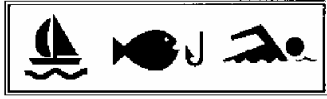


THE ROUGE RIVER PROJECT
A WORLD CLASS EFFORT



BRINGING OUR RIVER BACK TO LIFE

Rouge River National
Wet Weather
Demonstration Project

Wayne County, Michigan

Quality Management Plan
2001 - 2004

October 2001
Revised: July 2003

Rouge River National Wet Weather Demonstration Project
Wayne County, Michigan
QUALITY MANAGEMENT PLAN
October 2001 Revised: July 2003

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TABLE OF CONTENTS

SECTION	PAGE
1.0 Introduction, Project Organization and Quality Assurance Policy	1-1
1.1 Background of the Rouge River National Wet Weather Demonstration Project	1-1
1.1.1 Mission Statement.....	1-2
1.2 Project Organization	1-3
1.2.1 Wayne County Department of Environment	1-3
1.2.2 Project Partners	1-5
1.2.3 Rouge Program Office	1-5
1.2.4 Community Groups.....	1-8
1.3 Quality Assurance Policy.....	1-10
1.4 Quality Assessments	1-11
1.4.1 Assessments, Committees and Audits	1-12
1.4.2 Project Quality Management (PQM) and Peer Reviews	1-12
1.4.3 Work Plan Status Reviews.....	1-13
1.4.4 Rouge Product and Deliverable Reviews	1-13
2.0 Role of the Work Plan Manager.....	2-1
2.1 Work Plan Development.....	2-1
2.2 ATMs	2-1
2.3 Progress Reporting.....	2-1
2.4 Work Plan Leadership.....	2-2
2.5 Quality Assurance.....	2-2
2.6 Filing	2-2
2.7 Financial and Close Out.....	2-2
2.8 Products.....	2-2
3.0 Project Communications	3-1
3.1 Meetings.....	3-1
3.2 Distribution of Documents.....	3-1
3.3 Project Retreats	3-2
4.0 Process for Developing and Performing Work Plans.....	4-1
4.1 Annual Work Plans Schedule and Authorization From Steering Committee.....	4-1
4.2 Assign Work Plan Manager and County Reviewer	4-1
4.3 Preliminary Outline, Scope, Financials and Planning Sessions.....	4-1
4.4 Draft Work Plan.....	4-2
4.5 Review of Previous Work Plan Close Out Progress.....	4-2
4.6 Submittal and Sign Off by County Work Plan Reviewer	4-3
4.7 Approval of Wayne County Watershed Management Director.....	4-4
4.8 Tracking and Reporting Through Completion and Closeout.....	4-4
4.9 Change Management Process	4-4
5.0 Process for Awarding Subgrants and Developing Interagency Agreements	5-1
5.1 Notice of Grant Availability	5-1
5.2 Proposal Review by Project Evaluation Team.....	5-2

5.3	County Review of Evaluation Team's Results.....	5-2
5.4	Proposal Approvals and IAA Execution.....	5-2
5.5	Project Coordination by RPO Staff.....	5-2
5.6	Subgrant Work Plans	5-5
6.0	Process for Developing Rouge Products	6-1
6.1	Product Development Requirements	6-1
6.2	Product Presentation Requirements	6-1
6.2.1	Special Procedures for Papers and Presentations.....	6-2
6.3	Process for Adding Information to the Website	6-2
7.0	Process for Work Plan Close Outs	7-1
7.1	Work Plan Documentation Memorandum	7-1
7.2	Work Plan Close Out Sign-Off Sheet.....	7-1
7.3	Technical Products and Deliverables.....	7-1
7.4	Financial.....	7-2
7.5	Document Control Process (Hard and Electronic).....	7-2
8.0	Standards for Files.....	8-1
8.1	Document Management.....	8-1
8.2	RPO Digital Copies of Files	8-2
9.0	Standards for Asset Management	9-1
10.0	Procedures for Invoicing.....	10-1
11.0	Standards for Data Management	11-1
11.1	Central Administration.....	11-1
11.2	Central Field Database.....	11-2
11.3	Central GIS Server.....	11-4
11.4	Rouge IMS Environment	11-5
12.0	Standards for Field Data Collection.....	12-1
12.1	Quality Assurance Project Plan	12-1
12.2	Field Sampling Plans	12-2
12.3	Field Sampling.....	12-3
12.4	Field Activities Documentation	12-3
12.5	Laboratory Analysis.....	12-4
12.6	Data Evaluation and Reporting.....	12-5
12.7	Standard Operating Procedures Compendium.....	12-5
12.8	Quality Management Process Implementation	12-6
13.0	Standards for Procurement of Items and Services	13-1
13.1	Procurement Guidelines.....	13-1
13.2	Community Guide.....	13-3

FIGURES

<u>NUMBER</u>		<u>PAGE</u>
4-1	Authorization to Proceed on New Work Plan/Modify Existing Work Plan.....	4-6
7-1	Work Plan Close out Sign-off Sheet.....	7-3
11-1	Rouge Project Administration Server.....	11-2
11-2	Rouge Project Monitoring Database.....	11-3
11-3	Rouge Project GIS Server.....	11-5
11-4	Rouge Project IMS Environment.....	11-6

TABLES

<u>NUMBER</u>		<u>PAGE</u>
1-1	Rouge Project Product and Deliverable Reviews.....	1-13
4-1	Active Watershed-Wide Work Plans 2001.....	4-3
4-2	Active Community Project Work Plans 2001.....	4-3
5-1	Schedule of Grant Availability Publications.....	5-1
12-1	Field SOP Index.....	12-7

1.0 INTRODUCTION, PROJECT ORGANIZATION AND QUALITY ASSURANCE POLICY

The US EPA grant conditions for the Rouge River National Wet Weather Demonstration Project (Rouge Project) require that a Quality Management Plan (QMP) be prepared for the project and updated every two years. The previous QMP was submitted in October 1998 and approved in 1999. Provisions of the previous Quality Management Plan (QMP), prepared in October 1998, will be followed until this revised QMP is approved.

This QMP documents the quality management and assurance policies, procedures, roles and responsibilities, and identifies the methods by which continual improvement of quality management will be achieved and monitored.

This QMP and the associated quality management system components have been developed with the assistance of EPA Region V Quality Assurance Section and Water Quality Division.

This section sets forth the quality assurance policy of the Rouge Project and identifies those individuals responsible for implementing the quality system detailed in subsequent sections of this QMP. The QMP is disseminated to staff members within the Rouge Project and their contractors and sub-consultants by requiring Work Plan Managers, project coordinators, Wayne County reviewers, and senior management to become familiar with the document. Also, a copy of this QMP will be maintained on the Rougeriver.com web site.

1.1 BACKGROUND OF THE ROUGE RIVER WET WEATHER DEMONSTRATION PROJECT

The Rouge River and its watershed have been a primary source of pollution to the Great Lakes. The Clean Water Act of 1972 intended to make waterways "fishable and swimmable." Great progress has been made in improving water quality in most waterways. The Rouge River Remedial Action Plan (RAP), recommended to the Michigan Department of Environmental Quality (MDEQ) by the Rouge River Advisory Council (RRAC), provided a basis for which the Rouge Project was created. It identified the major sources of pollution and the relative contributions of each to the water quality of the river.

The Rouge River National Demonstration Project (Rouge Project) is managed under the Wayne County Department of Environment (WCDOE), Wayne County, Michigan. This project is funded in part through United States Environmental Protection Agency (EPA) Region 5 Grant Nos. XP995743-01, -02, -03, -04, -05, -06, -07, -08 and C-995743-01 totaling in excess of \$350 million and over \$175 million in local funds. As the recipient (Grantee) of federal grant funds, the executive management of the WCDOE is responsible for the overall administration, direction, and quality management of the Rouge Project including grant administration, reporting, and allocation of funds to subgrantee basin communities.

The Rouge Project was established under Rouge Grant 1 in 1992. This first grant enabled Wayne County to initiate a comprehensive watershed-wide pollution control approach that would address combined sewer overflow (CSO), storm water management, and other nonpoint source controls through the application of innovative technologies, progressive community based financial and institutional arrangements, and creative public involvement and education programs.

Under EPA Region 5 Grant Nos. XP995743-01, -02, -03, -04, -05, -06, -07, and -08, work continues with community-based demonstration projects for CSO Phase 1 projects, storm water management projects, Geographic Information Systems (GIS) development, wetlands, and recreation and habitat restoration projects. In addition to the demonstration grant funding, the Rouge Project also has funding from the State of Michigan Clean Michigan Initiative (CMI) and has applied for a Section 1135 Project Modification Grant.

The Rouge Project is attempting to look beyond traditional treatment and enforcement approaches, and it is demonstrating prevention, collaboration, and voluntary methods for urban river restoration. One of the primary goals of the Rouge Project is to promote the success of water pollution clean-up initiatives through demonstrating a holistic watershed-wide management approach to the problems of runoff and nonpoint flow control and treatment systems. The Rouge Project is intended to serve as a national model with inherent technical and administrative components specifically designed, and documented, for transfer, reuse, and portability to other watersheds with similar problems throughout the United States. The Rouge Project will also serve to demonstrate the efficacy of alternative wet weather flow control and treatment systems, and watershed-wide management processes. The project has incorporated Michigan's Storm Water National Pollutant Discharge Elimination System (NPDES) General Permit into the objectives allowing demonstration processes, plans, ordinance and watershed management plans, Rouge channel modifications, partnerships, national outreach, data exchange, waterway habitat and parkland improvements.

1.1.1 Mission Statement

The mission of the Rouge Project is to demonstrate effective solutions to water quality problems facing an urban watershed highly impacted by wet weather and develop potential solutions and implement projects, which will lead to the restoration of water quality in the Rouge River. The project will address both conventional and toxic pollutants to:

- provide a safe and healthy recreational river resource for present and future generations;
- re-establish a healthy and diverse ecosystem within the Rouge River Watershed;
- protect downstream water resources such as the Detroit River and Lake Erie, and
- help ensure compliance with federal, state and local environmental laws, which protect human health and the environment.

The mission will be accomplished through the development, implementation, and financial integration of technical, social, and institutional frameworks leading to cost

efficient, and innovative watershed-, and subwatershed-based solutions to wet weather problems. This Rouge River watershed-based national demonstration project has and will continue to provide guidance and potentially effective solutions to other municipalities across the nation facing similar problems.

1.2 PROJECT ORGANIZATION

1.2.1 Wayne County Department of Environment

The Rouge Project is operated by the WCDOE through four major units:

DOE Administration
Watershed Management Division
Environmental Outreach Division
Division of Public Works

The Rouge Project team member roles for the WCDOE are described below:

Director, Wayne County Department of Environment - Mr. Kurt Heise was appointed to Director of WCDOE in 2003. Mr. James E. Murray was the Director of WCDOE in 2001 and 2002. As Director of the WCDOE and the Rouge Project, Mr. Heise reports directly to Mr. Robert Ficano, Wayne County Executive. Mr. Heise is responsible for the oversight and overall management of the project and works directly with the Grantor, EPA Region V, in defining project management objectives and policy guidelines. Mr. Heise also coordinates closely with the EPA/MDEQ in the implementation of this project. Mr. Heise has designated key WCDOE staff members to assist with the management, administration, and coordination of the Rouge Project.

Chief Deputy Director, WCDOE - Mr. Butler Benton was appointed to Deputy Director in June 2003. Mr. Vyto Kaunelis, P.E. was the Deputy Director of WCDOE from 2001 through June 2003. The Deputy Director works under the direction of the Director of the WCDOE, and supports the Director on policy development for the Rouge Project. The Deputy Director has considerable latitude for independent judgment and action, and coordinates the Divisional programs, operations, and activities of WCDOE in accordance with the mission, directives, and statures by which the WCDOE programs operate. The Deputy Director is also responsible for overseeing all managerial and administrative operations in WCDOE. Specifically, Mr. Benton is responsible for overseeing the financial, technical, planning and general administration services, as well as the implementation of proper procedures and modernization of systems and resources to meet federal, state and county requirements. Additionally, he provides administrative leadership to the Division Directors in areas of Administration of the WCDOE and provides expert professional assistance to WCDEO management staff in areas of responsibility, and acts as Chief of Administrative Operations for the Director.

Director, Environmental Outreach Division - Ms. Josephine Powell works under the direction of the Director of WCDOE and is responsible for the Public Involvement aspects of the project. Ms. Powell works closely with the Rouge Program Office (RPO)

Project staff and the various Communities and Subwatershed Advisory Group (SWAGs) within the Rouge Watershed to implement the public education and community involvement aspects of the project and the Subwatershed Public Participation Plans.

Director, Watershed Management Division - Ms. Kelly Cave, P.E., is the Director of the Watershed Management Division. Ms. Cave is under the direction of the Director of the WCDOE, and plans, organizes, directs, reviews and evaluates grant, construction, demonstration and operating programs and staff to provide for day-to-day management of the Rouge Project. Ms. Cave provides expert professional assistance to the county and local agency management staff including transition activities for the Rouge Project to Wayne County communities and to the WCDOE through her Division.

