

US ARMY CORPS OF ENGINEERS  
PLANNING AND RESPONSE TEAM

INFRASTRUCTURE ASSESSMENT  
STANDARD OPERATING PROCEDURES

March 2012

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## 1 PURPOSE/MISSION STATEMENT

The purpose of this document is to provide mission guidance to Infrastructure Assessment (IA) Planning and Response Team (PRT) members. This guide includes an overview of IA PRT member roles and responsibilities in conjunction with the National Response Framework (NRF), as well as standard implementation and operational procedures.

The IA PRT has two main functions:

1. To augment local public works Applied Technology Council-20 (ATC-20) post-earthquake or ATC-45 post-windstorm and flood structural safety assessments during disaster response and recovery efforts;
2. The IA PRT can also be applied to manage ad hoc technical assistance missions and civil works inspections, including but not limited to electrical, mechanical, hazardous materials, water and wastewater infrastructure (e.g. treatment facilities, lift stations), geotechnical applications, and other infrastructure (e.g. roads, bridges, dams).

Further, the IA PRT includes an ATC-20 Training Officer who can provide Just-In-Time training to Structural Safety Inspectors. Sources of these inspectors include: local hire/public works, State assets, USACE Engineering and Construction community of practice, Forward Engineer Support Teams (FESTs), contractors, retired annuitants, and other Federal agencies (e.g. Bureau of Reclamation). The IA PRT program also supports water/wastewater infrastructure assessment and repair missions when tasked by the Federal Emergency Management Agency (FEMA).

The purpose of the ATC-20/45 evaluations is to determine whether buildings in the impacted area are structurally safe for use or if entry should be restricted or prohibited. The buildings are to be inspected for damage and assigned a safety rating or posting category in a uniform manner. The goal of the program is to allow for rapid re-use of structures deemed safe. Federal inspectors do not make recommendations on repairs; inspection results are not used to determine the basis for demolishing or condemning structures. The IA PRT management cell coordinates with state and local officials to provide management of various civil works inspections. The management cell will manage, track, and validate inspection data collected by qualified professionals.

## 2 REFERENCES

- IA PRT Mission Guide
- IA Fact Sheet
- National Response Framework (NRF, 22 March 2008)
- National Disaster Response Framework (NDRF, September 2011)

- Applied Technology Council-20 (ATC-20) Field Manual: Post Earthquake Safety Evaluation of Building
- Applied Technology Council-45 (ATC-45) Field Manual: Safety Evaluation of Buildings after Windstorms and Floods
- IA PRT Level II Training CD
- California Office of Emergency Services (Cal OES) Structural Assessment Program (SAP) Evaluator Training
- Guiding Principles of ATC-20 Rapid Assessments
- Cal OES Post-Disaster SAP Guidelines to the Activation and Utilization of Program Resources
- USACE Safety Manual, EM 385-1-1
- Army Programs – Civil Works Emergency Management Programs, ER 11-1-320
- Engineering Regulation, ER 500-1-28, Emergency Employment of Army and Other Resources

### **3 APPLICABILITY/RESPONSIBILITIES**

This SOP applies to USACE IA PRT mission parameters in conjunction with sanctioned requests for assistance. Outlined procedures are intended to provide baseline information to support mission requirements.

#### **3.1 Lead Division**

As the national lead of the Infrastructure Assessment (IA) Planning and Response Team (PRT) Program, South Pacific Division (SPD) Readiness and Contingency Operations (RCO) responsibilities include mentoring/training participating District (LRB, POA, NWS, and SPK) PRT members, Emergency Support Function # 3 (ESF # 3) Team Leader (TL)/ATL cadre members, USACE Local Government Liaisons (LGLs), top officials of state/Federal agencies, other ESF representatives, and other response and recovery stakeholders in conjunction with National Response Framework (NRF) objectives; supporting planning and response efforts that bear directly on public safety; developing/implementing training, workshops, tabletop exercises, standard operating procedures (SOPs), mission guides, and innovative procedures/technologies; coordinating with interfacing agencies to optimize training, response, and recovery support (e.g. FEMA, EPA, DHS Critical Infrastructure, Department of Transportation, Department of Energy, USACE Engineer Research Development Center); monitoring/strengthening team readiness; supporting national/international Applied Technology Council-20 (ATC-20) structural safety assessment training requests (e.g. NAVFAC Contingency Engineering Response Teams, Fort Leonard Wood Training Directorate); and incorporating “management cell” concept into all-hazards/all risk approach to ensure support of ad hoc FEMA technical assistance missions. Technical assistance missions include but are not limited to the full array of engineering inspections (e.g. electrical, mechanical, geotechnical, environmental applications), emergency repairs of critical public works (e.g. water/wastewater infrastructure), and heavy structural assessments that may bear on life-sustaining operations

