Figure A-31
TABLE OF CONTENTS FOR
DATA BASE ADMINISTRATION PROCEDURES MANUAL
(2.4.10 on OSM Documentation Requirements List)

Figure A-31 (Continued)
TABLE OF CONTENTS FOR
DATA BASE ADMINISTRATION PROCEDURES MANUAL
(2.4.10 on OSM Documentation Requirements List)

Section	Title	Content
1	Introduction	Provide appropriate background and summary information.
1.1	Background	Provide a brief overview of the new system or enhancement and why it is being implemented.
1.2	Scope	Explain why the Database Administration Procedures Manual is needed, provide a brief overview of its organization, and indicate system-related topics that have been included in the manual or excluded from consideration.
1.3	Assumptions and Constraints	Describe any factors that may affect the applicability of the procedures described in the manual.
1.4	Summary of the Data Base Administration Procedures Manual	Provide a brief summary of the most important information in the manual.
1.5	References	List pertinent standards, guidance, documentation, and any other materials used to prepare the manual. Include vendor-supplied materials; project documentation; other in-house documentation; and Federal, departmental, agency and industry standards and guidance.

Section	Title	Content
2	Organizational Environment	Describe the organizational hierarchy for the new system or enhancement. Identify key organizational units and personnel and describe their functions and responsibilities.

Section	Title	Content
3	General Maintenance Procedures	Describe general data base administration and maintenance procedures.
3.1	Design for Enhancements	Identify where the responsibility for data base administration lies in the design, review, and approval of enhancements to the new system.
3.2	Coordination of Changes	Discuss the review and approval process for proposed changes to the data base, the file layout, and the location of files. Discuss the change and configuration management controls. Describe change procedures, including each step in the process and individual and organizational responsibilities at each step.
3.3	Scheduling	Identify the schedules associated with data base maintenance activities.

Section	Title	Content
4	Performance Procedures	Describe procedures for evaluating the performance of the data base and associated procedures for fine-tuning the data base.
4.1	System Utilities	List the inventory of data base management and file management utilities used in the system. Describe their function and under what circumstances or at what regularly scheduled times they are used.
4.2	Problem Tracking and Reporting	Describe problem tracking and reporting procedures. Identify the logs to be kept and the procedures for review and resolution of problems.
4.3	Monitoring and Control	Explain how data base performance will be monitored.
4.4	Space Utilization	Describe the process for analyzing space utilization. Identify associated procedures; for example, running and analyzing data base management system space utilization reports, allocating additional space, and reorganizing the data base. Describe utilities available for this function along with responsibilities, access procedures, and security controls.

Section	Title	Content
5	Sizing Procedures	Describe procedures and responsibilities for capacity planning and estimating requirements for space needed by the application in the future.

Section	Title	Content
6	Security Procedures	Describe procedures for controlling user access and ensuring the integrity of data.
6.1	Controls	Describe the control mechanisms to ensure the integrity of the data base.
6.2	Access	Describe the procedures to prevent unwarranted access to the data base.
6.3	Data Protection	Describe the methods used to protect the data from intentional or accidental misuse.

Section	Title	Content
7	Backup and Recovery	Describe backup and recovery procedures.
7.1	Overview	Provide a summary of the procedures to be followed to back up the data base and to subsequently restore the data following an emergency situation.
7.2	Procedures	Describe the step-by-step recovery process to be followed in backing up and restoring the data base. Backing up should be a routine exercise and covered in the run descriptions. If back-up procedures are included in the Operations Manual, that section can be referenced here as well. Restore/recovery procedures should also be described here, to the extent that they differ from program restart procedures. Where procedures are described, it is important that they are described in detail, for they will serve as instructions to operators and must be precise to ensure proper backup and recovery of the data base.
7.3	Scheduling	Detail the schedule for backup and recovery procedures. Determine the schedule of events to be followed in an emergency situation.
7.4	Problem Logging	Discuss the tracking mechanism for logging problems during the recovery process.