Technical Coordinator, Watershed Management Division - Mr. Noel Mullett operates as Technical Coordinator for the Rouge Project. Mr. Mullett reports directly to Ms. Kelly Cave, Director, Watershed Management Division. The Technical Coordinator supervises technical oversight personnel; sets general project coordination policies; establishes task and process priorities for demonstration; directs the process and coordinates with or through others the project linkages transferring information, standards, or data to the Division and communities. The Technical Coordinator also establishes and maintains good working relationships with community governments, as assigned, citizen groups and individual citizens if assigned; and works with Project Administrators to assure development of community programs.

Field Services Coordinator, Watershed Management Division - Mr. Dean Tuomari operates as Field Services Coordinator for the Rouge Project. Mr. Tuomari reports directly to Ms. Kelly Cave, Director Watershed Management Division. The Field Services Coordinator oversees the overall Rouge Project monitoring program. The Field Services Coordinator supervises illicit discharge surveillance and elimination, spill response, sampling and property inspections.

GIS Coordinator, Watershed Management Division - Ms. Andrea Mealey is GIS Coordinator for the Rouge Project. Ms. Mealey reports directly to Ms. Kelly Cave, Director Watershed Management Division. Ms. Mealey oversees the Rouge Geographic Information System including GIS data development, map production, data services, and application development. Ms. Mealey coordinates with representatives from local communities, other Rouge watershed counties, and the State of Michigan to acquire and share GIS information. In addition, Ms. Mealey provides technical GOS Services to Rouge Project personnel as well as to local organization and communities involved in Rouge watershed activities.

Wayne County Grant Coordinator - Mr. Razik Alsaigh, P.E., manages subcontracts between Wayne County and Rouge watershed communities and agencies to implement pollution control and watershed management activities. He manages over 150 separate subcontracts between Wayne County and local communities including the 17 Rouge CSO basin/separation projects. His activities include quality assurance/quality control and technical review of subgrants products, reviewing and processing local community and agency reimbursement requests to Wayne County, status tracking and reporting on subgrant projects and change order reviews. He also prepares department budgets and

coordinates budget data for the Rouge Project. He also manages Rouge federal grants from U.S. EPA to Wayne County for implementing the Rouge River National Demonstration Project including tracking the financing plans for each of the grants and discussions with EPA regarding the grant issues.

Project Administrator - Mr. Dennis Scully works for the Department of Management & Budget. Mr. Scully works with the Wayne County Grant Coordinator on oversight of financial aspects of projects and coordinates resources for contract compliance and planned parameters of projects.

Wayne County MBE/WBE Compliance: The Department of Environment has designated Ms. Dione Alexander-Johnson, Department Executive, to monitor the minority compliance policies for the project. These efforts are coordinated with the RPO staff members.

1.2.2 Rouge Project Partners

Wayne County DOE works in partnership with the following organizations through individual or joint partnership agreements, Inter-Agency Agreements (IAA), or Memoranda of Understanding:

- Southeast Michigan Council of Governments (SEMCOG),
- Michigan Department of Environmental Quality,
- Wayne County Department of Public Services,
- Rouge RAP Advisory Council,
- Oakland County Drain Commissioner,
- Washtenaw County Drain Commissioner,
- City of Detroit,
- 46 other cities, villages and townships within the watershed,
- Friends of the Rouge,
- University of Michigan-Dearborn,
- Wayne State University,
- Henry Ford Community College,
- United States Geological Survey, and
- United States Army Corps of Engineers.

1.2.3 Rouge Program Office

WCDOE contracted with Camp Dresser & McKee (CDM) to provide program management, technical and administrative support in operating the project. The consulting team is collectively known as the Rouge Program Office (RPO), and it is currently comprised of the following firms:

Camp Dresser & McKee (CDM), Prime
Applied Science, Inc. (ASI)
AscI Corporation (AscI)

Cole Financial Services, Inc. (CFS)
Environmental Consulting & Technology, Inc. (ECT)
Hamilton Anderson Associates
Organizational Improvement Systems (OIS)
Project Management Associates (PMA)
Public Sector Consultants (PSC)
Ralph Tyler Company
Sigma Associates (SIGMA)
Smith Group – JJR (JJR)
Systems and Management Consultants (SYMCON)
Tetra Tech MPS (TTMPS)
Thomas Management Consultants (TMC)
Tilton & Associates (TA)
Tucker Young Jackson Tull, Inc. (TYJT)

The RPO has evolved over the years to reflect best management initiative in maintaining the quality of the programs and effectiveness of operations. The RPO has moved to a decentralized organization as functions were identified and transferred to Wayne County. Brief position and functional descriptions are provided below for RPO management controls positions.

RPO Project Manager - The Project Manager, Mr. Carl R. Johnson, P.E., is responsible for the successful implementation, and coordination of Wayne County directives and the quality management systems to ensure the development and delivery of quality RPO work products. He works under the direction of the Director of Watershed Management Division. Mr. Johnson is responsible for the general technical approach being taken and for providing guidance to the Work Plan Managers, SWAG Facilitators, and Project Coordinators.

RPO Financial Manager - The Financial Manager, Ms. Linda Jackson, is responsible for the review and cost accounting of all costs incurred under CDM's Rouge Project contract with Wayne County. The Financial Manager works in close coordination with the Wayne County Grant Coordinator in the planning and allocation of budgets and work plans to individual grants.

RPO Project Administrators - The Project Administrator, Ms. Charlotte Nichols, is responsible for maintaining the Rouge Project files at CDM's office, at the 220 Bagley storage room, and at the Wayne County Commerce Court Office; responsible for maintaining the conference log and for maintaining the files on Rouge Project presentations. The Administrator also prepares project correspondence and oversees the production of project mailings and deliveries.

Regulatory and Outreach Coordinator - As a regulatory consultant and outreach specialist, Mr. Dale Bryson provides advice and consultation to the managers of the Project on regulatory issues and opportunities as well as manages the outreach processes and activities of the Project. Mr. Bryson interacts with USEPA representatives, State representatives and national organizations (AMSA, WEF, etc.) on policy issues

associated with the Project and reviews and develop comments for the Project on regulatory documents issued by the State or EPA. Additionally, Mr. Bryson analyzes options and initiatives to enhance the Project's success. As part of his outreach responsibilities, Mr. Bryson develops presentations and papers for targeted conferences and manages all aspects of the Rouge Project web site, including reviewing current contents, updating material on the site, creating new material as appropriate to be added, and interacting with others that support the site.

RPO Editor-in-Chief - Ms. Amy Ploof is responsible for the presentation quality of Rouge Project products, including reports, technical memoranda, brochures, Compact Disks (CD's), conference papers and abstracts, training materials, and slide presentations. The Editor in Chief works closely with the respective product authors and respective County Reviewers in performing the review and editing, and quality assurance of project products.

Webmaster - As Webmaster for the Rouge Project web site, SEMCOG works with Wayne County and other RPO staff to identify priorities for updates to the Rouge Project web site. SEMCOG works with RPO and Wayne County in preparing website text. Additions to the web site are provided by SEMCOG to the web developer and SEMCOG also reviews the new information for quality assurance.

Web Developer - Symcon provides assistance to the Rouge Project as the web developer by making changes to current materials and posting new materials to the Rouge Project web site as directed by the Webmaster.

Work Plan Administrator - PMA Consultants LLC provides project management assistance on the Rouge Project through monitoring progress reporting and master scheduling. PMA's responsibilities include preparation of the quarterly RPO Progress Report, ongoing development of the RPO Work Plan Manager database application, and maintenance of the RPO Master Schedule. The RPO Progress Report details progress achieved by the project during the past period, with emphasis on RPO work plans and watershed community projects. The RPO Work Plan Manager database application is used to maintain billing rates for all consultants working on the project. The database is utilized in preparation of final budgets for all RPO work plans. PMA also updates the RPO Master Schedule on a regular basis, which details current schedules for all funded activities on the Rouge Project.

Work Plan Managers - The Work Plan Manager is responsible for the day-to-day management of the work plan. The Work Plan Manager is responsible for managing and completing the approved tasks within the established schedule and budget for each work plan. The Work Plan Manager is also responsible for the submittal of all deliverable work products and any supporting documentation as may be required. Additional details in the role of the Work Plan Manager are contained in Section 2 of this document.

Project Coordinators - The Project Coordinators are directly responsible to the RPO Project Manager and work in concert with the Work Plan Managers for the day-to-day execution of the work plan and IAA agreements for community projects. All Project

Coordinators are responsible for maintaining close communication and working relationships with the Subwatershed Advisory Group Facilitators and the affected communities. As Project Coordinators, one of their most important project management tasks is their timely identification/communication of project work issues and daily information exchanges to Wayne County. In some cases the Work Plan Manager will act as the Project Coordinator. In these cases the Project Coordinators are also responsible for generating, monitoring, and tracking individual work plan budgets and schedules against the daily management of the activities of work plan team.

SWAG Facilitators - The Subwatershed Advisory Groups (SWAGs) in the seven subwatersheds represent their communities and agencies in preparing Subwatershed Management Plans (SMPs). These plans are to meet the requirements of Michigan's Storm Water NPDES General Permit. The SWAGs each have a Facilitator to work with the RPO Manager and the RPO Work Plan Managers to improve communications between their SWAG and the RPO as well as each community representatives and the stakeholders. The work efforts focus on bringing clarity to the management plans, project priorities and schedule activities. Each SWAG Facilitator will assist communities in his/her subwatershed with the development of a Storm Water Pollution Prevention Initiative (SWPPI) and the implementation of the actions outlined in the SMPs and the SWPPIs.

RPO Quality Assurance Managers - The Rouge Project Quality Assurance Managers include Carl Johnson of CDM, plus Wayne County Reviewers Andra Mealy, Noel Mullett, Josephine Powell, and Dean Tuomari. These staff are responsible for designing, implementing, and monitoring the quality systems established for the Rouge Project and for continually ensuring that the quality management approaches evolve with the project are modified, revised and updated as necessary.

The Rouge Project quality assurance systems are dynamic in nature. As such, they are revised based on shared observations and input from both Rouge Project staff members and working groups at both the management and technical levels, as needed. Quality management for the Rouge Project has been designed around a process that ensures input from all levels of the organization. The goal is to promote interactive consensus building to implement and maintain quality management of all Rouge Project initiatives.

Staff - All Rouge Project staff are responsible for performing assigned tasks in a consistent manner with the procedures and protocols set forth in the QMP and to recommend methods to improve quality management, project execution and staff management.

1.2.4 Community Groups

Steering Committee - A Steering Committee formed by key participants in the Rouge Project has been established to provide advice and review of the Rouge Project. The Rouge Project Steering Committee meets quarterly, and it is chaired and facilitated by SEMCOG. The Steering Committee has specific responsibilities consistent with the grant application which include: (1) budget oversight, (2) review of project elements, (3) review of work plans, and (4) providing comments, guidance, and leadership to assure that the demonstration grant accomplishes its primary objectives. Membership in the Steering Committee includes one representative of each Subwatershed Advisory Group, three representatives of combined sewer communities, one representative each from Wayne, Oakland, and Washtenaw counties, two business representatives, and ex-officio representatives from the EPA, MDEQ, and US District Court. EPA participation in the Steering Committee does not in any way diminish its responsibilities as the grantor or in Wayne County's role as the grantee for the Rouge Project. Similarly, MDEQ's participation neither modifies nor diminishes in any way its responsibilities for enforcement of state environmental and delegated federal environmental laws.

Subwatershed Advisory Groups - There are seven subwatershed advisory groups: Main 1-2, Upper, Middle 1, Middle 3, Main 3- 4, Lower 1, and Lower 2. These seven subwatersheds represent the areas delineated in consultation with communities and the DEQ to fulfill requirements for subwatershed planning under the Michigan DEQ voluntary stormwater general permit. The subwatersheds meet approximately monthly, and there is a SWAG facilitator assigned to each group. The seven subwatersheds have representatives appointed by each community and other stakeholders, with the purpose of promoting community involvement in the Rouge Project and the MDEQ voluntary Storm Water General Permit.

CSO Work Groups - The CSO Work Groups are a set of technical work groups made up of WCDOE, MDEQ, and CSO NPDES permit communities. The groups include RTB (Retention and Treatment Basin) committees, Stream Data Committee, and the CSO Work Group proper. The purpose of these groups is to obtain, analyze and review operational data from the completed CSO basins and provide information necessary for the MDEQ to certify the basins with respect to the public health, elimination of raw sewage, and water quality standard goals of the facilities.

Gateway Partnership - A group of municipal, cultural, educational, and industry stakeholders situated in the lower Rouge River (Michigan Avenue to Detroit River) comprise the Gateway Partnership, which produced a Master Plan for ecosystem restoration and recreational improvements along the river. The partnership is currently working with Wayne County to advance the Master Plan.

MDEQ Quarterly Watershed Management - This group is made up of representatives from MDEQ, WCDOE, SWAG facilitators and Rouge Project management team and reviews and coordinates priorities, policies, initiatives and decisions for the Rouge Project. The meetings also provide a forum for the discussion of the process of updating the Rouge River Advisory Council/Remedial Action Plan (RRAC/RAP).

Public Education Plan (PEP) Team - This group provides information to community organizations concerning educational activities.

