

CHAPTER 11

OPERATIONS, MAINTENANCE, AND PROJECT MANAGEMENT

11-1. Resource Management of Project Lands and Facilities.

a. Management Objectives. The developed and natural resources at Civil Works projects are the public property of both present and future generations. Corps resource management activity is directed toward the continued enjoyment and maximum sustained use by the public of lands, waters, forests, other vegetative cover, and associated recreational resources, consistent with their aesthetic and biological values, and to allow such other new and innovative uses of the project that are not detrimental thereto. Projects administered by the Corps have resource use objectives, based on the expressed preferences of the residents of the region served, the needs of the ecosystem in which the project occurs, and on the capabilities of the natural and man-made resources of the project. Maintenance and administration of recreation areas, where they remain under Corps jurisdiction, is part of the overall management objective to preserve and protect the quality of project resources. Major considerations, in addition to management of recreation facilities, include: (ER 1130-2-540, ER 1130-2-550, ER 1165-2-400)

- (1) Protection of project visitors and employees.
- (2) Conservation and protection of project resources, including enforcement of land use requirements to prevent conflict between uses.
- (3) Prevention of visual and physical encroachments upon project lands and waters.
- (4) Preservation and enhancement of the aesthetic integrity of banks and shorelines and retention of access for public use.
- (5) Prevention or elimination of unauthorized structures and habitation on project lands or on the water surface.
- (6) Compatibility between recreation uses and equipment employed in recreation activity and established water quality standards.
- (7) Environmental improvement through vegetative management.
- (8) Interim use of project lands for appropriate agricultural practices to optimize recreation and fish and wildlife benefits.
- (9) Monitoring of public recreation use and recreation technology being used to insure that management practices and future recreation developments are consistent with discernible public preferences and needs.
- (10) Encouragement of local officials to adopt and enforce zoning and building codes to: control private developments adjacent to any project reservation; and to avoid resultant problems in water pollution from septic tank drain fields or sewage disposal, visual pollution due to poor siting or design, solid waste disposal on public areas, or use of project roads for access to private property.

b. Visitor Centers. It is the policy of the Corps to plan, develop, manage and operate Visitor Centers at water resource development projects. Visitor Centers educate and inform the public with regard to the history and mission of the Corps, its role in water resources development, the project, its purposes, benefits and costs. Visitor Centers are further operated to ensure the public is provided with the information necessary for the safe use and enjoyment of Corps projects. (ER 1130-2-550)

c. Public Access. Appropriate access to the project will be provided for the general public except in areas which are restricted for security or safety reasons. (ER 1130-2-550)

d. Shoreline Management Policy. It is the policy of the Corps to protect and manage shorelines of all Civil Works water resource development projects under Corps jurisdiction in a manner which will promote the safe and healthful use of these shorelines by the public while maintaining environmental safeguards to ensure a quality resource for use by the public. The objectives of all management actions will be to achieve a balance between permitted private uses and resource protection for general public use. Public pedestrian access to and exit from these shorelines shall be preserved. Corps management practices are directed toward gaining the maximum benefit for the general public. (ER 1130-2-406)

e. General Use of Public Recreation Areas. Public use areas on Civil Works projects are available for use by all members of the general public on a first-come, first-served basis. Corps operated group camp areas may be managed on a reservation system. (ER 1130-2-550)

f. Use Fees. See Chapter 17, paragraph 17-5.d.

g. Law Enforcement. States, local governments, and Federal law enforcement agencies retain statutory authority and responsibility to enforce the law at Civil Works projects. Section 234 of the Flood Control Act of 1970 provided that the Secretary of the Army may cause to be issued citations for aggravated cases of refuse dumping and other violations of the rules and regulations under Chapter III, Title 36, CFR. Division commanders have been authorized to designate Civil Works installations wherein the citation authority will be implemented. Oral and written warnings will be used in minor cases to the maximum extent possible. There is no authority for Corps personnel to take an offender into custody. Weapons will not be carried or used for citation enforcement. Federal, state, and local law enforcement agencies, as applicable, retain the authority and responsibility to enforce all laws. Section 120 of Public Law 94-587, as amended, authorizes the Chief of Engineers to enter into agreements with states and their political subdivisions for the purpose of obtaining increased law enforcement services at projects. (ER 1130-2-550, USACE Supplement to AR 190-29)

h. Forest Management. Public Law 86-717 requires that projects be developed and maintained to encourage, promote, and assure adequate and dependable future resources, including supplies of forest products. Multiple-use forest management, including sustained yield timber production, should be maintained unless a reasonable determination is made that such a program is incompatible with recreation, conservation, or other beneficial uses of the project.

Corps land managers have discretion to determine whether timber harvesting is practicable with other beneficial uses of the land, and whether it would yield the maximum benefit and improve such areas. Vegetation, living or dead, will be removed only with justification such as urgent disease control, urgent insect pest control, fire hazard reduction, wildlife management practice, removal for construction of recreational facilities or other specific essential uses. (ER 1130-2-540)

i. Wildlife and Fisheries Management. Section 3 of the Fish and Wildlife Coordination Act (Public Law 85-624) provides for the use of Civil Works projects for conservation, maintenance and management of fish and wildlife resources and wildlife habitat. This is accomplished through licensing of lands and waters to state wildlife agencies or by cooperative agreement with the Secretary of the Interior under terms of a General Plan. The General Plan must be approved jointly by the Secretary of the Army, the Secretary of the Interior and the head of the State wildlife agency. Licensees may plant or harvest crops, either directly or by share crop agreement, to provide food and/or wildlife habitat. Proceeds from the sale of crops may be used to further fish and wildlife uses in accordance with project management plans. Proceeds not used for this purpose will be paid to the United States at the expiration of each five-year period. (ER 1130-2-540)

j. Sanitation and Pollution Control. Sanitation for public use of Corps projects will be in accord with all Federal, state and local laws. Solid waste disposal and the control of air and water pollution will be in accordance with Executive Order 12088 on prevention, control and abatement of air and water pollution at Federal facilities. OMB receives a report on the prevention, control, and abatement of environmental pollution of Federal facilities annually. Section 107 of Public Law 93-251 permits Federal participation in the costs of local sewage treatment plant installations as warranted to provide for treatment of the additional sewage resulting from the operation of facilities (including recreation) at Corps projects. All potable water at Civil Works projects will meet or exceed the minimum standards prescribed by the Safe Drinking Water Act. (ER 200-2-3)

k. Soil Erosion Control. Erosion of project lands will be controlled as practicable to prevent land despoilment, improve project aesthetic appeal and extend the project life through reduced siltation.

l. Distribution of Rental Receipts. Under Section 7 of the Flood Control Act of 1941 (Public Law 77-228), as amended, the Corps shall pay 75 percent of the annual rental receipts from the leasing of project land under its jurisdiction to the state in which the leased properties are located.

m. Restrictions on Seaplane Operations. Seaplane operations on all or portions of lakes under the jurisdiction of the Corps may be prohibited or restricted by district commanders to protect all authorized uses of the project and the safety of all users. (ER 1130-2-550)

n. Private Exclusive Use. See Chapter 17, paragraph 17-6.c.

