APPENDIX B-3

PROJECT OPERATIONS SUBPLAN

1. Purpose. This subplan provides the general policies and procedures for the execution of quality control and quality assurance for products, services, and activities included in Detroit District's project operations.

2. Applicability

a. This subplan applies to all project operation activities of Engineering and Technical Services, including the Management Support Branch, Operations Office, the Soo Locks Complex and Area Offices and projects under their auspices.

b. This quality management plan applies to all major business functions related to project operations. These business functions and services include flood control, recreation services at our projects, navigation on navigable waters, hydropower, and environmental stewardship. These business functions and services are listed and summarized below.

(1) Flood Control Services. Ensures local protection projects are maintained to operate as designed when floods occur.

(2) Navigation Services

(a) Operation and maintenance of locks and dams and other channels and harbors to ensure the Great Lakes navigation system is available for navigation and the requirements of Navigation Industry are met.

(b) Maintenance of navigation channels in accordance with published navigation charts.

(3) Hydropower. Ensures hydroelectric plant is operated and maintained in a manner to achieve maximum availability for generation of power at most the reasonable cost.

(4) Recreation Services. Operation and management of day use facilities including visitor centers and picnic areas.

(5) Environmental Stewardship. Ensure operating projects and area office facilities comply with all Federal, state, and local environmental requirements.

c. Operations Office and Management Support Branch provide support, technical, administrative, and maintenance services for the navigation, flood control, hydropower, and recreation projects and functions related to project operations. Quality Control and Quality Assurance for these internal support branches is, for the most part, provided by the first level supervision, Branch and Division levels of management, and the internal checks and balances of day-to-day work.

3. References

a. AR 200-1, Environmental Protection and Enhancement, dated 21 February 1997

b. ER 200-2-3, Environmental Compliance Policies, dated 30 October 1996

c. ER 1130-2-510, Project Operations, Hydroelectric Power Operations and Maintenance Policies, dated 16 December 2002

d. ER 1130-2-520, Project Operations, Navigation and Dredging Operations and Maintenance Policies, dated 29 November 1996

e. ER 1130-2-530, Project Operations, Flood Control Operations and Maintenance Policies, dated 30 October 1996

f. ER 1130-2-540, Project Operations, Environmental Stewardship, Operations and Maintenance Policies, dated 4 November 2002

g. ER 1130-2-550, Project Operations, Recreation Operations and Maintenance Policies, dated 15 August 2002

h. EP 1130-2-540, Environmental Stewardship, Operations and Maintenance Guidance and Procedures, dated 4 November 2002

i. EP 1130-2-550, Recreation, Operations and Maintenance Guidance and Procedures, dated 15 August 2002.

3. Goal. The goal of project operations is to deliver navigation, flood control, hydropower, recreation, and environmental services in accordance with the Corps of Engineers regulations and policies to meet the requirements and expectations of our customers and the public. Due to the wide variety of activities undertaken and their extensive involvement with the commercial navigation industry, the Canadian and U.S. Coast Guards, other state and local agencies, private industry, local port and harbor authorities, recreational navigation interests, and the general public, the navigation, hydropower, flood damage reduction, natural resources management, and

environmental stewardship programs activities shall comply with existing regulations, policy guidance and relevant plans. Quality control activities for services and products provided within the referenced business functions shall be performed following the general quality management principles set forth in this document.

5. Responsibilities

a. Chief, Engineering and Technical Services. Responsible for the quality of products and services related to project operations produced as a result of work by ETS employees.

b. Assistant Chief, Engineering and Technical Services and Chief, Management Support Branch. Responsible for budgeting and quality efficient measures.

c. Operations Office and Branch Chiefs. Responsible to ensure the policies, procedures, and quality of work in their branches are met.

d. Area Engineers. Responsible to ensure the quality of business products and services provided by the field projects under their management meets the requirements and expectations of our customers.

e. Lockmasters. Responsible for the operation and maintenance of their lock and ensuring the quality of operation meets the navigation industry needs and the publics' requirements and expectations.

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f. Team Members and Project Managers. Responsible for producing quality products in their respective areas of responsibility.