Web Site Internet Content Committee (ICC) - A group consisting of Wayne County, SEMCOG, and the Rouge Project staff which continually update the Rouge Project web site for project information, technical reports and project demonstration data.

Computer Applications and Logistics (CAL) Team - The purpose of this team is to facilitate Department-wide cooperation and coordination between divisions and units in the developments and use of computer applications and the deployment of the Department's computer hardware. To accomplish this they will:

- (1) share information, experiences, resources and knowledge among themselves, other WCDOE staff and management; and
- (2) assess needs and make recommendations to management that will improve the overall performance of the Department through a more efficient and coordinated use of computer applications, computer hardware and overall computer technology.

Ad Hoc Groups - There are various ad hoc groups that the Rouge Project staff either lead or participate in over limited periods of time. Examples of such groups include: the Great Lakes Initiative Coordination Group (1995 and 1996); the MDEQ/SEMCOG SSO Task Force (2000); and the Urban Wet Weather FACA (1994 to 1998).

1.3 QUALITY ASSURANCE POLICY

Wayne County has developed this QMP in accordance with the US EPA "Requirements for Quality Management Plans" EPA QA/R-2, US EPA, 1992. The Rouge Project QMP defines the project management structure, framework for decision processes, implementation responsibilities, quality assurance policies, and standard operating procedures (SOPs) employed by Wayne County to ensure that the overall quality project management meets EPA requirements.

The QMP will be mutually approved by both the EPA and WCDOE. Upon approval, authority for approval of the associated quality assurance documents (Quality Assurance Project Plan, field sampling plans, standard operating procedures, and guidance documents) becomes the responsibility of Wayne County.

All environmental measurements will be made based on an approved Quality Assurance Project Plan, field sampling plan, and standard operating procedures; and the planning phase including the Data Quality Objective (DQO) process as described in the document "Guidance for the Data Quality Objectives Process" (EPA A/G-4).

The RPO performs all assignments set forth in the Rouge Project Grants in a manner that ensures full compliance with EPA grant requirements throughout all phases of project implementation; yields technically superior work products that are produced consistent

with established quality systems, and delivers on time and within budget. Wayne County has strived to continually improve RPO work processes and documentation and implements all quality management systems set forth in the previous QMP and will in this QMP to assure that:

- the Rouge Project may serve as a national model with inherent technical and administrative components specifically designed, and documented, for transfer, reuse, and portability to other watersheds with similar problems throughout the United States;
- environmental measurement activities are planned and executed to produce data of appropriate type, quantity and quality for decision making; and
- engineered systems are designed, constructed and operated to meet the criteria for which they were developed.

1.4 QUALITY ASSESSMENTS

The Rouge Project quality assurance systems have been instituted specifically to provide a mechanism to foster continual improvement in the quality of services and technical work products developed in support of the Wayne County Rouge River National Wet Weather Demonstration Project. The principal focus of the QMP and associated documentation is to ensure that the environmental measurement activities are undertaken in a manner consistent with EPA quality assurance requirements. The Rouge Project Program Management recognizes that monitoring of all work activities is a crucial part of the quality system and that appropriate means of assessing quality must be provided as part of these efforts. This section describes the procedure established for:

- Quality Assessments; and
- Response Actions.

Quality assurance is provided by developing and implementing appropriate technical operation and management systems. Audits are performed to ensure that the quality control systems are being followed, to monitor procedures, and to assess technical quality. Auditing the performance of components of the quality system are important aspects of the quality assessment activities, but more importantly, it is the integrated assessment of the overall management of the program. Although equipment and SOP deficiencies are often cited as root causes of environmental measurement problems, office procedures, resource limitations, and management attitudes may also affect the quality of services or work products.

The following types of assessments are conducted as part of the Rouge Project quality improvement process:

- Assessments, Committees and Audits;
- Project Quality Management (PQM) and Peer Reviews;

- Work Plan Status Reviews; and
- Rouge Product and Deliverable Reviews.

1.4.1 Assessments, Committees and Audits

Project Coordinators are responsible for conducting assessments and providing comments on the performance of each work plan as it relates the overall objectives established for the Rouge Project. The Project Coordinators are responsible for maintaining focus of the Work Plan Managers on the overall mission of the Rouge Project.

Technical Review Committees are available for major independent technical review of project components. TRCs should be budgeted for and scheduled as part of the work plan development, but in some cases, the need for a TRC may be identified during the course of work activities.

Environmental measurement activities, including all field monitoring and sampling and all field and laboratory analysis, are subject to system and performance audits as detailed in Section 10 of the *Quality Assurance Project Plan (QAPP)* (RPO-PCR-QAPP01.00). The Monitoring Work Plan Manager is responsible for ensuring that system and performance audits are performed and that appropriate response is taken as detailed under corrective actions sections of the QAPP.

1.4.2 Project Quality Management (PQM) and Peer Reviews

In February 1993, a PQM review of the RPO was conducted by an independent nationwide group of senior managers from the RPO prime contractor firm assigned to the Rouge Project. The results of this independent review were provided to the Wayne County Senior Management for review and comment. This initial PQM review included the identification of critical success factors and responsibilities of RPO project consultant firms. The PQM recommendations were reviewed in the fall of 1994 and as a result a number of recommended changes to the project were instituted. During 1995, the recommendations of the PQM follow-up were instituted. In 1996, the progress of the changes in program management, including the institution of a project controls group and integration of Project Management Plans into the work plan preparation process, was assessed. A major strategic review of the project approach was conducted by a Watershed Peer Review Team in September 1996.

1.4.3 Work Plan Status Reviews

The Rouge Project has established routine procedures for monitoring the activities of all work plans through monthly progress meetings and Monthly Progress Reports. During the monthly staff meetings, the Work Plan Manager reports on each current work plan for the Rouge Project. Work plan progress and obstacles to completion are discussed.

All Rouge Project staff are responsible for providing written updates on the current and planned activities of work plans for the Monthly Progress Report. Work Plan Managers

are responsible for monitoring all work plan schedules, budgets and technical progress and for informing the Project Manager if the need for implementing corrective actions is required. The Project Manager is responsible for monitoring the overall schedule, budget and technical scope for all RPO work plans.

1.4.4 Rouge Project Product and Deliverable Reviews

The reviews of contract deliverables and demonstration products of the Rouge Project are conducted according to the following table:

**Table 1-1
Rouge Project Product and Deliverable Reviews**

Review Area	County Reviewer	Operating Group(s) that Creates the Deliverable or Product
Regulatory and Institutional Issues	Cave	RPO SEMCOG
Grant Administration	Cave	RPO
CSO and SSO	Kaunelis	RPO
Monitoring Program	Mullett	RPO Laboratories USGS WMD IDEP Team DOE DPW
Web Site	Farrah	SEMCOG
GIS and Data	Mealey	RPO
Public Involvement	Powell	RPO FOTR SEMCOG
Subwatersheds and Watershed Management	Cave	RRAC RPO SWAGs & Gateway, GNUI
Project Administration	Cave	RPO DOE Administrative Unit
Subgrant Administration	Alsaigh	Rouge Project Staff Subgrantees

2.0 ROLE OF THE WORK PLAN MANAGER

The Rouge Project Work Plan Manager is responsible for managing and completing the approved tasks within the established schedule and budget for each work plan. The Work Plan Manager is also responsible for the submittal of all deliverable work products and any supporting documentation as may be required by the quality assurance manager. The Work Plan Manager will oversee technical activities; review CDM and sub-consultant invoices; prepare a monthly progress report; provide input to the project controls staff for budget/schedule updates; and coordinate the completion of the tasks defined in the work plan through close-out.

In addition, the Work Plan Manager is responsible for representing the work under their work plan to Wayne County Work Plan Reviewers on a periodic basis. The Quality Control (QC) reviews provide for the continuation of quality improvement. Quality improvement is achieved through the continual monitoring of Wayne County's satisfaction with the products and services delivered by the RPO. The feedback received from the various sources serves as the major input to the quality improvement process. Internal quality reviews are also used to direct quality improvement activities. The quality improvement process is built on the components described in the remainder of this section.

2.1 WORK PLAN DEVELOPMENT

Upon being assigned, the Work Plan Manager will prepare a work plan using the standard templates from the project manager. The Work Plan Manager will also develop a work plan budget with the work plan administrator: establish project filing requirements and provide resources for technical editing and technical review in developing the work plan.

Once complete, the work plan will be reviewed with the County Reviewer and Project Manager. The work plan is then finalized and the appropriate signatures are obtained. Finally the Work Plan Manager will verify with the Work Plan Administrator and team members that Task Orders were issued and received. (See Section 4.0 for more details on developing work plans.)

2.2 ATMs

Throughout the course of the work plan, the Work Plan Manager will identify needs for any authorizations to modify (ATM). Procedures for the development of ATMs can be found in Section 4.10. The Work Plan Manager will prepare paperwork with the financial manager, review the ATM with the Project Manager and obtain the appropriate signatures. Lastly, the Work Plan Manager will verify with the Work Plan Administrator and team members that Task Orders were issued and received.

2.3 PROGRESS REPORTING

The Work Plan Manager will review completed monthly reports, monitor all progress submissions for their work plan and coach other team members to maintain timeliness and consistency of progress reports. The Work Plan Manager will also be required to contribute to the quarterly Rouge Project Progress Report, as requested.

2.4 WORK PLAN LEADERSHIP

The Work Plan Manager is responsible for providing leadership to those working on the project. The Work Plan Manager will prepare presentations for monthly progress meetings, review progress by all team members and discuss problem areas and successes at the monthly meetings. The Work Plan Manager will also provide a schedule update to the Project Manager every month, attend monthly progress meetings as necessary, and attend or provide input for Steering Committee Meetings, U.S. District Court, MDEQ, or SWAG meetings, as requested by the County.

2.5 QUALITY ASSURANCE

The Work Plan Manager is responsible for reviewing adherence to technical quality standards for the work plan. This includes reviewing correspondence, and interim and final deliverables for comprehension, style, readability, spelling, and grammar. It also includes assigning technical editor services and/or technical review services, identifying quality problem areas and discussing these with the Project Manager.

2.6 FILING

Following the guidelines set forth in Section 8, the Work Plan Manager will check that project files are created in the central file area at the inception of the project. The Work Plan Manager will also check that paper and electronic files are being routinely placed in files and server directories and will perform a quarterly audit of paper and electronic files to verify that the information is complete.

2.7 FINANCIAL AND CLOSE OUT

For community-funded projects, the Work Plan Manager will prepare payment reimbursement forms no less than every three months and will prepare the Community Subgrant Close-Out form. The Work Plan Manager will review and approve invoices for the work plan each month, arrange for reviews with the financial manager and prepare RPO Close-Out Packages for each work plan. For final completion, the RPO Close-Out Packages are sent to Wayne County for review and approval.

2.8 PRODUCTS

At the completion of the project, the Work Plan Manager will identify to whom products should be distributed and review this plan with the County Reviewer and Project

Manager. The Work Plan Manager will work with the Project Webmaster to place products on the website and identify themes for Project Profile(s) with the Director of Watershed Management. The Work Plan Manager will then work with the Editor in Chief to develop a script for the profile(s), review the draft of the completed profile and assist with editorial issues and finalization.

3.0 PROJECT COMMUNICATIONS

The WCDOE Watershed Management Division (WMD) Director will ultimately determine whether the RPO has performed up to expectations. The open communication channels established between Wayne County and the RPO allow for continual feedback on the quality of work products and services provided. In addition, the following regular meetings and reports have been established to provide Wayne County with consistent ongoing mechanisms to conduct quality assessments of RPO project activities, management, work plans progress, and products.

3.1 MEETINGS

A routine calendar of meetings and meeting leaders is established for each year. Meetings for 2001 and 2002 are shown below.

Meeting	Contact (2001)	Frequency
• Steering Committee	Chuck Hersey	Quarterly
• Rouge Project Progress	Carl Johnson	Monthly
• Community GIS Work Group	Charlie Bristol	Quarterly
• CSO Work Group - Stream Data Committee	Carol Hufnagel	Approx. Bi-monthly
• Gateway Partnership	Kelly Cave	Bi-Monthly
• MDEQ Coordination Group	Carl Johnson	Quarterly
• PEP Group Meeting (Public Education Plan) - Wayne County General Permit	Noel Mullett, Kelly Cave & Josephine Powell	4 th Tuesday each mo.
• Web Site Internet Content Committee	Amy Mangus	4th Monday @ 10 am
• Computer Applications and Logistics Team	Charlie Bristol	Called by county

3.2 DISTRIBUTION OF DOCUMENTS

RPO Monthly Activity Report - The Wayne County RPO submits a Monthly Activity Report to WCDOE by the last day of the following project month (e.g., activities in March are reported by April 30). The RPO Financial Manager directs the preparation of the Monthly Activity Report, which serves as the official record of RPO activities. Each approved work plan is tracked by cost and schedule and progress achieved by each task for each month.

Rouge Project Quarterly Progress Report - The purpose of the quarterly report is to describe the progress of the Rouge Project to the granting agencies, and to the nationwide observers of the demonstration project. The Quarterly Progress Report is distributed to Wayne County senior management, decision-makers, EPA, MDEQ, and RPO Program Management staff. The Quarterly Progress Report is also made available through the web site.