(e.g. use of school gymnasium for emergency medical triage). Innovative procedures and technologies include developing/improving emergency contracting work scopes and mobile infrastructure assessment tools to support catastrophic event response planning; and interactive training tools to foster distance learning. SPD RCO also serves as the national USACE lead for infrastructure assessment response improvement constructs (e.g. National Remedial Action Plan Workshop infrastructure working groups, Senior Leader Seminars); and developing/implementing national-level programmatic doctrine, such as the IA SOP/Mission Guide, Fact Sheets, FEMA Pre-Scripted Mission Assignments (PSMAs), Essential Infrastructure Assessment (EIA) SOP, and USACE-EPA Sub-Mission Assignment procedures. EIA SOP initiatives include fostering collaborative, interagency approaches to optimize event responses, and cross-walking planning and response efforts with other key agencies and authorities; lead agencies of ESFs, including DHS/FEMA (ESF # 5, 6, 9, 14, and 15), Department of Transportation (ESF # 1), Health and Human Services (ESF # 8), EPA (ESF # 10), Department of Energy (ESF # 12); State-level emergency services; volunteer agencies (VOLAGs); and the private sector. Furthermore, as the national lead of water/wastewater infrastructure assessment and repair missions during Federally-coordinated response efforts, SPD RCO selects, develops, and trains qualified individuals to fulfill national subject matter expert (SME) support requirements; and maintains the national list of IA PRT SMEs, Water/Wastewater Infrastructure SMEs, and ATC-20 post-earthquake/ATC-45 post-wind/flood structural safety assessment Training Officers.

### **3.2 Assigned Districts and Staffing**

The following USACE Districts have been designated to provide IA PRTs for emergency response on a rotating basis:

LRB (Great Lakes and Ohio River Division) Buffalo District  
NWS (Northwestern Division) Seattle District  
POA (Pacific Ocean Division) Alaska District  
SPK (South Pacific Division) Sacramento District

Current rotational status can be obtained from ENGLink. The IA PRT is comprised of a six-person core team and is augmented by support elements as needed. Support elements include Inspection Team Leaders (ITLs), ATC 20/45 inspectors, as well as technical staff which will vary from mission to mission. The PRT configuration is designed to staff the Joint Field Office (JFO), the Recovery Field Office (RFO), and multiple Emergency Field Offices (EFO) as required. The standard PRT is expected to be capable of managing the efforts of 100 inspectors (50 two-person field inspection teams). The six core members of the IA PRT include:

Emergency Support Function (ESF) #3 Action Officer (AO)  
Mission Manager (MM)  
Mission Specialist (MS)  
Mission Data Manager (MDM)

ATC-20/45 Training Officer (TO)  
Supervisory Inspection Team Leader (SITL)

### **3.3 Customer**

IA missions are generally prompted by FEMA; State and local governments in the impacted area are the ultimate beneficiary of IA mission support. IA PRT assets also support structural safety assessment training assignments (e.g. NAVFAC CERT, Ft Leonard Wood Training Directorate).

## **4 INTERGOVERNMENTAL TEAM**

Success of the IA PRT is highly dependent on a coordinated effort between FEMA, USACE, EPA, HHS, State/Tribal Emergency Operations personnel, local public works staff, and other agencies participating in the response and recovery effort. The interface between USACE IA PRT members and local public works hinges on the scope of the mission as defined by the FEMA Mission Assignment (MA) and the extent to which locals require assistance. The IA PRT is intended to be scalable to meet event-specific and changing mission requirements. Team members need to be adaptive to meet changes in conditions, locations and mission scope that will bear on changes in intergovernmental operations.

The primary interface between USACE and other Federal agencies occurs with other ESFs in the JFO. When an RFO element needs support from other ESFs at the JFO, the request should be coordinated between the MM and AO. The AO will coordinate the support with the appropriate ESFs. Key ESFs and corresponding primary coordinating agencies that may bear on the IA mission are described below.

<b>ESF #1 – Transportation</b> <b>ESF Coordinator: Department of Transportation</b>
<ul style="list-style-type: none"><li>▪ Aviation/airspace management and control</li><li>▪ Transportation safety</li><li>▪ Restoration and recovery of transportation infrastructure</li><li>▪ Movement restrictions</li><li>▪ Damage and impact assessment</li></ul>
<b>ESF #2 – Communications</b> <b>ESF Coordinator: DHS (National Communications System)</b>
<ul style="list-style-type: none"><li>▪ Coordination with telecommunications and information technology industries</li><li>▪ Restoration and repair of telecommunications infrastructure</li><li>▪ Protection, restoration, and sustainment of national cyber and information technology resources</li><li>▪ Oversight of communications within the Federal incident management and response structures</li></ul>
<b>ESF #3 – Public Works and Engineering</b>

