (initially). The dikes quickly settled to between 75% to 80% of their initial heights. These dikes performed very well to protect the leading edges of the disposal areas which were designed to be like naturally occurring lobe islands. The rear diking was constructed to only 1' to 2' high utilizing the marsh hoe machines. The front dike construction by bucket dredge was expeditious and payable since the material came from within the channel cut. Whereas, the rear dikes were non-payable.

Long term settlement in the disposal areas is the result of a combination of shrinkage of the hydraulically placed dredged material and long term consolidation of the underlying subsoils due to the load placed by the dredged fill. In the placement of poor quality soils within a hydraulic fill, the elevation of the final discharge has the greatest impact upon how fast the material will shrink. When the final discharge is within 1 foot above the nominal water surface the soil is buoyed by the water (submerged weight) and consolidation is very slow. Only when low tide (drop in water level) occurs does the material have the opportunity to consolidate under its own weight. Conversely, when the final discharge is greater than 1 foot above the nominal water level the material will shrink quicker due to its weight. It is difficult to quantify the shrinkage of hydraulically placed material. However, based upon the soils report by Gore Engineering it is believed that settlement of the hydraulically placed material could range between 30 to 50 percent of its initial placement height.

The front dikes along the disposal areas close to the Achafulaya River (Natal DA-1 & DA-2; BIM DA-1 and DA-3 @ Channel A & D have settled approximately 30 percent. The final dike surveys show the elevations of Natal DA's at ± 3.0 and the BIM DA-1 and DA-5 @ Channel D) at 4 to 5 feet. The front dike of DA-5 along Channel A at the beginning of Channel D has only settled approximately 20 percent due to the material being sandy and the subsoil foundation being sandy. As the dike construction progressed farther from the river the soil became weak clays and dikes constructed showed as much as 50 percent settlement. This is primarily shrinkage. In the long term these dikes fills could settle another 9 to 16 inches, based upon current heights above the nominal water level and the subsoil strengths. The front dikes on the BIM disposal areas have breaches cut through them to allow for high river flow into the disposal areas to allow for accretion to help offset the expected settlements. The shell piles have also settled due to consolidation of the subsoil since the tops of piles initially placed ranged between 4
to 7 feet. The final surveys show the shell pile elevations currently between 3 to 5 feet, with additional long term settlement expected.

The marshlands (material placed below elevation 2.5) seem to be settling only slightly, about 10 percent. These areas will continue to settle slowly in the long term. Hopefully high river flows will provide the additional accretion needed to maintain their wetland characteristics. The project target elevations were +3.0 feet for front dikes (lobe islands) and +1.5 feet for marshlands of DA-5.

An unanticipated benefit was the quick germination of the vegetation covering the newly created marshlands. Evidently, the dredged material had embedded dormant seeds of plants indigenous to this area that sprouted almost immediately once material placement was completed. Another BIM project and in Natal Channel on the ASD project. Intermittent Shells were encountered during Channel A in the first 200' of Channel A, again around station 135+00. Shells were encountered at the beginning of Channel D and in the mid reach of Channel C. Due to the non-flow nature of shells the Contractor was instructed to make individual piles of shells with placement not to exceed +6.0 NGVD and even side slopes surrounding the mounds. In discussing the shell problem the "Team" decided upon the pile configuration since its vertical relief was beneficial to shore bird nesting. In fact, the shell pile placed within Disposal Area No. 3 on Natal Channel was utilized immediately by the shore birds requiring the Contractor to leave his shore dredge pipe in place until the eggs hatched and chicks matured enough to leave their nest areas. The Contractor was not able to efficiently place the shells in the low profile marshland acres. Therefore, the Contractor was instructed to place "shell piles" within the various disposal areas such that they were within the lobe island portion of the disposal area. In addition to Natal Channel DA No. 3, there are "shell piles" within BIM Disposal areas No. 1, No. 4, No. 5 and No. 9.

Two disposal areas in the ASD project did not utilize perimeter dikeing, Castille Pass DA and Natal Channel DA No. 4. These two areas were for enough removed from the new channel cuts that dikeing wasn't necessary to prevent material from returning to the channel. In addition, due to the observed discharged material flow characteristics, it was felt the material would settle out. This resulted in the material placed in these two (undiked) disposal areas being deposited over a larger area than if dikeing were present. The resulting material heights stayed rather low between 1.5 to 0.5 feet NGVD.

The BIM project site was in an abandoned oil field area, and two bid items were included to perform magneto meter surveys and relocate any abandoned or unknown pipelines that could interfere with the channel dredging. Fortunately, no pipelines were encountered that interfered with the channel dredging. There was also a special work area included where Channel A crossed the twin 30" active high pressure gas lines. The Contractor dredged this segment of channel by using only cables and no spuds. A representative of the gas line company was on board the dredge while working within this special work zone.
The ASD project was dredged prior to the high river period. Following this high river period, monitor surveys were made on the entrance to Natal Channel and Castille Pass. A shoal developed at the entrance to Natal Channel which reduced the channel depth to only 5 feet. Based upon the survey and a computed under-run of dredge quantities for the Natal Channel, the Engineer recommended that the channel be re-dug to remove some 23,247 cubic yards of material by bucket dredge and to construct two parallel dikes on both banks of Natal Channel between station 124+00 and 21+00 to better train the incoming flows from East Pass. The construction of the training dikes would also eliminate the cross flow entering Natal Channel from the trench created in building the front dike of Disposal Area No. 1. The Owner-Team agreed to the removal of this shoal. LDNR should continue to monitor the entrance to Natal Channel since shoaling has occurred here.

**Project Estimated vs As-Built Quantities and Costs**

Table A below presents a comparison of the project quantities and costs of the original and actual values. In reviewing the values of each of the variables in Bid Item 300, BIM Channels, only Channels A and C on BIM were less than estimated. Channels B, D, E and F were more than originally estimated Bid. However, the aggregate actual over all totals were less than estimated. In Bid Items 500, ASD Channels, both Natal Channel and Castille Pass were less than estimated, including the re-dredging of the Natal shoal. Item 600 and 700 were not utilized during construction also resulting in a savings. The resulting as-built project construction cost was $7,238,449.36 and was an under-run of $258,351.65 when compared to the project award price of $7,496,801.00.

**Disposal Areas**

Originally planned disposal areas, which were permitted, were obtained to assure that adequate permitted areas would be available for disposal of dredged material from the project. The ASD project allowed Contractor to dredge an access channel in East Pass if it became necessary in order to mobilize the dredge to Natal Channel and/or Castille Pass. Fortunately, East Pass had sufficient depth, and the access channel was not needed on the ASD project. Some of the bidding contractors expressed concern that the dredged material would stay in an expanded, suspended state and would require more disposal areas then planned for the project. BCG disagreed with the Contractor's concerns. However, LDNR directed BCG to revise the existing Coastal Use Permit to include DA 1A and DA 5 in the ASD project, and, DA 8A and DA 10A in the BIM projects. The dredged material performed as originally predicted by BCG and the additional areas were not utilized. However, LDNR should endeavor to renew the C.U.P. every three years to maintain the availability of these permitted areas. The permitting of these added areas will benefit LDNR in that they will be available for maintenance dredging during the life of the project.
Disposal Areas Constructed

There were five disposal areas created on the ASD project and five created on the BIM project. Table B presents the acreage for each of the ten disposal areas. The disposal areas as shown in Appendix E are the as-built configurations and show the as-built contour elevations in 0.5 feet increments to N.G.V.D. Also, TABLE C shows the disposal area acreage break down per half foot of elevation. At Big Island, the recorded water level varies from a low elevation of -1.25 N.G.V.D. during the low river season and a high of 3.02 N.G.V.D. during river headwater flooding. The yearly average water elevation, based upon the Amerada Hess Gage is 1.6 N.G.V.D. Assuming this to be the demarcation line between emergent marshland and subaqueous marshland; those acreages laying below the 1.5 elevation level would be considered to be subaqueous marshlands. Similarly, those acreages above the +2.5 elevation would be considered to be lobe islands, above the nominal tidal influence. According to TABLE C the acreage created on the two projects totaled:

<table>
<thead>
<tr>
<th>ELEVATION</th>
<th>BIM</th>
<th>ASD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage Above EL. 2.5</td>
<td>61.53 Ac</td>
<td>20.76 Ac</td>
</tr>
<tr>
<td>Acreage Between EL. 2.5 and 1.5</td>
<td>231.08 Ac</td>
<td>48.73 Ac</td>
</tr>
<tr>
<td>Acreage Below EL. 1.5</td>
<td>629.8 Ac</td>
<td>211.05 Ac</td>
</tr>
<tr>
<td>TOTAL ACREAGE</td>
<td>922.41</td>
<td>280.54 Ac</td>
</tr>
</tbody>
</table>

A breakdown of each disposal area is listed in TABLE C.
BEFORE AND AFTER SURVEYS

The project specification required the Contractor to take Before Dredging Surveys of channel alignments and disposal area boundaries prior to any dredging and disposal. Also, After Dredging Surveys of channels and disposal areas after all dredging was completed were required. This information was to be presented on hard copy and electronic diskettes and delivered to the Engineer. The delivered hard copies of channel and disposal areas consisted of drawings showing channel plan and cross sections at 100' intervals and disposal area plans showing the elevations to NGVD and x and y coordinates to the NAD27 datum. Channels and Disposal area base lines are referenced to Louisiana State Plane Coordinate System. The electronic back-up surveys are contained on 3 1/4 magnetic computer disks. The entire project data collected are contained in three electronic files called DWG, DXF, and TXT files. The DWG and DXF files can be opened utilizing AutoCadd program and shows layout of surveys taken. The TXT files show listings of every survey point taken which includes survey point index number, elevation and "X" and "Y" state plane coordinate. The TXT files can be opened under Word or Word Perfect Program or Lotus Program for Windows 95/98.

The Contractor utilized GPS Real Time Kinematic Survey equipment to layout channel and disposal area alignments. The channel after dredging cross sections were taken by using a Fathometer and GPS equipment. The hard copies and electronic back up disks of the Before and After Surveys were delivered to LDNR by the Engineer under separate cover. A listing of all surveys delivered to LDNR is included in Appendix D of this report.

AS-BUILT DRAWINGS

Utilizing the Contractor's surveys the Engineer controlled the project, implementing field changes, redirecting dredging activities and verify constructed quantities on the project. *As-Built* drawings showing the actual channel and disposal area construction were prepared by the Engineer and half scales showing channel plans and disposal areas are contained in Appendix E of this report. The drawings show the as built channel center lines and disposal area boundaries showing distances as established by the Engineer. Each drawing has a varying scale in order to clearly show elevations.
TABLE A: COMPARISON OF ESTIMATED AND AS-BUILT PROJECT CONSTRUCTION COSTS

<table>
<thead>
<tr>
<th>BID NO.</th>
<th>ITEMS</th>
<th>UNIT COSTS</th>
<th>ESTIMATED VALUES</th>
<th>AS-BUILT VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DESCRIPTION</td>
<td>UNIT</td>
<td>RATE</td>
<td>QUANTITY</td>
</tr>
<tr>
<td>100</td>
<td>Mobilization</td>
<td>L.S.</td>
<td>L.S</td>
<td>1</td>
</tr>
<tr>
<td>200</td>
<td>BIM Surveys</td>
<td>L.S.</td>
<td>L.S</td>
<td>1</td>
</tr>
<tr>
<td>300</td>
<td>BIM Channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Channel A</td>
<td>CY</td>
<td>$1.88</td>
<td>2,780,000.00</td>
</tr>
<tr>
<td></td>
<td>Channel B</td>
<td>CY</td>
<td>$1.50</td>
<td>280,000.00</td>
</tr>
<tr>
<td></td>
<td>Channel C</td>
<td>CY</td>
<td>$1.50</td>
<td>107,000.00</td>
</tr>
<tr>
<td></td>
<td>Channel D</td>
<td>CY</td>
<td>$1.50</td>
<td>101,000.00</td>
</tr>
<tr>
<td></td>
<td>Channel E</td>
<td>CY</td>
<td>$1.50</td>
<td>145,000.00</td>
</tr>
<tr>
<td></td>
<td>Channel F</td>
<td>CY</td>
<td>$1.50</td>
<td>0.00</td>
</tr>
<tr>
<td>400</td>
<td>ASD Surveys</td>
<td>L.S.</td>
<td>L.S</td>
<td>1</td>
</tr>
<tr>
<td>500</td>
<td>ASD Channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natal Channel</td>
<td>CY</td>
<td>$1.50</td>
<td>670,000.00</td>
</tr>
<tr>
<td></td>
<td>Castille Pass</td>
<td>CY</td>
<td>$2.25</td>
<td>50,000.00</td>
</tr>
<tr>
<td>600</td>
<td>Change Locations</td>
<td>EA</td>
<td>2,500.00</td>
<td>2.00</td>
</tr>
<tr>
<td>700</td>
<td>Remove Pipelines</td>
<td>EA</td>
<td>40,000.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>

TOTALS

-$7,496,801.00

+$7,298,448.36
### TABLE B
**DREDGED DISPOSAL AREAS ACREAGE**

<table>
<thead>
<tr>
<th>Disposal Area</th>
<th>Plan Design Acres</th>
<th>As-Built Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA-1</td>
<td>85.1</td>
<td>111.08</td>
</tr>
<tr>
<td>DA-2 (Reserved for COE)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DA-3</td>
<td>43.1</td>
<td>0</td>
</tr>
<tr>
<td>DA-4/5</td>
<td>362.7</td>
<td>323.07</td>
</tr>
<tr>
<td>DA-6</td>
<td>207.3</td>
<td>222.39</td>
</tr>
<tr>
<td>DA-7 (Deleted)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DA-8</td>
<td>96.4</td>
<td>150.36</td>
</tr>
<tr>
<td>DA-8A (Optional)</td>
<td>37.5</td>
<td>0</td>
</tr>
<tr>
<td>DA-8B (Optional)</td>
<td>81.8</td>
<td>115.15</td>
</tr>
<tr>
<td>DA-10 (Optional)</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>DA-10A (Optional)</td>
<td>147.2</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL ACRES</strong></td>
<td><strong>1096.2</strong></td>
<td><strong>922.05 Ac</strong></td>
</tr>
</tbody>
</table>