11-2. Responsibility for Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R). Responsibility for OMRR&R of Civil Works projects has been established by the general requirements of River and Harbor and Flood Control laws and administrative policy. Also, under Section 103(j) of WRDA 1986, non-Federal sponsors are responsible for the OMRR&R of any new cost shared projects and/or modifications to portions of existing projects accomplished under Section 103 of WRDA 1986. However, local sponsors are not responsible for OMRR&R of those portions of existing projects that are not modified under Section 103 of WRDA 1986.

a. Navigation.

(1) Completed Projects. Authorizations for most existing completed navigation improvements established that operation and maintenance (O&M) is solely a Federal responsibility to be accomplished at Federal cost.

(2) Uncompleted Projects. It is general policy to recommend that improvements for commercial navigation be maintained by the Federal Government. The Federal Government is responsible for the costs of O&M of the "general navigation features" (GNF) of commercial navigation projects, except that in the case of a deep-draft harbor, the local project sponsor shall be responsible for an amount equal to 50 percent of the incremental cost of O&M for depths greater than 45 feet (Section 101(b) of WRDA 1986, Public Law 99-662). The non-Federal sponsor is responsible for the OMRR&R of all public berthing areas; public terminals, wharves, and transfer facilities; and dredged material dikes, bulkheads, spillways and embankments necessary for the project, except as provided under Section 201 of WRDA 1996 (see paragraph 11-2.a(4) below). The U.S. Coast Guard is responsible for OMRR&R of all aids to navigation. At projects having commercial and recreational features, the non-Federal sponsor is responsible for 100 percent of the OMRR&R cost allocated to recreation.

(3) Emergency Clearing and Snagging. Section 3 of the River and Harbor Act of 1945 provided continuing authority for limited emergency clearing and snagging of navigation channels of non-vessel debris (amended by Section 915(g), WRDA 1986). A limit per project is not specified; however, in any given year a maximum of \$1,000,000 may be used nationwide. Section 3 actions are approved on a case-by-case basis by HQUSACE (CECW-O).

(4) Emergency removal of wrecks (i.e., vessels or other similar obstructions) is authorized by Section 20 of the River and Harbor Act of 1899, as amended, and is handled as an operational activity subject to the October 1985 Memorandum of Agreement with the U.S. Coast Guard (Appendix E, paragraph 6g). A limit per wreck is not specified; however, in any given year a maximum of \$500,000 may be used nationwide. Section 20 actions are approved on a case-by-case basis by HQUSACE (CECW-O). Paragraph 12-16, Wreck Removal, contains further discussion of this authority. Wreck removal actions are approved on a case-by-case basis by HQUSACE (CECW-O).

(5) Dredged Material Disposal Facilities (DMDF).

(a) Prior to WRDA 1996 (on or before 12 October 1996), provisions and preparation of disposal areas for initial construction

and subsequent O&M were the responsibility of non-Federal interests, unless authorizing legislation provided otherwise. All necessary disposal area retaining works were to be provided by local interests. Subsequent to WRDA 1996 (after 12 October 1996), land-based and aquatic DMDF associated with the construction and O&M of all Federal navigation harbors and inland harbors (but not the inland navigation system including the Atlantic Intracoastal Waterway and the Gulf Intracoastal Waterway) are considered to be general navigation features (GNF) of a project and subject to cost sharing (for both construction and O&M) in accordance with procedures set forth in Section 101 of WRDA 1986. The Federal share of construction of DMDF associated with the O&M of Federal harbor projects, Federal DMDF O&M costs, Federal costs of dredging and disposal of contaminated sediments that are in or that affect the maintenance of a Federal navigation channel and Federal costs of mitigation for storm damage and environmental impacts resulting from Federal maintenance activity are eligible O&M costs under Section 210 of WRDA 1986 and are reimbursed from the Harbor Maintenance Trust Fund. The use of a DMDF designed, constructed, managed or operated by a private entity is not precluded if, consistent with economic and environmental considerations, the use of such facility is the least-cost environmentally acceptable alternative.

(b) On Federal projects without a non-Federal sponsor, mosquito control programs are generally a Federal responsibility. When, however, non-Federal regulations impose project operational requirements that create conditions conducive to mosquito propagation, control programs are their responsibility. Section 148 of Public Law 94-587 calls for using appropriate management practices to extend the capacity and life of disposal areas. Section 401(c) of Public Law 92-500 provides that when the Chief of Engineers deems it to be in the public interest, others may be permitted to use dredge material disposal areas under Corps jurisdiction, subject to an appropriate charge. Section 217 of WRDA 1996 provides for DMDF partnerships: (a) the Secretary of the Army may, at the request of a non-Federal interest, provide additional capacity at a DMDF being constructed by the Secretary; (b) the Secretary of the Army may permit the use of any DMDF managed by the Secretary by a non-Federal interest; and (c) the Secretary of the Army may implement opportunities for public-private partnerships in the design, construction, management, or operation of DMDFs in connection with construction or maintenance of Federal navigation projects (see paragraph 6-4.a(5) for further conditions and cost sharing).

(6) Environmental Dredging. There are two distinct authorities in Section 312 of WRDA 1990, as amended by Section 205 of WRDA 1996 (P.L. 104-303), as described below, under which the Secretary of the Army is authorized to remove and/or remediate contaminated sediments from the navigable waters of the United States. The authorities of Section 312, as amended, will not be used to remove or remediate contaminated sediment which are classified as hazardous, toxic and radioactive wastes (HTRW) (i.e., sediments within the boundaries of a site designated by the U.S. Environmental Protection Agency (EPA) or a state for a response action (either a removal action or remedial action) under the Comprehensive Environmental Compensation and Liability Act (CERCLA; 42 U.S.C. 9601 et seq), or if they are part of a National Priority List (NPL) site under CERCLA. Environmental cleanup of such sites is the primary responsibility of EPA and Civil Works funds will not be used for cleanup activities. However, direct

assistance to EPA will continue to be provided on a reimbursable basis for environmental cleanup activities including cleanup dredging and related studies. Sediments beneath the navigable waters, which are not classified as HTRW and proposed for removal and remediation under the authorities of Section 312, as amended, shall be tested and evaluated for their suitability for disposal in accordance with the appropriate guidelines and criteria adopted pursuant to Section 404 of the Clean Water Act (CWA) of 1972 and/or Section 103 of the Marine Protection and Sanctuaries Act (MPRSA) of 1972 and supplemented by the Testing Manuals.