6. Quality Control for Project Operation Business Products and Services.

Performance measures have been developed for all major business functions in operations and maintenance (O&M). These performance measures are used to manage and control services, schedules, and costs of the business functions to ensure quality products are provided to the public and to ensure the costs for our business functions are reasonable. In addition to the performance measures for each business function, each function and product is governed and regulated by laws, regulations, and procedures to further ensure the products and services we provide to the public are of highest quality. For each business function there are various procedures whereby we receive feedback from our customers (the public) that assist in our evaluation of the quality of services and products we are providing. Our quality control processes, reviews, and checks for each business function related to project operations are presented below. Quality Control Management Plans are exhibited for Navigation (Exhibit B-3-1), Hydropower (Exhibit B-3-2), Recreation (Exhibit B-3-3), In-House Support Services (Exhibit B-3-4), Flood Control (Local Protection Projects) (Exhibit B-3-5), and Environmental Stewardship (Exhibit B-3-6).

EXHIBIT B-3-1

QUALITY CONTROL FOR NAVIGATION

1. Business Product. Navigation

2. Roles and Responsibilities. Detroit District has the Soo Locks Complex and 95 other channel and harbor projects that are operated and maintained for navigation purposes. These projects constitute the deep draft commercial and shallow draft navigation system of the upper Great Lakes. The locks complex operates 24 hours a day during the navigation season. Shutdown or closure of a lock and the subsequent delay of commercial navigation for even a short period of time has a significant economic impact upon the commercial navigation industry and the national public interest. Therefore, the quality management system for navigation must ensure that our locks and dams are maintained and operated with minimal closures. Likewise the channel and harbor maintenance program must be managed to ensure the navigation channel is maintained to required depths and that structures serve their intended purposes. Failure to maintain the projects in accordance with published navigation depths could result in navigation accidents, blockage of navigation and severe economic impacts.

3. Responsibilities

a. Area Engineers. Area Engineers are responsible for the overall management and quality control of channel and harbor projects in a specific geographical area. The Soo Area Engineer is responsible to insure individual locks at the Soo have an adequately trained staff and are budgeted to ensure operation of the locks. Other area engineers are responsible to ensure individual projects are budgeted and their staff is in place and trained to ensure operation and maintenance (O&M) of the projects under their management. The Kewaunee Area Engineer has the responsibility for O&M of the Fox River, Wisconsin project, which includes nine dams.

b. Lockmasters. Lockmasters are responsible for day-to-day operation, maintenance, and quality control management of their locks.

c. Operations Office. Technical Services Branch monitors operations surveying and surveillance involving structure repairs, navigation accident investigations, issuance of Notice to Navigation Interests, channel maintenance dredging and, publishing navigation charts. Method of accomplishment by hired labor forces or contract is also monitored by the branch.

d. Maintenance Personnel, Lock and Dam Operators, and Project Administrative Employees. Maintenance personnel, lock and dam operators, and project administrative employees are responsible for performing daily operation and maintenance of the locks and dams (Fox River).

4. Quality Control Processes. The quality control process involves a series of actions that ensures our locks and dams and other navigation projects are maintained and operated in a manner to insure their maximum availability for commercial and recreational navigation. Inspections are conducted at each lock and dam every five years. These inspections are conducted by District Office specialists and engineers that evaluate the structural, mechanical, electrical and operational components of the project. These inspections are a major component of the comprehensive quality management system to ensure that the locks and dam are being maintained in accordance with the original design requirements. Deficiencies discovered during inspections are scheduled for repair before breakdowns occur that could cause a lock shutdown. Routine and major preventive maintenance are integral parts of the overall quality management system. Execution of a quality maintenance program is the most important component of ensuring our locks and dams provide the navigation industry with optimum service. Reconnaissance and/or hydrographic surveys are conducted to determine the extent of shoaling and to develop channel maintenance dredging requirements to remove restrictive disposition of material. Dredging contracts can be administered under emergency procedures or planned and scheduled within time frames that preclude unreasonable obstruction or blockage of the navigable channel. Pre-dredge and post-dredge surveys are performed to ensure that project dimensions are restored and contractor's productivity is acceptable. Navigation project structures are inspected annually by area office personnel and periodically by District Office specialists to determine maintenance needs.

a. Quality Production

(1) Annual and five-year maintenance plans are developed and updated to identify routine, periodic, and long-term maintenance deficiencies, needs, and repairs for operating equipment and operation of the locks and dams and other navigation projects.

(2) District Office specialists perform periodic and intermediate inspections. These inspections are intensive, thorough evaluations by trained professional civil, structural, mechanical, and electrical engineers that evaluate all structural and mechanical features of the locks and dams and the structures of other navigation projects.

(3) Lockmasters attend the National Lockmaster's Convention on 2 to 3 year intervals in which we invest a week of valuable time in sharing numerous areas of concern and different operating practices and maintenance work concerns.