<b>ESF Coordinator: Department of Defense (U.S. Army Corps of Engineers)</b>
<ul style="list-style-type: none"> <li>▪ Infrastructure protection and emergency repair</li> <li>▪ Infrastructure restoration</li> <li>▪ Engineering services and construction management</li> <li>▪ Emergency contracting support for life-saving and life-sustaining services</li> </ul>
<b>ESF #4 – Firefighting</b>
<b>ESF Coordinator: Department of Agriculture (U.S. Forest Service)</b>
<ul style="list-style-type: none"> <li>▪ Coordination of Federal firefighting activities</li> <li>▪ Support to wild land, rural, and urban firefighting operations</li> </ul>
<b>ESF #5 – Emergency Management</b>
<b>ESF Coordinator: DHS (FEMA)</b>
<ul style="list-style-type: none"> <li>▪ Coordination of incident management and response efforts</li> <li>▪ Issuance of mission assignments</li> <li>▪ Resource and human capital</li> <li>▪ Incident action planning</li> <li>▪ Financial management</li> </ul>
<b>ESF #6 – Mass Care, Emergency Assistance, Housing, and Human Services</b>
<b>ESF Coordinator: DHS (FEMA)</b>
<ul style="list-style-type: none"> <li>▪ Mass care</li> <li>▪ Emergency assistance</li> <li>▪ Disaster housing</li> <li>▪ Human services</li> </ul>
<b>ESF #7 – Logistics Management and Resource Support</b>
<b>ESF Coordinator: General Services Administration and DHS (FEMA)</b>
<ul style="list-style-type: none"> <li>▪ Comprehensive, national incident logistics planning, management, and sustainment capability</li> <li>▪ Resource support (facility space, office equipment and supplies, contracting services, etc.)</li> </ul>
<b>ESF #8 – Public Health and Medical Services</b>
<b>ESF Coordinator: Department of Health and Human Services</b>
<ul style="list-style-type: none"> <li>▪ Public health</li> <li>▪ Medical</li> <li>▪ Mental health services</li> <li>▪ Mass fatality management</li> </ul>
<b>ESF #9 – Search and Rescue</b>
<b>ESF Coordinator: DHS (FEMA)</b>
<ul style="list-style-type: none"> <li>▪ Life-saving assistance</li> <li>▪ Search and rescue operations</li> </ul>
<b>ESF #10 – Oil and Hazardous Materials Response</b>
<b>ESF Coordinator: Environmental Protection Agency</b>



<ul style="list-style-type: none"> <li>▪ Oil and hazardous materials (chemical, biological, radiological, etc.) response</li> <li>▪ Environmental short- and long-term cleanup</li> </ul>
<p><b>ESF #11 – Agriculture and Natural Resources</b>  <b>ESF Coordinator: Department of Agriculture</b></p>
<ul style="list-style-type: none"> <li>▪ Nutrition assistance</li> <li>▪ Animal and plant disease and pest response</li> <li>▪ Food safety and security</li> <li>▪ Natural and cultural resources and historic properties protection</li> <li>▪ Safety and well-being of household pets</li> </ul>
<p><b>ESF #12 – Energy</b>  <b>ESF Coordinator: Department of Energy</b></p>
<ul style="list-style-type: none"> <li>▪ Energy infrastructure assessment, repair, and restoration</li> <li>▪ Energy industry utilities coordination</li> <li>▪ Energy forecast</li> </ul>
<p><b>ESF #13 – Public Safety and Security</b>  <b>ESF Coordinator: Department of Justice</b></p>
<ul style="list-style-type: none"> <li>▪ Facility and resource security</li> <li>▪ Security planning and technical resource assistance</li> <li>▪ Public safety and security support</li> <li>▪ Support to access, traffic, and crowd control</li> </ul>
<p><b>ESF #14 – Long-Term Community Recovery</b>  <b>ESF Coordinator: DHS (FEMA)</b></p>
<ul style="list-style-type: none"> <li>▪ Social and economic community impact assessment</li> <li>▪ Long-term community recovery assistance to States, tribes, local governments, and the private sector</li> <li>▪ Analysis and review of mitigation program implementation</li> </ul>
<p><b>ESF #15 – External Affairs</b>  <b>ESF Coordinator: DHS</b></p>
<ul style="list-style-type: none"> <li>▪ Emergency public information and protective action guidance</li> <li>▪ Media and community relations</li> <li>▪ Congressional and international affairs</li> <li>▪ Tribal and insular affairs</li> </ul>
<p>Defense Coordinating Officer (DCO). The DCO can determine available DoD resources, coordinate tasking, and provide personnel for interpreters, security, and engineering expertise.</p>

## **5 STAFFING & RESOURCE REQUIREMENTS**

### **5.1 IA Prime PRT Members Basic Description of Duties and Qualifications**

#### **5.1.1 ESF #3 Action Officer (AO)**

The ESF #3 IA Action Officer (AO) must have full knowledge of the NRF, FEMA operations, operational dynamics of a JFO, and:

- Represents the ESF #3 authority to task MA parameters to the RFO; Team Leader/Assistant Team Leader (TL/ATL), and other AOs in the JFO
- Coordinates mission requirements with FEMA, State, local government; serves as IA liaison for ESF #3 TL/ATL, and other ESFs to scope mission requirements
- Works with FEMA to develop MA including fund requirements
- Coordinates with MM/MS and RFO EOC to determine staffing needs
- Supports JFO, RFO and other reporting requirements
- Resolves impediments to mission execution with MM and other agencies

#### **5.1.2 Mission Manager (MM)**

The Mission Manager (MM) position requires an aggressive "can do" manager that is familiar with the requirements of the inspection process. The MM must be trained as an integral part of the IA PRT, and is knowledgeable of contracting, coordination, and reporting requirements. Further qualifications and responsibilities include:

- Serves as the primary RFO Commander POC
- Responsible for execution of the inspection mission, working with the MS and MDM to ensure database supports mission requirements; coordinates personnel procurement, scheduling, tracking of personnel, and reporting
- Has a strong rapport with the AO and can communicate mission requirements to RFO staff, Human Resources, Engineering, Safety, PAO, and other support elements
- Manages personnel requirements for ATC 20/45 inspector training and provides required materials to support field operations
- Coordinates ad hoc mission assignment support
- Coordinates with State and local public works to determine training locations and operations centers

#### **5.1.3 Mission Specialist (MS)**

The Mission Specialist (MS) position requires the same type of individual as the Mission Manager and should be capable of performing as the MM and the basic duties of the MDM. Primary roles and responsibilities include:

- Reporting
- Coordinating data management

- Maintaining a list of pertinent mission information
- Serving as a back up to the MM
- Preparing Situation Reports (SITREPs)
- Serving as the RFO Commander’s secondary point of contact (POC) for all mission execution activities

#### **5.1.4 Mission Data Manager (MDM)**

The MDM is responsible for maintaining the mission data management system, which includes inspection data collected during the mission, including hard copy files, electronic files, and other relevant pieces of information. The MDM not only enters information into a database (e.g. MS Access) but also must be able to modify the system or create a new data management system to meet mission requirements. Further MDM roles and responsibilities include:

- Responsibility for maintaining the mission data management system
- Determining data management needs with the MM/MS
- Familiarity with the inspection process and an understanding of the data being maintained
- Maintaining data integrity and minimizing data loss
- Working with the MM/MS to provide up-to-date information regarding IA mission progress for upward reporting and other reporting requirements
- Aiding the MM in finalizing end-products, contributing to transition process and closing out the mission

#### **5.1.5 Training Officer (TO)**

The ATC-20/45 Training Officer (TO) must be a qualified ATC instructor with good leadership and management skills. A strong structural background is desirable with a minimum of five years experience in structural design and analysis. The following backgrounds also enhance a TO's qualifications: architectural, civil engineering and building inspection experience; facilities management experience; participation in earthquake and/or other emergency recovery operations (i.e., USACE US&R Structures Specialist); experience in post earthquake safety assessment of damaged buildings; and experience in vulnerability assessment of buildings. Further qualifications and responsibilities include:

- Working closely with the Mission Manager
- Providing “last minute” training to qualified individuals concerning inspections of impacted structures for safety of occupancy and restricted use after a major disaster
- Using ATC 20-1 and ATC 45 manuals (and related materials)
- Ensuring each inspector is trained in structural and safety hazards associated with this type of work
- Providing inspectors with required manuals
- Filling other roles on IA Team after training is complete (e.g. SITL of special inspections such as geotechnical, electrical, mechanical, etc)

### **5.1.6 Supervisory Inspection Team Leader (SITL)**

The Supervisory Inspection Team Leader (SITL) must be an effective manager with leadership and communications skills, capable of organizing a large team of inspectors, providing instructions, and assigning tasks to the ITLs and inspectors to accomplish the mission. The SITL should also have a background in structural engineering or construction experience. As with the TO, any of the following would also enhance a SITL's qualifications: architectural and building inspection experience; facilities management experience; participation in earthquake or other emergency recovery operations (i.e. USACE US&R Structures Specialist); experience in post earthquake safety assessment of damaged buildings; and experience in vulnerability assessment of buildings. Further, the SITL:

- Coordinates with Inspection Team Leaders (ITLs) and TO to ensure training provided is in accordance with State and local government requirements
- Coordinates daily inspection schedules with the State or local entity
- Coordinates with MM and ITL to assign inspections and ensures all inspections are completed in an efficient and safe manner
- Resolves any questions or problems that may arise from evaluations
- May serve as SITL for special inspection teams (TO can fill this role after training is complete)
- Selects ITLs either through specific taskers or by utilizing onsite qualified inspectors

## **5.2 Mission Support Team Members**

### **5.2.1 Safety and Occupational Health (SOH) Professional**

The Safety and Occupational Health Professional is provided from the functional Safety Cadre roster. The SOH Professional:

- Provides daily onsite safety and health assistance to IA-PRT members and situation report memorandums to each ITL with copies furnished to the SITL and the RFO Safety Manager
- Reports to the RFO SOH manager daily
- Is a resource to the SITL but works directly under the RFO SOH Manager
- Serves as a safety consultant/advisor to SITLs and ITLs
- Reviews Site Safety and Health Plan and ensures team members follow plan accordingly
- Monitors team operating environments for hazards and potential hazards

### **5.2.2 Inspection Team Leader (ITL)**

Similar to the SITL, the inspection team leader must also be an effective manager with leadership and communications skills, capable of organizing a large team of inspectors, providing instructions, and assigning tasks to the inspectors to accomplish the mission. The ITL should also have a background in architecture or construction experience. As with the TO and SITL, any of the following would also enhance an ITL's qualifications: architectural, civil engineering and building inspection experience; facilities management experience;

participation in earthquake or other emergency recovery operations (i.e. USACE US&R Structures Specialist); experience in post earthquake safety assessment of damaged buildings; and experience in vulnerability assessment of buildings.