Wayne County Monthly County Executive Report - This report highlights items of policy interest for Wayne County from the above reports. This report is distributed to the Wayne County Executive and other officials within Wayne County.

Web Site - The Rouge Project web site www.rougeriver.com, is a means of communicating information about the Rouge River National Wet Weather Demonstration Project, its organization, work plans, products and areas of interest to the public.

On-Line Products Catalog - This is a part of the web site and is maintained by the ICC. The catalogue includes a list of all technical documents, tools and public involvement materials produced for the project. Its purpose is to disseminate reports, findings, and maps developed under the Rouge Project. Users of the web site can download pdf files of many documents, or can submit an order by e-mail to request a hard copy of a product.

3.3 PROJECT RETREATS

Beginning in 1995, members of the WCDOE and RPO staff have periodically met in a retreat format to review the course of the Rouge Project and plan for future priorities. The first retreat, held in 1995, was an effort to solidify the organization's mission, pull the work teams together and discuss grant funding. Since then, retreats have been held in 1997 and 1998. The purpose of these retreats has been to make modification as to the direction of the organization based on previous results and to establish priorities for the coming years. Another retreat is scheduled for 2001 to discuss the implications of recent findings and discuss new approaches to the demonstration project.

4.0 PROCESS FOR DEVELOPING AND PERFORMING WORK PLANS

Work plans are the primary planning documents for all Rouge Project tasks to be undertaken by the RPO. They define the scope of work activities, schedule, deliverables, products and budgets for specific tasks and define the overall goals of the tasks. The work plan must include budgetary information, therefore, consideration must be given to the types of analyses to be performed and the frequency or number of samples needed to make decisions and answer the questions raised in the work plan. The work plan not only serves as the initial planning document but also serves as a monitoring document to ensure that the tasks are performed with the scope, budget, deliverables, products and schedule defined and approved by Wayne County. See Figure 4-1 for a flow chart of the steps involved in this process.

4.1 ANNUAL WORK PLAN SCHEDULE AND AUTHORIZATION FROM STEERING COMMITTEE

Once the grants have been authorized, the Rouge Project Steering Committee reviews the priorities for the year in developing the work plan schedule.

4.2 ASSIGN WORK PLAN MANAGER AND COUNTY REVIEWER

For each work plan set forth by the Steering Committee, a Work Plan Manager and Wayne County Reviewer is assigned. The Work Plan Manager is responsible for the day-to-day management of the work plan. The Work Plan Manager is also responsible for the submittal of all deliverable work products and any supporting documentation as may be required. The Work Plan Manager will use the appropriate work plan template, community-funded or general, as a guide throughout the creation of the work plan. The work plan template is available in electronic format from the Project Administrator.

4.3 PRELIMINARY SCOPING, BUDGETS, AND PLANNING SESSIONS

The RPO Work Plan Manager will first prepare a statement of the work plan purpose and a preliminary outline. The work plans are the primary planning documents for all activities undertaken by the RPO and, as such, the scoping sessions that lead to the work plan are critical tasks in the overall work process.

Planning sessions will be held after the Work Plan Manager has prepared the purpose, objective and a preliminary outline for the scope of services performed. The project staff will schedule a session and work with the Work Plan Manager to describe the following:

- Task activities,
- Agency activities,
- Performance measurements,
- Milestones (i.e. meetings, deadlines),

- Deliverables (task memoranda, technical memoranda and technical reports),
- Products,
- Review schedule, and
- Reference to the close out process.

After the planning session, the Work Plan Manager will develop a comprehensive outline and preliminary budget. The project staff will develop a preliminary schedule.

4.4 DRAFT WORK PLAN

The Work Plan Manager will develop a task list addressing the following:

- Program management effort,
- GIS / data management effort - coordinate with GIS / data work group,
- Sampling efforts - coordinate with sampling work group,
- Document processing level of effort - coordinate with document manager,
- Technical writer / editor support,
- General office support, and
- QA/QC level of effort - coordinate with Quality Assurance Managers.

The work plan budget development requires the following:

- Determine the budget required for RPO, WCDOE, subcontractors, and others as necessary,
- Calculate the Disadvantaged Business Enterprise (DBE) involvement - in coordination with the finance manager,
- Meet with the RPO support teams to define the level of effort by task, and
- Review work plan budget with subconsultants.

The Work Plan Managers will develop a work plan schedule, coordinating with the project control staff. The schedule will include:

- Responsibility and duration for each sub-task,
- Work plan milestones and deliverables with due dates,
- Work plan review schedule, including names of reviewers, dates and types of reviews to be performed. Types of reviews include technical review, committee reviews, specialist reviews and computation checks,
- Interface with other work plans, and
- Wayne County Reviewer and other agency involvement points.

4.5 REVIEW OF PREVIOUS WORK PLAN CLOSE OUT PROGRESS

This step serves as a checkpoint for the Work Plan Manager. All previous work done in the same category (work plan name) should be finished or an explanation provided as to the timeline for the completion.

4.6 SUBMITTAL AND SIGN-OFF BY COUNTY WORK PLAN REVIEWER

The RPO Work Plan Manager through the Project Manager will incorporate all review comments and finalize the work plan tasks. A second review of the work plan tasks with the county work plan reviewer and other agency work plan participants is required. The final work plan will include an updated schedule based on final decisions with Wayne County.

**Table 4-1
Active Watershed-Wide Work Plans 2001**

Work Plan #	Work Plan Name	County Reviewer	Work Plan Manager
DSSPI1.8	Public Involvement / Subwatershed Services	J. Powell	Z. Ball
WMD6.10	Grant/ Subgrant Administration	K. Cave	C. Johnson
URBSW6.5	Subwatershed Management Plans	K. Cave	C. Johnson
URBSW6.6	Technology Transfer	K. Cave	D. Bryson
URBSW7.14	Gateway Project	K. Cave	S. Lovall
WMOG2.6	Monitoring	N. Mullett	E. Smith
WMOG6.8	WC Computer Applications	A. Mealy	C. Bristol
WMOG6.9	GIS and Data Management	A. Mealy	C. Bristol

**Table 4-2
Active Community Project Work Plans 2001**

Work Plan #	Work Plan Name	Work Plan Manager
URBSW7.4	Detroit Parks – Parkland Improvements (Grant 2/SP-88)	B. Johnson
URBSW7.7	West Bloomfield/Farmington Hills - WSM GIS Development (Grant 5/GIS-40)	C. Bristol
URBSW7.8	West Bloomfield/Farmington Hills - Stormwater Master Plan (Grant 5/SW-11)	G. Mercer
URBSW7.10	Farmington Hills Stormwater Drainage GIS (Grant 5/GIS-01)	C. Bristol
URBSW7.11	Lower 1 Subwatershed Wetland Resource Protection Plan (Grant 5/WET-01)	D. Tilton
URBSW7.12	Wayne County DPW GIS	C. Bristol
URBSW7.13	Washtenaw County Enhanced IDEP (Grant 5)	S. Rood

4.7 APPROVAL OF WAYNE COUNTY WATERSHED MANAGEMENT DIRECTOR

The final work plan will be distributed to the RPO Project Manager and then to the WCDOE Director for signoff on the work plan summary page. Once the final work plan has been approved, the WCDOE director will issue an approval letter to initiate the work plan execution. The approved work plan will become the basis for progress reporting.

4.8 TRACKING AND REPORTING THROUGH COMPLETION AND CLOSE OUT

The RPO Monthly Activity Report is used to track progress on each work plan. The monthly RPO Progress Review meetings provide a forum for the discussion of progress, identification of new issues, and resolution of problems or unforeseen situations.

The Work Plan Manager will meet (in person or via telephone) at least every other month with appropriate individuals performing work under the work plan to achieve three basic goals:

- To review progress in meeting the goals/objectives of the work plan,
- To ascertain the status of interim and final products being completed under the work plan, and
- To identify and resolve issues that may be impacting the accomplishment of the goals and objectives of the work plan.

During the last month of the work plan, the Work Plan Manager will meet (in person or via telephone) with appropriate individuals performing work under the work plan. The purpose of this communication is to review the status of the anticipated products, to discuss the distribution of those products and to discuss future actions that should be taken by the Rouge Project based upon what has been learned under the subject work plan.

The work plan must delineate discrete tasks that will be undertaken. Each task should define specific work plan products and milestones for the completion of the task and product(s). All work plan products should be completed in accordance with the milestone schedule. It is the Work Plan Manager's responsibility to take the steps necessary to meet established schedules. Where it will not be possible to meet the schedule, the Work Plan Manager must discuss alternatives with the Project Manager to determine the best course of action.

4.9 CHANGE MANAGEMENT PROCESS

The Work Plan Manager or Project Manager will initiate a review and approval process by using the ATM (Authorization to Modify) Identification Form, as shown in Figure 4-1 on Page 4-6. Potential changes will be given appropriate visibility in the various management reports generated by the program management system until they are incorporated into the work plan. A copy of the approved ATM Identification Form will

be provided to the project controls staff so that the potential change can be entered in the ATM Tracking Log, which will be distributed monthly, or more often as necessary. Funding for potential changes must be found within the work plan budget or from another work plan budget. The form will indicate the proposed source of funds. The ATM form is reviewed by Wayne County for final approval and signature.

Figure 4-1
Authorization to Proceed on
New Work Plan(ATP)/Modify Existing Work Plan (ATM)

<input type="checkbox"/> Authorization to Proceed (New)			<input type="checkbox"/> Authorization to Modify (Existing)		
Initiator:		ATP/ATM#: (to be assigned by Financial Manager)	Date:		
Work Plan Number:		Work Plan Name:	Work Plan Approved:		
Requested by:					
Task(s) associated with this ATP:					
(CHECK ALL THAT APPLY)					
<input type="checkbox"/> Additions to work scope		<input type="checkbox"/> Work to stop		<input type="checkbox"/> Reallocate Budget	
<input type="checkbox"/> Reductions of work scope		<input type="checkbox"/> Exchange of approved tasks for new/added work scope		<input type="checkbox"/> Change in Schedule	
<input type="checkbox"/> Change in work scope		<input type="checkbox"/> Work Plan Closeout			
Description:					
<input type="checkbox"/> See Attachment					
Anticipated start date:		Date decision required:		Anticipated end date:	
Cost Estimate ¹ (provide labor hours, labor \$ and other direct costs - indicate CDM, subcontractors and et. al.):					
<input type="checkbox"/> New Task(s)		<input type="checkbox"/> Trade Task(s)		<input type="checkbox"/> Preauthorization	
(ATM) New work plan upper limit:					
Work Plan Manager:				Date:	
Finance Manager:				Date:	
Program Director:				Date:	
Wayne County:				Date:	

Distribute completed form to signatories listed above.

¹ Show dollar change by task (+) or (-) or (0).

5.0 PROCESS FOR AWARDING SUBGRANTS AND DEVELOPING INTERAGENCY AGREEMENTS

The Community Grant Program began in 1993 with the award of grants for the Phase I CSO basins and sewer separation projects. The program expanded in 1997 when the RPO introduced three new community support features:

- a streamlined process for executing IAAs for Wayne County;
- a handbook on grant requirements to assist communities; and
- the appointment of an RPO Project Coordinator to provide general management services to the community in the development and implementation of the project.

The process for awarding subgrants and developing interagency agreements is divided into the following five components:

1. Notice of Grant Availability,
2. Project Evaluation Team Review of Proposals,
3. County Review of Evaluation Team's Results,
4. Proposal Approval and IAA Execution, and
5. Final IAA Transmittal to Community.

These components are described in more detail below. Figure 5-1 illustrates this process.

5.1 NOTICE OF GRANT AVAILABILITY

Once a grant become available, a Notice of Grant Availability is sent out to all communities and agencies in the watershed. The Notice of Grant Availability describes the eligibility of projects and the process for submitting proposals.

Each Notice of Grant Availability is related to a “round” of subgrant awards. This term was created in 1997 to uniquely identify groups of subgrants. The different funding rounds since 1997 are presented in the table below.

**Table 5-1
Schedule of Grant Availability Publications**

Name of Subgrant Round	Date Notice of Grant Availability Published
GIS – 1	October 1997
Storm Water	January 1998
GIS –2	April 1998
Recreation and Habitat	March 1998
Onsite Sewage Disposal	November 1998
General Permit Round 1	November 1998
General Permit Special Needs #2	September 1999
General Permit Round 2A	August 2000
General Permit Round 2B	February 2001

Communities or agencies who wish to receive funding under the available grant will then submit proposals. These proposals must be accompanied by a letter from the respective SWAG that recommends and prioritizes the proposed projects in the subwatershed.

5.2 PROPOSAL REVIEW BY PROJECT EVALUATION TEAM

Once all of the proposals are received a project evaluation team meets to review them. The team includes representatives from the County, RPO and other agencies, such as the MDEQ, the MDNR and SEMCOG. During the evaluation of each proposal, the team assigns a score and review comments to each proposal based on the set criteria outlined in the Notice of Grant Availability. The team can recommend that certain tasks be deleted from project proposals, if such tasks do not meet the eligibility criteria set forth in the Notice of Grant Availability.