(4) Weekly and monthly safety sessions at projects are used to identify and correct deficiencies which are directly related to project availability.

(5) Qualified mechanical and electrical equipment maintenance employees are hired and trained to ensure proper maintenance and repair of the complex operating equipment at the locks.

(6) Systematic daily, weekly, monthly, and annual inspections are scheduled and performed by project personnel to monitor various parts and features of the locks and dams to ensure the project is operationally ready and safe.

(7) Qualified personnel are hired and trained to operate Government-owned floating plant and other equipment used to maintain navigation projects. Similarly, personnel are hired and trained to use complex electronic hydrographic surveying equipment for condition surveys.

(8) For Operations Office, Technical Services Branch personnel, training is provided to staff to improve and expand job skills and to keep abreast of the technology curve. All branch employees are counseled annually and performance evaluations are completed timely. Detailed training plan is provided to meet employee career development. Employees are given positive guidance on responsibility to ensure contractor compliance with contract requirements. Institutional knowledge is provided to lower-grade employees regularly, and more often when work assignments are more complex.

b. Internal Checks and Reviews

(1) Special meetings are conducted among project crewmembers to gather the thoughts and concerns of all team members to insure the total availability of the locks and operability of the dams.

(2) Area Engineers supervise, coordinate, and manage projects to ensure they are maintained, operated, and managed to perform on a daily and long-term basis as an integral feature of the upper Great Lakes navigation system.

(3) Daily, weekly, and monthly reporting systems are in place to ensure each management level of the Corps of Engineers are made aware of any problems at our navigation projects. The necessary technical, engineering, and staff support can then be immediately provided if problems occur that would impact the project's ability to function.

(4) All contracted maintenance activities are inspected by government personnel with the institutional knowledge and skills required assuring quality performance from the contractor. Internal safety meetings are conducted and employees are furnished with instructions on responsibility to ensure contractor safety and to be conscious of their own safety during field activities and in the office. Progress reports of channel maintenance dredging are reviewed periodically to ensure program scheduling and execution deadlines are met. All hired labor maintenance activities are subject to Government contract like safety and quality control requirements.

c. External Checks and Reviews

(1) Work group meetings, teleconferences, and communications are maintained on a continuing basis between Corps of Engineers navigation managers, Canadian and U.S. Coast Guards representatives and navigation industry representatives to discuss navigation concerns, such as high water, ice, navigational hazards or obstructions.

(2) Meetings with the U.S. Coast Guard and navigation industry representatives are regularly conducted to communicate important concerns and potential improvements in operation procedures and practices.

(3) Day-to-day communication and contact is maintained with the navigation industry including pilots, dock operators, navigation industry representatives, states, and local entities to provide immediate feedback to Corps managers responsible for day-to-day operation and maintenance of the navigation projects.

(4) Notices are issued to the navigation industry advising navigation interests of hazards, obstructions, lock closures, construction activities in navigable waters, and other information vital to the project users.

(5) Regular and special purpose meetings with the Canadian and U.S. Coast Guards, navigation industry, Federal. State and local agencies, port and harbor interests and users, and the Corps of Engineers are held during each year to advise waterways users about the dredging program, other marine activities that may impact channel conditions, and solicit comments from industry on improving navigation and determining adequacy of the navigation system. Notices to Navigation Interests of marine activities are coordinated, planned and disseminated timely to insure continued navigation with minimal impact to the navigation industry and other waterways users. The Technical Services Branch creates and maintains amicable relationship with commercial and public navigation interests to discuss problems, recommendations and needs, and how the Corps might better facilitate the use of navigable water and the structures thereon.

5. Performance Measures. These national performance measures and business function service indicators are part of the Corps' quality management system for our navigation systems.

a. National Performance Measures. National Performance Measures have been developed to evaluate the performance of the Corps of Engineers' navigation system business functions. The following measures were developed:

(1) Unscheduled Closures. This measure requires reporting the number of unscheduled days a lock is closed to traffic (excluding weather related closures) expressed as a percentage of total days planned availability. This demonstrates the ability to preclude or react to unscheduled closures. The goal is to have fewer than 75% of closure days due to unscheduled closures (excluding weather related).

(2) Lock Chamber Days Available. This is the percentage of total time a lock is open to traffic. This measure demonstrates a lock chamber's availability for commercial and public traffic. The goal is to have locks available for use at least 97% of the time.