### ATCHAFALAYA SEDIMENT DELIVERY

<table>
<thead>
<tr>
<th>Disposal Area</th>
<th>Plan Design Acres</th>
<th>As-Built Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castille Pass D.A.</td>
<td>39.5</td>
<td>20.68</td>
</tr>
<tr>
<td>Natal DA-1</td>
<td>32.6</td>
<td>47.53</td>
</tr>
<tr>
<td>Natal DA-1A (optional)</td>
<td>54.8</td>
<td>0</td>
</tr>
<tr>
<td>Natal DA-2</td>
<td>53</td>
<td>70.07</td>
</tr>
<tr>
<td>Natal DA-3</td>
<td>38.4</td>
<td>47.49</td>
</tr>
<tr>
<td>Natal DA-4</td>
<td>81.8</td>
<td>94.77</td>
</tr>
<tr>
<td>Natal DA-5 (optional)</td>
<td>25.6</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>323.9 AC</strong></td>
<td><strong>280.52</strong></td>
</tr>
<tr>
<td>Disposal Area</td>
<td>-2.0 to -1.5</td>
<td>-1.0 to -0.5</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>BIM DA-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIM DA-4/5</td>
<td>35.12</td>
<td>10.67</td>
</tr>
<tr>
<td>BIM DA-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIM DA-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIM TOTAL</td>
<td>1.34</td>
<td>4.38</td>
</tr>
</tbody>
</table>

| ASD-CAST      |              |              |             |            |           |           |           |           |           |           |           |           |
| ASD-NDA-1     | 11.05        | 6.10         | 2.91        | 7.49       | 7.94      | 2.91      | 2.91      | 2.91      | 2.91      | 2.91      | 2.91      | 2.91      |
| ASD-NDA-3     | 6.85         | 10.07        | 12.27       | 13.07      | 1.74      | 1.74      | 1.74      | 1.74      | 1.74      | 1.74      | 1.74      | 1.74      |
| ASD-NDA-4     | 10.76        | 53.90        | 22.13       | 7.90       | 10.76     | 53.90     | 22.13     | 7.90       | 10.76     | 53.90     | 22.13     | 7.90      |
| ASD TOTAL     | 10.76        | 104.34       | 54.43       | 41.50      | 23.37     | 23.37     | 16.90     | 3.96      | 3.96      | 3.96      | 3.96      | 3.96      |

Table C Notes:
BIM = 822.41 Ac
ASD=280.56 Ac
Total=1202.90 Ac

Note: In computing the total acreage of Table C to Table B there is a slight variance due to the rounding off of acreage in the sub areas. Table B values should be used to represent the true actual values on the project.
ATCHAFALAYA SEDIMENT DELIVERY CONSTRUCTION DETAILS

The Contractor commenced Before Dredging surveys by staking the planned centerline of Castille Pass and plotted cross sections at 100 foot intervals of the existing Castille Pass Channel. After reviewing the surveys and the planned centerline, the Engineer recommended Field Change No. 1 (FC-1) to the Owners that the channel centerline be shifted approximately 75' toward Ibis Island (southward) and also that the bottom width of Castille Pass be reduced from 190 as planned to 125. It was observed that Castille Pass was maintaining itself with a 120' wide bottom with only the first 2000 feet sized in with an average bottom elevation of -6.0 NGVD. Field Change No. 1 was accepted and the Contractor was issued same. The Contractor requested permission to access the disposal area by tracking the 20 inch dredge pipeline across Ibis Island vegetated area and to place an alternate disposal area adjacent to the back side of Ibis Island. The LDWP Manager stipulated that this would be acceptable provided that only one 30' wide traverse across the vegetation would be placed and Contractor's equipment stayed within this access. The Contractor was also instructed to build the alternate disposal area in FC-1. The Contractor commenced dredging the 2000 feet of Castille Pass on February 2, 1998 with the Katrina. On Feb. 4th the North Carolina replaced the Katrina which had extensive mechanical problems. Castille Pass was completed to station 21+08 on February 9, 1998, dredging 32,242 cubic yards and disposing material into the opposite disposal area creating some 20.7 acres.

Utilizing the Capt. Bufford Berry (8 cy bucket dredge) the construction of the front dike of DA No. 1 commenced on Feb. 6th and DA-1 diking (front and rear) was completed on Feb. 10th. The Katrina began dredging Natal Channel on Feb. 12th, dredging the 190 foot bottom width to El-10.0 NGVD. Natal Channel was originally planned with a branch channel north of Teal Island. However, the LDNR directed re-alignment of channel to miss adjacent private property ownership which eliminated the Teal Island Branch. After reviewing the survey data that showed there was no deeper water (>-3.0 Feet) for Natal Channel to empty into the Engineer recommended to the Owner that a 45' branch channel be constructed with a 150' bottom at station 70+00 and extending in a southeasterly direction for 1500 feet into the open Vermilion Bay. This branch would give the channel two openings to increase its discharge width to 300 feet wide to double the channel outlet flow into the bay.

The field change was acceptable to the Owner and FC-2 was promulgated and delivered to Contractor on March 10, 1998. The Contractor completed dredging Natal Channel and Branch A channel on March 29, 1998, dredging some 645,436 cubic yards of material and creating four disposal areas totaling 257 acres of new marshland from previous bay bottoms. The Contractor was able to dredge continuously since the digging of the 3 disposal areas was completed in advance and dike maintenance was constantly performed during placement of material. As mentioned in the GENERAL section of this report the two unanticipated events of encountering shells and bird nesting did not significantly hinder dredging progress since two dredges were being operated during this portion of the construction. The Field Changes are listed in Appendix A at the rear of this report.
Following the high river season monitor surveys showed that Natal Channel had partially silted in at its entrance to East Pass between station 12+00 and 21+00 with the shallowest point on the bottom at -5.0 NGVD. After analyzing the shoaling pattern it was observed that an excessive amount of water from East Pass was entering Natal Channel via the trench cut in East Pass to build the front dike along Disposal Area One and, as a result of the short circuiting of flow the main entrance was shoaling along the south bank of the channel. After review of survey data the Engineer recommended that the entrance be re-dug to a -8.0 bottom and a 170 foot wide bottom and that training dikes be constructed on both banks that extend from station 12+00. On the north bank extend dike back to the dike of Disposal Area No. 1 physically closing off the trench entrance into Natal Channel. On the south place a similar dike. This would require dredging an additional 23,250 cubic yards of material, which would not extend the total yardage past the bid quantity. This work was not considered as a field change to the plans since no channel re-alignment was required. The Owner agreed to this shoal re-digging; and, the Contractor was issued a letter with instructions on how to dredge the shoaled area on August 11, 1998. This added yardage was included in the Natal Channel Bid Item 500. The Contractor completed dredging the shoal with the Capt. Berry on September 3, 1998. At the end of the construction contract in early October a bottom probe survey was made that showed the bottom to be still at -8.0 to -10.0 NGVD. The shoal Dredging letter is included in Appendix A: Field Changes for convenience of report placement.

The three diked disposal areas created by Natal channel dredging experienced immediate luxuriant vegetation growth while the two undiked (lower elevation) disposal areas did not have quick growth. In the marshland areas the flora consisted primarily of wild millet, delta duck potato, three corner square grass, and potenogator, all indigenous species to this area. Willows were concentrated along the top of the front dikes in the higher elevations.
BIG ISLAND MINING CONSTRUCTION DETAILS

The Contractor began dredging Channel A on March 29, 1998 with the North Carolina dredge. Using the dike trench channel for DA-1, the North Carolina started dredging at station 41+25, dredging the left side of the cut for 160' bottom. The Channel A, being 450 feet wide had to be dredged with three cuts to obtain the full width. On March 30th the Katrina commenced dredging at station 74+00. Field surveys verified that the existing Atchafalaya River bottom was below the flared entrance channel of Channel A between the beginning of work station 24+89 and 74+28. This non-dredging reach of Channel A primarily resulted in an under-run of some 600,000 cubic yards to the bid quantity for Channel A. RRCC continued dredging the reach of Channel A opposite Disposal Area No. 1 (station 7+00 to stat 85+00), during April 1998.

On May 21, 1998 the North Carolina Dredge left the job site, leaving the Katrina to dredge remaining BIM channels. Contractor completed "before" surveys on Channel D in early April and upon reviewing same it was discovered that there was a new channel which was developing between the planned Channel D and Shell Island (mainland) that had a bottom depth averaging at -5.0 NGVD.

The Engineer recommended to the Owner that Channel D be re-aligned to follow the thalweg of the developing channel which would be more hydraulically efficient. In addition, the construction of DA No. 3 in 5 feet of water was recommended to be deleted since it would be difficult to build (required 8' high dike) with the in-situ material. The Owners accepted the recommendation and Engineer prepared a drawing showing the revised alignment of Channel D to start at intersection with Channel A at station 67+20 instead of station 51+77. An advanced copy of drawing was given to Contractor who was awaiting decision to commence work on building the dike along DA 45. Following completion of dike along Channel D, the Katrina commenced dredging re-aligned Channel D on May 25th. The 4000 feet long by 20' feet bottom width Channel D was completed on June 3, 1998. The Katrina completed placement of dredged material into DA-1 on May 20, 1998 and began placing material into DA-5. The official FC-3 was sent to RRCC on June 24, 1998 to confirm oral instructions given on Channel D, DA-3. Contractor continued dredging Channel A and constructing DA-5 (channel A) disposal dike and reached station 86+00 of Channel A and station 108+00 of DA-5 front dike (channel A) at the end of May 1998. The Contractor on May 31, 1998 had dredged a total of 1,043,950 cubic yards including Channel D, on the BIM project since March 29th when dredging began on BIM. DA-1 was completed on May 25th.

In June the Contractor continued to work on Channel A, disposing material into DA-5 along Channel A side while constructing front dikes along Channel B opposite DA-5 and Channel A opposite DA-6. On June 30th the Contractor completed Channel A to station 111+00 having dredged a total of 1,542,000 cubic yards on Channel A.

During July, Contractor completed dredging the full width of Channel A to station 157+30. Contractor encountered heavy shell concentrations around station 138+00 and again at station
148+00 which was placed in DA-5 in piles about 700 feet from the front dike. The bucket dredge constructed the front dike of DA-8 along Channel B.

LDNR held a project dedication ceremony on July 1, 1998 at the Atchafalaya Delta Headquarters which is on Catfish Pass, about 2 miles from the end of the BIM project. Senator Breaux and officials from all the agencies involved with the CWPPRA program were present, along with the press officials were briefed on the project and visited the DA-5 site to observe the new marshland being created. Following the site visit a ceremony was held in the Morgan City Civic Center. See Appendix B for Ceremony.

On July 11, 1998 the Contractor completed initial diking of DA-6 and began discharging into DA-6. During July the Contractor completed the Bafbre Dredging Surveys for the remainder of Channel A, Channel B, Channel E and Channel C. In reviewing the projected yardage available and comparing this to amount of yardage in the contract as bid, there was still a large predicated under-run in actual yardage to be dredged. This deficiency would have resulted in not achieving the project goals to create the projected acres of new marshlands. In discussing this finding with the Team Owners the Engineer recommended the following changes to the project to recapture the disposal acreage in DA-6, DA-8 and DA-9.

1. **Channel A:** Change the bottom widths as follows:
   - a. Widen bottom from 300' to 375' between station 145+00 and 180+00.
   - b. Bottom stays at 250' between station 180+00 and 200+00.
   - c. Shift 125' bottom Channel A to south side of channel baseline between station 200+00 and 206+00; (end of work).

2. **Channel B:** Widen bottom width from 125' to 160'.

3. **Channel C:** Widen bottom width from 100' to 125'.

4. **Channel E:** Widen bottom width from 100' to 125' and end work at station 41+50, to the -3.0 NGVD contour line of Big Island.

5. **Add a new Channel F** with a bottom width of 160', starting at Channel A station 180+00 and extending on 45° to the north west for a distance of 2200 linear feet to tie-in with the existing pipeline canal.

The Owners orally approved changes 1 thru 4. By letter of August 10, 1998 the Owner's agreed to the proposed recommended changes for Channel F provided that the existing Coastal Use Permit be revised to show Channel F, since it is a new channel. The Contractor was given an advanced drawing by the Engineer and was orally directed to implement the above changes (except for Channel F) to maintain construction progress. A revised permit application for Channel F was subsequently submitted to the Corps and LDNR permit section by the local NMFS office, utilizing revised permit drawings prepared by SCG.
Contractor started dredging Channel B on July 31st. At the end of July the Contractor had dredged 2,123,193 cubic yards of material from Channel A. The dredging of Channel A was done with two cuts. Half of the Channel was deposited into DA-5 and half deposited into DA-6.

During August 1998 the Contractor continued dredging Channels B discharging into DA-6 then DA-5, constructing the front dike along Channel A for DA-8 and DA-9. Channel B was completed to station 55+24 on August 8, 1998. Contractor returned to dredging Channel A right half (along DA-8) then left half between stations 157+00 and 200+00 completing the full cut of Channel A at station 200+00 on August 24th. Contractor then continued dredging Channel A to 206+00 completing Channel A on August 25th. The Contractor commenced dredging Channel C on August 26th depositing into DA-9. Heavy shells were encountered between station 1+50 and 7+00. Concurrently, the bucket dredge mobilized in Natal Channel and began dredging the shoaled entrance on August 28th and completed work on September 5th.

On August 6th representatives from LDNR and LDWF established five permanent benchmarks on the project. Two were established on the ASD project and three were established on the BIM project. After installing the benchmarks RRCC established the "xyz" of each benchmark to NAD 27 Datum. BCG formalized a drawing and benchmark descriptions and delivered same to LDNR on September 4, 1998. The Benchmarks are described in Appendix C of this report.

On August 29th, the Katrina stopped dredging Channel C at station 16+15 and relocated to Channel E, discharging into DA-6 because of insufficient land discharge line. At the end of August the Contractor had dredged 2,472,279 cubic yards of material from Channel A.

Contractor demobilized from the job site on September 1, 1998 due to advancing Tropical Storm "Earl". On September 3rd Contractor returned to site and began dredging in Channel E at station 14+00 and disposing into DA-6. Also, the bucket dredge returned to complete dredging the Natal Channel shoals. However, dredging was difficult for the bucket dredge due to excessive tidal currents filling in dredged excavations. The dredge had to over dredge to -12.0 feet to achieve -8.0 net section. The Natal dredging was completed on September 5, 1998. There was no apparent damage to the completed work from Tropical Storm "Earl". The bucket dredge then moved to Channel F and dredged the front dike of DA-B.

On September 6th the Katrina began discharging into DA-9 at station 17+00 of Channel E. At station 35+00 disposal was switched back to DA-6 until completion of both the left and right thirds of the turning basin. The Katrina dredged the middle third of the turning basin while disposing into DA-9, completing Channel E on September 17th. On September 11th the Corps of Engineers approved the C.U.P. revision to dredge Channel F; and, BCG issued formal Field Change No. 4 September 14th to the Contractor. This field also officially compiled all of the previous revisions to change Channels A,B,C, and E that were issued earlier. For a description of the PC-A refer to Appendix A. The Contractor began dredging Channel F on September 18th, disposing material into DA-8. Channel F was dredged to a bottom width of 160', and was completed to station 21+36 on September 23rd. The Contractor then moved to station 16+00 of
Channel C and began dredging. Contractor disposed material from Channel C into DA-9 and completed dredging to station 23+00 on September 25th.

During an earlier inspection of site (8-27-98) on Channel A the Engineer noticed about a 100' plug was left between where the Contractor completed Channel A @ station 206+00 and the deeper water within the existing pipeline. The Engineer directed the Contractor to return to Channel A and remove the "plug" at end of cut. It referring to plans they instruct Contractor to dredge to the centerline of the existing canal. The Contractor, following completion of Channel C, remobilized to end of Channel A and dredged out plug to station 207+13. All required channel dredging for the BIM project was completed on September 25, 1998. Contractor immediately demobilized the dredge plant due to the approaching Hurricane George.