(a) Section 312(a). Implementation of this section may be considered where the contaminated material is located outside and adjacent to a Federal navigation channel and contributes to contamination of material in the Federal navigation channel and it can be demonstrated that the costs of removal and remediation, as appropriate, of the contaminated sediment are economically justified based on savings in future O&M costs. Savings in future O&M costs are those associated with reduction in dredging and disposal costs through the reduction of contaminated sediment input into the navigation channel (e.g., reduction of contaminated sediment may allow continuation or resumption of open water disposal, remediation, and elimination of the need for more costly confined disposal). Implementation of this section will require agreement by a non-Federal sponsor to provide all costs related to disposal of contaminated sediment. Under this policy, disposal costs are considered those costs not directly related to removal (dredging), remediation (treatment), and transport of the material to reasonably proximate disposal sites; and includes those costs associated with lands, easements, rights-of-way, retaining dikes, bulkheads, embankments, excavation of subaqueous pits, capping/liner requirements, fish and wildlife mitigation associated with the disposal area, and maintenance and management of the disposal area. The dredging, transport, disposal, and remediation must be environmentally acceptable pursuant to all applicable Federal statutes and regulations.

(b) Section 312(b). Removal and remediation of contaminated sediment from the navigable waters of the United States for the purposes of environmental enhancement (restoration) and water quality improvement may be considered for implementation if requested by an appropriate non-Federal sponsor and if it is consistent with current program and budget priorities in effect at the time of consideration. Implementation of Section 312(b) will require agreement by a non-Federal sponsor to provide 50 percent of the costs of removal and remediation. In addition, all costs related to the disposal of contaminated sediment are a non-Federal responsibility. Disposal costs are considered those not directly related to removal (dredging), remediation (treatment), and transport of the material to reasonably proximate disposal sites; and includes those costs associated with lands, easements, rights of way, retaining dikes, bulkheads, embankments, excavation of subaqueous pits, capping/liner requirements, fish and wildlife mitigation associated with the disposal area, and maintenance and management of the disposal area. A project under Section 312(b) authority may include removal and disposal of contaminated sediment, removal and remediation of contaminated sediment, or remediation of contaminated sediments in place.

(7) Dredged Material Management Studies. The policy in the

following paragraphs regarding development and financing of studies required for dredged material management at existing Federal navigation (harbor and inland harbor) projects is applicable to all Federal navigation projects maintained by the Corps which are eligible for reimbursement of O&M costs from the Harbor Maintenance Trust Fund (HMTF). The policy is not applicable to the inland waterways subject to the waterways user fuel taxes under Public Law 95-502, as amended.

(a) Study Authorities. Dredged material management plan (DMMP) studies for existing Federal navigation projects shall be conducted pursuant to existing authorities for individual project O&M as provided in public laws authorizing specific projects, and as may be supplemented by general authorities relating primarily to beneficial uses of dredged material. Where DMMP studies disclose the need to consider expanding or enlarging existing projects, such studies may only be pursued under specific study authority or under Section 216 of the Flood Control Act of 1970.

(b) Management Plans. DMMPs for existing Federal navigation projects or groups of interrelated projects shall identify specific measures necessary to manage the volume of material likely to be dredged over a 20-year period. In those cases where two or more Federal projects are physically interrelated (share a common disposal area or a common channel) or are economically complementary, one DMMP may encompass that group of projects. Non-Federal permitted dredging within the related geographic area shall be considered in formulating DMMPs to the extent that disposal of material from these sources affects the size and capacity of disposal areas required for the Federal project(s).

(c) DMMP Study Financing. The cost of DMMP studies for continued maintenance of existing Federal navigation projects are O&M costs and shall be federally funded and reimbursable from the HMTF subject to the following:

-- Project sponsors, port authorities and other project users, are partners in dredged material management and must pay the costs of their participation in the DMMP studies including participation in meetings, providing information and other coordination activities.

-- Budgeting priority for the navigation purpose is limited to the least cost plan that is consistent with sound engineering practice and meeting environmental standards established by Section 404 of the CWA of 1972 or Section 103 of the MPRSA of 1972, as amended (i.e., the "base plan"). Therefore, the cost for any component of a DMMP study attributable to meeting local or state environmental standards that are not provided for by the requirements of Federal laws and regulations, shall be a non-Federal cost, and not be recoverable from the HMTF.

-- Study activities related to dredged material management for the Federal project but not required for continued maintenance dredging and dredged material disposal, will not be funded from the HMTF and will not be included in DMMP studies unless funded by others. Such activities would include contamination source identification and studies leading to the control of non-point sources of pollution.

-- Studies of project modifications needing Congressional authorization, including dredged material management requirements

related to the modification, will be pursued as cost shared feasibility studies with General Investigation funding. Where the need for such modifications are identified as part of DMMP studies, O&M funding for the study of the modification should be terminated and a new feasibility study start sought through the budget process under the authority of Section 216 of WRDA 1970.

(d) Costs for beneficial uses that are consistent with and part of the base plan are O&M costs and the cost of studies pursuant to these beneficial uses are a Federal cost, recoverable from the HMTF. However, study costs for beneficial uses which are not part of the base plan, beyond those reconnaissance level studies needed to identify these potential uses as part of DMMP studies, are either a non-Federal responsibility or are a shared Federal and non-Federal responsibility depending on the type of beneficial use (i.e., restoration and protection of environmental resources; placement of material on beaches).

(e) Where there is a feasibility study for modification of an existing Federal navigation (harbor and inland harbor) project and a need for dredged material management planning for the maintenance of the existing Federal navigation project being modified, the costs of dredged material management and disposal studies will be allocated between the existing project and the feasibility study for the project modification. Costs will be allocated by first identifying all costs that would be associated with planning for dredged material management for the existing authorized Federal project at existing depths and widths. These costs will be allocated to maintenance of the existing project and be funded from the O&M, General, appropriation at 100 percent Federal cost. Increments of dredged material management study costs above those required for planning for continued maintenance of the existing project, which are associated with disposal of dredged material from construction of the project modification or increments of new maintenance cost attributable to the project modification, will be shared 50-50 with the non-Federal sponsor as feasibility study costs. The definition of the required dredged material management studies and the allocation of costs of these studies between the existing project and the feasibility study must be a carefully coordinated effort involving planning and operations elements and the non-Federal sponsor. While the costs for dredged material management are allocated between O&M and the feasibility study, the dredged material management studies will be conducted as a unified study within the context of the feasibility study.

b. Flood Control.