(3) Project Availability. Achieve acceptable level of service 90% of the time during the navigation season, based on mutual agreement with customers, etc.

b. Other National Performance Indicators. Other national performance indicators that are used to evaluate our navigation system business functions include our operation and maintenance costs per ton-mile and costs per ton. In these evaluations, the costs to operate the locks and dams, perform maintenance dredging, and the systems overhead costs including maintenance and management are all considered and evaluated.

Channel Condition Surveys. Channel condition surveys indicate project dimensions availability.

EXHIBIT B-3-2

QUALITY CONTROL FOR HYDROPOWER

1. Business Product. Hydropower

2. Roles and Responsibilities. Detroit District provides hydropower for in–house use and for sale to the public at the Soo Locks Complex. The hydropower facility consists of five units, one of which (Unit 3A) provides project service with a total rated capacity of 21megawatts (MW). Our customer, Edison Sault Electric Company (ESELCO) has very high expectations of our services. They expect and deserve an efficiently operated, well-managed, and safe facility.

3. Responsibilities

a. Soo Area Engineer. The Soo Area Engineer is responsible for the overall management and quality control of the hydroelectric plant. The Area Engineer is responsible to ensure that the facility has a fully trained and is adequately budgeted to operate and maintain the service.

b. Facility Personnel. Plant operators, maintenance personnel and project administrative employees are responsible for performing daily operation and maintenance of the hydropower plant.

4. Quality Control Processes. The quality control processes include a series of actions that ensures that the hydroelectric plant is operated and maintained in a manner to ensure its maximum availability for the generation of power. These processes ensure our customer the maximum quantity of power available. Inspections are conducted at each lock every five years. These inspections are conducted by District Office specialists and engineers that evaluate the structural, mechanical, electrical and operational components of the project. These inspections are a major component of the comprehensive quality management system to ensure that the locks and dam are being maintained in accordance with the original design requirements. Deficiencies discovered during inspections are scheduled for repair before breakdowns occur that could cause a unit to shut down. Routine and major preventive maintenance is integral parts of the overall quality management system. Execution of a quality maintenance program is the most important component of insuring our hydroelectric plant provides ESELCO with optimum service. Hydropower services and support services are reviewed by each supervisory level for conformance with regulations and policies.

a. Quality Production

(1) Annual and five-year maintenance plans are developed and maintained to identify routine, periodic, and long-term maintenance deficiencies, needs, and repairs for operating equipment and operation of the hydroelectric plant and appurtenant facilities.

(2) District Office specialists perform periodic and intermediate inspections. These inspections are intensive, thorough evaluations by trained professional civil, structural, mechanical, and electrical engineers that evaluate all structural and mechanical features of the plant.

(3) Plant personnel attend National Hydropower O&M Conferences on 2 to 3 year intervals in which we invest a week of valuable time in sharing numerous areas of concern and different operating practices and maintenance work concerns.

(4) Weekly and monthly safety sessions at projects are used to identify and correct deficiencies, which are directly related to project availability.

(5) Qualified mechanical and electrical equipment maintenance employees are hired and trained to ensure proper maintenance and repair of the complex operating equipment at the plant.

(6) Systematic daily, weekly, monthly, and annual inspections are scheduled and performed by project personnel to monitor various parts and features of the plant to ensure the it is operational and running safely and at peak efficiency.

(7) Qualified personnel are hired and trained to operate the hydroelectric plant.

(8) For Operations Office, Technical Services Branch personnel, skills training is provided to improve and expand job skills and to keep abreast of the technology curve. All branch employees are counseled annually and performance evaluations are completed in a timely manner. Detailed training plan is provided to meet employee career development. Employees are given positive guidance on responsibility to ensure contractor compliance with contract requirements. Institutional knowledge is provided to lower-grade employees regularly, and more often when work assignments are more complex.

b. Internal Checks and Reviews

(1) Area Engineers through TAPES evaluations, project visits and inspections by District staff (including Safety, ERGO, OSHA) provide a continuing internal quality review of hydropower services provided at our facility.

(2) Special meetings are conducted among project crewmembers to gather the thoughts and concerns of all team members to ensure the total availability of the plant.

(3) The Area Engineer supervises, coordinates, and manages the facility to ensure it is maintained, operated, and managed to perform on a daily and long-term basis.

(4) Daily, weekly, and monthly reporting systems are in place to ensure each management level of the Corps of Engineers are made aware of any problems at our facility. The necessary technical, engineering, and staff support can then be immediately provided if problems occur that would impact the plant's ability to function.