Following the passage of George a final punch list was made, the only items of work that remained was to clean up site and remove dredge lines, and the construction of dike breaches. Also, the staking of temporary channel markers (2" pvc pipes) to identify the bank of Channel B where it intersects Channel A. The LDWF requested that the channel point be marked to keep boaters from running aground by turning too soon along DA-8. RRCC said that it would take them about two weeks to complete the dike breaches. In addition, some of the final surveys for BIM needed to be taken and delivered.

On October 13th a final inspection was made. There were still some uncut dike breaches along the front dikes of DA-5, DA-6 and DA-8. Also, the point of Channel A-B was not staked adequately. Contractor agreed with our findings and completed the dikes and channel markers by our next inspection on October 27th. All dike breaches and staking had been accomplished. The BIM Before and After Surveys of channels and disposal areas were delivered to the Engineer on November 17, 1998 thereby completing the construction contract requirements.

During the course of construction one accident occurred that resulted in an injury. The accident occurred on the job quarterboat, in the galley, at 5:30 am on the morning of April 8th. An off duty worker while exiting the galley slipped and fell on the outside deck of the quarterboat. The employee broke lower left leg and was taken to a Morgan City hospital for treatment.

CONCLUSIONS

The BIM/ASD projects were successfully constructed (within time and under budget) and the project's expectations have, we feel, been achieved. After Survey show the channels were dredged to the depths and widths called for in the plans and specifications. Also, the disposal areas achieved acreage requirements and configurations expected for this project. BCG presents the following conclusions and discussions of what occurred on this project that could be of benefit for future coastal freshwater diversion projects.
Project Scoping

The CWPPRA projects define a project scope and estimates project costs and benefits. These projects are then either engineered in-house or awarded to an outside consultant. The LDNR should maintain a total scope flexibility and should have an in-house project peer review by an objective noted team of experts from the agencies impacted before awarding, to review things such as:

a. Environmentally compatible with surrounding areas; i.e. will this project complement or detract the contiguous area.
b. Environmental impact upon the surrounding areas; i.e. will materials used in the project be compatible with the area.
c. Constructability of the project within current construction equipment constraints; i.e. to reflect material, dredging, flotation, disposal height and other limitations.

The initial LDNR scope of the BIM project was not the best solution to achieve the desired goals of diversion channels and marshland creation. For example, the location of the Big Island Channel, as originally conceived was on the island itself. Hydrologically, this would have been inefficient due to location on inside of riverbend. Also, it would have been very disruptive of LDWP’s activities as well as the environment on the island.

Project Engineering

The Engineer should be allowed to value engineer the initial project scope to assure that the scope allows for the most expeditious construction methods to be utilized that will provide cost effective and environmentally sound results. Review milestones should be established, say at the 25%, 50% and 90% design progress, to assure the Owner’s Team that the project is being designed to their expectations.

Project Permitting

The permit application process for the ASD/BIM project was, BCG feels, rather complicated in that the permit applications were made by NMFS and handled by the local office. This required additional coordination with other agencies and LDNR by the Engineer to keep all parties informed. Request consideration by LDNR that the Engineer be assigned the LDNR Agent for the CUP Permit and that the Engineer do the actual permit application for LDNR. Also, LDNR should consider being the permit owner since this agency is responsible for project administration. LDNR would then act as the clearing house for all project milestones and would keep all other impacted agencies informed of project progress. Engineer would then report to only LDNR on project progress.

Construction

The Construction activities that, BCG feels, were a positive and contributed to the overall success
of the project are the following:

1. Weekly site trips to inspect progress, and discuss any problems early on to allow for early resolution.
2. Daily Inspection reporting that kept Engineer and Owner informed of work progress.
3. Active Team participation by LDNR, LDWF and NMFS, RRCC and BCG in the weekly on-site meetings. A real consensus on how to best resolve problems was achieved.
4. Plans engineered to reflect construction equipment and methods capability.
5. Contractor cooperation.
6. Construction of lobe islands (front dikes) with a bucket dredge rather than marsh hoe machines.

There were some things that occurred during construction that, BCG feels, could be improved upon on future projects:

1. The project planning period was protracted over one year due to awaiting the promulgating of a land use agreement between LDNR and LDWF. Also, the Corps delayed the approval of the initial permit application. On future projects consideration should be given to identifying the land use requirements prior to award of an engineering project. Similarly, concept project scoping should be reviewed by the CWPPRA representatives of the Corp and other agencies involved to, possibly, eliminate the delays encountered during the Permit acquisition phase planning of this project.

2. The project disposal area boundaries that BCG designed could be closer to the channels at channel intersections and channels flaired on the acute inside angle of channel intersections. This would have eliminated the broad point bank created at Channel B and A of BIM. It was considered to dredge out this flail after completing dredging on BIM. However, due to Hurricane Georges the Contractor didn’t have time to dredge before evacuating the site.

3. Navigation Channel Aids were not a part of the BIM/ASD project. However, the LDWF requested some channel definators or markers be installed to guide boaters at some channel intersections which was done by Contractor with concurrence from Owners. The question of liability for navigation aids should be considered on future projects. Whether navigation aids should be included and who should be liable for them and responsible for their maintenance, should be determined by LDNR.

4. The addition of Channel F to the project required that the existing Coastal Use Permit be revised. Although everything worked out on this project, any extended
delay in receipt of the revised permit could have prevented the work from occurring. On future projects, including optional work areas (such as Channel F) on the initial permit should be considered. This would eliminate the subsequent revisions to permit to be made, if optional work was requested during construction. This was done on disposal areas, but not on channels.

5. On future projects requiring an on site office and extensive travel time, BCG will include the requirement of a separate inspector office, and an all weather crewboat with HVAC. The sharing an office with the Contractor results in crowded conditions and does not provide private meeting space for Inspector and Engineer. Also, the crewboat during summer months needs to have an air conditioned cabin in Louisiana.

6. The project area had existing active gas lines that impacted the project solution. The 8 inch Cypress Gas Line prevented the full extension of BIM Channel A and branch Channels B & F to exit in deeper water. Fortunately, there was an existing abandoned pipeline canal that had 3 to 4 feet of depth which we emptied into. On the ASD side the lengths of both Natal Channel and Castille Pass was limited by the 20 inch gas line running across Atchafalaya Bay. This line prevented Natal Channel from reaching deeper water to empty into. Natal went to 100 feet of the line and empties into only about 2 feet of water which will impact the efficiency of delta development at this location. Consideration on future projects would be to relocate in-situ utilities in a project area to make them lower so new channels could be constructed across them.

Report Summary

BCG feels the construction of Atchafalaya Sediment Delivery and Big Island Mining projects has achieved the goals and expectations of the assigned project by the Louisiana Department of Natural Resources and the National Marine Fisheries Service by creating a new west delta lobe behind Big Island that will serve as the initial vehicle to allow annual overflows from the Atchafalaya River to continue to naturally build marshlands in Atchafalaya Bay utilizing the channels and lands created under this project. The re-opening of Natal Channel and Castille Pass in the emerging east delta will convey silt laden river water to fill in the back bay areas and create new marshlands, naturally. In addition, the Louisiana Department of Wildlife and Fisheries through the singular efforts of Mr. Greg Linscombe insured that much of the newly-constructed marshlands were constructed with low elevations to allow for proper wetland vegetation to grow in the new marshlands. The success of the BIM/ASD projects was primarily due to the diligence displayed by the team members; the Owners who decided the project scope and provided the funding, the Engineer in planning and designing an environmentally sound constructable project, and providing competent, oversight for construction of said project, and the Contractor who endeavored to provide
construction dredging methods to achieve the desired goals of the project while staying within budgetary and time constraints.

The submittal of this report satisfies the requirements of our contract with LDNR for the planning design and construction management of the Atchafalaya Sediment Delivery and Big Island Mining Projects.

Emmett J. (Bill) Mayer, Jr., P.E.
Project Manager

BROWN CUNNINGHAM & GANNUGH, INC.
9181 Interline Ave.
Baton Rouge, LA 70809

Telephone: 225-924-3116
PHOTOGRAPHS
APPENDIX A

PROJECT FIELD CHANGES
March 3, 1998

Mr. Chris Rayner
River Road Construction, Inc.
P.O. Box 1406
Mandeville, LA. 70470

RE: BIM/ASD
Field Change No. 1

Dear Mr. Rayner:

This confirms my field instructions to you to dredge the Castille Pass channel to a reduced bottom width of 125 feet wide with 1V:3H side slopes in lieu of the planned 190 foot bottom. Based upon pre dredging survey channel readings, the existing Castille Pass is maintaining itself on average at a -5.0' NGVD and an approximate bottom of 120' to 150'. The volume of dredging required to restore the channel to a -10.0 NGVD for some 2100 feet is estimated at some 35 to 40 thousand cubic yards. Also, initial dredging is to not cross the existing 20 inch gas line. Therefore, it was recommended to perform a 125' bottom cut to -10.00 between stations 0+00 and 20+00.

If you have any questions and/or concerns, please advise.

Sincerely yours,

BROWN CUNNINGHAM GANNUCH, INC.

[Signature]

Emmett J. Mayer, Jr., P.E.
Construction Engineer Manager

cc: V. Cook
R. Gannuch
Mr. Chris Rayer  
River Road Construction, Inc.  
P.O. Box 1466  
Mansville, LA 70470

RB: BIM/ASD Project Field Change No. 2  
Revision to Natal Channel Alignment Between Sta. 70+00 and End.  
BCG Project 30594-1.

Dear Mr. Rayer:

As the Engineer of Record and in accordance with the project specifications we are forwarding Field Change No. 2 to you for implementation into the project. This change calls for extending and revising the bottom width of Natal Channel from station 74+00 to the new end station 88+00. Also, adding Branch A channel at station 70+00 with a deflection angle of 45° and extending for 1500 feet in an effort to reach deeper bay bottoms. The new channel bottom width between Sta 74+00 and end, and the Branch A channel between Sta 0+00 and end is reduced to a 150 foot bottom at a design depth of -10.00 NGVD. The channel side slopes remain at I:VH. In addition, there is a flair end transition on both channels as shown on the enclosed Field Change No. 2 drawing dated March 10, 1998. This change in cross section and channel extension is estimated to require the total dredging in Natal Channel of approximately 657,000 cubic yards; and is to be constructed at the unit bid price of $1.59 per cubic yard. This change results in no changes to the contract unit prices and stays within the estimated bid quantity item No. 510 of the contract.

Please implement this field change immediately. If you have any concerns or questions, please advise.

Sincerely yours,

BROWN CUNNINGHAM GANNUCH, INC.  

[Signature]

(see pg. 2 for excl. and co)
Mr. Chris Rayer
March 10, 1998
Page 2

End: 8 1/2" x 11" Drawing

cc:
V. Cook @ LDNR
R. Rubesman @ NMFS
E. Zobrist @ NMFS
G. Linscombe @ LDWF
G. Duszynski @ LDNR
K. Vaughan @ LDNR
H. Janecz @ DNR
FIELD CHANGE NO. 2
BROWN, CURRININGHAM AND CANNUCH

FIELD CHANGE NO. 2
ATCHAFALAYA SEDIMENT DELIVERY
FIELD REVISION TO NATAL CHANNEL
FROM STA. 70+00 TO END

DATE: 3/9/98
SHEET: 1 OF 1
June 24, 1998

Mr. Chris Rayer
River/Road Construction, Inc.
P.O. Box 1406
Mandeville, LA 70470-1406

RE: BIM/ASD Project Field Change No. 3
Revise Channel D Alignment,
Delete Disposal Area No. 3
And Revise Disposal Area No. 4/5

Dear Mr. Rayer:

This letter confirms oral instructions previously given to River Road on Field Change 3. As the Engineer of record and in accordance with the project specifications we are directing you to implement Field Change No. 3, as follows:

1. Realigning the originally configured Channel D of the construction plans, to begin work at Channel A c/f station 67+20 and construct a 200' bottom to Elev. -10.0 NGVD. The new Channel D extends along a centerline azimuth of 97° 21' 53" for 4000 feet, ending work at Channel D (c/f station 40+00).

2. Delete Disposal Area No. 3 from the project in its entirety.

3. Modify Disposal Area 4/5 to be contiguous to the new Channel D alignment, all as shown on "Field Change Drawing No. 3", dated June 1998 (copy attached).

4. My letter dated April 19, 1998, entitled "Field Change No. 3" is to be voided since Channel D is realigned rather than extended. This present letter which describes required Field Change No. 3 supersedes my letter of April 19, 1998. The reason for realigning Channel D results from review of contractor's Before Dredging Surveys for the original D and Disposal Area No. 3. This survey shows an existing shallow natural channel that has developed having an average depth to -4.0 NGVD along the alignment of the new Channel D, described in paragraph 1 above. Following this in-situ channel affords a better hydraulic solution, since otherwise, there would be two channels side by side. Also, DA No. 3 has to be deleted since there is insufficient space between the new Channel D and the main land to construct DA No. 3.

5. Disposal Area 4/5 is revised and expanded along its perimeter to be contiguous to the new Channel D alignment, the optional back dike alignment for DA No. 4/5 has been shifted to follow the +1.0 NGVD contour elevation of the bay bottom. Some field deviation from alignment shown may be required to stay in shallow water (-1.0 NGVD).
The project estimated changes of quantities that result from Field Change No. 3 are as follows:

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<tr>
<th>Item</th>
<th>Original</th>
<th>Revised</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Channel D:</td>
<td>101,000 cy</td>
<td>174,345 cy</td>
<td>+73,345 cy</td>
</tr>
<tr>
<td>2. DA No. 3:</td>
<td>+82.6 ac</td>
<td>0.0 ac</td>
<td>-82.6 ac</td>
</tr>
<tr>
<td>3. DA No. 4:</td>
<td>+92.68 ac</td>
<td>+91.1 ac</td>
<td>-1.6 ac</td>
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<tr>
<td>4. DA No. 5:</td>
<td>260 ac</td>
<td>219 ac</td>
<td>-41.0 ac</td>
</tr>
</tbody>
</table>

The increase in dredge quantities for revised Channel D of 73,345 cy is less than the predicted underrun of 326,000 cy for BIM based upon contractor’s Before Dredging Surveys. This Field Change No. 3 stays within contract “as bid” price and requires no contract changes to the original contract between DNR and River Road Construction Company. All other requirements of the original contract are still in force except the foregoing instructions for implementing Field Change No. 3.

If you have any questions or concerns, please contact me at 504-924-3116.

Sincerely yours,

BROWN, CUNNINGHAM & GANNUCH, INC.

Emmett J. Mayer Jr., P.E.