(1) WRDA 1986 does require that the non-Federal sponsor(s) pay for, and be responsible for, the cost of project OMRR&R. The general policy is that the non-Federal sponsor shall operate, maintain, repair, replace and rehabilitate (OMRR&R) the project and that any agreement made during PCA negotiations with more local involvement is satisfactory and within policy guidelines. Corps reservoir projects, both multiple-purpose and single purpose flood control (dam) projects, undertaken prior to 1986 are operated and maintained by the Federal Government. WRDA 1986, enacted 17 November 1986, provides that, for new reservoir (dam) projects, non-Federal interests shall be responsible for OMRR&R requirements related to the flood control function. In the case of modification to an existing Corps operated and maintained reservoir, interpretation of the Act allows for several

possibilities as to which partner (Corps or non-Federal sponsor) actually OMRR&Rs the project for flood control. The possibilities range from a non-Federal sponsor performing all these functions to a request by the non-Federal interests to have the Federal Government perform project OMRR&R. The use of an incremental approach to determine sharing of the flood control OMRR&R costs would be equitable. The Federal Government should pay the flood control OMRR&R costs of the existing reservoir and the non-Federal sponsor is to pay for the increment of costs introduced by the modification. Non-Federal sponsors for flood control and multipurpose dams constructed under the provisions of WRDA 1986 should be fully prepared by the Corps to accept their responsibility for OMRR&R:

(a) During the feasibility phase, all project OMRR&R and dam safety requirements should be identified and discussed with the non-Federal. The non-Federal must be made aware of the project design, the expected function of each project element, the requirements of operation, and all state and other Federal requirements. A turnover plan that establishes responsibilities and a definite point for the turnover of the project to the non-Federal should be documented in the Management Plan and in the feasibility report.

(b) In the PED phase, the responsible Corps commands should hold necessary meetings between the non-Federal, the state, and other Federal agencies to refine all criteria and requirements of project design, construction and OMRR&R. The non-Federal must be made aware that after transfer of the project, the Corps is in a supporting role with respect to dam safety and will only participate in inspections and review performance data.

(c) In the construction phase, the responsible Corps commands should schedule and coordinate visits to the site for the non-Federal and state representatives to observe construction of significant and critical features of the project. During these visits, the non-Federal should be briefed on the construction records and reports.

(d) The turnover of the project to the non-Federal will occur after the first periodic inspection which will be conducted and documented by the Corps with participation by the non-Federal. Future periodic inspections will be conducted by the non-Federal with a representative of the Corps. The following items will be included in the turnover plan and be completed prior to project turnover: OMRR&R Manual; initial dam safety training for the non-Federal; the emergency identification, emergency operations and repair, inundation maps and the Federal portion of the notification subplans of the Emergency Action Plan (EAP); instrumentation, monitoring and surveillance plans; periodic inspection schedule; and, appropriate review and certification by the State. Responsible Corps commands should monitor the performance of these projects by reviewing yearly instrumentation records and by the observations of the Corps representative participating in the scheduled inspections.

(2) Flood control works such as levees, channel improvements, and emergency repair work under Section 5 of the 1941 FCA (often referred to as Public Law 84-99) authority are OMRR&R'd by non-Federal interests. There is one exception: channel improvements specifically authorized under the Flood Control Act of 1938 are a Federal O&M responsibility.

(3) Projects for snagging and clearing for flood control under Section 208 of the Flood Control Act of 1954 and emergency bank protection under Section 14 of the Flood Control Act of 1946, as amended, require O&M by non-Federal interests.

c. O&M Controls, Flood Control Projects. Section 208.10, Title 33, CFR contains regulations for the O&M of local flood protection works approved by the Secretary of the Army in accordance with authorities contained in Section 3 of the Flood Control Act of 22 June 1936 (49 Stat. 1571), as amended and supplemented. District commanders are to keep informed as to the extent of compliance with the local O&M requirements through the Inspection of Completed Works Program, and analysis of semi-annual reports required to be submitted by the operating and maintaining agency. (ER 1130-2-530)

d. Flood Control (Mississippi River and Tributaries). Local responsibility is limited to regular levee maintenance, but this is defined by law to consist only of mowing grass and weeds, local drainage and minor repairs of main river levees. The Federal Government is responsible for extraordinary maintenance of levees and all maintenance of structures other than levees.

e. Shore Protection Projects (including Hurricane and Storm Damage Reduction). Maintenance is a non-Federal responsibility. Federal participation may be provided for a specified period in periodic nourishment when nourishment has been selected and adopted in lieu of more extensive construction, and such Federal participation is adopted as part of the recommended project. (ER 1165-2-130)

f. Other Projects. Except for the OMRR&R on fish and wildlife enhancement lands, the non-Federal sponsor is responsible for 100 percent of the OMRR&R cost for all non-navigation projects. On fish and wildlife enhancement lands, the non-Federal sponsor is responsible for 25 percent of the OMRR&R costs.

g. Requirements of Project Cooperation for Cost Shared Projects. During the negotiation of a PCA, the non-Federal sponsor should be made aware of activities it will be required to undertake in the performance of its O&M responsibilities, including the estimated annual cost to perform those OMRR&R functions. Non-Federal sponsors should be made aware that the estimated annual OMRR&R cost will be refined as the final project design is completed and will be adjusted accordingly after the project is transferred for OMRR&R. (See, also, paragraph 13-8.)

11-3. Major Rehabilitation. Major rehabilitation shall consist of either one or both of two mutually exclusive categories, i.e., reliability or efficiency improvement.

a. Reliability.

(1) Rehabilitation is a major project feature restoration consisting of structural work on a Corps operated and maintained facility, such as a lock, dam, hydropower plant, etc., intended to improve reliability of an existing structure, the result of which will be a deferral of capital expenditures to replace the structure.