(5) All contracted maintenance activities are inspected by government personnel with the institutional knowledge and skills required, assuring quality performance from the contractor. Internal safety meetings are conducted and employees are furnished with instructions on responsibility to insure contractor safety and to be conscious of their own safety during field activities and in the office. Progress reports of channel maintenance dredging are reviewed periodically to ensure program scheduling and execution deadlines are met. All hired labor maintenance activities are subject to Government contract like safety and quality control requirements.

c. External Checks and Reviews. Continuous coordination is maintained with ESELCO regarding plant operation to provide base load to the eastern upper peninsula of Michigan power grid. Regular and special purpose meetings are held during each year with ESELCO to advise them of the plant condition, major repairs planned and to review sales contract modifications. The Technical Services Branch creates and maintains an amicable relationship ESELCO to discuss problems, recommendations and needs, and how the Corps might better serve the needs of its customer

5. Performance Measures. National Performance Measures and Level of Service indicators have been developed to measure our hydropower business functions.

a. Forced Outages. Maintain a high degree of generating unit availability by achieving less than 4.5% forced outages.

b. Unit Availability. Maintain a high degree of generating unit availability by achieving unit availability of 90%.

c. Cost per Megawatt-Hour (MW/hr). Achieve a reasonable production cost of power. This measure is for data collection only; there is currently no goal.

d. Operations Cost/Unit. Achieve a reasonable operating cost for each generating unit. This measure is for data collection only; there is currently no goal.

e. Maintenance Cost/Unit. Achieve a reasonable maintenance cost for each generating unit. This measure is for data collection only; there is currently no goal.

f. FTE/Unit. Achieve a reasonable number of operations personnel in the hydroelectric plant (automate operations where possible). This measure is for data collection only; there is currently no goal.

EXHIBIT B-3-3

QUALITY CONTROL FOR RECREATION

1. Business Product. Recreation

2. Roles and Responsibilities. Detroit District provides recreation services and opportunities for the public at the Soo Locks Complex and at the Duluth Area Office. Recreation at our projects includes operation and management of the visitor centers and picnic areas. Our customers have very high expectations at our recreation facilities. They expect and deserve efficiently operated, well-managed, clean, safe facilities and grounds.

3. Responsibilities

a. Area Engineers. The Soo and Duluth Area Engineers are responsible for the overall management and quality control of the visitor centers in their area. They are responsible to ensure that the facilities are provided with a fully trained staff and are budgeted to operate and maintain the recreation services.

b. Facility Personnel. Responsible for providing a variety of services to our customers and visitors to our projects.

4. Quality Control Processes. The quality control processes includes a series of actions that ensure the recreation services provided at our projects meet the expectations of our customers and the public. These processes ensure that customers at our facilities are provided with safe, clean, well-managed recreation experiences. Recreation services and support services are reviewed by each supervisory level for conformance with regulations and policies. Processes are in effect that allow our customers (the public) to provide immediate feedback when our services fall below their expectations.

a. Quality Production

(1) Selections of contractors and personnel hired to manage visitor centers are based on a broad range of recreation skills and knowledge to ensure we provide quality recreation services to the public.

(2) Extensive and continuing staff development in visitor assistance are provided to our visitor center personnel. Professional certifications are encouraged for those professional areas where available.

(3) TAPES plans for visitor center personnel incorporate measurable assignments pertaining to quality recreational services.

(4) Master Plans for each project are reviewed and updated allowing opportunity for review, planning, and improvements to project recreation services and facilities.

(5) Recreation sites and facilities are reviewed to ensure compliance with the Americans with Disabilities Act (ADA) and incorporate modifications as necessary to comply with accessibility standards prescribed by ADA.

b. Internal Checks and Reviews

(1) Area Engineers through TAPES evaluations, project visits and inspections by District staff (including Safety, ERGO, OSHA) provide a continuing internal quality review of recreation services provided at our projects.

(2) Comprehensive facilities checklists are prepared and submitted to managers to identify hazards and improvements that need programmed and accomplished to ensure safe, quality recreation at the projects.

(3) Project staffs conduct ongoing visitor carrying capacity evaluations to ensure quality recreation experiences are provided and natural resources are protected.

(4) Extensive quality assurance of our service and maintenance contracts is performed including pre-bid and pre-work conferences, review of contract technical proposals, evaluating and approving contractor quality control plans, inspection checklists, oversight of the contractor safety program, and a comprehensive inspection system of all contractor services provided. Compliance inspections of project leases are performed.

c. External Checks and Reviews

(1) Government employees and contractor employees, interacting with the public, are trained on the importance of providing quality service to the public, maintaining a pleasant, open, and cooperative attitude, and being receptive and responsive to public concerns and complaints.