Section	Title	Content
8	Data Dictionary	Describe the Data Dictionary and explain how it relates to data base administration.
8.1	Description	Provide a description of and reference to the Data Dictionary.
8.2	Automated Procedures	Identify the specific software utilized. Define user access and responsibilities and data base administration responsibilities.
8.3	Manual Procedures	Describe the method by which the documentation is maintained manually. Describe user or system developer requirements and responsibilities as well as data base administration responsibilities.

Section	Title	Content
9	Data Base and Record Structure	Describe the data base and file structures.
9.1	Description	Provide an overview of the data base structure. Reference appropriate data base specification documents.
9.2	Standards and Requirements	Describe the design structure and related requirements. Include any supplementary information that will help data base technicians understand the structure and relationship of data bases and files and will make structure modification.

Appendix B.

CUMULATIVE LIST OF REFERENCES

Appendix B
CUMULATIVE LIST OF REFERENCES

Department of the Interior

Department of the Interior Departmental Manual. All current parts of the Department of the Interior Departmental manual are hereby incorporated into this manual as OSM policy. Individual parts specifically referenced herein are:

Part 110 DM 10, Organization of the Office of IRM. June 1981.

Part 306 DM 2, ADP Standards Handbook.

Part 375 DM 1, IRM Program Management—Program Definition, Goals, Responsibilities. December 1982.

Part 375 DM 2, Information Systems Management—IRM Policy and Program Coordination.

Part 375 DM 4, IRM Program Management—IRM Strategic Planning.

Part 375 DM 5, IRM Program Management—IRM Assessment Program.

Part 375 DM 7, IRM Program Management—Economic Analysis in Support of IRM Decision Making.

Part 375 DM 12, IRM Program Management—Information Resources Standards Program.

Part 375 DM 19, IRM Program Management—Information Resources Security Program.

Part 376 DM 4, Information Resources Management—ADP Acquisition. June 1988.

Part 376 DM 6, ADP—ADP Cost Accounting, Cost Recovery, and Sharing.

Part 376 DM 10, Life Cycle Management of AIS.

Part 376 DM 11, Information Resources Management—ADP Resource Inventories.

Part 376 DM 13, ADP—Automated Information Systems Management Accountability.

Part 377 DM 2, Telecommunications. October 1983.

Part 382 DM 11, Managing Records in Electronic Form.

Part 383 DM 1-12, Management and Safeguarding of Privacy Act Records.

Department of the Interior Property Management Regulations (IPMR).
Department of the Interior Acquisition Regulations (DIAR), including:

DIAR 1424.104 (Required contractual clauses for contracted operations)

Department of the Interior Departmental Handbooks (available from Division of Printing and Publications, Office of Administrative Services, Department of the Interior, Washington, DC 20240), including:

DOI Information Resources Security Handbook.

Telecommunications Handbooks:

Radio Communications Handbook. April 1986.

Data Communications Handbook

Telecommunications Terminology Handbook. December 1983.

Telephone Systems Handbook. 4 January 1985.

Local Area Network Guide. 2 October 1988.

Department of the Interior, A Project Manager's Guide to Benefit/Cost Analysis of Information Technology Investments, January 1989.

Department of the Interior, A Project Manager's Guide to Application Systems Life Cycle Management (376 DM 10), August 1985.

DOI Mainframe Strategy, May 1988.

DOI Strategic Framework for Information Resources Management, July 1988.

Office of Surface Mining Reclamation and Enforcement

Office of Surface Mining Directives. (Available from the Chief, Division of Management Services), including:

OSMRE Directive INF-11, Information Systems Management Program. October 1982.

OSMRE Directive OPM-11, Information Systems Management Directorate Organization and Functional Statements. June 1987.

Executive Office of the President, Office of Management and Budget

Internal Control Guidelines, December 1982.

Office of Personnel Management's Federal Personnel Manual.

OMB Circular No. A-123, Internal Control Systems
OMB Circular No. A-130, Management of Federal Information Resources

OMB Circular No. A-127, Financial Management Systems

OMB Circular A-130, Management of Federal Information Resources. December 1985.