(2) Rehabilitation will be considered as an alternative when it can significantly extend the physical life of the feature and can

be economically justified by benefit-cost analysis. The work will extend over at least two full construction seasons and will require at least \$5.1 million in capital outlays if initially funded before 1 October 1994. For inland navigation projects initially funded in Fiscal Year 1997, the reliability threshold will increase to \$8.2 million.

b. Efficiency Improvement. The efficiency improvement category will enhance operational efficiency of major project components. Operational efficiency will increase outputs beyond the original project design. Efficiency improvement will require at least \$1.03 million in capital outlays on a component which does not exhibit reliability problems.

c. Threshold Considerations. The threshold amounts listed for the reliability and efficiency improvement categories shall be adjusted annually according to the Administration's economic assumption published each year as guidance in the Annual Program and Budget Request for Civil Works Activities of the Corps of Engineers (i.e., "Budget EC"). In determining whether project work falls within the dollar thresholds set forth in paragraphs 11-3.a(2) and 11-3.b above, the dollar value of work on separate projects shall not be aggregated, even if within the same river or waterway system.

11-4. Correction of Design or Construction Deficiencies. Occasionally a project may require modification after project completion because of a deficiency detected in the original Federal engineering design or construction of the project. A design or construction deficiency is a flaw in the Federal project that interferes significantly with the project's authorized purposes or full usefulness as intended by Congress at the time of initial construction. A design deficiency may be patent and readily observable or latent and remain hidden for years after completion of the project. Work required to correct a design or construction deficiency can be accomplished under existing project authority without further congressional authorization if the proposed corrective action meets all the following criteria: (ER 1165-2-119)

a. It is required to make the project function as initially intended by the designer in a safe, viable and reliable manner.

b. It is not required because of changed conditions.

c. It does not change the authorized scope, function, or purpose of the project.

d. It is incrementally justified by current economic considerations or otherwise needed and justified for safety reasons.

e. It is not required because of inadequate local maintenance.

f. If corrective measures are proposed and adopted that involve cost sharing, there is a non-Federal sponsor willing to enter into a project cost sharing agreement to cover the cost sharing requirements (using the same percentage as specified in WRDA 1986 for the project purpose(s)).

11-5. Dam Operations Management. Corps of Engineers dams are managed in accordance with the safest and most effective criteria and

procedures that can practicably be established. Projects are inspected at appropriate intervals for signs of weakness or distress by trained personnel. A Dam Safety Plan is prepared for each dam consisting of: an emergency notification procedure; a description or list of conditions leading to emergency situations and way of dealing with them; reservoir de-watering procedure; dam failure inundation maps; a listing of location, types, and quantity of emergency repair materials and equipment; details outlining responsibilities for inspection and execution of emergency repairs; and a list of contractors available within a reasonable distance of the dam. (ER 1130-2-530)

11-6. Dam Safety Assurance. This program provides for modification of completed Corps dam projects when detailed studies indicate that safety improvements are warranted in light of present day engineering standards and knowledge. The program facilitates upgrading of dams and related facilities constructed or operated by the Corps when new hydrologic or seismic data or changes in state-of-the-art design or construction criteria make upgrading necessary for safety purposes. The indicated modifications must be within the Chief of Engineers discretionary authority to rectify, or a specific congressional authority must be obtained. Generally, existing authorities are sufficient to permit improvements to a project for safety purposes if such improvements do not alter the scope or function of the project or substantially change any of its specifically authorized purposes. Primary examples of project features eligible for upgrading under this program are: enlarging existing or constructing new facilities to provide adequate flood discharge capability; raising the dam height to provide adequate freeboard allowance; and increasing structural stability of the dam foundation or structure to withstand hydraulic and/or seismic loading. Modifications based on changes in state-of-the-art design or construction criteria require thorough documentation. Other modifications to correct conditions that may threaten the integrity of a dam are accomplished as part of major rehabilitation or routine maintenance. The Dam Safety Assurance Program is also designed to upgrade dams built by the Corps and turned over to local interests to operate and maintain; however, additional authorization may be required for such projects. (ER 1110-2-1155)

11-7. Changes in Water Control Plans. Authorities for the allocation and regulation of reservoir storage in projects operated by the Corps are contained in project authorization acts. Some modifications to approved water control plans may be undertaken to provide more efficient use of the project. It is the policy of the Chief of Engineers that reservoir regulation procedures be evaluated continually. The objective of this policy is to improve water management in light of changing conditions. However, proposed changes, including those required to maintain instream flow needs, must be carefully reviewed in conjunction with the authorizing legislation to determine the extent of the change which may be undertaken. Further, PL 101-640 requires that any change to a water control plan, regardless of purpose, must be developed with full public involvement. Water control plans may be modified to add a purpose for which the Congress has granted general authority to all Corps reservoirs. Such purposes are limited to: recreation (PL 78-534); municipal and industrial water supply (PL 85-500); fish and wildlife conservation (PL 85-624); water quality control (PL 92-500); and threatened and endangered species preservation (PL 93-205). The addition of any other purpose would require congressional

authorization. (To the extent practical, without adverse impacts on Federal project functions, other adjustments to suit locally-desired objectives may be considered and proposed contingent upon suitable non-Federal fees or contributions.) Often, proposals for changes of this type involve increases in the length of time waters are stored at various levels in the reservoir. Such proposals may require acquisition of a greater interest in reservoir lands on which flowage easements were initially obtained. The cost of those additional land takings along with all other benefits and costs should be considered in the decision to change reservoir regulation. If such lands are leased, amendments to the lease may be required. (ER 1110-2-240, ER 1165-2-119).

11-8. Mitigation of Damages Resulting from Construction and Operation of Project. The Federal Government is not normally held responsible for damages incidental to Civil Works activities within areas subject to the Navigation Servitude. Normally, as a condition of project authorization, local interests are required to hold and save the United States free from damages due to construction, operation, and maintenance of the project works. Section 9 of Public Law 93-251 states that such requirement does not include damages due to the fault or negligence of the United States or its contractors. While the Federal Government may be liable for damages resulting from the negligence of a government employee, no recovery is allowable resulting from the exercise of a discretionary function by a government official. The Chief of Engineers has discretionary authority under certain conditions to provide remedial work to correct certain adverse conditions resulting directly from a Civil Works project. This includes any destructive erosion of lands beyond Federal property limits around reservoir boundaries. The Office of Counsel should be consulted on the applicability of this authority to individual cases. (33 U.S.C. 633, 701(q))