BIM/jga

sends: DWG Field Change No. 3

cc: V. Cook
    R. Gannuch
Mr. Chris Rayner  
River/Road Construction, Inc.  
P.O. Box 1406  
Mandeville, LA 70470-1406  

Re: BIM/ASD: Removing shoaling from entrance to Natal Channel

Dear Chris,

This letter confirms our oral agreement on removing the shoal at the entrance to Natal Channel. Use the bucket dredge (Capt. Berry) to dredge between c.f. stations 12+00 to 21+00 to create a channel with a 170 bottom width at -8.0 NGVD with a box side cut to achieve a 1V on 3H side slope. Deposit the dredged material on both sides of the new cut. Concentrate placing dredge material to plug the existing trench in front of Disposal Area No. 1 to shut off cross flow into Natal Channel. Also, construct a short groin dike on the Disposal Area No. 2 side extending from the bank line parallel to the channel cut, and extending out not further than c.f. station 12+00. Based upon Before Dredging surveys and a design template of -8.0', the estimated volume is expected to be 21250 cubic yards.

Please take After Dredging surveys as soon as possible for verification. If you have any questions regarding above instructions, please call.

Sincerely yours,

Brown, Cunningham & Gannuch, Inc.

Emmett J. (Ike) Mayer, Jr., P.E.

cc: V. Cook  
E. Zobrist  
G. Lincombre  
R. Gannuch
Van Cook  
LDNR - Coastal Restoration  
625 N. Fourth Street  
Baton Rouge, LA 70804

Re: BIM/ASD: Request for Field Change No. 4

Dear Mr. Cook:

On September 11, 1998 the Corps issued approval of our request to add Channel "F" to project. Enclosed, please find BCU's letter to River/Road conveying instructions to revise widths to Channels A, B, C, & E. Also, add a new Channel F to the project in order to maximize the creation of marshlands for the project. These changes, if implemented, will result in an approximate underrun of BIM/ASD project of some $247,450.00. Upon reviewing actual field "Before Dredging" surveys there will be a sizable underrun of cubic yards on the project as originally configured. Also, this will result in an underrun of marshland acreage.

We propose that the existing channels have their bottom widths slightly widened to achieve the project intent to create new marshland acreage. In addition, we recommend that a new Channel F be added to the project to enhance the potential for future sediment deposition to the western end of the project, i.e. another outlet to the northwest emptying into the open bay.

Implementing the recommended changes as outlined in the Field Change No. 4 will result in an underrun to the project of some $247,450.00. By previous letter of August 10, 1998 both you and Mr. Zobrist (NMFS) approved the above changes as field changes provided the COE issued permit approval.

We request your concurrence to release this Field Change No. 4 to River/Road for implementation since we have Corps approval on "F".

If you have any questions, please call me.

Sincerely yours,  

BROWN, CUNNINGHAM & GANNUCH, INC.

[Signature]

September 14, 1998
Mr. Chris Rayer  
River/Road Construction, Inc.  
P.O. Box 1406  
Mandeville, LA  70470

Re:  BIM/ASD Project Field Change No. 4  
Revised Channel Widths For "A", "B", "C", and "E" and add Channel F.

Dear Mr. Rayer:

This letter shall confirm our discussions on completing the Big Island Mining project based upon the actual "Before Dredging Surveys", recently completed. In an effort to achieve the original design intent of this project and to maximize creation of marshlands acres we direct you to revise the following channels:

1. Channel A:
   - Widen the bottom width from 100' to 375' between stations 145+00 and 180+00.  
   - Channel A widths stay the same between sta. 180+00 and end of job; as 250' bottom between sta. 180+00 and 200+00, and 125' bottom between sta. 200+00 and 206+00. However, between 203+00 and 206+00 Channel A is shifted to the south side of Channel A baseline.

2. Channel B:
   - Widen Channel B from a 125' bottom to a 160' bottom.  
   - Dredge Channel per dimensions shown on cross section.

3. Channel C:
   - Widen Channel C from a 100' bottom to a 125' bottom.

4. Channel E:
   - Widen Channel E from 100' bottom to a 125' bottom and end channel at sta. 414+50+ to the +3.0 NGVD contour along alignment shown.

In addition, add new Channel F starting at station 180+00 of Channel A and extending on an azimuth of 119° 06' 02" to station 22+00+ to intersect with the existing pipeline canal. Channel F shall have a bottom width of 150 feet to -10.0 NGVD. Also, extend the Disposal Area No. 8 dike along new Channel F with the bucket dredge to station 20+00 of Channel F. Contractor shall conduct a magnetometer survey prior to doing work along Channel F to insure that no pipelines exist.

An attached set of 5 drawings describes the directed field changes for Field Change No. 4.
Mr. Mayer
Page 2
September 14, 1998

The estimated revised values to complete the project are estimated as shown on attached Table A. In comparing the estimated final cost to the as bid cost an estimated underrun of $247,450,000 could be achieved:

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<th>Description</th>
<th>Amount</th>
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<tr>
<td>As Bid</td>
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<tr>
<td>Est. Final</td>
<td>$7,249,349.00</td>
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<tr>
<td>Underrun</td>
<td>$247,450.00</td>
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The actual final quantities will vary slightly based upon after dredging surveys. However, this Field Change No. 4 results in the total project costs not exceed the "as bid" total project costs and requires no changes to the original contract between DNR and River/Road Construction Company. All other requirements of the original contract are still in force except the changes authorized by Field Change No. 4 as well as Field Changes 1 thru 3, previously issued.

If you have any questions or concerns, please contact me at 225-924-3116.

Sincerely yours,

BROWN, CUNNINGHAM & GANNUCH, INC.

Emmett J. Meyer, Jr., P.E.

cc: V. Cook@LDNR
    E. Zobels@NMFS
    R. Gannush@BCG
    R. Ruebsamen@NMFS

codi: Drawings (five); Field Change No. 4
      Table: Field Change No. 4
<table>
<thead>
<tr>
<th>Bid Item - Description</th>
<th>Revised Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
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<tr>
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APPENDIX B

PROJECT DEDICATION CEREMONY

JULY 1, 1998
Atchafalaya Sediment Delivery and
Big Island Mining
CWPPRA Act Restoration Project
Site Visit and Over-flight

July 1, 1998
Proposed Project Tour Helicopter Schedule for July 1, 1998

7:30 a.m. Depart Morgan City Municipal Auditorium by van to helicopter landing/take-off site

7:40 a.m. Safety briefing by National Guard and N76 helicopter pilot; Pre-flight briefing/overview of site tour and flight plan (by Erik L.)

8:00 a.m. Depart Morgan City

8:40 a.m. Arrive Atchafalaya Delta Wildlife Management Area Camp

- Welcome (by LDWF personnel)
- Project Overview (by Van Cook, LDWF)
- Construction Overview (by Chris Mayer)

Load air boats.

9:10 a.m. Project site tour by air boat

- Existing wetlands/northwest Big Island
- Created delta lobes/Disposal areas 5, 5, 4, and 3 (Engineering overview by Ike Mayer)

9:55 a.m. Return to Camp

10:10 a.m. Depart Delta

10:30 a.m. Arrive Morgan City

Return from helicopter landing site to Morgan City Municipal Center by vans

11:00 a.m. Ceremony at Morgan City Municipal Center
Dedication of "Breaux Act" Wetlands Restoration Projects
Atchafalaya Sediment Delivery & Big Island Mining

Morgan City Municipal Auditorium
Wednesday, July 1, 1998
11:00 AM

PROGRAM

Welcome & Introductions
The Honorable John Breaux
U.S. Senator
Master of Ceremonies

Recognition of Dignitaries, U.S. & State Legislators and Local Officials

Remarks
Rolland A. Schmitz, Director
National Marine Fisheries Service

Colonel William L. Comardelle, U.S. Army Corps of Engineers
Chairman, multi-agency Wetlands Conservation and Restoration Projects

C. L. Callahan, Secretary
Louisiana Department of Natural Resources

H. C. Jenkins Jr., Secretary
Louisiana Department of Wildlife & Fisheries

The Honorable Father "Ted" Gautreaux
Louisiana House of Representatives

The Honorable Paul "Pete" Kehoe
Louisiana House of Representatives

Timothy Matts, Mayor
City of Morgan City

Closing Remarks
Len Bahr
Governor's Executive Assistant for Coastal Activities
APPENDIX C

BENCHMARKS ON BIM AND ASD
September 4, 1998

Van Cook
LDNR - Coastal Restoration
625 N. Fourth Street
Baton Rouge, LA 70804

Re: Benchmarks on BJM/ASD

Van:

Enclosed here are Benchmarks as established by DNR and Wildlife and Fisheries Personnel. These are forwarded for your information and records.

Sincerely,

[Signature]
Emmett J. Mayer, Jr., P.E.

cc: E.Zobrist
    H.Juneau
    G.Linscombe
BIM/ASD BENCHMARK DESCRIPTION
(SHEET 2 OF 2)

1. The marks were established using 9/16" diameter stainless steel rods, connected together with threaded adapters, all of manufacture by Bernsten International, Inc., P.O. Box 6976, Madison, Wisconsin 53708-8670. The Louisiana Department of Wildlife and Fisheries supplied all benchmark components from their stock of an earlier purchase from the Bernsten Company. The specific nomenclature for the rods and connecting hardware is "MODEL H-1, HDR, SS ROTATING ROD MONUMENTS (U.S. Patent No. 4,087,945)."

Benchmarks were physically established by manual driving using a 2 1/2" diameter post driver and tightening successive rods with a stiloane wrench, while employing the driving head, furnished by Bernsten, to protect each 4' length of rod from blows of the driver. Rods were connected per supplied instructions and driven to " refusal", and the completed assembly was marked and protected by use of a 4 foot length of Schedule 40, 6" diameter PVC pipe of white color, that was partially buried in the ground to an extent that PVC pipe, with cap, extended approximately 1 foot above the tip of each respective benchmark brass cap.

2. Benchmark AUGUST, located on left descending side of the Big Island Channel, approximately 160 feet (estimated) SW of the water surface gage and piling used for the Big Island Channel construction project, approximately 30' south or "landward" from water's edge on crown of dike of Spill Disposal Area #1, opposite Channel Station 61+43\(\frac{1}{2}\) with offset of 491\(\frac{3}{4}\) from left (estimated). Total Rod length used was 36 feet, or 9, 4' joints. Rod was left protruding above ground approximately 1 foot.

3. Benchmark JUNEAU, located on right or north descending bank of Big Island Channel, approximately 100 feet east of a grove of willow trees currently existing on southern edge of Spill Disposal #4 as modified, and approximately 33 feet north or "landward" from water's edge in crown of channelward dike of Area #4, opposite Channel Station 101+85\(\frac{1}{4}\) with offset of 190\(\frac{1}{2}\) from right (estimated). Total Rod length used was 32 feet, or 8, 4' joints. Rod was left protruding above ground approximately 1 foot.

4. Benchmark MARCANTIEL, located on left descending or south side of Big Island Channel Station 175+91\(\frac{1}{4}\) with offset of 555\(\frac{1}{2}\) from left (estimated) from Big Island Channel Centerline, where ground surface this day of installation was about 1.5' Elevation. Total Rod length is 32 feet, or 8, 4' joints. Rod was left protruding approximately 24" above existing ground surface of that day. Dike of Spill Area in this area makes a turn to the south and is immediately east of the entrance to the new access channel that goes south to Big Island.

5. Benchmark MOUTON, located on eastside of Natal Channel, in crown of channelward dike of Spill Disposal Area #2 of Natal Channel, opposite Water Surface gage and piling that was set in Natal Channel during construction period, approximately 30 feet landward of water's edge, opposite approximate Channel Station 28+19\(\frac{1}{4}\) with offset of 217\(\frac{1}{2}\) from right (estimated). Total Rod length is 28 feet, or 7, 4' joints. Rod was left protruding approximately 1 foot above existing ground of that day of installation.

6. Benchmark COOK-LINCOLN, is located in the existing natural marsh of Ibis Island on the right descending or east bank of Castille Pass Channel, approximately 35 feet landward of water's edge of that day when water surface was +1.2', opposite estimated Channel Station 10+01\(\frac{1}{4}\) with offset of 300\(\frac{1}{2}\) from right. Total Rod length of 28 feet, or 7, 4' joints, were used to establish this benchmark. Tip of top of rod was left protruding approximately 25 inches above the ground.
APPENDIX D

BEFORE AND AFTER SURVEYS

SECTION ONE - ASD

SECTION TWO - BIM
Mr. Van Cook
LaDNR - Coastal Restoration
625 N. Fourth Street
Baton Rouge, LA 70804

RE: Atchafalaya Sediment Delivery (PAT-2)
CWPPRA Project - Project Construction Surveys

Dear Mr. Cook,

We herewith transmit the following survey information as a requirement to our engineering agreement with LaDNR on the subject project:

1. Total of 6 full size drawings describing the channel and disposal areas for Castille Pass dredging project. These surveys were performed by River/Road Construction Co. and witnessed by BCG inspectors.

2. Total of 44 full size drawings describing the channel and four disposal areas for Natal Channel dredging project. These surveys were performed by River/Road Construction Co. and witnessed by BCG inspectors.

In addition we are transmitting a total of 27 electronic diskettes that contain all survey plotted information produced on this project. The diskettes are basically compiled in three formats as follows:

1. .DWG files: Actual drawings of before/after dredging surveys performed. Can be used to reprint drawings described above.

2. .DXF files: Actual scaled survey plots used to prepare the .DWG files.

3. .XYZ files: The listing of all survey points shown on the drawings. Each print shows a northing, easting and NGVD elevation.

This completes the survey requirement deliverable for the Atchafalaya Sediment Delivery Project. If you have any questions/concerns please feel free to call us @(225) 924-3116.

0181 Interline Avenue • Suite 100 • Baton Rouge, LA 70809 • 504-924-3116 • FAX: 504-924-9130
cc: R. Ganuch, BCG
    M. Fugler, DNR

EJM/odh
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<th>Date</th>
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Station 56+00 to 88+00 drawings of before dredging cross sections.

Station 9+00 to 13+00.

Plan view of Natal Channel cross sections between station 30+00 and 58+00.

Plan views of Natal Channels Cross Sections between Stations 5+00 and 30+00.

Listing of survey paints for before dredging cross sections between stations 1+00 and 93+00.

Natal Channel A plan drawing showing before dredging cross sections between Station A0+00 and A15+00.

Cross section survey station center line and station A0+00 to A15+00.

Survey point listing of Natal Channel A before dredging.

Station 31+00 to 35+00.

Station 36+00 to 39+00.

Station 40+00 to 44+00.

Plan of after dredging cross sections Station 5+00 to 88+00.

After dredging cross section drawings showing before dredging, design template, and after dredging surveys from station 10+00 to 54+00.

After dredging cross sections drawings Station 55+00 to 88+00.

After dredging cross section surveys showing plots of before dredging and after dredging readings.

Station 75+00 to 78+00.

Station 79+00 to 82+00.

Station 83+00 to 88+00.
5/19/98

Station 25+00 to 27+00.
Station 28+00 to 30+00.
Station 31+00 to 34+00.
Station 35+00 to 37+00.
Station 38+00 to 42+00.