(2) Public feedback and comments on Corps recreation services are actively solicited through the Corps "Comment Card" program. Comment Cards are furnished to Corps visitors at our visitor centers. These cards ask our customers to rate our facilities, staff, overall quality, and improvement areas.

(3) Public outreach through television stories, local newspapers, and public service announcements on local radio dealing with water safety allow the public to better understand the Corps of Engineers' roles and responsibilities in recreation, and water resource management.

(4) Cooperative efforts and agreements, and coordination of volunteers with civic and fraternal groups, have resulted in public participation in the improvement of our recreation facilities and project resources. These cooperative agreement programs and volunteer efforts result in public involvement with Corps of Engineers management and operation of our facilities.

(5) Interpretative programs given both on-site at our projects and off-site at schools, meetings, and fairs are provided on a variety of topics such as water safety, Corps missions, litter control, and natural resource protection. These programs involve and educate the public on our programs and mission.

(6) Carrying capacity studies are being conducted to measure visitor and customer feedback on the quality of our recreational services and protection of our natural resources.

5. Performance Measures. National Performance Measures and Level of Service indicators have been developed to measure our recreation business functions. This is measured through customer satisfaction surveys. The goal is 90% customer satisfaction.

EXHIBIT B-3-4

QUALITY CONTROL FOR IN-HOUSE SUPPORT SERVICES

1. Business Products. Support services for field projects

2. Roles and Responsibilities. Management Support Branch and Operations Office provide technical, administrative, and maintenance support functions for our Soo Locks Complex (including hydropower and recreation), navigation and local flood protection projects. These two branch offices are located in the Detroit District office and provide support functions for the field. Management Support Branch provides budgeting and administrative support functions. Operations Office, Technical Services Branch provides field and in-house engineering support services, administration, including budget formulation, of the District O&M and plant programs, environmental support, interpretive services, sign and uniform coordination, and a variety of other technical and management services.

3. Responsibilities

a. Office and Branch Chiefs. Responsible to ensure the policies, procedures, and quality of work performed in the Branch are performed on time, within budget, and of professional quality.

b. Project Managers and Team Members. Responsible for producing quality products in their respective area of responsibility.

4. Quality Control Processes. The quality control processes involve a series of reviews and evaluations by supervisors, managers and branch chiefs to ensure the technical, and administrative support services provided to the field are quality products. Technical services and actions are reviewed by each supervisory level for conformance with regulations, policy, and design adequacy. Final quality control check is provided by the field (the customers), which provides immediate, direct feedback on the quality of services provided.

a. Quality Production. Each branch in Engineering and Technical Services has recruited a multidisciplinary staff to meet the variety of administrative, technical, engineering and environmental services provided by their respective branches. Each branch has a training program to ensure individual employees are trained to perform the multitude of administrative and technical support services for our Soo Locks Complex, navigation and local flood protection projects. The goal of each branch is to provide quality technical, engineering resource management, and administrative services to the field projects. Quality is brought into the services provided by placing individual responsibility on branch employees to provide services and responses to field requests on

schedule and with professional quality. The requirement for timely, quality service is incorporated into employees' TAPES. The Division Chief and Branch Chiefs emphasize in staff meetings and day-to-day assignments that it is imperative that quality, timely and professional services be provided to our field projects.

b. Internal Checks and Reviews. Each Division member is responsible for providing quality service and products to the field. Only quality products shall be released for use by the field. Branch Chiefs and the Division Chief perform reviews of services and products being provided prior to their delivery to the field and implementation. The organizational structure in the District has been developed to ensure there are adequate internal quality checks and reviews of all work, services and products performed.

c. External Checks and Reviews. District office branch chiefs communicate regularly to ensure the technical and administrative services and products provided by District office support branches are clearly understood, are what the field requested, and provided within the time frames requested. Staff meetings are held at the division and branch levels to discuss projects, programs, and assignments. Periodic meetings are conducted with the Division Chief, Branch Chiefs, and Area Engineers to discuss division activities, problems and suspenses. These meetings and day-to-day communications provide continuous quality control checks and reviews on the programs, products, and services. This ongoing effort of maintaining communications and working as a team ensures quality, professional services are provided on schedule. Regular and special purpose meetings with the Canadian and U.S. Coast Guards, navigation industry, Federal, state and local agencies, port and harbor interests and users, and the Corps of Engineers are held during each year to advise waterways users about the dredging program, other marine activities that may impact channel conditions, and solicit comments from industry on improving navigation and determining adequacy of the navigation system. Notices to Navigation Interests of marine activities are coordinated, planned and disseminated timely to insure continued navigation with minimal impact to the navigation industry and other waterways users. The Operations Office, Technical Services Branch creates and maintains amicable relationship with commercial and public navigation interests to discuss problems, recommendations and needs, and how the Corps might better facilitate the use of navigable water and the structures there on.