11-9. Use of Corps Reservoir Flowage Easement Lands. Flowage easement lands present a difficult challenge. The Corps has only purchased certain rights associated with periodic water storage on the property and does not exercise the absolute control associated with ownership in fee. Therefore, the Corps ability to plan for developing and using flowage easement lands in the master planning process is limited. Though easement provisions may vary, ER 405-1-12 sets forth the current flowage easement requirements. It provides that no structure for human habitation shall be constructed or maintained on the land, that no other structure shall be constructed or maintained on the land except as may be approved in writing by the Corps, and that no excavation shall be conducted or landfill placed without Corps approval. Under the standard flowage easement, the land use decisions under the purview of the district commander are approval for structures other than for human habitation, and approval of excavations or landfill placements. Final approval authority for release of the restriction on human habitation rests with the ASA(CW). Guidance on considerations in making the land use decisions and recommendations for flowage easements is presented in the following paragraphs. This guidance applies to decisions on future land use and does not apply to corrective actions for unpermitted encroachments on flowage easement areas.

a. Structures Other Than for Human Habitation. Approval for structures other than for human habitation rests with the district commander. However, to ensure national and regional consistency in

policy application, any approval action must be coordinated with the division commander before it is finalized. The following criteria should be used for evaluating the approval of these structure on flowage easement lands.

(1) Compatibility with Project Operations. The structure must be compatible with project operations. Therefore, any proposal which would result in a significant increase in debris or sedimentation in the reservoir will not be approved. Any proposed structure for the production or storage of highly volatile, hazardous, toxic, or water reactive materials will not be approved.

(2) Compatibility with Floodplain Management. In accordance with the requirements of the national policies on floodplain management, any non-residential structure (building), including such structures as barns and storage buildings, must be elevated above the 100-year flood plain or floodpool or floodproofed watertight to or above the 100-year flood level. Also the landowner must demonstrate that there is no practical alternative to location of the structure other than within the floodpool or flood plain. Certain types of development are compatible with periodic low velocity inundation including parking lots and other paved surfaces, field recreation facilities (backstops, goalpost, etc.) and open type structures (picnic shelters). These kinds of developments would generally be approved unless their construction reduced the flood control storage capacity of the project or considerations of safety or property damage preclude the approval (e.g., inadequate warning time to evacuate people from a recreation area).

(3) Excavation or Landfills. The primary consideration in approving excavations or landfill placements is the preservation of the flood storage capacity of the project. Therefore, landfill placements will not be approved unless substitute flood storage is provided. Proposals for excavation and grading of flowage easement areas will not be approved if they result in loss of flood control storage. Approval authority for excavations and landfills rests with the district commander. However, to ensure national and regional consistency in policy application, any approval action must be coordinated with the division commander before it is finalized.

c. Release from Restriction on Human Habitation. Generally, the restriction on human habitation will not be recommended for release. Human habitation below the flood control or navigation pool elevation places an undue limitation on the Congressionally authorized operation of the project. However, if it can be demonstrated that the release will not result in a significant threat to human life, health, or safety, and will not place or suggest any restriction on the operation of the project, the release may be approved under certain conditions. As with other structures, such developments must meet the requirements of national policy on flood plain management as set forth in Executive Order 11988 and its implementing regulations. Executive Order 11988 requires consideration of alternatives which avoid the flood plain wherever practical. Therefore, any landowner requesting relief from the restriction on human habitation in a flood plain or project pool must also demonstrate that there is no practical alternative to the location of the habitable structure. In addition to satisfying these requirements, if there is any threat to human life, the proposal for release of the human habitation restriction will not be recommended for approval. However, if it can be

demonstrated that there would be adequate warning time to evacuate the structure in the event of a flood that would inundate the site and that non-flooded egress out of the project area (offsite) then it may receive approval. Proposals for release of human habitation restriction must be submitted through the Major Subordinate Command to HQUSACE for approval by the ASA(CW). The human habitation restriction is a property right acquired by the Federal Government which must be released by a deed, including the provision for adequate compensation for the disposal, in accordance with ER 405-1-12.

11-10. Granting Use of Civil Works Project Real Estate. Lands and waters of Civil Works projects frequently can, without detriment to the primary project purposes, also be used to provide many other forms of public and private benefits. Such uses may take place either under Corps management or by third parties under the following authorities:

a. 10 U.S.C. 2667 provides for the lease of real and personal property which is not excess or required for public use. Leases are limited to five-year terms unless the Assistant Secretary of the Army (Installations and Logistics) determines that a longer lease term will promote the national defense or will be in the public interest. Agricultural and grazing leases are examples of leases issued under this authority.

b. 16 U.S.C. 460d provides for lease of real property at water resources development projects when it is determined to be in the public interest. Generally, these leases are for commercial concessions and recreational purposes. This authority is also used for licenses for fish and wildlife purposes.

c. 43 U.S.C. 961 provides authority to grant easements on Government lands for electric power and communication lines.

d. 10 U.S.C. 2669 provides authority to grant easements for gas, water and sewer pipelines.

e. 10 U.S.C. 2668 provides authority to grant various types of easements for rights-of-way.

f. 30 U.S.C. 185 provides authority to grant easements for fuel-carrying pipelines and related facilities.

g. 10 U.S.C. 4777 provides authority for ferry landings, bridges and livestock crossings.

h. 40 U.S.C. 319 provides for easements for rights-of-way or other purposes.

i. The general administrative power of the Secretary of the Army allows for use of Army real property by a license or permit.

11-11. Disposal of Civil Works Project Real Estate. Power to dispose of real estate belonging to the United States is vested in Congress (Article VI, Section 3, clause 2 of the Constitution) and no Corps real estate will be sold or otherwise disposed of without authority of Congress. The major portion of real estate disposal actions performed by the Corps is predicated on authority derived from the Federal Property and Administrative Services Act of 1949 (Public Law 152, 81st Congress), as amended (40 U.S.C. 471, et seq.), and the rules,

regulations and delegations of authority issued by the General Services Administration (GSA) thereunder. For example, GSA has delegated to the Secretary of the Army the authority to dispose of real property that has an estimated value of \$15,000 or less. However, absent specific delegation from GSA or specific authorization by Act of Congress to dispose of project lands, lands excess to project requirements must be turned over by the Corps to GSA for disposal in conformance with the 1949 Act. Some general examples of specific disposal authority are:

a. 10 U.S.C. 2571(a) authorizes the transfer, without reimbursement, of real estate between the Army, Navy, Air Force and Coast Guard.

b. Specific authority exists for transfers to the Tennessee Valley Authority, Federal Prison Industries, Inc., the Veterans Administration, the Department of Transportation, the National Weather Service, and to the District of Columbia.

c. 16 U.S.C. 505a, 505b authorizes the interchange of national forest lands and lands under the control of the military departments.

d. 33 U.S.C. 558b authorizes the exchange of Government-owned excess fee-owned land and easement interests for land or interests in land required for river and harbor project purposes. 33 U.S.C. 558b-1 extends this authority to flood control projects.

e. 49 U.S.C. 2215 provides for disposal of lands for airport development.

f. 33 U.S.C. 578 provides for the conveyance of land which is part of a water resources development project to a state, political subdivision thereof, port district, port authority, or other body created by a state for the purpose of public port or industrial facility development. As a matter of policy, only lands within a navigation project will be made available for conveyance for these purposes.

g. Public Law 84-999 provides authority for the sale of lots for cottage development and use.