After dredging cross sections surveys,
showing before dredging, design
template, and after dredging readings.
Station 10+00 to 13+00.
Station 14+00 to 17+00.
Station 18+00 to 21+00.
Station 22+00 to 24+00.
Station 24+00 to 26+00.
Station 26+00 to 29+00.
Station 30+00 to 33+00.
Station 33+00 to 36+00.
Station 37+00 to 40+00.
Station 41+00 to 44+00.
Station 45+00 to 48+00.
Station 52+00 to 54+00.
Station 54+00 to 57+00.
Station 57+00 to 60+00.
Station 60+00 to 63+00.
Station 63+00 to 65+00.
Station 65+00 to 70+00.
Station 70+00 to 74+00.

After dredging survey point listing for
surveys shown on disks 23 and 24.
Point show xyz coordinate.

9/9/98

Plan drawing of entrance to Natal
Channel between Station 12+00 and
21+00 existing bottom condition on.
9/1/98.

Resurvey cross sections of natal Channel
entrance showing existing bottom and
after dredging surveys, design bottom
for redredging is -8.0 NGVD.
Same for Station 16+00 to 19+00.
Same for Station 20+00 to 21+00.
Cross Section Survey plots.
Plan plot after dredging surveys between Station 12-00 and 21-00.
Survey point listing of after dredging of redredging to Entrance to Natal Channel showing northing, easting and elevation between station 12-00 and 21-00.
Re: Final Surveys - Atchafalaya Sediment Delivery Electronic Disks

Dear Mr. Cook:

Reference is made to my letter of October 15, 1998 transmitting final surveys on the subject project. Subsequently, we spoke with Mr. Matthew Mahler who informed us that some of the disks transmitted were unable to be opened. We met with Ron Laverton of RiverRoad and we herein transmit the following two disks containing the original raising information.

Information contained on Disk A & B dated 12/21/98 is as follows:

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</table>

This should complete the requirement on survey deliverables for the Atchafalaya Sediment Delivery project. If you experience any problems, please give us a call.

Sincerely yours,

[Signature]

BROWN CUNNINGHAM & GANNUCH, INC.

cc: R. Gannuch
Mr. Van Cook  
LaDNR - Coastal Restoration  
625 N. Fourth Street  
Baton Rouge, LA 70804

RE: Big Island Mining (CAT-7) Atchafalaya Sediment Delivery  
(PAT-2) CWPPRA Project - Project Construction Surveys

Dear Mr. Cook:

We herewith transmit the following Big Island Mining survey information as a requirement to our engineering agreement with LaDNR on the subject project:

1. Total of 133 full size drawings describing the channels and disposal areas for the Big Island Mining project. These surveys were performed by River/Road Construction Co. and witnessed by BCG inspectors.
2. Also included are a total of 4 full size drawings describing the re-dredging of the closed entrance to Natal Channel. These surveys were performed by River/Road Construction Co. and witnessed by BCG inspectors.

In addition we are transmitting a total of 133 electronic diskettes that contain all survey plotted information produced on the Big Island Mining Project. The diskettes are basically compiled in the formats as follows:

1. .DWG files: Actual drawings of before/after dredging surveys performed. Can be used to reprint drawings described above.
2. .DXF files: Actual scaled survey plots used to prepare the .DWG files.
3. Data files: The listing of all survey points shown on the drawings, these files use the following extensions: .dat, x y z, .pm, .bak, .wkl, .wks, .ad, and .sam.

The after dredging plan view of Channel "A" Sta. 140+00 to Sta. 180+00 is not included with this submittal. An electronic copy of this drawing is being furnished by River Road Construction Company and will be forwarded as an addendum when it is received.

This completes the survey requirement deliverable for the Big Island Mining Project. If you have any questions/concerns, please feel free to call us @ (225) 924-3116.

Sincerely yours,

[Signature]

cc: R. Gannuch, BCG

Brown Cunningham Gannuch  
ENGINEERS • ARCHITECTS • CONSULTANTS  
February 4, 1999
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A.D. Survey
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A.D. Survey
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Cross-section co-ordinates and azimuth
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A.D. Survey
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A.D. Survey
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Xsec117.dwg 7-5-98 Big Island Channel A.A.D. Cross-
Section 117+00

BIM Channel "A"
A.D. Survey
118+00 to 139+00

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122-124.dwg 7-19-98 Big Island Channel A.A.D. Cross-
section 122+00-124+00

125-128.dwg 7-19-98 Big Island Channel A.A.D. Cross-
section 125+00-128+00

129-132.dwg 7-19-98 Big Island Channel A.A.D. Cross-
section 129+00-132+00

133-136.dwg 7-19-98 Big Island Channel A.A.D. Cross-
section 133+00-136+00

137-139.dwg 7-19-98 Big Island Channel A.A.D. Cross-
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Plan.dwg 7-19-98 Big Island Channel A.A.D. Cross-
section Plan View 118+00-139+00

140-143.dwg 8-30-98 Big Island Channel A.A.D. Cross-
section 140+00-143+00

144-147.dwg 8-30-98 Big Island Channel A.A.D. Cross-
section 144+00-147+00

148-151.dwg 8-30-98 Big Island Channel A.A.D. Cross-
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152-154.dwg 8-31-98 Big Island Channel A.A.D. Cross-
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A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. Survey
x,y,z file

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5-6-98
A.D. Plan View 21+00 to 48+00

BICHAAD2.xyz
5-6-98
Point File x,y,z no pt. numbers

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A.D. 13+00-20+00

BIM Channel "A"
A.D. 13+00-20+00

13-20sh1.dxf
4-16-98
Cross Section 20+00-23+00

13-20sh2.dxf
4-16-98
Cross Section 24+00-27+00

Bicaad.dxf
4-15-98
Plan view cross sections
13+00-20+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

BIM Channel "A"
A.D. DXF Files
7+00 to 12+00
21+00 to 43+00

17

ADXSSH4.dxf
5-6-98
Big Island Channel A A.D. Xsection
20+00 to 29+00

ADXSSH5.dxf
5-6-98
Big Island Channel A A.D. Xsection
30+00 to 33+00

ADXSSH6.dxf
5-6-98
Big Island Channel A A.D. Xsection
34+00 to 37+00

ADXSSH7.dxf
5-6-98
Big Island Channel A A.D. Xsection
36+00 to 41+00

ADXSSH8.dxf
5-6-98
Big Island Channel A A.D. Xsection
42+00 to 45+00

18

BIM Channel "A"
A.D. 42+00-63+00

BIM Channel "A"
A.D. 42+00-63+00

Ad0510.dxf
5-11-98
Plan view cross section 42+00-63+00

Xsecal1.dxf
5-10-98
Cross section 42+00-45+00

7
12 BIM Channel "A"
A.D. 42+00-63+0

Xsecsh2.dxf 5-10-98 Cross section 46+00-48+0

18 BIM Channel "A"
A.D. 42+00-63+0

Xsecsh3.dxf 5-10-98 Cross section 49+00-52+0

18 BIM Channel "A"
A.D. 42+00-63+0

Xsecsh4.dxf 5-10-98 Cross section 52+98-55+0

18 BIM Channel "A"
A.D. 42+00-63+0

Xsecsh5.dxf 5-10-98 Cross section 56+00-58+0

19 BIM Channel "A"
A.D. sta 42+00-63+0

Xsecsh6.dxf 5-10-98 Cross section 58+00-61+0

19 BIM Channel "A"
A.D. sta 42+00-63+0

Xsecsh7.dxf 5-10-98 Cross section 62+00-63+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh1.dfx 6-10-98 A.D. Cross Section 64+00-66+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh2.dfx 6-10-98 A.D. Cross Section 67+00-69+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh3.dfx 6-10-98 A.D. Cross Section 70+00-72+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh4.dfx 6-10-98 A.D. Cross Section 73+00-75+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh5.dfx 6-10-98 A.D. Cross Section 76+00-79+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh6.dfx 6-10-98 A.D. Cross Section 80+00-83+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh7.dfx 6-10-98 A.D. Cross Section 84+00-86+0

20 BIM Channel "A"
A.D. 64+00-87+0

Xsecsh8.dfx 6-10-98 A.D. Cross Section 87+0

21 BIM Channel "A"
A.D. Survey 88+00-104+0

Sub88108.dxf 7-7-98 Big Island Channel "A" Plan
View 88+00-104+20

21 BIM Channel "A"
A.D. Survey 88+00-104+0

Sub88108.xyz 7-7-98 x,y,z co-ordinate
No point numbers

21 BIM Channel "A"
A.D. Survey 88+00-104+0

Tsoe.dat 7-7-98 Cross Section line co-ordinates
distance azimuths
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<th>Channel / Survey</th>
<th>X-section File</th>
<th>Date</th>
<th>Description</th>
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<td>Cross section 140+00-143+00</td>
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A.D. Survey
Subsh9.dxf
8-30-98
Cross section 171+00-174+00

BIM Channel "A"
A.D. Survey
Xsecsh1.dxf
9-20-98
Cross section 180+00-183+00

BIM Channel "A"
A.D. Survey
Xsecsh2.dxf
9-20-98
Cross section 184+00-187+00

BIM Channel "A"
A.D. Survey
Xsecsh3.dxf
9-20-98
Cross section 188+00-191+00

BIM Channel "A"
A.D. Survey
Xsecsh4.dxf
9-20-98
Cross section 192+00-195+00

BIM Channel "A"
A.D. Survey
Xsecsh5.dxf
9-20-98
Cross section 196+00-199+00

BIM Channel "A"
A.D. Survey
Xsecsh6.dxf
9-20-98
Cross section 200+00-203+00

BIM Channel "A"
A.D. Survey
180206ad.dxf
9-20-98
Plan view cross section sta 180+00 206+00
x,y,z coordinates, no point numbers

BIM Channel "A"
A.D. Survey
180206ad.xyz
9-24-98
Templet co-ordinates

BIM Channel "A"
A.D. Survey
Channel.prn
9-24-98
Plan view centerline 180+00-206+00

BIM Channel "A"
A.D. Survey
PLANCLAD.dxf
9-19-98
Plan view centerline 180+00-206+00

BIM Channel "A"
A.D. Survey
Xsecsh7.dxf
9-20-98
Cross section 204+00-206+00

BIM Diak 1
Channel "A"
B.D. Surveys
CHANAPLAN.dwg
3-19-98
BIM Channel "A" Plan view -3+00 to 20+00

BIM Diak 1
Channel "A"
B.D. Surveys
XSEC1.dwg
3-15-98
W Pass Channel "A" Cross Section 3+00 to 1+00

BIM Diak 1
Channel "A"
B.D. Surveys
XSEC2.dwg
3-15-98
W Pass Channel "A" Cross Section 2+00 to 6+00

BIM Diak 1
Channel "A"
B.D. Surveys
XSEC3.dwg
3-15-98
W Pass Channel "A" Cross Section 7+00 to 10+00

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Channel "A"
B.D. Surveys

BIM Disk 2
Channel "A"
B.D. Surveys
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    B.D. X-sec
    152+16 - 206+00
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                      Cross Section 152+16 - 157+00

35  BIM Channel "A"
    B.D. X-sec
    152+16 - 206+00
    Xsec2.dwg  5-20-98  Big Island Channel A B.D. X-section
                      Cross Section 158+00 - 163+00

35  BIM Channel "A"
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    152+16 - 206+00
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                      Cross Section 164+00 - 169+00

35  BIM Channel "A"
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35  BIM Channel "A"
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36  BIM Channel "A"
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37  BIM Channel "A"
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                      143+00 - 147+00

37  BIM Channel "A"
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152+16 - 156+00

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7-18-98Big Island Channel A.B.D.X-sec
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143+00 - 180+00
375' Bottom
167-171.dwg
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90+00 - 180+00 Cross-Section
167+00 - 171+00

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143+00 - 180+00
375' Bottom
172-176.dwg
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90+00-180+00
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90+00-180+00
177+00-180+00

38
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143+00 - 180+00
375' Bottom
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7-19-98Big Island Channel A Plan View
143+00 to 180+00

39
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90180BD.xyz
7-19-98x,y,z without point no.

40
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Widths, 180+00-206+00
180-184.dwg
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180+00-184+00 (Labeled incorrectly as A.D. Surveys)

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185-190.dwg
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BIM Channel "D"  
B.D. Survey

Plan2.dwg  5-18-98  Plan view of cross section 27+00-50+89

BIM Channel "D"  
B.D. Survey

BDSEC4.dwg  5-17-98  Big Island Channel D B.D. Xsection 29+00-38+00

BIM Channel "D"  
B.D. Survey

Bdsecsh1.dxf  5-17-98  Big Island Channel D B.D. Xsection Cross Section 0+00-8+00

BIM Channel "D"  
B.D. Survey

Bdsecsh2.dxf  5-17-98  Big Island Channel D B.D. Xsection Cross Section 9+00-18+00

BIM Channel "D"  
B.D. Survey

Bdsecsh3.dxf  5-17-98  Big Island Channel D B.D. Xsection Cross Section 19+00-28+00

BIM Channel "D"  
B.D. Survey

Bdsecsh4.dxf  5-17-98  Big Island Channel D B.D. Xsection Cross Section 29+00-38+00

BIM Channel "D"  
B.D. Survey

Bdsecsh5.dxf  5-17-98  Big Island Channel D B.D. Xsection Cross Section 39+00-48+00

BIM Channel "D"  
B.D. Survey

Bdsecsh6.dxf  5-17-98  Big Island Channel D B.D. Xsection Cross Section 49+00-59+89

BIM Channel "D"  
B.D. Survey

Chandr.xyz  5-18-98  x,y,z co-ordinates no pt. numbers

BIM Channel "E"  
A.D. Survey  
Cross Section

0-3.dwg  10-6-98  Big Island Channel "E" A.D. Xsection 0+00-3+00

BIM Channel "E"  
A.D. Survey  
Cross Section

4-9.dwg  10-6-98  Big Island Channel "E" A.D. Xsection 4+00-9+00

BIM Channel "E"  
A.D. Survey  
Cross Section

10-20.dwg  10-6-98  Big Island Channel "E" A.D. Xsection 10+00-20+00

BIM Channel "E"  
A.D. Survey  
Cross Section

21-27+14.dwg  10-6-98  Big Island Channel "E" A.D. Xsection 21+00-27+14

BIM Channel "E"  
A.D. Survey  
Cross Section

28-35.dwg  10-6-98  Big Island Channel "E" A.D. Xsection 28+00-35+00

BIM Channel "E"  
A.D. Survey  
Cross Section

36-38.dwg  10-6-98  Big Island Channel "E" A.D. Xsection 36+00-38+00
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Big Island Channel "E" B.D. Xsection Plan View 0+00-41+50
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Cross-section 12+00-23+00
Cross-section 24+00-34+00
Cross-section 35+00-37+50
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Cross-section 41+00-41+50

x,y,z co-ordinates no point number
Co-ordinates for Channel template
Cross section line co-ordinates azimuths and distance
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B.D. Survey
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105 BIM Channel "F"
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105 BIM Channel "F"
B.D. Survey
Xsecsh2.dxf 3-7-98 Cross section 5+00-9+00