### **5.2.3 Inspectors**

Inspectors work for the ITLs at the EFO. All inspectors reporting onsite will receive orientation and qualification training. There is no specific grade level requirement for inspectors. This position is 95% fieldwork. Inspectors are expected to deploy with supplies and gear listed in Appendix F. Specific inspector qualifications are listed in Appendix E. Generally inspectors:

- Are responsible for the structural safety inspections assigned to their team
- Provide daily reports of the completed inspections, postings of inspected structures, and the status of remaining inspections

### **5.2.4 Essential Infrastructure Assessments and other Technical Assistance**

Technical assistance for Essential Infrastructure Assessments and ad hoc missions should initially be requested from the impacted District. If the impacted District is unable to supply requested specialties the impacted Division will be contacted for assistance followed by a national canvassing by HQUSACE.

#### *5.2.4.1 Water/Wastewater Infrastructure Inspectors*

Water/Wastewater Infrastructure inspectors that support water sector missions must have experience commensurate with mission assignment requirements that range from initial rapid inspections to making recommendations on repair requirements (see Appendix O). FESTs, water/wastewater SMEs and sub-mission assignments to the EPA water sector will be leveraged to support mission requirements. Any of the following would enhance the qualifications for a water/wastewater inspector: licensed professional environmental or civil engineer; licensed water/wastewater treatment plant operator; local public works personnel; and professional with experience performing water quality testing. The number of inspectors will be driven by the local needs in conjunction with FEMA request for ESF #3 assistance. This work can also be contracted out to qualified personnel, and/or other federal agencies (e.g. Bureau of Reclamations). This position is 95% fieldwork. Inspectors are expected to deploy with supplies and gear identified in the SOP.

#### *5.2.4.2 Inspectors associated with other Technical Assistance assessments*

An important component of ESF #3 support to FEMA includes Technical Assistance which can encompass a wide array of engineering disciplines for which there is no PRT per se. To assist the ESF #3 TL/ATL cell with the management of data associated with these ad hoc inspections the IA PRT can provide a management cell. Inspectors that support these inspections are expected to have sufficient experience commensurate with the respective mission requirements. Examples include, but are not limited to, FEST members (electrical, mechanical, civil, and environmental engineers, and contracting officer), heavy structural engineers,

hazardous material specialists, geotechnical engineers, etc. This position is 95% fieldwork. Inspectors are expected to deploy with supplies and gear identified in the SOP.

## **5.2.5 Subject Matter Expert (SME)**

### *5.2.5.1 IA Program SME*

IA Program SMEs must have considerable experience in the inspection process; and a thorough knowledge of mission parameters, coordination and mission execution requirements, and the roles and responsibilities of each PRT member. The SME is often brought in at the beginning of the mission (including pre-declaration) and helps the AO and MM determine the magnitude and scope of the mission. The SME is inserted where needed to rectify complex issues, impart perspective to FEMA, RFO Command, and other stakeholders, and facilitate decisions with regulators and other agencies. The IA Program SME sometimes also serves as an AO as needed; duty location will vary amongst the key emergency support offices in order to provide support where needed.

### *5.2.5.2 Technical SME*

Technical SMEs have expert knowledge within specific engineering communities of practice (mechanical, electrical, heavy structural, hazardous material, water/wastewater infrastructure, etc). A water/wastewater infrastructure SME, for example, might be an environmental engineer or sanitary engineer with specific knowledge in water/wastewater infrastructure. Technical SMEs shall be capable of coordinating a team of trained inspectors to standardize the inspection process and interface with the mission manager and specialist to ensure completion of the mission.

## **5.3 Example Missions**

IA missions can vary considerably depending on the size and scope of the mission. Generally the IA PRT is not implemented during pre-declaration applications, but it is feasible that FEMA may want to pre-deploy an IA Program SME and/or partial management cell prior to landfall of a size-large hurricane. It is important to underscore that every disaster response will be different and PRT members need to be flexible to accommodate local requirements as needed. The following five examples provide representative mission parameters:

### **5.3.1 Management Cell**

Normally the management cell includes the AO, MM and MS, but this is scalable depending on the particular needs of the impacted public works or FEMA requirements. A management cell might be scaled up to include an MDM, or down to AO, MM and SME during a pre-declaration application. FEMA may also solely request an SME to be available to respond as needed. The AO will coordinate mission requirements with the MM (and SME if deployed) to formulate the FEMA Mission Assignment (MA). In the event resources are limited, an SME can serve as both SME and AO with HQUSACE concurrence.

### **5.3.2 Management Cell w/Training Officer**

This includes scalable management cell duties as described above as well as provides ATC-20 or ATC-45 inspection training.

### **5.3.3 ATC 20/45 Training Officer**

The Training Officer alone may be deployed to support local ATC 20/45 training needs.