OMB Circular A-11, Preparation and Submission of Budget Estimates, Section 43.2.

Federal Laws/Regulations

Computer Security Act of 1987 (PL 100-235).

Department of Defense Authorization Act of 1982.

Federal Managers Financial Integrity Act

National Archives and Records Administration's regulations on records management.

Paperwork Reduction Act of (44 USC 3506(c)(8)) (PL 96-511).

Paperwork Reduction Reauthorization Act of 1986 (PL 99-500)

Privacy Act of 1974, as amended (5 USC 522a)

General Services Administration

General Services Administration's Federal Information Resources Management Regulations (FIRMR) on security, privacy, Automated Data Processing (ADP) and acquisition, telecommunications management and acquisition, and records management including:

FIRMR 201-33.003 (Reuse of ADPE)
FIRMR 201-31 (Sharing ADP resources)
FIRMR 201-32.104 (Computer security)
FIRMR 201-23.103 (Thresholds)
FIRMR 201-6 (Required contractual clauses for contracted operations)

FIRMR 201-30.007 (Requirements analysis)
FIRMR 201-30.009 (Analysis of alternatives)
FIRMR 201-30.007(d)(9) and 201-34.002 (Performance Evaluation for current ADP system)
FIRMR 201-30.009-3 (Findings to support the use of compatibility limited requirements)
FIRMR 201-30.012-1 (Software conversion study)
FIRMR 201-11.002(b) (Certified data to support sole source)
FIRMR 201-11.002-1 (Certified data to support sole make/model)
FIRMR 201-30.012 (Planned actions to foster competition)

Federal Information Resources Management Regulations (FIRMR) Supplement, Federal IRM Review Handbook, 1985.

Federal Acquisition Regulations (FAR), including:

FAR 2.1
FAR 24.104 (Required contractual clauses for contracted operations)

Department of Commerce, National Bureau of Standards

Federal Information Processing Standards (FIPS). FIPS PUBS are sold by the National Technical Information Service (NTIS), U.S. Department of Commerce. A FIPS PUBS Index summarizing each FIPS PUB is available from:

Standards Processing Coordinator (ADP)
Institute for Computer Sciences and Technology
Building 225, Room B-64
National Bureau of Standards
Gaithersburg, MD 20899
Phone: (301) 975-2816

All current FIPS PUBS are incorporated in OSM policy by reference. FIPS PUBS specifically cited herein include:

Guidelines for Documentation of Computer Programs and Automated Data Systems, 30 June 30 1974, Federal Information Processing Standard Publication 38.

Federal Information Processing Standard Publication 64, Guidelines for Documentation of Computer Programs and Automated Data Systems for the Initiation Phase, August 1979.

Guidelines for Software Documentation Management, 6 June 6 1984, Federal Information Processing Standards Publication 105.

Other Governmental Organizations

Automated Application System Internal Control Guideline

Department of the Navy, Naval Data Automation Command, Publication 15, Economic Analysis Procedures for ADP.

Department of Treasury Directive 81-80, Electronic Funds and Securities Transfer Policy—Message Authentication.

Federal Telecommunications Standards Committee.

National Security Decision Directive 145.

Other Non-Governmental Organizations

American National Standards Institute (ANSI).

Electronic Industries Association (EIA).

Institute of Electrical and Electronics Engineers (IEEE)

International Organization for Standardization (IOS).

International Telegraphic and Telephone Consultative Committee (CCITT).

Appendix C.

OFFICE OF SURFACE MINING
MANAGEMENT INFORMATION SYSTEMS
CONTACTS

Appendix C
OFFICE OF SURFACE MINING
MANAGEMENT INFORMATION SYSTEMS CONTACTS

Office of Surface Mining
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1951 Constitution Avenue, N.W., Room 142
Washington, D.C. 20240
FTS 268-2916
Commercial 202-208-2916

Chief, System Development Operations and Maintenance Branch
1951 Constitution Avenue, N.W.
Washington, D.C. 20240

Chief, Information Resource Management Branch
1951 Constitution Avenue, NW, Room 125
Washington, D.C. 20240