11-12. Pest Management Programs.

a. Administration. HQUSACE assigns responsibilities, issues guidance, and exercises management controls to assure compliance with prescribed pest management procedures at Corps reservoir projects. Objectives are to attain an acceptable level of pest control while providing for the safety of the environment, the public, and pest management personnel. Division commanders coordinate with EPA regional offices and assure compliance with guidance and regulatory requirements. District commanders may approve and supervise implementation of pest management plans.

b. Annual Pest Management Plans. Field project managers prepare and submit detailed annual plans, including anticipated use of pesticides, to their district offices for review and approval.

c. Training, Personnel Protection and Surveillance. All

personnel directly involved in pesticide application must be properly trained prior to making applications. Specialized training and/or certification is required for restricted use pesticide applicators. Personnel whose duties include supervision of pesticide applications must have a practical knowledge of applicable Federal and state regulations. Health and safety practices and procedures, including the use of personal protective equipment and clothing where appropriate, are required. Pesticide applicators also receive medical surveillance, which at a minimum consists of annual physical examinations. (ER 1130-2-540, EP 1130-2-540)

d. Documentation. Pesticide application data is promptly recorded and retained at project offices. (ER 1130-2-540, EP 1130-2-540)

11-13. Acceptance of Donations of Materials.

a. The Act of 24 April 1888 (33 USC 591) authorizes the Secretary of the Army to accept donations of lands or materials required for maintenance or prosecution of works for the improvement of rivers and harbors for which provision has been made by law. This authority has been delegated to the Chief of Engineers. Division commanders are delegated authority to accept unconditioned donations of such materials not to exceed a value of \$5,000. Acceptance of donations of lands has not been delegated by the Secretary of the Army.

b. Section 203 of the Water Resources Development Act of 1992 authorizes the Corps to accept contributions from groups and individuals in connection with carrying out water resources projects, for environmental protection and restoration or for recreation. The Corps may accept and use contributions to provide for operation and/or maintenance of recreation areas and the protection and restoration of natural resources at water resource development projects. Cash, funds, materials, and services may be accepted, but real estate can not be accepted. (ER 1130-2-500, Chapter 11)

c. Section 225 of the Water Resources Development Act of 1992 authorizes the Corps to develop and implement a program to share the cost of managing recreation facilities and natural resources at water resource development projects. The Corps is authorized to enter into cooperative agreements (Challenge Cost Share Agreements) with non-Federal public and private entities to provide for operation and/or management and development of recreation facilities and natural resources where such facilities and resources are being maintained at complete Federal expense. Funds, materials, and services may be accepted in conduction with this program. (ER 1130-2-500)

11-14. Discontinuation of Maintenance of Projects. Some waterways and harbor improvements constructed years ago may no longer be needed or used for the purposes for which originally intended, because of changed physical and economic conditions. Efforts are made to transfer the projects to appropriate state or local agencies for maintenance where obsolete waterways serve local purposes such as recreation or as sources of municipal or industrial water; or where local developments have grown up along the navigation pools. Where Federal improvements are not justified or no longer serve their authorized purpose, the Corps will recommend discontinuation of maintenance to Congress. Pending arrangements for disposition, they

are maintained as economically as possible to ensure that public health and safety are not endangered. Obsolete harbor improvements, which no longer have importance for commercial or recreational traffic, are not maintained by the Federal Government.

11-15. Operation and Maintenance Resumption after Suspension of Substantial Curtailment of Maintenance.

a. Suspended or substantially curtailed maintenance defines a situation where a conscious decision has been made in the past to suspend, stop, or curtail normal Federal maintenance practices for a project or specific feature(s) of a project. This decision may not have been from a study or a document but may reflect budget realities of competing needs of scarce resources, benefits diminished or gone at the project, or environmental compliance constraints. Presently the project dimensions or capacities are diminished enough to require a special one-time funding to bring the project up to a level of performance to accrue benefits for authorized purposes.

b. The reinstatement of Federal O&M budgetary support in authorized projects with suspended or substantially curtailed maintenance requires: (1) reaffirmation of Federal interest; (2) determination that the proposed maintenance is engineeringly, economically, and environmentally sound; and, (3) approvals.

11-16. Monitoring Coastal Projects. In the planning, design, construction and O&M of coastal projects, elements of uncertainty about the performance and ultimate effectiveness of the project works are always present in some degree because of the complex and forceful processes at work. Monitoring of completed, in-place projects is a means of achieving new insights for future application in development of other projects. The Corps O&M budget generally includes provision for undertaking intensive monitoring programs at a select few Corps projects -- shore protection and navigation. Where the shore protection project is Construction, General funded, no funds will be used to undertake monitoring. (Proposals for new projects should include, as part of the recommended project authority, provision for accomplishment of monitoring efforts foreseen as desirable.) The Waterways Experiment Station (WES) will provide technical advice on program preparation and execution to Corps districts. (ER 1110-2-8151)

11-17. Energy Conservation. Energy conservation goals were established by the Office of the Assistant Secretary of Defense (Logistics and Material Management) in Defense Energy Program policy Memorandum 86-3. FOAs have been directed to meet the energy conservation goals.

11-18. Environmental Compliance, Pollution Prevention and HTRW Site Restoration.

a. General.

(1) Corps Projects and Facilities. This paragraph (11-18) addresses the Corps policies and responsibilities for proper environmental stewardship of Corps operated and maintained Civil Works projects and facilities. Elements of the Corps Environmental Management System are presented. Policy guidance is contained in ER 200-2-3, Environmental Compliance Policies, dated 30 October 1996.

(2) Sponsor Projects. This paragraph (11-18) does not apply to projects operated and maintained by sponsors. While the environmental laws apply equally to projects and facilities irrespective of who operates them, this paragraph (11-18) includes Corps regulations, procedures and processes that are not imposed on others.