5.3 COUNTY REVIEW OF EVALUATION TEAM RESULTS

The final list of recommendations is sent to the County for review and approval. The list includes the criteria used, reviewers scoring and comments, SWAG priorities, and a summary of how projects are distributed across the seven subwatersheds. The review team must recommend the highest scoring projects within the original budget allocation set forth in the Notice of Grant Availability. The County can add to the list of projects recommended by the review team by increasing the budget allocation for the round of subgrants. Once the final projects are selected, an award letter is sent to the selected communities/agencies.

5.4 PROPOSAL APPROVALS AND IAA EXECUTION

A Resolution and Table of Recommended Projects is created by the reviewers and sent to the Wayne County Commission for funding appropriation and to the Steering Committee for review and approval.

A Project Coordinator is then assigned and a project kickoff meeting is scheduled. At this meeting a draft IAA is created for each community or agency including scope of project, schedule of work, financial provisions and budget figures. A final IAA is developed for each community and sent out to the community for their review.

The community or agency reviews and signs the IAA once approval is received from the Wayne County Commission. The County Executive signs the agreement after the communities have signed. Following the signature of the County Executive, copies are distributed to the community or agency with an authorization to proceed.

5.5 PROJECT COORDINATION BY RPO STAFF

Responsibilities of the Project Coordinator assigned to each subgrant project are described below:

1. Meet with the County Grant Manager; obtain a copy of the proposal and evaluation comments.
2. The County Grant Manager will set project startup meetings with the communities or agencies regarding their funded projects
3. Attend the project startup meeting with the County Grant Manager and the community or agency. The following items will be addressed at this meeting by the County Grant Manager and the project coordinator:
 - Discuss project in detail with the community and their representative.
 - Resolve county reviewer's comments on the project (technical, cost or schedule).
 - Identify reasonable schedule to complete project. Identify deliverables.
 - Explain the procedures and the requirements for reimbursement.
 - Explain the time commitment and responsibilities of the Community Contact.
 - Provide a template for the Inter-Agency Agreement (IAA), if needed.
 - Describe the basic elements of the project:
 - Inter Agency Agreement
 - Procurement of Consultant
 - Plan for Meeting Fair Share Goals of the Grant (MBE/WBE)
 - Project Execution
 - Progress Meetings and Reports
 - Payment Reimbursements
 - Project Deliverables
 - Project Summary Report
 - Financial close-out Forms.
4. During the startup meeting the community or agency should identify how they will proceed with the project:

Option 1: Community Performs the Work with Its Own Staff. The County Grant Manager and the coordinator should discuss community personnel cost documentation for the project.

Option 2: Community Procures a Consultant to Perform Work. The County Grant Manager and the coordinator should provide the community with a model advertisement, if necessary and shall discuss with the community the need for meeting MBE and WBE Fair Share goals on all procurements. The project coordinator will monitor the advertisement and selection process. Once a consultant has been selected, the project coordinator will hold a project kick-off meeting, if needed, to decide on major project schedule milestones and tasks. If MBE and WBE participation levels have not been finalized in the consultant selection process, then the community must prepare and submit a plan for meeting the respective goals.

Option 3: Community Contracts with Wayne County/RPO. If the community or agency chooses to have the RPO perform the work, see the RPO Project Manager to prepare a cost estimate, schedule milestones and an RPO Work Plan for the project. This option is also discussed in Section 5.6.

After the startup meeting, the community or their representative will prepare the first draft of Attachment "A" to the IAA. This document will include the revised/update scope, budget and schedule of the project based on the issues discussed at the startup meeting. The Attachment "A" will be mailed/mailed to the County Grant Manager.

5. Assist the County Grant Manager to complete the IAA.
6. Obtain a progress report from the community or their representative via email (preferred) or fax. County Grant Manager should be copied for the progress report. The report should be requested for 20th of the month (On larger projects, quarterly, on smaller projects monthly). Attend regularly scheduled progress meetings among the community and its consultant, if needed. On larger projects, attend quarterly; on smaller projects attend monthly. Call a meeting with the community if the project has implementation issues or delays
7. Monitor the submission of the first reimbursement request. Check with the County Grant Manager to determine when the first reimbursement request is received. If the first request is not received within 90 days of executing the IAA, then call the community and establish a date for the submittal, or determine if there is a problem. Work with the County Grant Manager and the community contact as needed to complete the reimbursement request.
8. Obtain progress reports and status of reimbursement requests during the project at the agreed upon frequency. If the schedule falls behind, alert the RPO Project Manager and the County Grant Manager. After discussion with the County and RPO, assist with resolving project management problems.
9. Prepare project status summaries for the Rouge Project Progress Report compiled by the Project Controls Specialist (PMA).
10. Obtain project deliverables from the Community Contact. Work with the Grants Manager to determine what reviews are required on the deliverables.
11. Obtain a Final Project Summary Report from the Community Contact.
12. Meet with the Community Contact and major project participants to discuss the project and obtain ideas and advice for future projects. Prepare a memo to the County Grants Manager that summarizes the discussion.
13. Work with the RPO Outreach Coordinator to prepare a draft "Project Profile" for the Rouge Project web site.

14. Work with the County Grant Manager to complete the final reimbursement request and close-out forms.

5.6 SUBGRANT WORK PLANS

In some situations, a subgrantee may elect to have some or all of the subgrant project work performed by Wayne County or the RPO. When the subgrantee makes this choice, the IAA is structured in a way that the subgrantee reimburses the County for a portion of the incurred cost up to a certain limit. The portion is consistent with the funding percentage established in the Notice of Grant Availability. When RPO services are involved, a new Work Plan specific to the subgrant project is created, and the procedures for Developing and Performing Work Plans (Section 4) are used.

6.0 PROCESS FOR DEVELOPING ROUGE PRODUCTS

Every work plan, which is performed under the guidelines spelled out in this guide, will produce some type(s) of products. Examples of the types of products generated are reports of projects performed under the work plan, videos, data compact discs, training modules or summaries of meetings.

6.1 PRODUCT DEVELOPMENT REQUIREMENTS

In the development of products, the following requirements must be met:

- Work plans will result in specific deliverable products.
- Distribution to the appropriate parties must be considered by the Work Plan Manager.
- Interim products must be completed during the life of the work plan
- End products must be completed on time and must be of good quality.
- Interim and final products must be dated and supplied to the official files of the project. There must be a hard copy and an electronic copy.
- The Work plan manager will assess which products should be placed on the web site.

6.2 PRODUCT PRESENTATION REQUIREMENTS

Once a draft product is generated under the project work plan, either interim or final, a copy is sent to the Editor-in-Chief for review. The Editor-in-Chief will provide advice and counsel on possible changes that could be made to the written text that describes the products in order to further the achievement of the overall goals of quality products. The following details the process that will be followed in finalizing products:

- The Editor-in-Chief will maintain a list of Rouge Products to be prepared during the period of the work plan. This list will be generated in consultation with appropriate Work Plan Managers.
- For all reports sent to the Editor-in-Chief, editing of the document to enhance its readability will be performed.
- The revised document will be resubmitted to the Project Administrator for the appropriate revisions to the text.
- The Editor-in-Chief will prepare an Executive Summary of the document, or an enhanced summary in consultation with County Work Plan Reviewer.
- The Editor-in-Chief will consult with the web site manager concerning placement of the summary and the full report onto the web site.
- The Editor-in-Chief will consult with Work Plan Managers regarding the distribution of the products. The Work Plan Managers will have suggested a distribution list for the product. The Editor-in-Chief will review that list and make recommendations as appropriate.
- Based upon experience gained in this process, Editor-in-Chief will make recommendations to the County Work Plan Reviewer on how to improve the overall process and/or products.

6.2.1 Special Procedures for Papers and Presentations

The RPO Project Administrator will maintain a “Conference Log”. This log will identify upcoming conferences and presentations. This log is based on conferences identified by RPO staff and by the Outreach Coordinator. This log will be distributed monthly for review by Rouge Project team members.

The Director of Watershed Management approves requests for conference attendance and presentation of professional papers. RPO and County staff who receive approval from the Director of Watershed Management can attend conferences. Once approval is provided, the author will receive support from the RPO staff in preparing the paper and the presentation slides. As appropriate, presentation slides and papers are reviewed by the Editor-in-Chief for overall presentation quality.

The RPO Project Administrator maintains a series of files containing papers, presentations, 35-mm slides and PowerPoint graphics. These files are available to any author of a paper or presentation for the purpose of coordinating previous papers, or adapting previous ideas into a new paper or presentation.

Certain presentations will be posted on the Rouge Project web site. The Work Plan Manager for the Technology Transfer Work Plan (in 2001, URBSW6.6) will identify such presentations in consultation with the Director of Watershed Management.

6.3 PROCESS FOR ADDING INFORMATION TO THE WEB SITE

The Rouge Project web site is located at www.Rougeriver.com. The process for adding materials to the web site is described below.

- Wayne County, RPO staff and the RPO Webmaster discuss priorities for updates to the web site through meetings of the ICC (Internet Content Committee).
- The Webmaster works with RPO and Wayne County in drafting new text (such as Project Profiles that summarize projects), or, adding new items to the Products Catalogue, or in converting documents to a web format.
- Web-ready products are provided in digital form to the Webmaster at which time the placement and associated links to other parts of the web site are established by the Webmaster.
- The Webmaster then provides instructions to the Web Developer for posting the material on the site.
- The Webmaster reviews the newly posted information for quality assurance.

7.0 PROCESS FOR WORK PLAN CLOSE-OUTS

This procedure establishes the steps to provide for a complete work plan close-out. It should be noted that this procedure must be finished before a continuation work plan in a series may be submitted to a County Work Plan Reviewer.

The Work Plan Close-Out process is divided into the following five components:

1. Work Plan Documentation Memorandum,
2. Work Plan Close-Out Cover Sign-Off Sheet,
3. Technical Products and Deliverables,
4. Financial (All financials and back-up), and
5. Document Control Process (Files).

7.1 WORK PLAN DOCUMENTATION MEMORANDUM

The document memorandum should be a one-page memorandum (two-pages if necessary) to the RPO Project Manager from the Work Plan Manager. It includes:

1. Purpose of Work Plan - this is pulled from the original work plan developed following the guidelines in Section 4.
2. Complete Status of all Deliverables (including agencies) - each deliverable outlined in the original development of the work plan should be listed including what was completed and how.
3. Punch List, if necessary, of remaining unfinished works items including a detailed explanation of why it was not completed and what steps, if any, are being taken to complete the work items.
4. Product which Wayne County D.O.E. should have in their Reference Library - the procedures detailed in Section 8, Standards for Paper and Digital Filing, will dictate the correct process for completing this step.

7.2 WORK PLAN CLOSE-OUT SIGN-OFF SHEET

This close-out form (electronic) is to be used by the Work Plan Manager as approvals, sign off, and process steps are complete. An example of this form follows is shown in Figure 7-1. If exceptions are noted on the form, the Work Plan Manager must create a punch list of those items and include them as a part of the Document Memorandum. This form is the master control for the Close-Out process and will be part of the work plan in the archive file.

7.3 TECHNICAL PRODUCTS AND DELIVERABLES

All technical reports and deliverables, which are part of the work plan, must be complete and prepared in accordance with the Document Style Guide (procedures) at close-out. A list of all deliverables prepared as part of the work plan should be attached to the Close-Out Sign-Off sheet. All products must have the Wayne County Reviewer and the RPO Project Managers sign off. The Table for Closeouts (electronic) shows the Work Plan Name and Manager and

will be formatted by Columns for Deliverables (Listing Tasks with relevant information only and Task Products), Type and Document Name, Paper Copy Location by Folder Number and Electronic Filename/Path for Deliverables and Other Relevant Documentation. The remaining part of this form will be for General Work Plan Information including the location of contract, amendment(s) and cost(s) information by folder number.

7.4 FINANCIAL

The Finance Manager will prepare a final ATM to reallocate any remaining funds for other project purposes. All Authorizations to Proceed (ATP) and Authorizations to Modify (ATM), including the final ATM, for the work plan will be attached to the close out sheet and archived with the work plan.

7.5 DOCUMENT CONTROL PROCESS (Hard Copy and Electronic)

The Rouge Project Document Control Process procedure is to be followed for all document filing whether central file, hard copy or electronic. Each Work Plan Manager should follow that procedure as part of his/her documentation responsibilities throughout their work plan activities and the work plan close-out. The sign off, by the Document Control Coordinator, is required to indicate that all hard copy and electronic files are complete, conform to the Document Control Process and are in the central file. A print out of the cross-reference file for electronic files should be maintained and attached to this sign-off sheet by the Document Control Coordinator.

Figure 7-1
WORK PLAN CLOSE-OUT
Sign-Off Sheet
(Electronic Template)

Work Plan Number: _____ Work Plan Name: _____
Work Plan Manager: _____
Date Approved: _____ Close-Out Date: _____

DOCUMENTATION

(Check if complete. Note if incomplete and place on Work Plan Manager Close-Out Punch list.)