105 BIM Channel "F"
B.D. Survey
Xsecsh3.dxf 3-7-98 Cross section 10+00-14+00

105 BIM Channel "F"
B.D. Survey
Xsecsh4.dxf 3-7-98 Cross section 15+00-19+00

105 BIM Channel "F"
B.D. Survey
Xsecsh5.dxf 3-7-98 Cross section 20+00-24+00

106 BIM Channel "F"
B.D. Survey
Chanbd.xyz 4-7-98 x,y,z co-ordinates no. point numbers

106 BIM Channel "F"
B.D. Survey
Survey.dat 4-7-98 Channel co-ordinates for raw data

1 BIM Channel "F"
B.D. Survey
Toe.dat 4-7-98 Cross section lines co-ordinates, azimuth
distance

107 BIM Disposal 1
DXF & DWG
B.D. Survey
BIDA1GPS.dxf 5-31-98 B.D. Plan View D.A. #1

107 BIM Disposal 1
DXF & DWG
B.D. Survey
BIMA1A.dxf 5-31-98 B.D. Plan View D.A. #1 25+00 to 55+00

107 BIM Disposal 1
DXF & DWG
B.D. Survey
BIMA1A.dxf 5-31-98 B.D. Plan View D.A. #1 25+00 to 55+00

107 BIM Disposal 1
DXF & DWG
B.D. Survey
BIMA1BF.dwg 5-31-98 Big Island Disposal 1 Plan View 22+00 to 80+00

108 BIM Disposal 1
x,y,z Files
Point File

108 BIM Disposal 1
x,y,z Files
Point File

108 BIM Disposal 1
B.D. Survey
Point File

37
110 BIM Disposal 5 BIMDA5.dwg 5-31-98 Big Island Disposal #5 Plan View
111 BIM Disposal 5 BIMDA3BF.dxf 6-1-98 D.A. 5 Plan View -4+00 to 5+00
111 BIM Disposal 5 BIMDSP5.dxf 6-1-98 D.A. 5 Plan View 95+00 to 160+00
112 BIM Disposal 5 BIMDA3BF.xyz 6-1-98 x,y,z, date, time No point numbers
112 BIM Disposal 5 BIMDSP5.xyz 6-1-98 x,y,z, date, time No point numbers
113 BIM Disposal 5 BIMDSPSB.xyz 6-1-98 B.D. x,y,z, date, time No point numbers
114 BIM Disposal 6 BIDA6PL2.dxf 6-23-98 Profile of Disposal Area #6
114 BIM Disposal 6 BIMDA6.dwg 6-24-98 Big Island Disposal Area #6 Plan View
114 BIM Disposal 6 CH40A6.dxf 6-23-98 Big Island Disposal Area #6 Xsection sta 155+00, 160+00, 165+00, 170+00, 175+00 and 180+00
114 BIM Disposal 6 CHANA3D.dxf 6-23-98 Big Island Disposal Area #6 Xsection 130+00, 135+00, 140+00, 145+00 and 150+00
115 BIM Disposal Area 6 BIDA6PL2.xyz 6-24-98 Point file x,y,z date, time no pt. numbers Word Pad
115 BIM Disposal Area 6 BIDA6PL2.xyz 6-24-98 Point file x,y,z date, time no pt. numbers Word Pad
115 BIM Disposal Area 6 CHANA30.xyz 6-24-98 Point file x,y,z date, time no pt. numbers Word Pad
116 BIM Disposal #8 B.D. DA8BD.dxf 6-21-98 Plan View Disposal Area #8
116 BIM Disposal #8 B.D. DA8BD.xyz 6-21-98 B.D. x,y,z no point numbers Word Pad
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42
APPENDIX E

AS-BUILT DRAWINGS

SECTION ONE - ASD
1. Data shown on this drawing was compiled from field surveys performed by contractor, river road construction.
2. LOAR has electronic DMS, DWF, and TXT files on surveys.
3. LOAR has full-size drawings showing plan and after dredging cross sections.

NATURAL CHANNEL 12+00 TO 21+00
REDREDGE SHOALEO ENTRANCE

LOUISIANA DEPARTMENT
OF NATURAL RESOURCES
BIG ISLAND MINING &
ATCHAFALAYA SEDIMENT DELIVERY

Brown Cunningham Gannuch
ENGINEERS - ARCHITECT - CONSULTANTS

DATE: DEC 1998
DRAWN: RIC
DRAWN NO. 9 OF 30
CURVE DATA 1
\[ \Delta = 0' 16' 28'' \]
L = 397.67'
R = 83020.8'

CURVE DATA 2
\[ \Delta = 1' 27' 24'' \]
L = 2109.79'
R = 82980.80'

NOTES:
1. DATA SHOWN ON THIS DRAWING WAS COMPILED FROM FIELD SURVEYS PERFORMED BY CONTRACTOR, RIVER ROAD CONSTRUCTION.
2. LOUR HAS ELECTRONIC DWO, DWX AND TXT FILES ON SURVEYS.

BIG ISLAND DISPOSAL AREA 1
AS-BUILT CONFIGURATION

LOUISIANA DEPARTMENT OF NATURAL RESOURCES

BIG ISLAND MINING & ATCHAFALAYA SEDIMENT DELIVERY

Responsible
Brown Cunningham Gannuch
CURVE DATA
\[ \Delta \theta = 2^\circ, 43', 36" \]
\[ R = 21750.00' \]
\[ L = 5436.26' \]

ACREAGE BETWEEN ELEVATIONS

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NOTES:

1. Data shown on this drawing was compiled from field surveys performed by contractors.
2. Draw has electronic 2D, .dxf and .txt files on survey.

BIG ISLAND DISPOSAL AREA 4/5
AS-BUILT CONFIGURATION

LOUISIANA DEPARTMENT
OF NATURAL RESOURCES

BIG ISLAND MINING &
ATCHAFALAYA SEDIMENT DELIVERY
ACREAGE BETWEEN ELEVATIONS

ABOVE 4.0  0.29 ACRES
3.5 TO 4.0  0.62 ACRES
3.0 TO 3.5  1.43 ACRES
2.5 TO 3.0  1.80 ACRES
2.0 TO 2.5  5.86 ACRES
1.5 TO 2.0  11.94 ACRES
1.0 TO 1.5  15.56 ACRES
0.5 TO 1.0  30.85 ACRES
0.0 TO 0.5  29.79 ACRES
-0.5 TO 0.0  7.30 ACRES
-1.0 TO -0.5  4.19 ACRES
-1.5 TO -1.0  4.38 ACRES
BELOW -1.5  1.34 ACRES

NOTES:
1. DATA SHOWN ON THIS DRAWING WAS COMPILED FROM FIELD SURVEYS PERFORMED BY CONTRACTOR, RIVER ROAD CONSTRUCTION.
2. LDNR HAS ELECTRONIC .DWG, .DXF AND .TXT FILES ON SURVEYS.

BIG ISLAND DISPOSAL AREA 9
AS-BUILT CONFIGURATION

LOUISIANA DEPARTMENT
OF NATURAL RESOURCES
BIG ISLAND MINING &
ATACHAFALAYA SEDIMENT DELIVERY

Brown Cunningham Gannuch
ATTACHMENT V

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

PROJECT PERMITS
DEPARTMENT OF THE ARMY PERMIT

National Marine Fisheries Service
Permittee:
Habitat Conservation Division

Permit No.:
SN Atchafalaya Bay 753 0
NM-19-970-1467

Issuing Office:
New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, mean the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:
Dredge and deposit bay material to construct and maintain seven channels and 13 adjacent marsh creation sites to implement the Atchafalaya Bay Sediment Delivery (CPRA Number 357-7) and Atchafalaya Delta Sediment Delivery (CPRA Number PAT-2) projects, in accordance with the drawings attached in thirteen sheets, dated July 1995, and revised August 11, 1995, December 19, 1996, January 20, 1997, and January 28, 1997.

Project Location:
In Atchafalaya Bay, central to a point approximately 18.8 miles southwesterly from Morgan City, Louisiana, in St. Mary Parish.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on February 28, 2002. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in accordance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unreported historic or archaeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

2002 EDITION OF SEP 92 IS REVOLVED.
(33 CFR 323 [Appendix A])
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

3. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

5. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:
Special conditions are continued on page 4.

Further Information:

1. Congressional Authorization: You have been authorized to undertake the activity described above pursuant to:
   (3) Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. Limits of this authorization.
   a. This permit does not relieve the need to obtain other Federal, state, or local authorizations required by law.
   b. This permit does not grant any property rights or exclusive privileges.
   c. This permit does not authorize any injury to the property or rights of others.
   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
   a. Damage to the permitted project or areas thereof as a result of other permitted or unpermitted activities or from natural causes.
   b. Damage to the permitted project or areas thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
   c. Damage to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
   d. Design or construction deficiencies associated with the permitted work.
a. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant’s Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see a above).

c. Significant new information surfaces which this office did not consider in making the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 225.7 or enforcement procedures such as those contained in 38 CFR 326.4 and 326.5. The enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 326.170) accomplish the corrective measures by contract or otherwise and bill you for the costs.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below as permittee indicates that you accept and agree to comply with the terms and conditions of this permit.

[Signature]  
[Date]

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

[Signature]  
[Date]

Albert J. Guillot, P.E., Chief/Operations Division
for William L. Comer, District Engineer

When the circumstances or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validly transfer the interest in this permit and the associated liabilities associated with compliance with its terms and conditions, have the transfer sign and date below.

[Signature]  
[Date]
7. The permittee's use of the permitted activity must not interfere with the public's
right to free navigation on all navigable waters of the United States.

8. The permittee must install and maintain, at his expense, any safety lights and
signals prescribed by the US Coast Guard, through regulations or otherwise, on the
authorized facilities.

9. The time limit for maintenance dredging activities authorized herein, unless
specifically revoked or suspended by the New Orleans District, Regulatory Functions
Branch (ROD), expires 10 years from the effective date of this approval.

10. Prior to initiation of onsite dredging operations, the permittee shall consult with
the U.S. Fish and Wildlife Service and the Louisiana Department of Wildlife and
Fisheries to assess the presence of seabird/wading bird nesting colonies, or occurrence
of nesting activities by such populations, in the vicinity of the work sites. If it is
determined that active nesting or brood rearing is, or may be, occurring during the
planned construction period, the permittee shall notify the NOD and delay construction
until an appropriate course of action to be implemented by the permittee to minimize
impacts to breeding seabirds/wading birds is developed in consultation with state and
federal resource agencies, and approved by the NOD.

11. The permittee shall provide written notification of work completion to the NOD
immediately following installation of authorized project components.

12. The permittee shall monitor ecosystem responses to project implementation in
accordance with the final MNPTE Monitoring Plans dated June 25, 1996. Monitoring
reports shall be submitted to the NOD for review within one year of completion of data
analysis.

13. The permittee is aware that any deviation from the permitted project design may
require prior review and approval by the NOD.
A permit to dredge and deposit bay material to construct and maintain seven channel and 13 adjacent marsh creation sites to implement the Big Island

**Permit No:** MPEPA Number Y09-71 and Abashalaya Sediment Management (MPEPA Number FAD-79) Project, in Abashalaya Bay, central to a point approximately 18.0 miles southwesterly from Morgan City, Louisiana, in

**Address of Permits:**

National Marine Fisheries Service

Habitat Conservation Division

C/O LSU Center for Coastal Energy

and Environmental Resources

Baton Rouge, Louisiana 70803-7335

**Permit Number:** SW(Abashalaya Bay)/753 and 486-19-970-1476

for the **District Commander**

United States Army Corps of Engineers

March 7, 1997
DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 6587
NEW ORLEANS, LOUISIANA 70166-0587

March 11, 1996

Subject: SW (Atchafalaya Bay) 753

Mr. Rickey H. Ruebanum
National Marine Fisheries Service
C/O LSU Center for Coastal Energy and
Environmental Resources
Baton Rouge, LA 70803-1753

Dear Mr. Ruebanum:

This is in reference to your permit application, numbered above, to implement the Big Island Mining and Atchafalaya Sediment Delivery Projects in Atchafalaya Bay, approximately 18.0 miles south-southwesterly from Morgan City, Louisiana.

The supplemental information you have submitted with your letter dated January 31, 1996, has been reviewed by other elements of this District and copies of their comments are attached. Although there is some question regarding projected benefit in terms of marsh creation, concern relative to impact on maintenance of the navigation channel still remains. Therefore, Operations Division conditionally indicated no objection provided a monitoring plan to measure sediment and flow into the proposed channels is furnished. Furthermore, if dredging is determined necessary as a result of these projects, adjacent disposal areas be will be provided by the State. If such areas cannot be provided, the applicant shall bear the costs of disposing of the material in other State-designated areas.

Because the proposed action involves vital navigation missions of the U.S. Army Corps of Engineers, compliance with these provisions is essential. Please review the enclosed material and respond at your earliest convenience so that we may complete project review.

If you have any questions, please call me at (504) 862-2276.

Sincerely,

Martin S. Mayar
Environmental Resources Specialist
Western Evaluation Section
MEMORANDUM FOR Chief, Operations Division

SUBJECT: Permit Number: SW(Achafalaya Bay/753, Big Island Mining/Achafalaya Sediment Delivery Projects

1. Please reference CELMN-OD-GE multiple endorsement dated 1 Feb 96, subject as above (Ref 1).

2. As designed, we have no objections to the permit for the two CWPPRA projects. However, it is apparent that the estimates of acreage of new marshland created are optimistic. The increase in maintenance dredging resulting from the construction of the Big Island cut appear realistic provided the cut conveys less than 10 percent of the flow entering the delta. We recommend that the project manager, John Flanagan, be advised that some minimal impact can be expected from implementation of this permit thus affording him the opportunity to voice his concern.

3. The letter from Brown Cunningham and Company states that the presently configured Big Island Mining Project will create some 2,270 acres of new marshland after initial construction is completed without dredging. The growth rate of the Lower Achafalaya River delta is presently around 350 acres per year. At its present rate, approximately 6,000 acres will be created in the Lower Achafalaya River delta over the next 20 years without the new outlet at Big Island. Even though delta growth adjacent to the new outlet will have a higher rate of growth than the existing rate for the entire delta, it is unlikely that the new outlet will account for almost 38 percent of the growth of the entire delta with the outlet only conveying an average flow of 6,000 cfs and a sediment transport of 2,800 tons/day (Engineering Summary Report dated January 1995). For 2,270 acres to be created over 20 years in a receiving area with a depth of 2 to 3 feet, approximately 94 percent of the sands, silts, and clays entering the outlet need to settle out in the receiving area. With the presence of tides, currents, and frontal passages reworking the sediments and the absence of a saltwater environment to precipitate the clays, this percentage is unlikely. In addition, the creation of marshland at the Big Island site will be offset by marsh loss at other sites as the project does not affect the amount of sediment entering the entire delta that is available for marsh creation.