### **5.3.4 Full PRT w/Mission Support Staff**

This MA covers broad range support of primarily rapid inspections but can also include management of special inspection data. In this application, once rapid inspection training is complete, the TO changes duties to become a SITL for special inspections. Special inspections include but are not limited to detailed structural inspections (e.g. critical infrastructure) as well as geotechnical, electrical, and mechanical engineering applications. This MA includes management of inspections by one or various resources, including Forward Engineering Support Teams (FESTs), local inspectors (who may be trained by TO), State inspectors, contract employees (either hired via USACE contract as part of the mission or hired by local public works), as well as USACE employees filling nationwide taskers and sub-tasking to other Federal agencies.

### **5.3.5 Management Cell for Ad Hoc Technical Assistance**

This application covers ad hoc inspections that would not otherwise have PRT style management. The most standard application involves management of USACE resources only, and is particularly useful when inspections are numerous. Without a management cell in non-PRT applications, RFO or impacted District staff is interrupted from their other duties to manage resources and provide upward reporting. Example: USACE receives a mission request where numerous detailed structural inspections of critical infrastructure such as hospitals, schools and other public buildings that might be needed for mass care and housing requiring 20 structural engineers (e.g. USACE US&R StS Cadre, Structural Engineering Community of Practice). In this case, a tailored IA management cell (MM, MS, MDM, and SITL) could deploy to provide mission management. It will be critical to closely coordinate support requirements with SPD, USACE US&R Program Manager, and HQUSACE.

(Note: There will be times when a supported Division would prefer to handle the management of an inspection mission with their own resources, e.g. Kona Earthquake 2006, heavy structural inspection mission. The trigger point of an IA management cell should be closely coordinated with the FEMA Operations/Infrastructure Branch Chief, supported District/Division, HQUSACE, and lead Division/SMEs).

### **5.3.6 ATC-20 or ATC-45 Inspectors Only**

This application is implemented in the event FEMA supports State and local government request for inspectors to augment their own inspectors. Typically this requirement would be met through nationwide taskers requesting individuals with appropriate qualifications.

Inspectors may either receive last-minute training from local ATC-20/45 instructors or by TO (in which case the TO would also deploy). This mission would be anticipated in California in the event local public works and/or State resources explicitly provide mission guidance, and the State request is intended to augment their pool of resources under the Cal OES SAP. In this application, USACEHQ and SPD may decide to provide a management cell to track USACE inspections.

### **5.3.7 Water/Wastewater Infrastructure**

Pre-Scripted Mission Assignments (PSMAs) and sub-tasking procedures specific to water/wastewater infrastructure are provided in Appendix M. This mission ranges from assisting FEMA with preliminary assessments to design/build applications.

### **5.4 PRT Operational Forms and Checklists**

Forms necessary to support the IA mission include but are not limited to standardized ATC-20/45 Rapid Evaluation Safety Assessment Forms, detailed inspection forms, sub-tasking documents and inspection placards. These forms will be made available by deploying management cell and are on the Level II Training CD, and ENGLink. Sample forms can be found in Appendix N. Inspection forms and placards are often locale specific, however, and will either be made available by local public works to which the team is assigned, or the forms will have to be created in the response arena to meet specific mission requirements. Teams should deploy with a representative database that will include Essential Elements of Information (EIs). Deployment checklists germane to each PRT position are available in Appendix G.

### **5.5 Equipment Checklist**

Basic equipment checklists are provided in the Appendix F.

## **6 PLANNING CONSIDERATIONS**

In conjunction with PRT training and readiness mandates, planning considerations are an important component of USACE response capabilities. The goal of this SOP is to provide a framework for readiness and execution standards, while allowing Divisions and corresponding Districts the latitude to prepare and maintain teams to meet mission requirements. Coordinated efforts in this regard foster preparedness and support the entire emergency management community.

### **6.1 PRT Lead Division**

Advance preparedness is critical to an IA PRT's ability to execute its assigned mission. As the lead division, the SPD RCO's primary pre-event responsibilities that are met in order to successfully execute the IA mission include:

- 1 Provide technical leadership and mentoring to the District PRTs



- 2 Ensure parent division commanders are updated annually concerning concepts of operation and PRT status, to include deficiencies
- 3 Participate with other appropriate elements in the development and update of measures to assess PRT performance
- 4 Develop and conduct PRT training, to include tabletop exercises
- 5 Review/screen PRT trainee list(s) for compliance with established qualification standards and team templates
- 6 Ensure that PRT have been adequately trained and equipped for deployment
- 7 Serve as proponent for the Mission Guide associated with the assigned mission
- 8 Ensure that PRT vendor databases are current and that proper coordination with the industry has taken place
- 9 Develop and maintain a current database of PRT Subject Matter Experts (SME) for respective missions
- 10 Review and provide comments regarding PSMA's
- 11 Coordinate with PRT to ensure proper scopes of work and contracting procedures are in place to support mission requirements
- 12 Provide status of PRT readiness to HQUSACE points of contact
- 13 Participate in inter-agency workshops (e.g. Remedial Action Plan workshop), development of infrastructure assessment/repair doctrine (e.g. Essential Infrastructure Assessment SOP), and other relevant initiatives
- 14 Develop readiness criteria and provide status of PRT readiness to HQUSACE points of contact
- 15 Maintain relationships with other federal engineering resources (e.g. EPA, Bureau of Reclamations) to streamline support of large scale event responses.
- 16 Coordinate water/wastewater infrastructure assessment sub-tasking procedures with EPA.