- Work Plan: Documentation Memorandum -- Attachment 1
 - Identify any products (Enclose Copy), which should be in WCDOE Reference Library
- List of Technical Products and/or Work Plan Deliverables -- Attachment 2
 - All Products received from others: Agencies, Consultants, etc.
- Financial Summary and Sign-off -- Attachment 3
 - Work Plan Spreadsheet
 - ATP/ATM's/Final ATM (Copies)
- Document Control Process (with cross reference) -- Attachment 4
- Digital Files to Office Manager (Text, Figures, Tables, Maps)

APPROVALS

Work Plan Manager: _____ Date: _____

- Products Completed
- WCDOE Reference Library Recommendation

Project Manager: _____ Date: _____

Document Control Coordinator: _____ Date: _____

- Central File and Electronic Cross Reference (Archives)

Finance Manager: _____ Date: _____

- Wayne County Notification of Financial Close-Out (Signed ATM)

Wayne County Reviewer: _____ Date: _____

Wayne County Project Manager: _____ Date: _____

Close Out Control: _____ Date: _____

(Initials)

8.0 STANDARDS FOR FILES

Work Plan Managers must establish a work plan Central File at the office of Camp Dresser & McKee. The RPO Project Administrator will prepare file folders and titles, and add the file names to an overall Master File List. In general, one file folder is created for each task enumerated in the work plan.

The Master File List is updated each month by the Project Administrator. On a quarterly basis it is synchronized with a list from the Wayne County DOE Records Management System.

8.1 DOCUMENT MANAGEMENT

Various forms and types of documents will be managed by RPO staff as a normal course of Program work effort task execution, including reports published by others and original data collected. The information will be collected in various formats, including written reports; paper and digitized maps; photographs and computer generated images; and videotape and sound recordings.

Work plan managers are responsible for maintaining working files of all documents important to the execution of work tasks. Those reference documents and publications which are not relied upon on a daily or continual basis are transferred to the Central File.

After work plans are closed, the files are archived to the 220 Bagley Storage Room or to the Wayne County Commerce Court office file storage area. Generally, the 220 Bagley area is used for archiving materials that may need to be retrieved more frequently than those at Commerce Court. The RPO Project Administrator maintains a list of the archival files at each storage location.

Copies of all deliverables, by work plan, produced by the Rouge Project are maintained in the central file managed by the RPO Project Administrator. Deliverables include technical memoranda, official correspondence, meeting notes and agenda, and work task reports. Each technical memoranda and technical work product is assigned a document control number and stored in the secure central file under the control of the Project Administrator.

The central files contain all technical information that documents the activities conducted by the Wayne County RPO. For example, draft reports and final reports for each Work Plan are maintained in the central file. All project records for active work plans and those that were active within the past two years are stored at CDM's One Woodward Detroit office. Project files for inactive work plans more than two-years old are maintained at the Wayne County Commerce Court Office. This off-site storage facility, which is available for use by staff, provides an archive of information important to the RPO and Wayne County.

All RPO off-site storage records will be maintained by Wayne County in accordance with federal, State, and county guidelines. The transfer of project magnetic media to an off-site secure facility is also managed by the RPO document control specialist.

8.2 RPO DIGITAL COPIES OF FILES

Electronic copies of project-related files are stored on the RPO Novell Server. Backup of this server is maintained by Wayne County. A duplicate copy of the server is located at CDM's One Woodward office for use by RPO project staff. Copies of new files generated at the CDM office are added to the Wayne County Server on a quarterly basis. For a further description of this process, see Chapter 11.

Project directories on the RPO server as subdivided into directories as described below:

- ADM - All administrative files;
- FINANCE - All financial files;
- TECH - the technical files associated with work plans;
- WEB - all WEB site files (PDF's; Profiles, etc.);
- WP - Word processing documents; final reports; tech memos, etc.; and
- SHARED – a general area for files that do not fit into other categories.

9.0 STANDARDS FOR ASSET MANAGEMENT

Procedures for asset management incorporate requirements outlined in CFR 40 Part 31 – Uniform Administrative Requirements For Grants and Cooperative Agreements To State and Local Governments; Section 31.32 Equipment:

- An inventory tracking system must be maintained. System must include a description of the property, a serial number or other identification number, the source of the property, who holds title, the acquisition date, cost of property, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the equipment.
- Equipment shall be used by the grantee or sub-grantee in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by Federal funds. When no longer needed for the original program or project, the equipment may be used in other activities currently or previously supported by a Federal Agency.
- A physical inventory must be taken and the results reconciled at least once every two years. (Completed in 1999. Scheduled to be done in 2001 and 2003.)
- When the original or replacement equipment acquired is no longer needed disposition of the equipment will be made as follows:
- Items of equipment with a current per-unit fair market value of less than \$5,000 may be retained, sold or otherwise disposed of with no further obligation to the awarding agency.
- Items of equipment with a current per unit fair market value in excess of \$5,000 may be retained or sold and the awarding agency shall have a right to their calculated fair share of the proceeds from equipment sales.
- Title will remain vested in the Federal Government.
- Grantees or Subgrantees will manage the equipment in accordance with Federal agency rules and procedures, and submit an annual inventory listing.

10.0 PROCEDURES FOR INVOICING

Invoices serve not only as the means of processing payments, but as the basis for documenting project costs for review by Wayne County personnel. These procedures were developed as a joint effort by Wayne County and RPO staff.

Invoices, which include all labor costs and direct expenses for the invoicing period are submitted to the Rouge Project Financial Manager by the 20th of the month. A summary invoice should be submitted for each Grant with a detailed invoice for each work plan.

The Finance Manager will review invoices to ensure the following:

- Numerical correctness of the invoice;
- Total cost incurred does not exceed the funding limits;
- Proper overhead rates for the period of performance were used;
- Adequate supporting documentation was submitted with the invoice including a detailed activity report which should be e-mailed to the Rouge Project Administrative Assistant; and
- Any discrepancies noted as a result of the above reviews will be noted on the invoice and appropriate adjustments made.

Work Plan Managers oversee and monitor all expenses charged to their work plans on an ongoing basis. Discussions between the consultants/contractors regarding project cost issues is highly encouraged prior to invoice submission in order to minimize the need for invoice revisions. Work Plan Managers must review and approve all invoices charged to their work plans.

Upon approval of subcontractor invoices and a CDM draft invoices, final invoices are prepared. Explanations are provided for any charges that may not be immediately identifiable by the client. Copies of receipts are provided for any direct costs that exceed \$1,000. Additional documentation is prepared to highlight or explain any exceptions to the normal workflow. This documentation includes a detailed listing of unbilled costs. Invoice documentation also includes a report of hours worked by key project personnel.

A summary invoice for each Grant is submitted to the Wayne County Grant Coordinator on the 20th of the month to request funding from the EPA. Detailed invoices for each work plan are distributed to the applicable Wayne County review from review and approval.

An activity report detailing the activities of Rouge Project personnel is distributed in a separate transmission to monitor the progress of the project and to facilitate the invoice review process.

Any invoice review comments from Wayne County personnel are addressed and applicable adjustments made on a subsequent invoice.

A spreadsheet with cost and budget information for each work plan is maintained by the project Financial Manager to facilitate the invoicing process and assist Work Plan Managers and subconsultants with budget or invoice issues.

11.0 STANDARDS FOR DATA MANAGEMENT

The Rouge Project has established an integrated Information Management Services (IMS) structure to support the various operations of the project. The IMS structure includes such components as:

- Central administration server for storing project related files;
- Central database for project related monitoring programs;
- Central GIS server for storing and managing the spatial information;
- A web site for providing information about project activities; and
- A variety of applications designed to support project functions.

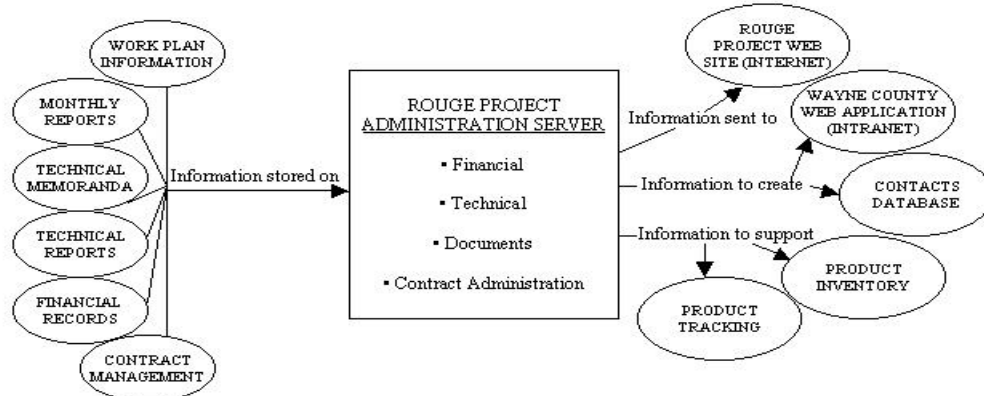
This section of the Quality Management Plan 2001 will present an overview of each component of the Rouge Project IMS.

11.1 CENTRAL ADMINISTRATION

The Rouge Project maintains a central project server that houses many types of information related to the project. Figure 1 shows a diagram of the types of information provided to the central project server and the functions that are supported by the project administration server.

As can be seen in Figure 11-1, all the related information concerning work plans, technical reports, monthly reports, contract administration and financial status are stored in a definitive directory structure on the Rouge Project Information server. This server is a Novell server housed and maintained by the Wayne County Information Technology Department.

The Rouge Information server is organized in four major directories – 1) Finance; 2) Technical; 3) Documents; and 4) Administration. The information stored in these directories is provided by all members of the Rouge Project team. Other Rouge Project IMS components that are served by this server are the Rouge Project Internet web site and several Wayne County Intranet including a project contacts database; a product inventory database; and a product tracking database.



**FIGURE 11-1
ROUGE PROJECT ADMINISTRATION SERVER**

11.2 CENTRAL FIELD DATABASE

The Rouge Project maintains a central relational database to house all the incoming monitoring and other field information. There have been many filed programs designed and implemented during the Rouge Project and as these programs generate information, it is stored in an Oracle database running on a Windows NT server. Figure 11-2 shows an overview of the information flow process for the Rouge Project monitoring database.

As shown in Figure 11-2, when new field programs are planned and designed, the field sites are defined through the use of the Site Management Application. This application begins the initial definition of the sites that will generate information for the central monitoring database. Sites must be defined before information can be linked. The Site Management Application will also define the location for use in the GIS environment.

Other incoming field information that is stored in the central Oracle database includes:

- Rainfall data;
- In stream flow and level data;
- Continuous water quality data;
- Field grab samples via project laboratories; and
- Special projects (modeling studies, impoundment studies, sediments, etc.).

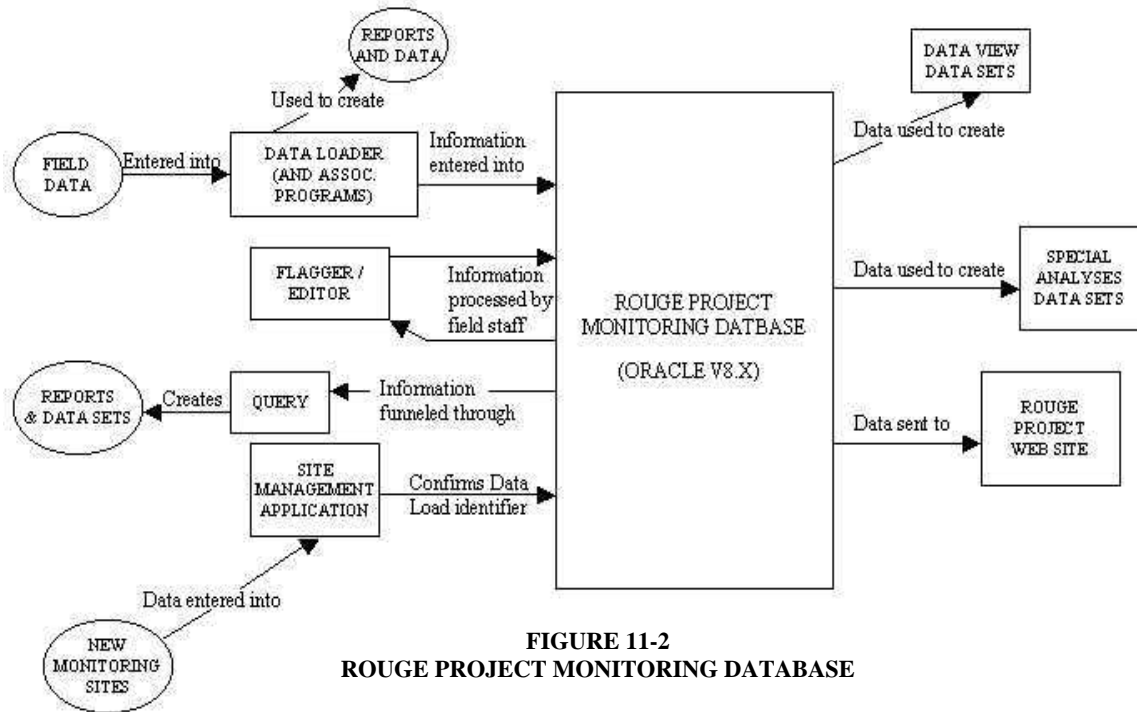


FIGURE 11-2
ROUGE PROJECT MONITORING DATABASE

The monitoring information comes into the Rouge Project and is processed through a series of data management applications (see Figure 11-2) connected to the Oracle database. These data management applications include:

- **Data Loader** – reads and prepares the raw incoming field information for loading into the Oracle database. The Data Loader application performs a series of checks and balances to evaluate the incoming field data. Once the data is loaded into the Oracle database it is considered preliminary until future quality control checks are completed.
- **SAS Plotting application** – produces a series of data graphs comparing the rainfall, flow / level, and continuous field data. These plots are used by field monitoring staff to perform additional quality control checks.
- **Rain Cross Tab Report** is generated that presents the rainfall information in a format that makes it easy for field monitoring staff to evaluate and quality check the rainfall data.
- **Flagger / Editor Application** - reads the preliminary information from the Oracle database and provide a suite of functions for field monitoring staff to final edit the data. The quality control flags are updated and the data is considered final, once the field monitoring staff (data owner) completes the process.