4. Although not mandatory for the permit, we recommend that the monitoring plan for the two projects, required under CWPPRA, include discharge and sediment measurements in the Big Island cut and in East Pass to monitor the amount of flow and sediment being conveyed by these data bifurcations and therefore the effect on maintenance dredging in the Chene, Boeuf, and Black navigation channel. Four sets of measurements at each site taken during various river conditions should be adequate. The monitoring should be performed initially every year for the
CELMN-ED-EH

SUBJECT: Permit Number: SW(Atchafalaya Bay)753, Big Island Mining/Atchafalaya
Sediment Delivery Projects

next 5 years or so and then once every 4 to 5 years over the project life.

5. POC is Nancy Powell, x2449.

Encl

W. EUGENE TICKNER
Chief, Engineering Division
MEMORANDUM FOR O/Regulatory Functions Branch

SUBJECT: Permit Number: 5W(Atchafalaya Bay)753, Big Island Mislay/Atchafalaya Sediment Delivery Projects

1. We have reviewed the above subject permit request and have no objections providing the following conditions are met:
   a. The applicant must provide us with a monitoring plan that includes discharge and sediment measurement in the Big Island Cut and in East Pass to monitor the amount of flow and sediment being conveyed by these delta bifurcations.
   b. If dredging is required as a result of these projects, the Department of Natural Resources and the Louisiana Wildlife and Fisheries will provide us with adjacent disposal areas, i.e., disposal areas that are within 1,500 ft of the areas being dredged.
   c. If the disposal areas as mentioned in item b. cannot be provided, the applicant will pick up the incremental cost for disposing materials to other areas designated by Louisiana Wildlife and Fisheries.

2. POC is the undersigned or Mr. Steve Schimsky at ext. 2343.

JOHN F. FLANAGAN
Project Manager, Operations Division

8 MAR 96
Rev. #1: Restrictions for DA No. 2
Rev. #1
Rev. #2
No. Changes
Rev. #2: Added Dikes@DA-1
modified DA#3 section
Rev. #1

On the Big Island Mining project two disposal areas were added, namely DA#8A and DA#10A, as shown on drawing No. 5. On the Atchafalaya Sediment Delivery project Disposal Area No. 5 and 1-A were added, the four original disposal areas (1,2,3 and 4) were slightly modified, and the temporary access channel in East Pass was added as shown on drawing No. 6. Drawing #1 was revised to show the Temporary Access Channel and the layout of access for Disposal Area No. 1 was corrected. Drawing 7a is a new drawing that shows the cross sections of DA#5 and the Access Channel.

I spoke with Mr. Martin Mayer at the Corps of Engineers regarding these changes on January 12th, and he requested that we resubmit the total revision package for their records. He thought that the changes as shown by these revised drawings were minor and within the original scope of these two CWPPRA projects.

Rick, I have incorporated your 12/18/97 submittal into this "final" version so that the Corps officially has only revision to deal with (this current one). Martin said that he would delete the 12/18/97 submittal and replace with this one upon receipt of this new package.

Please sign and forward this revised permit drawing package to the Corps.

Sincerely yours,

Emmett J. Mayer, Jr. P.E.
Office Manager

cc: V. Cook
    R. Cunnigham
    G. Linscomb
**APPLICATION FOR DEPARTMENT OF THE INTERIOR**

**Privy Act statement**

Authority: 33 USC 401, Section 10; 1413, Section 404. Periodic purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed as a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (except for drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

<table>
<thead>
<tr>
<th>ITEMS 1 THROUGH TO BE FILLED BY THE COMM</th>
<th>ITEMS BELOW TO BE FILLED BY APPLICANT</th>
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<td>1. APPLICATION NO.</td>
<td>2. FIELD OFFICE CODE</td>
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<tr>
<td>WH-09-070-1476</td>
<td></td>
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<td>3. DATE RECEIVED</td>
<td>4. DATE APPLICATION COMPLETED</td>
</tr>
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| 5. APPLICANT'S NAME                      | 6. APPLICANT'S ADDRESS                |
| National Marine Fisheries Service        | LSU Center for Coastal & Env. Restoration |
| 7. APPLICANT'S PHONE NO. (WAIKA CODE)    | 8. AGENT'S ADDRESS                     |
|                                         |                                      |
| 9. AGENT'S ADDRESS                       | 10. AGENT'S PHONE NO. (WAIKA CODE)    |
|                                         | a. Residence                         |
|                                         | b. Business                          |
|                                         |                                        |
| 504-339-0508                             |                                        |

**STATEMENT OF AUTHORIZATION**

I hereby authorize, to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE

<table>
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<tr>
<th>NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY</th>
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<td>12. PROJECT NAME OR TITLE (see instructions)</td>
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<tr>
<td>Atchafalaya Sediment Delivery (CNPRA #5PAT-2) &quot;ASS&quot;</td>
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<td>14. PROJECT STREET ADDRESS (see instructions)</td>
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</tr>
<tr>
<td>15. LOCATION OF PROJECT</td>
</tr>
<tr>
<td>St. Mary LA</td>
</tr>
<tr>
<td>COUNTY STATE</td>
</tr>
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<td>16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)</td>
</tr>
<tr>
<td>East Paps of Atchafalaya River (Lat. 29° 28'00&quot;N-Long. 91° 18'00&quot;W)</td>
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</tbody>
</table>

**DIRECTIONS TO THE SITE**

From Morgan City, LA travel south on the Atchafalaya River, site is on both descending banks of river at its entrance to Atchafalaya Bay.
ESTIMATED PROJECT QUANTITIES CHANGES

Big Island Mining Project:

DREDGED QUANTITIES:

Original Channels A - E 3,589,093.4 Cubic Yards

MAXIMUM DISPOSAL AREA ACREAGE

Original Disposal Areas 1 thru 10 1087.2 Acres
New Disposal Area 8A 37.5 Acres
New Disposal Area 10A 147.2 Acres

Amended Total BIM Disposal Acreage 8271.92 Acres

ATCHAFALAYA SEDIMENT DELIVERY PROJECT:

Original Dredged Quantities 8013915 Cubic Yards
(Natal and Castille Pass)
Temporary Access Channel 156,000 Cubic Yards
(East Pass)

Amended Total ASD Disposal Volume 957,391.5 Cubic Yards

MAXIMUM DISPOSAL AREAS

Original Natal Channel Disposal Areas 1 thru 4: 187.1 Acres
Original Castille Pass Disposal Area 1: 39.9 Acres
Amended Disposal Area No 1-A (Natal Channel): 54.8 Acres
Amended Disposal Area No. 5 (Natal Channel): 25.6 Acres

Amended Total ASD Disposal Acreage 307.4 Acres
NATIONAL MARINE FISHERIES
HABITAT CONSERVATION DIVISION

BIG ISLAND MINING PROJECT AND
ATCHAFALAYA SEDIMENT DELIVERY PROJECT
VICINITY MAP

PREPARED BY: BROWN, CUNNINGHAM & GANNUCH, INC.

DATE: 6/21/95
SHEET: 1 OF 13
DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT
CORPS OF ENGINEERS
HEADQUARTERS
NEW ORLEANS, LOUISIANA 70117-6097
February 23, 1998

ATTENTION OF:
Operations Division
Western Evaluation Section

SUBJECT:
Sw (Atchafalaya Bay) 753 and
WH-19-970-1646

FROM:
Martin Wagner
CERW-CD-SW
504/882-2575

TO:
BCG
Ike Meyer
504/924-3116
504/924-9130

CLASSIFICATION: 
UNCLASSIFIED

PRECEDENCE:
ROUTINE

NO. PAGES:
2

DATE-TIME:
23 FEB 98

REMARKS:
Attached is the signed permit as per your previous request.
Hand copy to 43510 to follow.

Martin L. Wagner

[Signature]
Operations Division
Western Evaluation Section

SUBJECT: WH-19-970-1476 and SW(Atchafalaya Bay)753

National Marine Fisheries Service
C/O LSU Center for Wetland Resources
Baton Rouge, Louisiana 70802-7533

Gentlemen:

Revised drawings attached in five sheets, furnished with your application dated August 19, 1999, covering the excavation of a distributary channel (Channel F) in association with CWPPRA Projects XAT-7 and PAT-2, in Atchafalaya Bay, at a location central to a point approximately 20.0 miles southwesterly from Morgan City, Louisiana, in St. Mary Parish, are approved and will be included in your plans for the work authorized by the Secretary of the Army in permit dated March 7, 1997. These drawings supersede drawings shown on sheets 2, 4, 5, 10 and 11 attached to your permit.

The conditions to which the work is made subject, remain in full force and effect.

The attached Notice of Authorization, ENG Form 4336, is to be conspicuously displayed at the site of work.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Ronald J. Ventola
Chief, Regulatory Branch

William L. Conner
Colonel, U.S. Army
District Engineer

Attachments
This notice of authorization must be conspicuously displayed at the site of work.

United States Army Corps of Engineers

September 11, 1998

A permit to excavate a distributary channel (Channel P) in association with CWPRM Projects XV-7 and PAP-2, in Atchafalaya Bay, at a location at least a point approximately 18.0 miles southwesterly from Morgan City, LA, in St. Mary Parish, has been issued to National Marine Fisheries Serv on Sept. 11, 1998.

Address of Permittee: C/O LSU Center for Wetland Resources
Baton Rouge, LA 70803-7535

For the District Commander

Permit Number: WR-19-970-1476 and 3M(Atchafalaya Bay)753
Mr. Rickey Ruebsaman  
National Marine Fisheries Service  
LSU Center For Wetlands Resource  
Baton Rouge, LA 70803-7535

Re: Revision No. 2 to Permit Drawings:  
Big Island Mining and Atchafalaya Sediment Delivery Projects  
Coastal Use Permit SW (ATCH-BAY)753 WH-19-970-1476  
BCG Project No. 30594

Dear Mr. Ruebsaman:

Based upon actual before dredging cross sections submitted by the contractor; The Big Island Mining Project is projected to have an under-run of dredged quantities based on the original designed channels A thru E. Based upon discussions with Mr. Van Cook (LA DNR), Mr. Erik Zobrist (NMFS) and Mr. Greg Linscomb (LA LDWF) we have proposed to recapture the under-run by adding a new channel called "Channel F" which has a 160-foot bottom at a depth of -10.0 NCVD and modify the widths of Channels A, B, C, D, and E. In addition, we have slightly realigned Channel D to better fit insitu field conditions. Furthermore, due to the above channel changes Disposal Area No. 3 has been deleted from the project and Disposal Area No. 4/5 has been expanded to replace DA No. 3. Disposal Area 8 has been enlarged by placing a back dike.

We feel that it will be necessary to forward a revision to the permit with drawings incorporating channel F to the Corps for their approval prior to dredging the new channel. We have also revised the permit drawings to reflect the project Field Changes made thusfar on the other channels of the Big Island project in order to reflect current project conditions. We herewith transmit our revised set of drawings that cover the foregoing changes. The drawings impacted by the above changes are Drawings 2, 4, 5, 10 and 11 to the permit drawings. All other permit drawings remain unchanged.

I am enclosing the revised permit application and revised drawings for your use in submitting the second revision permit application to the Corps of Engineers for approval to the original permit of March 7, 1997. The first revision to the permit was dated January 20, 1998 and approved by COE on February 23, 1998.

9181 Interline Avenue • Suite 100 • Baton Rouge, LA 70809 • 504-924-3113 • FAX: 504-924-9130
<table>
<thead>
<tr>
<th>Original Permit Drawing and Date</th>
<th>Revision-1</th>
<th>Revision-2</th>
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<td>Added Channel F and realignment of Channel D</td>
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<td>Realigned Channel D with 200' bottom.</td>
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<td>Revised bottom widths of:</td>
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<td></td>
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<tr>
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<td>From 100' to 125' (200 to 206)</td>
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<td>Channel B from 125' to 160'</td>
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<td>No. 7 - July 95</td>
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<td>Channel C from 100' to 125'</td>
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<td>No. 7a</td>
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<td>Channel E from 100' to 125'</td>
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<td>Add Channel F with 160' bottom (Sta 0+00 to 22+00) Start &quot;P&quot; at c/l &quot;A&quot; Sta 180</td>
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<td>New Dwg 11-10-97</td>
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No. 8 - July 95
No Change

No. 9 - July 95
No Change

No. 10 - July 95
No Change

No. 11 - July 95
No Change

Please sign and forward this second revision to the original CUP Permit to the Corps for approval.

Sincerely yours,
BROWN, CUNNINGHAM & GANNUCH, INC.

cc: R. Gannuch
V. Cook
E. Zobrist
G. Linscomb
ATTACHMENT VI

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

OPERATION, MAINTENANCE AND REHABILITATION BUDGET
CWPPRA PRIORITY LIST II

AT-02 ATCHAFALAYA SEDIMENT DELIVERY

LEAD AGENCY: NMFS

PROJECT FEATURES:

1. Dredging to open channels in Natal Channel and Castille-Radcliffe Pass. Channels are 200 ft. wide by 10 ft. deep with a total length of 10,000 ft. The project will remove approximately $00,000 cubic yards of material from these channels.