## **6.2 PRT District**

The assignment of a PRT gives a District full responsibility to be prepared to execute an assigned mission. Each PRT will have primary responsibility for initial responses to a disaster within its Division. Outside the areas of their home division, PRTs will respond on a rotational basis as determined by the HQUSACE Operations Center (UOC). District Emergency Manager's (EM) primary pre-significant event responsibilities include:

- 1 Selecting team personnel, with alternates, to include obtaining supervisor's and Commander's approval
- 2 Managing team deployment data
- 3 Providing team equipment and supplies
- 4 Assuring team members attend initial and refresher PRT training
- 5 Assuring team members and alternates are trained on the mission and function guides

- 6 Keeping team informed on pending response deployments and status of USACE response activities

### **6.3 All USACE Districts**

Impacted Districts will be asked to support water/wastewater infrastructure repair efforts with in-house contracting capabilities. Examples: design/build lift station repair, sewage treatment plant repair. Catastrophic event response applications may warrant full scale emergency contracting provisions to ensure robust coverage of infrastructure repairs.

## **7 PROCEDURES**

### **7.1 Preparedness**

To maximize mission support, PRT members receive training (minimum Level I and Level II) prior to deployment. In addition to training, resources such as the Mission Guide, SOPs, IA Fact Sheet, ATC-20/45 instructions are available on the Level II Training disc and on ENGLink. Preparedness is further supported through workshops and exercises. Between alert status and activation, the PRT should maintain situational awareness of the pending mission and develop a mindset for deployment by informing family members of deployment potential, managing workload, ensuring supplies are ready, assessing checklists, etc. Readiness criteria can be found in Appendix A.

### **7.2 Activation**

The IA PRT should be prepared to deploy within six hours of activation. The UOC will coordinate with FEMA and the Lead (supported) Division EM/Readiness office prior to activating any PRTs for deployment. The UOC will issue a tasker to the Lead Division with information copy to the supporting District PRT for alert, activation and deployment actions. All District PRTs for IA will be informed of activation and deployment status by their EM office. Arrival at the mission site will be dependent on commercial airline schedules or availability of military transportation; however, the six-hour deployment requirement is understood by all PRT members and is agreed upon as the standard prior to training. District EM is responsible for:

- 1 Keeping team informed of response deployment status to include alert, standby, and actual deployment
- 2 Coordinating with requesting Division on required team composition (as different types of missions might require varying team configurations and areas of expertise)
- 3 Coordinating deployment details to include, travel orders, deployment location, POCs, transportation requirements and lodging
- 4 Maintaining an e-mail list of IA team members (e.g. CESP-K-EOC-IAPRT) and a phone list of PRT members and direct supervisors to facilitate deployment

- 5 Coordinating with the District Resource Management (RM) office to ensure sufficient emergency funds are available to deploy the PRT utilizing provisions of Army Programs – Civil Works Emergency Management Programs ER 11-1-320 if necessary
- 6 Supervising initial application and required subsequent updates of medical screenings for all deployable personnel. When possible this process will be facilitated utilizing ENGLink

## **7.3 Execution**

### **7.3.1 Significant Event Initial Assessment**

Initial damage assessments conducted by local authorities of damaged structures will provide a baseline for immediate needs and facilitate an estimate of efforts necessary for the response. FEMA may, however, elect to provide SMEs and other knowledgeable staff to augment local scoping efforts. Initial assessment criteria include:

- Identifying the extent of damages to hospitals, shelters, other mass care facilities, critical public buildings and family residences
- The response capability of local public works departments
- Commercially available (local) sources of structural safety assessment inspectors
- Initial (i.e. NIMAT/IMAT support) may also include repair recommendations/repairs

### **7.3.2 Onsite Assessment**

Once deployed, the PRT management cell will conduct a more comprehensive assessment of the scope of damages in order to obtain a better estimate of resources required. This process will include significant input from local public works and information gathered by the AO (in the JFO), MM, SITL, as well as other stakeholders.

### 7.3.3 Operational Procedures

Figure 1 depicts the basic operational responsibilities of the five main functions followed by the responsibilities and relationships for each PRT position.