- Query Application – retrieves data from the Oracle database based upon a series of parameters such as date, site identifier, parameter, etc. This information can be submitted to a report or to working files for use by the end user.

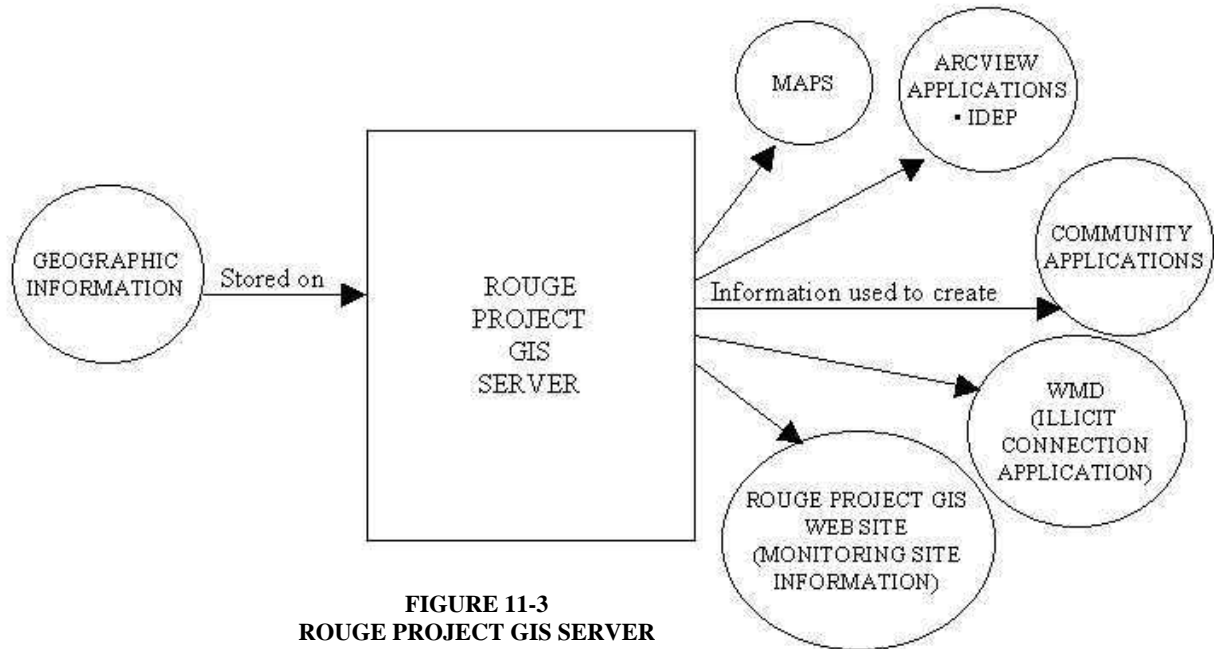
Once the monitoring data in the Oracle database has been classified as final by the data owner, the information is made available to other components of the Rouge Project IMS. As shown in Figure 11-2, the information in the Oracle database is retrieved for special analysis in default data sets or can be formatted in the DataView application data sets. The DataView application provides Rouge Project monitoring data on a CD-ROM that can be distributed to people interested in working with the data. DataView data sets are generated from the final monitoring data on an annual basis.

A future component of the Rouge Project IMS will be the Wayne County GIS web site. This web site will house summary information about the monitoring data linked to the GIS information.

11.3 CENTRAL GIS SERVER

In addition to the Administration server and the Oracle monitoring database, the Rouge Project also maintains a central geographical information system (GIS) server. This server is a Windows NT server that houses all the GIS related information and is shown in Figure 11-3. GIS information has been collected from many sources including:

- State of Michigan base map of local and county roads, political boundaries, railroads, highways, etc;
- Other state and federal coverages related to wetlands, environmental sites, landfills, etc;
- EPA's river reach file with local updates;
- Rouge Project monitoring locations; and
- Community watershed information including existing and future land use.



**FIGURE 11-3
ROUGE PROJECT GIS SERVER**

The GIS environment consists of ESRI's ArcInfo and other related software applications. The GIS server is used to produce maps for project activities including public events. In addition, the GIS information is used in many Rouge Project applications (see Figure 11-3). In the future, portions of the Rouge Project GIS information will be available through the Wayne County GIS web site.

11.4 ROUGE IMS ENVIRONMENT

The Rouge Project IMS environment consists of a networked series of servers and desktop computers running commercial software and project developed applications. Figure 11-4 shows an overview of the Rouge Project IMS environment. The Rouge Project GIS server, which also houses the Oracle monitoring database, runs on a Windows NT server computer that is located in the Wayne County Commerce Court operations. The Rouge Project GIS server is backed up on a regular basis.

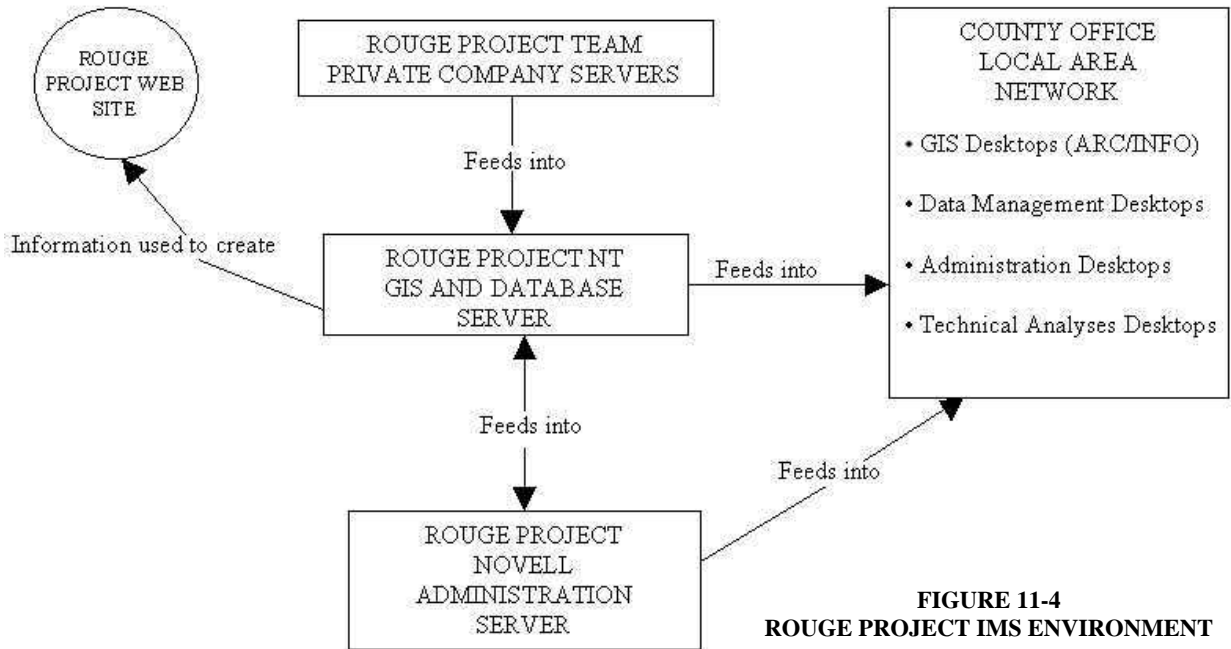


FIGURE 11-4
ROUGE PROJECT IMS ENVIRONMENT

The Rouge Project administration server runs on a Novell server computer that is located in several locations throughout Wayne County – DOE_CLI; DOE_RPO; and DOE_LRM. These Novell servers are interconnected via the Wayne County Wide Area Network. Procedures have been established that allow Rouge Project team members (non-County team members) to move Rouge Project information to these servers on a regular basis. This ensures that only a set of key Novell servers containing the Rouge Project information. Backups of these administration servers are conducted on a regular basis by Wayne County.

As shown in Figure 11-4, there are many desktop computers attached to these Rouge Project servers including:

- GIS workstations computers
- Data management computers for loading and retrieving data
- Administration (finance and contracts) computers
- Technical analyses (modeling; data evaluation; graphics processing () computers

In addition, the suite of Rouge Project computers also feed the Wayne County web sites (County GIS and Rouge Project).

12.0 STANDARDS FOR FIELD DATA COLLECTION

Environmental measurement activities undertaken as part of the Rouge Project include baseline water quality and sediment characterization, storm event sampling, and sampling for special studies including CSO surrogate basin evaluations. The data collected will be used in the development of water quality model simulations and for making decisions with regard to control and treatment of wet weather flows.

12.1 QUALITY ASSURANCE PROJECT PLAN

Numerous sampling events are planned for the course of the study; the purpose of the Quality Assurance Project Plan (QAPP) is to document the manner in which sampling and analysis will be performed. Since the majority of environmental sampling and analyses activities that will be performed over the course of the Rouge Project will utilize identical sampling and analyses procedures, a decision was made to develop an overall QAPP that would serve as the guide for conducting RPO field and analytical activities.

The *Quality Assurance Project Plan* (RPO-PCR-QAPP01.00) documents the overall requirements for establishment of Data Quality Objectives (DQOs) using the process outlines in "Guidance for the Data Quality Objectives Process" (EPA A/G-4) and specifies minimum requirements. Specific DQOs are developed for each sampling and analysis task and documented in the Field Sampling Plan (FSP). The QAPP serves as the overall guidance for planning field activities and developing FSPs.

The QAPP is submitted for internal review and approval to the following individuals:

- RPO Manager;
- Wayne County, Divisions, of Public Works and Watershed Management Directors;
- WCDOE, Director;
- EPA Region V, Quality Assurance Manager; and
- EPA Region V, Water Division, Director.

The QAPP will be updated whenever dictated by the results of the annual review of the QMP. The QAMs will provide staff with updates through e-mail or presentations at staff meetings.

12.2 FIELD SAMPLING PLANS

Field Sampling Plans (FSPs) provide the detailed documentation necessary to conduct specific environmental measurement activities. Before any sample is collected or field measurement is made, an FSP must be prepared, reviewed and approved following the procedures described in this QMP and in the RPO Quality Assurance Project Plan (QAPP).

Companion documents to the QAPP 4 1993 are the compendia of Field Standard Operating Procedures and Laboratory Standard Operating Procedures (SOPs) that are utilized for monitoring, sampling and analysis. The SOPs cover sampling, measurement and documentation methods, as well as procedures for calibrating and troubleshooting instruments. Some SOPs have been developed internally by RPO staff, while others are from published sources. SOPs contained in EPA guidance documents, such as the sampling methods contained in "A Compendium of Superfund Methods", may also be used. The SOP Compendia are updated as new SOPs are developed or existing SOPs are revised as part of specific FSP development activities.

FSP development is facilitated by use of the *RPO FSP Preparation Guide*, which also serves as a framework for the development of site specific SOPs. The FSP Preparation Guide identifies the major elements that must be included in task specific FSPs. FSPs will be developed under various program work efforts including monitoring, CSO, and NPS activities. The Preparation Guide provides for the consistent development of FSPs across the program elements regardless of the member firm developing the document. The FSP Guide also provides for the efficient review of draft FSPs by serving as a checklist.

Within the SOP, consideration must be given to identifying Data Quality Objectives (DQOs). DQOs are specific statements as to the quantity and quality of data that will be collected as part of the work plan. For all activities that will require the collection of environmental samples or making field measurements, the work plans must provide information on the following issues:

- The type of sampling or monitoring activity planned;
- The study objectives and uses of the data;
- The types of samples and parameters to be analyzed;
- The targets of quality control and quality assurance to be achieved, including detection limits, precision, accuracy, representativeness, completeness, and comparability of the data; and
- The Standard Operating Procedures (SOPs) to be followed.

12.3 FIELD SAMPLING

The Field Sampling Coordinator (FSC), in conjunction with the Monitoring Work Plan Manager (WPM), is responsible for developing a schedule of all anticipated field monitoring or sampling activities, and for identifying the types and numbers of samples or data that will be collected and analyzed as a result of these activities. This information is used by the FAM to inform laboratories of anticipated sample volume and determine if additional laboratory capacity is required.