(3) Outgrants. All real estate outgrants have a provision that requires the grantee to protect project property against pollution of its air, ground, and water. Disposal of any toxic or hazardous materials on the premises is specifically prohibited. All laws, regulations, conditions or instructions affecting the grantee's use of land issued by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency having jurisdiction are made a condition of the outgrant. Periodic compliance inspections are performed to assure the grantee's compliance with all environmental provisions. If noncompliance is found with an environmental provision that is potentially a regulatory violation, the lessee must be notified in writing. The appropriate regulatory agency will determine if there is a violation, and when compliance is achieved. (See ER 405-1-12, paragraph 8-99.e(3)(d))

b. Environmental Compliance.

(1) Policy. The Corps will be a proactive facility leader in attaining and sustaining compliance with environmental standards established in applicable Federal, DOD, DA, state, and local laws and regulations. Locks, dams, dredges, campgrounds and property under Corps control and facilities under lease or license, such as marinas, oil and gas exploration and extraction areas, and grazing lands, must be managed to be compatible with the environment.

(2) The Environmental Compliance Program.

(a) Environmental Compliance Assessments. The purpose of Environmental Compliance Assessments is to identify and correct noncompliance. Environmental Compliance Assessments, conducted on a regular basis, provide a picture of compliance levels and corrective action requirements. Environmental Compliance Assessments are a proactive approach to assuring that potential environmental protection and compliance issues are promptly identified. Once identified, the full range of specialties within the Corps can be called on to assist in their resolution. Deficiencies are prioritized and corrective actions taken as routine maintenance work or programmed in the Civil Works budget process.

(b) The Environmental Assessment and Management (TEAM) Guide and the Environmental Review Guide for Operations (ERGO). These manuals are the foundation of a comprehensive program to achieve, maintain, and monitor compliance with applicable environmental laws and regulations, and to implement good management practices. The TEAM and ERGO manuals contain checklists of Code of Federal Regulations, Engineer Regulations, and Management Practices that show legal requirements and specific operations or items to review at Civil Works projects and facilities. The manuals are divided into categories or Aprotocols@ to assist in the evaluation of such items as: air emissions, cultural resources, hazardous materials and waste, natural resources, pesticides, solid waste, wastewater, underground storage

tanks and toxic substances. They are designed for on-site personnel to use for internal (self) assessments or for district teams, contractors, and others to use for external assessments.

(c) Annual Assessments. Annual external or internal assessments are performed to evaluate environmental compliance and to give necessary feedback so supervisors can organize, direct, and control environmental compliance and protection activities. A multidisciplinary approach is essential to resolving environmental issues because most activities that affect the environment must be assessed from various perspectives to achieve the most effective environmental management. TEAM/ERGO assessments: enhance Corps environmental compliance at Federal, state and local levels; improve Corps environmental management; build supporting budget requirements; and, assure supervisors that their environmental programs will be implemented effectively according to Corps goals and objectives.

c. Enforcing Environmental Regulations. Managing Corps projects and facilities includes accepting responsibility for compliance with applicable environmental regulations. The EPA and other Federal and state agencies are charged with enforcing environmental regulations. An effective TEAM/ERGO assessment program will help to reduce risks and liability.

d. Pollution Prevention.

(1) Policy. As in the case of environmental compliance, pollution prevention is one of the four pillars of the Army Environmental Strategy. It is Corps policy that:

(a) The Corps will comply with all applicable Federal, state, and local environmental laws and regulations.

(b) Pollution shall be prevented or reduced at the source. Wastes and by-products that cannot be prevented shall be recycled. Pollutants that cannot be recycled shall be treated to minimize environmental hazards. Disposal or other release into the environment shall be employed only as a last resort and shall be conducted in an environmentally safe manner.

(c) Pollution prevention plans shall be prepared, maintained, and used as a basis for pollution prevention at each Corps project or facility. Corps operations and activities shall incorporate pollution prevention practices on a life-cycle basis.

(d) Corps personnel shall practice pollution prevention.

(2) The Pollution Prevention Program.

(a) Executive Order (EO) 12856. Signed by the President on 3 August 1993, EO 12856 "Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements", sets a goal of fifty percent reduction in toxic chemical releases by 1999. The Secretary of Defense issued a directive on 11 August 1994, subject: Comprehensive Pollution Prevention Strategy, which incorporates the requirements of several EOs, including EO 12856, as well as recommendations from the Deputy Under Secretary of Defense (Acquisition Reform). Civil Works projects and facilities subject to the Emergency Planning and Community Right to Know Act of 1986 (EPCRA) reporting requirements

must develop and implement pollution prevention program plans as an ongoing process.

(b) EPCRA. Starting in calendar year 1994, Corps Civil Works facilities, as do all Federal facilities, are required to comply with the reporting requirements of EPCRA. The basic philosophy of EPCRA is to get the community involved with emergency planning by letting them know what kinds of danger they can be exposed to based on the kinds of chemicals, the quantities of those chemicals, and the possible effects of those chemicals on the population during an unforeseen incident. It requires that detailed information about the nature of hazardous substances in or near communities be made available to the public. In addition to informing the public, certain EPCRA reports are submitted directly to the EPA. Whenever possible, EPA expects the facility to use information already in existence, such as permit information and monitoring data already being collected and used by the facility for compliance with other environmental, health, and safety activities.

(c) EPCRA Reporting. EPCRA contains several different reporting and planning requirements. Whether a facility must comply with a particular section of EPCRA, for example: Sections 302, 304, 311, 312, 313, is based on certain thresholds for storage, use, manufacturing, processing, or release of listed chemicals. Because each section of EPCRA has discrete thresholds and chemical lists, most facilities are likely to be subject to one or more sections of EPCRA.

e. HTRW Site Restoration.

(1) Policy. HTRW considerations at Corps operated and maintained projects and facilities are generally anticipated to be of a localized nature. Examples of HTRW situations may include unanticipated discovery of HTRW sites, contaminated discharges, and illegal disposal of HTRW materials on project lands. Corps policy is to work closely with appropriate Federal, state, and local agencies to address completely its responsibilities for HTRW situations.

(2) HTRW Guidance. When HTRW sites are discovered at a Corps operated project or facility, the affected area must be secured and protected until the contaminants are identified and site safety and health programs and plans are put into effect. HTRW considerations of appropriate post-response monitoring will be included in the project O&M Manual. ER 1165-2-132, Hazardous, Toxic, and Radioactive Waste (HTRW) Guidance for Civil Works Projects, is a reference for this topic.