5. Performance Measures

a. National Performance Measures. National performance measures and level of service indicators have been developed for flood control, navigation, and recreation services. A majority of the services provided by Technical Services and Management Support are support services for navigation, hydropower and recreation. Therefore, these performance measures and service indicators indirectly reflect the performance of ETS support branches.

b. Budgetary. The following budgetary goals will be used to measure quality performance:

(1) O&M Program. Obligations at 97% of work allowances measured against basic schedule and expenditures at 95% of work allowances measured against basic schedule.

(2) PRIP. Obligations at 95% of annual authority.

EXHIBIT B-3-5

QUALITY CONTROL FOR LOCAL PROTECTION PROJECTS

1. Business Products. Inspections conducted under Title 33, Part 208, of the Code of Federal Regulations and under Public Law (PL) 84-99 to ensure that local protection projects (LPP) are operated and maintained in a manner that maximizes flood protection. Review proposals of local sponsors to perform construction activities on or near LPPs. Provide technical support to local sponsors during flood operations of LPPs, and, in accordance with PL 84-99, provide rehabilitation assistance to those LPPs that sustain major damage during high water.

2. Roles and Responsibilities. The Operations Office, Technical Services and Readiness Branches have responsibility for the administration of the inspection of completed works program for the LPPs constructed by the Detroit District, Corps of Engineers and turned over to local sponsors for operation and maintenance. The branches review construction proposals from local sponsors with respect to the operations and maintenance of the project, and coordinate such proposals with other divisions (i.e., Engineering and Construction Division, Real Estate Division, Office of Counsel, etc.) for their review with respect to how such proposals may affect their functional element. During flood events, they remain aware of the high water situation by monitoring river gages, coordinating with Hydraulics Branch in Engineering and Technical Services, obtaining National Weather Service river forecasts, and coordinating with and disseminating information to local sponsors. Contact is maintained with local sponsors during high water events to ensure proper operation of the LPPs and to provide technical assistance for problems that may occur. For LPPs that sustain major damage during high water events, rehabilitation assistance is provided to the local sponsor to restore the project to its original flood protection capability.

3. Responsibilities. Responsible for the quality control of the local protection projects program. Provides assistance to the natural emergency manager in matters relating to emergency operations.

4. Quality Control Processes. The quality control process involves a series of actions to ensure that all local protection projects are operated and maintained as set forth in Title 33, Part 208, of the Code of Federal Regulations and in Public Law 84-99. Inspection reports, proposed responses and technical services are reviewed, evaluated and approved by branch chiefs to ensure quality products are provided to the local sponsors. Final quality control check is provided by the local sponsors who provide feedback on the quality of services provided.

a. Quality Production. Quality assurance ensured through the TAPES process.

b. Internal Checks and Reviews. A report is sent to local sponsors informing them of the results of annual LPP inspections. The report is reviewed by appropriate branch chiefs, and is reviewed and approved by Chief, Engineering and Technical Services (ETS). Proposals for construction on or near local protection projects are reviewed by Operations Office, Technical Services Branch, and are reviewed and approved by Chief, ETS. During high water events, briefings of the current situation of the LPPs are held in which the District Engineer, Deputy District Engineer, and/or key staff are given the opportunity to raise questions and offer suggestions. After the flood event, all personnel involved in the flood operations are given the opportunity to provide feedback and offer suggestions through an After Action Report.

c. External Checks and Reviews. During high water events, Readiness Branch maintains contact with local sponsors either by telephone or in person via liaison personnel to ensure that the Corps is responding to the sponsor's needs.

5. Performance Measures. Official performance of the LPP program is measured by the demonstration of the local sponsor of each LPP to correct deficiencies identified during the annual inspections and to properly operate the LPPs during flood events. Another performance measure is to ensure local sponsors submit proposals for all construction work that may affect the performance of the LPPs and to respond to such proposals within 45 days.