Although some baseline, dry weather, CSO and NPS sampling activities can be scheduled ahead of time, most of the wet weather sampling events cannot be scheduled and will be dependent on storm events. Responding to these storm events is addressed in the logistical plan outlined in each specific FSP that addresses wet weather sampling activities. RPO has contracted with a weather forecasting service that provides advanced warning of anticipated storm events expected to occur within the Rouge River Watershed. The FSC or their designee, will be in constant communication with the forecasting service to determine if the precipitation event is expected to yield rainfall that will produce samples for synoptic or specific area data needs as defined in the Baseline FSP. Upon notification of an impending rainfall event, the FSC will determine if adequate time is available for sampling teams to mobilize and respond to the storm event. If less than 48 hours of advance notice for the rainfall event is provided, mobilization will not be initiated. Should the forecast indicate that precipitation will not occur for at least 48 hours, then mobilization will be initiated.

Mobilization activities for any field surveys require that the FSC inform the sampling team of all field activities and insure that all sampling containers, Chain-of-Custody (COC) forms, logbooks, and sampling equipment be assembled. Laboratories must be contacted to prepare sample containers with preservatives if these have not already been put aside for the event. All production and QC laboratories are then contacted to coordinate sample delivery and to ensure that laboratory staff is available to receive samples and to initiate short hold time analyses. Coordination of all sampling activities is handled by the FSC, who maintains continual communication with all field staff during the sampling activities by cellular telephone.

During the actual sampling activities the FSC will serve as the dispatcher, shifting field crew assignments to meet the sampling event objectives.

12.4 FIELD ACTIVITIES DOCUMENTATION

The RPO QAPP provides detailed information on the documentation that is collected as part of all field activities. Chain-of-Custody form preparation and distribution procedures, as well as logbook entries, are described. The

observations and information generated as part of the field activities are critical data sources that will subsequently be used in assessing analytical data and interpreting the results. Extreme care must be taken to ensure that all sample containers and field measurements are accurately recorded, because these data will serve as the basis for subsequent decision-making activities.

The FAM is responsible for all preparation activities for sampling or monitoring, for coordinating the field sampling or measurement activities, for documentation of samples, and for reporting on field activities. Field survey reports serve as a record of samples and observations that can be reviewed in conjunction with analytical data. In some cases, the field report will provide insights to the data, which are not apparent in a review of the laboratory data alone. For example, the field summary report should report observations of automatic sampler conditions (like potential fouling) or water quality conditions such as floating sheen that may affect data quality.

12.5 LABORATORY ANALYSIS

The RPO has contracted with a number of laboratories to provide analysis of environmental samples including:

- AAC Trinity, Inc.;
- Tetra Tech McNamee, Porter, & Seeley, Inc.;
- University of Michigan, School of Public Health; and
- DLZ Laboratories, Inc.

These laboratories provide routine production laboratory services for the baseline sampling activities as well as the specific analytical services required for program work effort support. The process by which analytical data quality control is conducted is described in detail in the *RPO Data Management Guide* and the *Data Screening, Validation Reduction and Reporting*.

Because of the significant number of samples that may result from any one sampling event, it is important that all staff understand the process by which sampling activities are undertaken. Coordination of all analytical laboratory services is the responsibility of the FAM, with the FSC providing day-to-day support on sampling/analytical logistics. The FAM, with the support of the Monitoring WPM, is responsible for developing RPO contracts and pricing with laboratories, and for ensuring that analytical reports are generated per specified standards and delivered on time.

All analytical reports resulting from the field activities are provided to the RPO in the Excel® spreadsheet formats as shown in the QAPP. The analytical data undergoes a series of reviews before it is entered into the environmental database,

including laboratory QA/QC reviews and data usability reviews. These reviews are described in detail in the Data Management and Evaluation Guide. The Monitoring WPM maintains a data status spreadsheet, updated monthly, which describes the review status of data groups from various sources.

12.6 DATA EVALUATION AND REPORTING

Analytical data that are determined to be valid for use in interpretive reports (useable) are then assembled into summary reports. Detailed descriptions of how these summary data tables and figures are generated are discussed in the *RPO Data Management and Evaluation Guide*.

Development of the final report generated from each sampling/monitoring activity is the responsibility of the Monitoring WPM or other Work Plan Managers for whom the work effort was undertaken. In the case of the annual Baseline Data Summary Report on RPO monitoring results, sections of the report are assembled with assistance from the FSC, the Database Coordinator, and other RPO staff. Field/analytical technical memoranda content and format are discussed in the *RPO Data Screening, Validation, Reduction and Reporting Guide*.

12.7 STANDARD OPERATING PROCEDURES COMPENDIUM

Activities that are undertaken routinely in a consistent manner are documented in the RPO Compendia of SOPs. SOPs are available for laboratory methods (like the 5-day Biochemical Oxygen Demand Determination) and field sampling (like sediment coring) techniques. The RPO is assembling SOPs in the following documents that are available for staff use:

- Field SOP Compendium;
- Laboratory SOP Compendium; and
- Office Procedures SOP Compendium.

Each laboratory under contract to Wayne County is responsible for implementing a quality assurance program specifically designed for laboratory activities. As part of this program, laboratories must document and update SOPs regularly in their Quality Assurance Program Plans (QAPP). The RPO maintains on file current copies of all subcontract laboratory QAPPs. Only EPA approved analytical methods are used for analyses of samples collected as part of the Rouge Project. For those activities, which require modification of existing SOPs or development of new SOPs, internal review and approval will be sought from EPA prior to their use. A listing of existing SOPs can be found in Table 12-1.

12.8 QUALITY MANAGEMENT PROCESS IMPLEMENTATION

All SOPs developed by the RPO will have a structured format. SOPs developed for field or laboratory analytical methods will follow a set outline. The overall length of each SOP may vary in length from two to 20 pages and the level of detail will enable another professional not experienced with the task to carry out the work effectively.

Quality control checks have been built into the FSP development. FSPs are developed for each task-specific field activity defined under each program element. The FSP is developed using the FSP Guide as guideline, and using the QAPP for specific information on sampling and analysis methods that are consistent across the program. SOPs that are available in the RPO Compendia are utilized as available in preparing FSPs, or new SOPs are developed as needed.

Keys to the development of a sound FSP for field activities are early planning and involvement of senior level technical staff during this stage of the project. The Work Plan Manager responsible for the FSP development must confer with the Field Activity Manager and QA Manager(s), at least during the planning stages of FSP development. FSPs must be reviewed and accepted by the Work Plan Manager responsible for the environmental measurement activities, the Field Activity Manager, and the QA Manager(s).

The QA Manager(s) conduct(s) audits of the files to ensure that the appropriate level of staff involvement was provided in the FSP development. In addition, the QA Manager(s) also audits the process to ensure that all newly developed SOPs or EPA-accepted SOP's are included in the appropriate compendium. Any new SOPs or changes in the QAPP that are identified through the preparation of the site-specific FSP will trigger updating or review of these documents. EPA will be informed of any proposed changes to SOPs or the QAPP. The QA Manager(s) are also responsible for ensuring that the FSPs and SOPS are reviewed and that the review process is modified as the need arises.

**TABLE 12-1
FIELD SOP INDEX**

Title	Document Number
Sodium Sulfate Baking Procedure for Use in Field Extraction of Organics from Sediments	RPO/ASCI-FLD-0610
Field Extraction of Organics from Sediment	RPO/ASCI-FLD-0609
Collecting Sediment Samples by Vibrocoring	RPO/ASCI-FLD-0608
Field Collection and Processing of Sediment Grab Samples	RPO/ASCI-FLD-0607
Grab Sample collection Standard Operating Procedure	RPO/ASI-FLD-0606
Sample Collection and Handling Protocol Standard Operating Procedure	RPO/MPS-FLD-0605
Combined Sewer Overflow Grab Sampling	RPO/ASI-FLD-0604
Wet Weather Survey In-stream Field Sampling	RPO/ASI-FLD-0603
Dry Weather Survey In-stream Field Sampling	RPO/ASI-FLD-0602
Automatic Sampler Configuration and Programming Standard Operating Procedure	RPO/MPS-FLD-0601
Flow Measurement	RPO/MPS-FLD-0501
Rain Gage Site Servicing	RPO/MPS-FLD-0405
RPO Rain Gage Calibration	RPO/MPS-FLD-0404
RPO Rain Gage Installation	RPO/MPS-FLD-0403
Site Servicing	RPO/RPO-FLD-0402
Site Equipment Installation	RPO/TYJT-FLD-0401
Laboratory Coordination	RPO/MPS-FLD-0103
RPO Site Sampler Collection Crew	RPO/MPS-FLD-0102
Field Crew Scheduling	RPO/MPS-FLD-0101
Health and Safety for the Handling and Storage of Potentially Hazardous Sediments	RPO/ASCI-FLD-0009
Sample Tracking System and Expected Sample Flow	RPO/ASCI-FLD-0002

13.0 STANDARDS FOR PROCUREMENT OF ITEMS AND SERVICES

The RPO utilizes the services of a number of subcontractors and purchases equipment and supplies in support of environmental measurement activities that are authorized by Wayne County for use on the Rouge Project. This section describes how the services and materials required by the RPO are procured. The procedures outlined have been developed to ensure that the vendors and subcontractors are guided by quality systems consistent with those established by Wayne County for the RPO.

One of the most important services procured by the RPO, from the standpoint of environmental measurements, are analytical laboratory services. The data resulting from laboratory analyses are critical inputs to all stages of the planning, modeling and evaluation portions of the RPO Program work efforts. Equally important are the field monitoring and sampling equipment installed on the Rouge River.

13.1 PROCUREMENT GUIDELINES

The RPO procurement procedures were developed to comply with EPA grant requirements and Federal Acquisition Regulations (40 CFR Part 31). Specifically, the RPO procurement procedures mirror the requirements for Wayne County as they relate to:

- Having written procedures;
- Maintaining a contract administration system, which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders;
- Reviewing proposed procurements to avoid the purchase of unnecessary or duplicate items;
- Using value engineering in design contracts for construction projects;
- Awarding contracts only to responsible contractors with demonstrated ability to perform successfully under the terms and conditions of the proposed procurement;
- Maintaining records sufficient to detail the significant history of a procurement, including but not limited to:
 - rationale for the method of payment;
 - contractor selection; and
 - basis for the contract price.

- Maintaining procedures, which allows bidders or contractors to communicate and resolve disputes and protests. All disputes/protests shall be resolved by Wayne County; and
- Ensuring that the Wayne County requirements for the Disadvantaged Business Enterprise (DBE) Program are met. If needed, the Wayne County Human Relations Director shall be consulted on proposed procurements.

The RPO is committed to conducting procurement transactions in such a way as to provide full and open competition consistent with Wayne County and 40 CFR Part 31.36 standards and quality assurance practices consistent with 40 CFR Part 31.45 standards. To this end, all procurements by the RPO must be approved by the appropriate Finance Manager and RPO Project Manager. Additionally, the procurement of capital equipment and/or services (in excess of \$5000 for a single procurement) must be reviewed and approved by the appropriate Wayne County Senior Management Staff before the procurement process is initiated. The RPO Project Manager shall consult with the appropriate Wayne County Senior Management Staff in the RPO procurement process; within the RPO, no further delegation is permitted.

For all procurements where Federal Acquisition Regulations (FAR) require open competition, the RPO will issue appropriate announcements and conduct the procurement consistent with FAR, State and applicable local regulations. The goods or services required to perform environmental measurement-type activities are identified by the originator of the purchase requisition. The standard purchase requisition form contained in the Wayne County RPO Office Procedures Guideline should be used for all basic project purchases. Additional justification for procurement of services should be provided as required. For other equipment, supplies or services related to environmental measurements, the purchase requisition should be forwarded to the RPO Finance Manager. For items or services not related to environmental measurements, the purchase requisition is given to the RPO Finance Manager for review. Sub-consultants who are procuring the equipment for service under their contract shall use their own company standard form for the purchase.

The respective Work Plan Manager, Project Coordinator, or Finance Manager, in consultation with the RPO Project Manager, should determine if adequate justification exists to procure the requested service or item. If so, the appropriate form of requisition should be prepared, whether that be a Request for Bid (RFB), Request for Proposal (RFP), Request for Qualifications (RFQ), or Purchase Order (PO). The completed requisition is provided to the RPO Finance Manager for review to ensure that it complies with all regulatory requirements prior to approval.

13.2 COMMUNITY GUIDE

Procurement guidelines for IAA's can be found in the *Community Project Guide* (RPO-NPS-SR16.00). This guide is designed to provide communities receiving grant sponsorship for projects through the Rouge River National Wet Weather Demonstration Project with information, policies and procedures to administer project funds in accordance with applicable federal guidelines. By referring to this Guide along with the appropriate Code of Federal Regulations when necessary, the community can meet the fiscal and accounting requirements needed for EPA compliance and effective project reporting.

In the Guide, the term "community" is used to refer to any organization receiving EPA grant sponsorship for a watershed project.

This Guide is organized according to each stage in a sponsored project's duration. After formal sponsorship approval through the Project's Notice of Grant Availability process, the Guide provides information for the following project stages:

- Legal Agreement Process;
- Project Initiation and Procurement;
- Monthly Reporting and Invoicing;
- Project Documentation; and
- Project Completion and Closeout.