OPERATION AND MAINTENANCE / REHABILITATION ASSUMPTIONS:

1. Channel Maintenance: Assume that sediment will fill the channel from 10 feet deep to 6 feet deep and dredging will be required as follows:

   Year 10  Dredge 4 feet of 5,000 LF of channel

OPERATION AND MAINTENANCE COST CONSIDERATIONS:
(Based on a 20 year project life; costs include inflation)

A. ANNUAL INSPECTIONS:
   (1 field day with 2 team members, boat and report from Schedule A-1)
   $ 58,942

B. ANNUAL COST FOR OPERATIONS:
   (Not required for this project)
   $ 0

C. PREVENTIVE MAINTENANCE:
   (Not required for this project)
   $ 0

D. COST FOR MAINTENANCE PROJECT AT YEAR 10:

   1. Contractor Mobilization/De-mobilization $ 25,000

   2. Dredge Channel: $200000
      (5,000 LF x 200 feet wide
      x 4 feet deep x $1.35/cy)
      Contractor Subtotal $225,000
Contractor Cost with Inflation  
($232407 x 1.484 inflation factor for Schedule C-2)  
$333,900

3. DNR Design Cost/Administration:  
(2 week project, $7,550 x 1.484 inflation factor from Schedule C-2)  
$11,204

4. Engineering Consultant Design, Survey and Inspection:  
Basic Services:  
(9% x $366,877 construction cost)  
$30,051
Survey Supplemental Services:  
(5 days at $1,855/day inflated for year 10 from Schedule E-2)  
$9,275
Resident Inspection:  
(8 workdays x $1,135/day inflated for year 10 from Schedule E-3)  
$9,080

TOTAL COST FOR MAINTENANCE YEAR 10:  
$452,452

TOTAL ESTIMATED OPERATION AND MAINTENANCE COST:  
$452,452

OPERATION AND MAINTENANCE (O&M) COST SUMMARY:  
AT-02 ATCHAFALAYA SEDIMENT DELIVERY

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ATTACHMENT VII

ATCHAFALAYA SEDIMENT DELIVERY (AT-02)

ANNUAL INSPECTIONS
State of Louisiana
Department of Natural Resources
Coastal Restoration Division

2003 Bi-Annual Inspection Report

for

ATCHAFALAYA SEDIMENT DELIVERY PROJECT, AT-02, & ATCHAFALAYA BIG ISLAND MINING PROJECT, AT-03

State Project Numbers AT-02 and AT-03
Priority Project List 2

October 28, 2003
St. Mary Parish

Prepared by:
Herbert J. Juneau, Jr., Engineer IV
Stan Aucoin, Engineering Tech.
LDNR/Coastal Engineering Division
Lafayette Field Office
635 Cajundome Blvd.
Table of Contents

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III. Inspection Procedures ..................................................................................................... 2
IV. Inspection Results .......................................................................................................... 3
    AT-02 - Big Island Mining Project ..................................................................................... 3
    AT-03 - Sediment Delivery Project .................................................................................... 3
V. Conclusions ....................................................................................................................... 5
VI. Recommendations ........................................................................................................... 6
    Immediate Repairs ........................................................................................................... 6
    Programmed Maintenance ............................................................................................... 6

Appendices

Appendix A  Project Features Map
Appendix B  Photographs
Appendix C  Three Year Budget Projections
Appendix D  Field Inspection Form
I. Introduction

The Atchafalaya Sediment Delivery Project is a distributary channel maintenance and delta-lobe creation project consisting of approximately 2,182 acres of freshwater wetlands and shallow open water. The project is located in the northeastern region of the Atchafalaya Delta within the Louisiana Department of Wildlife and Fisheries Atchafalaya Delta Wildlife Management Area in the southeast corner of St. Mary Parish, Louisiana. The Project is bounded on the north by Mile Island, the west by East Pass, and to the east and south by the Atchafalaya Bay. (Attachment III)

The Big Island Mining Project is a distributary channel and delta lobe creation project. The project is located in the northwestern region of the Atchafalaya Delta and is bounded by Shell Island and Shell Pass to the north and west, Amarada Pass to the south, and the Atchafalaya Bay Channel to the east and southwest. The project is located in the Atchafalaya Delta Wildlife Management Area in the southeast corner of St. Mary Parish, Louisiana. (Attachment III)

II. Project Description, Purpose, and History

The Atchafalaya Delta is bisected by the Lower Atchafalaya River which is maintained by the U.S. Corps of Engineers to an Elevation of 20.0 NGVD with a 400 foot bottom width for navigation purposes. The continued dredging and placement of spoil material along the banks of the river has caused sediment deprivation in adjacent delta environments.

The Sediment Delivery Project was designed to enhance the natural delta-building process by restoring the Natal Channel and Castille Pass Channel to functional tertiary distributary channels and utilizing the dredged material to create delta lobe islands as wetlands that are suitable for establishment of emergent marsh.

The Big Island Mining Project was designed to create and re-establish channels for water and sediment distribution from the Atchafalaya River to the northwest portion of the Atchafalaya Delta and to create delta lobe islands with the resulting spoil material from the channel excavations.

The projects were constructed as a Coastal Wetlands, Planning, Protection, and Restoration Project (CWPPRA) with the Louisiana Department of Natural Resources as the local State Sponsor and the National Marine Fisheries Service of the Department of Commerce as the Federal Sponsor. The general contractor for the construction of the Projects, which were accomplished under one contract by the State of Louisiana Division of Administration, and administered by the Louisiana Department of Natural Resources was River Road Construction Co. of Mandeville, LA. The Projects were constructed during the period of January 28, 1998 and October 27, 1998. Final cost of the construction contract was $7,238,449.36. The design, engineering, and construction oversight for the Projects was performed under an Engineering Services Contract with the State of Louisiana Department of Natural Resources by Brown, Cunningham, Gammich Engineers.
The principle project features of the Sediment Delivery Project include:

- Natal Channel - 5,100 linear ft. dredge channel with a 170 ft. wide bottom width and with a branch channel of 1,500 linear ft. oriented to the northeast from Station 74+00. Bottom width of this branch channel was 150 feet.
- Castille Pass Channel - 2,000 linear ft. dredge channel with a 125 ft. wide bottom width.
- Marsh Creation – 668,683 cubic yards of dredge material from Natal Channel placed at four (4) sites creating approximately 257 acres of wetlands.
- Marsh Creation – 32,242 cubic yards of dredge material from Castille Pass placed on a location southeast of the channel and creating approximately 20.5 acres of wetlands.

The principle project features of the Big Island Mining Project include:

- Channel A, 20,600 linear ft. of dredged channel from the Atchafalaya River starting with 800 feet of bottom width at the Elevation -20.0 ft. NGVD contour of the Atchafalaya River to a 400 ft. bottom width at an elevation of -10.0 ft. NGVD, thence remainder of channel was dredged to -10.0 feet NGVD. Bottom width of the channel was 400 feet to Station 145+00, thence 375 feet between Stations 145+00 and 180+00, thence 250 feet width between Stations 180+00 and 200+00, thence with a 200 feet width between Stations 200+00 and 206+00 with exception that this latter portion of the channel created is all to the south of the channel centerline baseline.
- Channel B, 5,500 linear ft. of dredged channel with a bottom width of 160 feet.
- Channel C, 2,400 linear ft. of dredged channel with a bottom width of 125 feet.
- Channel D, 4,000 linear ft. of dredged channel with a bottom width of 160 feet.
- Channel E, 4,150 linear ft. of dredged channel with a bottom width of 125 feet.
- Channel F, 2,300 linear ft. of dredged channel with a bottom width of 160 feet.
- The placement of 3.36 million cubic yards of dredged material at eleven (11) separate disposal areas to create wetlands at an elevation of between Elevation 1.5 ft. to 3.0 ft. NGVD.
- All channels that were dredged were excavated to an elevation of -10.0 feet NGVD Datum, except where noted differently for the “ramp” entrance of Channel A from the Atchafalaya River.

III. Inspection Procedures

On Tuesday, October 28, 2003, this writer and the following individuals participated in the required bi-annual inspection of the Big Island Mining, AT-3, and Atchafalaya Sediment Delivery, AT-2, Projects: Patrick Landry, Dewey Billodeau, Herbert Juneau, and Stanley
Aucoin of LDNR/CEQ/Lafayette Field Engineering Office, Edmond Mouton and Steve Smith of LDW&F New Iberia Office, and John Foret of the Lafayette, LA NMFS Office. This report is to serve to document the observations made and some of the results found during the trip.

The purpose of the trip was to inspect the various channels of the two projects by observations and intermittent soundings to determine condition of the channels with respect to the depths initially excavated during construction. Though original excavated depth of all channels was to a (minus) -10.0 feet NGVD, widths of the channels during construction varied from 400 feet to 25 feet. No attempt to measure the current existing channel widths was made during the inspection. The inspection began at approximately 9:00 AM, originating from the Berwick, LA Public Boat Launch, and was completed at approximately 2:00 PM, when we returned to the landing. Transportation to and from the landing was via LDNR/Lafayette Field Engineering Office's 21' Workboat. The LDNR/Lafayette Workboat had capability of performing fathometer soundings, by use of borrowed equipment from C F Fenstemaker & Associates, Inc. of Lafayette, LA. The fathometer was operated by LDNR personnel. The inspection party was able to accomplish a cursory, but adequate, investigation for depths existing in the various primary and secondary distribution channels of the Big Island and Sediment Delivery Projects by the fathometer soundings.

IV. Inspection Results

AT-02-BIG ISLAND MINING PROJECT

The actual inspection began at the Atchafalaya River near the transition and beginning reach of the Big Island Channel, Channel A on the construction drawings. There we found "good" soundings that averaged between -8.0 to sometimes -10.0 feet, but generally soundings slightly below -8.0 feet as we journeyed slowly downstream in the channel, intermittently, as we would veer off each time we encountered a secondary distribution channel to profile them. We "took" a partial cross-section of Channel A opposite the "piling" near the start of Channel A, and verified some -8.0 foot depths across portions of the channel. At the very downstream end of Channel A, we discovered that the channel continued for some distance past the location of where we had stopped dredging under the original work. Though width was not measured and channel seemed very narrow, apparently some erosion occurred for an estimated several hundred feet to the southwest. As an aside, the sandbar in the Atchafalaya River, noted during our inspection of CY 2000, immediately upstream in the River of the entrance to Channel A, appears to have not aggraded and encroached into the cross-section of Channel A. Apparently, the flow into Channel A from the River gathers and carries any sediments trying to accumulate on the downstream of this "bar" into and downstream into Channel A. This is a very desirable condition as this puts Channel A in what's possibly a "sediment-rich" location that will contribute to and enhance maximum sediment distribution into the project area.

Comments on the various secondary distribution channels of the Big Island Project follow. Channels D, the first channel on the right down Channel A, was found to have approximately -4.0 feet of water in the initial reach of same after immediately leaving Channel A. Thereafter, approximately -5 feet of water depth was noted as we moved downstream in Channel D.
towards the Shell Island Pass Channel to the northwest. Channel D remains in a condition similar to that noted during the CY 2000 inspection.

Channel B, the second channel to the right that spurs off Channel A, indicated depths of approximately -4.0 feet of water for an estimated distance of several hundred feet from Channel A. Depths then increased to -6.0 feet and then eventually to -8.0 and -9.0 feet towards the Shell Island Pass Channel to the northwest. This channel is still in good condition.

Channel F, the third channel on the right encountered down Channel A, revealed about -4.0 feet as the controlling water depth, again just off of Channel A and entering Channel E, and after a distance of several hundred feet, we found a very regular bottom that had about -6 feet of water.

Channel C, the last channel on the left side of Channel A, and that leads to Catfish Pass, indicated approximately -5.0 feet of water as we left Channel A, and then thereafter was -6 to -7 feet deep until we reached Catfish Pass which had depths of approximately -8.0 feet. This channel is marked with plastic pipe used as saeking and is regularly used by W&F, sportamen, and others for access to and from Amarada Pass.

An inspection of the Channel E, the "dead end" Cul de Sac Channel that is oriented towards the south towards Big Island and is the first channel to the left off of Channel A when traveling downstream in the latter, was found to have approximately but -2.0 foot depths controlling over a hump approximately 150 feet in length, then thereafter water depths went to -5 feet, then gradually sloping down to -10.0 feet at a point approximately 1,500+ feet down the Cul de Sac Channel, then we found another hump at -6.5 feet, then we found the Cul du Sac area at the southern end of the channel irregular in depth but varying between -9 and -11 feet in depth from that day's water surface. It is apparent that immediately off Channel A, Channel E is receiving significant deposits of sediment that probably "falls out" from the effect of very minor to zero slope in the channel to the Cul du Sac from Channel A. Channel E is used frequently for navigation to Big Island by maintenance/biology crews of LDW&F. They are contending with the shallow draft problem at this time, but it is the opinion of this writer that the problem will significantly worsen over the next year and that we may have to address same by some maintenance dredging in CY 2005.

AT-03-SEDIMENT DELIVERY PROJECT

We then traveled quickly to East Pass and the Natal Channel site of the Sediment Delivery Project, AT-3. In route, we found a substantial "bar" across the mouth of East Pass on the left descending bank of the Atchafalaya River Channel and the fathometer indicated depths of only approximately -3.0 to -3.5 feet of water for an estimated distance of 150-200 feet to the east in East Pass. Thereafter, East Pass had water depths of -6 to -10 feet until of the mouth of Natal Channel near the "jetties" (remnants of some bucket dredging spoil placed during the initial construction of the channel).

As we entered Natal Channel, water depths immediately sloped upwards to -5.0 feet and then stayed at -6 to -7.5 to -8.0 feet until we approached and passed the "natural old outlet" that
continues to the northeast into open water near Ivor’s Island, then water depths decreased dramatically to slightly less than -3.0 feet for quite a distance around a curve and down Natal Channel. (It was our observation that, perhaps the natural old outlet has re-developed and possibly captured the flow of the upstream portion of Natal Channel.) Later, as we continued down Natal Channel, we discovered a new spoil area placed by the Corps of Engineers during the 1999 maintenance dredging season. The spoil area appears to have been placed unconfined, is narrow and very lengthy in shape, and existed from 0.3 to approximately 1 foot above the water. Vegetation on the spoil was very, very sparse, though many species of birds were enjoying the area. We continued on a tangent down Natal Channel that carried us down the “right” leg of the “fork” created by the initial dredging of Natal Channel and found water depths of -6 to -6.5 feet for quite some distance. So much distance in fact, that we speculate that the channel has scoured and lengthened to the south. (This needs be explored, as if this is indeed the case, then if the natural old outlet is closed, this area can be a site for a future marsh creation area, as channel scour indicates significant flow conditions.) We then returned to the base of the “fork” and inspected the “left” leg of the Fork in an easterly direction. This channel leg runs parallel and is adjacent to the new Corp’s disposal area described above. There, we were surprised to find -5 to -10 feet of water, and were baffled. Perhaps, work by the Corps wheeled-washed the area or maybe natural scouring has occurred. We stopped the inspection near the northern end of the Corps’ spoil area. We then traveled to the Castille Pass Channel by returning up Natal Channel to East Pass, thence downstream down East Pass to the Castille Pass Channel. Immediately upon entering Castille Pass, we found -4.0 feet of water depth, then thereafter found -11.0 feet of depth to the reach of the channel in vicinity of the “pipeline (Trunkline’s 20” Pipeline) and the end of the initial dredging performed on the Castille Pass Channel.

V. Conclusions

It was again apparent that the projects are working well and are surviving after now being in place for five (5) years. We must remember however, that the projects and the delta area have not experienced a significant “high water” event from the Atchafalaya River since the initial construction work was completed in late 1998. Since late 1997, drought conditions in the upper
basins of the Mississippi and Red Rivers have limited the lower Atchafalaya River to very low flows, and thus low sediment contributions available to the project.

It was observed by several of the inspection party, that conditions found this year in some of the various channels are perhaps in as good shape as found as during the Inspection of November 2000. The sediment accumulation noted by this inspection in the dredged channels of the projects is not excessive or unexpected and does not require any maintenance dredging at this time, except as noted above for Channel E of the Big Island Mining Project. Since the constructed project features are simply excavated channels, no photographs were taken on this trip to be included in Appendix B. Also, no Field Inspection Forms are included in Appendix C.

VI. Recommendations

Immediate Repairs

- None immediate, however, we should begin discussing and considering some preliminary planning for some minor maintenance dredging on the most upstream end of Channel E, the “dead end” channel to the Cul du Sac on the lower end of the Big Island Channel A.

Programmed Maintenance

- None
Appendix A

Project Features Map
Appendix B

Photographs
Appendix C

Three Year Budget Projection
### BIG ISLAND MINING PROJECT (AT-03)
#### Three-Year Operations & Maintenance Budget 07/01/2003 - 06/30/06

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**Total O&M Budget**

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Appendix D

Field Inspection Form