EXHIBIT B-3-6

QUALITY CONTROL FOR ENVIRONMENTAL REVIEW GUIDE FOR OPERATIONS

1. Business Products. The Environmental Review Guide for Operations (ERGO) program was devised by OCE and CERL as a Corps-wide mechanism to ensure that all USACE operating projects maintain compliance with all Federal, State and local laws, including USACE environmental requirements.

2. Roles and Responsibilities. The District Environmental Compliance Coordinator (ECC) in the Operations Office, Technical Services Branch, Engineering and Technical Services is responsible for the execution of the ERGO program.

3. Responsibilities. There are five area offices with appurtenant facilities and 14 navigation projects with confined disposal facilities that constitute "operating projects" in the Detroit District. The District Environmental Compliance Coordinator, in the Operations Office, Technical Services Branch, has responsibility for conducting environmental compliance reviews at these projects on a regularly scheduled basis. Reviews are also conducted at all outgranted facilities under leases administered by Real Estate Division. The purpose of these reviews is to ensure compliance with all environmental laws and regulations.

4. Quality Control Processes. The District ECC is responsible for leading teams of reviewers to conduct environmental compliance reviews at operating projects. Team members are chosen by the ECC because of their particular expertise or knowledge in a specific environmental area, providing that the situation at the operating project requires that knowledge. Reviewers are selected from District staff depending upon existing or potential environmental issues at the operating project. Twelve major environmental categories are considered during an environmental compliance review, as follows. Air Emissions, Cultural and Historic Resources Management, Hazardous Materials Management, Hazardous Waste Management, Natural Resources Management, Pesticides Management, Solid Waste Management, Special Pollutants Management, Underground Storage Tank Management, Wastewater Management, and Water Quality Management.

a. Quality Production. The environmental review process begins with a questionnaire completed by the manager at a project or outgrant facility, and is submitted to the District ECC. The ECC chooses a review team based upon information contained in the questionnaire. A review is scheduled with concurrence from the Area Engineer. An in-briefing is held at the beginning of the review, at which time a specific schedule for the individual team members is developed to accommodate personnel at the facility. Also at this time, dialogue proceeds with project personnel to resolve issues that have surfaced during previous reviews or which are presently known to exist.

Following the in-briefing, a walk-through of different parts of the facility takes place by review team members who are "matched" with correspondingly concerned project personnel. This allows a simultaneous review of many facets of the project or outgrant, thereby increasing the efficiency of the review process. An outbriefing follows the walk-through review, during which time deficiencies are noted by the members of the review team. At this time, alternative solutions to problems are proposed and discussed, and an exchange of ideas occurs between the review team members and project personnel. Free expression of all issues is encouraged.

Although the ultimate responsibility for achieving environmental compliance rests with the facilities manager, the team leader emphasizes that all review team members and other district personnel are available for consultation if the need exists. A written report of the environmental compliance review follows, under the signature of the Chief, Engineering and Technical Services. The report reiterates the discussions that occurred during the outbriefing.

All review team members and many project personnel have undergone training in the ERGO review process; all have access to the ERGO manual, which is used as a basis of the environmental compliance review. Every effort is made by the District ECC to match review team members with project requirements.

b. Internal Checks and Reviews. A filed report listing all deficiencies noted during the review is maintained; as the deficiencies are resolved, corrective actions taken are noted. Project personnel have been briefed that information and guidance concerning environmental issues can be secured from the District ECC. Occasionally, information is disseminated by the District.

c. External Checks and Reviews. Maintaining environmental compliance in twelve major categories and among Federal, State and local laws and regulations is a continuing process. Because of District boundaries, laws and regulations originating from the U.S. Environmental Protection Agency Regions III, IV, and V and the state codes of Michigan, Wisconsin and Minnesota must be obeyed. USACE environmental regulations and policies must also be considered.

5. Performance Measures. Official performance of the ERGO program is measured by the number of environmental compliance reviews conducted each fiscal year versus the number of reviews scheduled. Another performance measure is the formulation of action plans to correct deficiencies noted during reviews. The initial frequency (Cycle I) of repeat reviews was every three years. Currently, the frequency for Cycle II reviews is every five years. The most useful measure of performance is correction of deficiencies identified during the ERGO inspections in a timely manner and correction of deficiencies identified in prior reviews at the project. In this regard, the following National Performance Measures have been developed:

a. Environmental Compliance. Correction of 100% of significant findings detected during compliance reviews.

b. Environmental Compliance. Correction of 65% of major findings detected during compliance reviews.