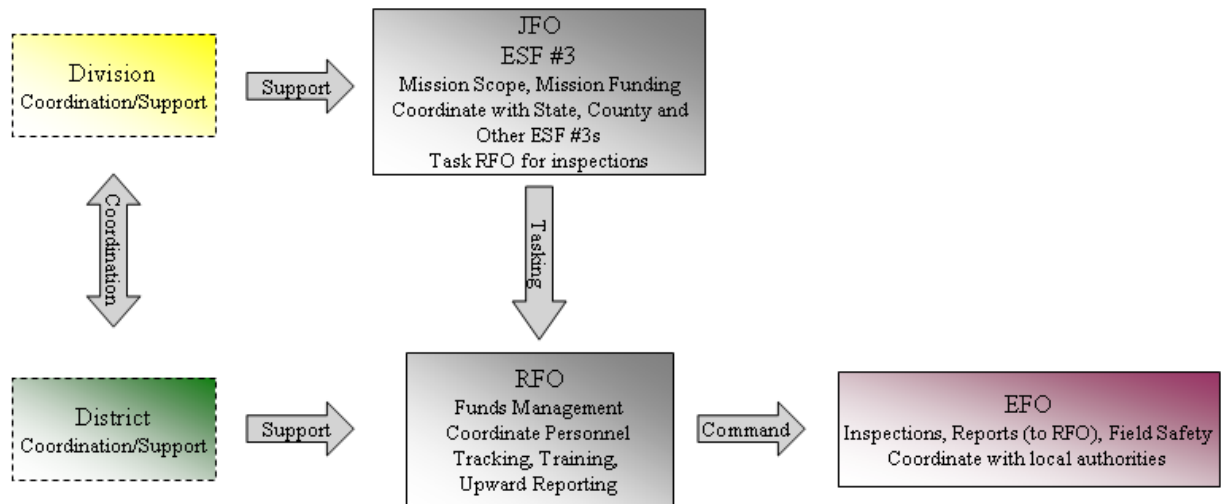


Figure 1: Responsibilities and Coordination between Emergency Response Functions

### 7.3.4 IA PRT Brief Summary of Execution

Initially the AO scopes the total mission and develops an MA with FEMA in the JFO. This process may include input from an SME and MM, particularly if the pre-declaration pre-scripted MA was implemented. The MM then takes direction from the AO on support requirements and procures the required personnel and materials to the field operation areas. The MS assists the MM and tracks personnel and completed inspections and is responsible for providing information for the daily situation report. If an MDM is deployed, the MS works closely with the MDM to provide EEIs and other relevant data for daily situation reports. The MM, MS and MDM also need to be prepared to provide other information as necessary to support data requests and allay concerns respect to mission progress and local-specific issues. The ATC-20/45 Training Officer trains the inspectors for a structural assessment mission. For a mission with a non-structural component, qualified/trained inspectors will be requested for the mission and work under the guidance of the SME. The SITL collects data from ITLs and helps ensure inspections are completed and conducted in a safe manner. ITLs manage 10 two-person teams of inspectors. This six-way relationship gives each team member a specific duty within the mission. All six elements must work together effectively to accomplish the mission; flexibility to accommodate changes in mission requirements is essential. More detailed descriptions of individual team member roles and responsibilities are provided below. Operational Checklists for each IA PRT member are listed in Appendix G.

The Mission Essential Task List for the IA mission is: (1) Alert team / individual and deploy appropriate personnel; (2) Provide just-in-time training to inspectors (ATC-20 or ATC-45 applications) in conjunction with mission requirements; (3) Support cradle-to-grave mission support including ATC inspection applications; management of ad-hoc technical assistance missions; and water/wastewater and other infrastructure system assessments/repairs; (4) Prepare for transition of replacements or prepare for demobilization or mission termination. Return to Home Duty Station.

### **7.3.5 Water/Wastewater Infrastructure Execution Parameters**

Historically these missions have been executed by the EPA who has the authority to maintain safe drinking water therefore support of these missions will be conducted in close coordination with EPA. Water/wastewater assessments may be sub-tasked to EPA (see Appendix M); response capabilities will vary region to region, particularly in the context of design/build requirements.

#### *7.3.5.1 Water and Wastewater Infrastructure Assessment – Pre-Declaration (Federal Operations Support)*

Pre-position experts in water and wastewater systems to provide event-specific planning and preparation for the rapid evaluation of water and wastewater facilities, treatment units, conveyance systems, and piping. This support also includes the liaison/planning with State officials.

#### *7.3.5.2 FEMA Public Assistance for Drinking Water and Wastewater Infrastructure (Federal Operations Support)*

This mission involves assisting FEMA with the initial eligibility determination process. Water resource professionals will assist with water-sector PA assessments of public drinking water, wastewater, and storm water infrastructure. Tasks may include Preliminary Damage Assessments, reporting, and interviewing/consulting with public works entities.

#### *7.3.5.3 Drinking Water Safety/ Water & Wastewater Infrastructure Assessment Technical Assistance to State – Post-Declaration (Technical Assistance)*

This mission provides technical assistance to State, Tribal and/or local jurisdictions for drinking water and wastewater infrastructure/safety assessments. Deploy water resource professionals to provide event specific planning and preparation for drinking water and wastewater infrastructure/safety missions. Activities may include sampling and analysis, initial damage assessments, inventorying of public water supplies and publicly owned treatment works.

#### *7.3.5.4 Drinking Water Safety/Water & Wastewater Infrastructure Assessment and Repair – Post-Declaration (Direct Federal Assistance)*

This mission provides assistance to municipalities for the assessment, evaluation, and design/build response and recovery actions of drinking water and wastewater systems. Personnel are deployed to coordinate and execute all necessary assessments, evaluations, and

may involve design/build response and recovery actions. This mission will ensure the safety of drinking water and wastewater systems in the affected area in coordination with the appropriate State agencies, as directed by FEMA. Design/build repair work will require leveraging existing Indefinite Delivery/Indefinite Quantity A/E Services through the RFO/impacted District. Some EPA regions will have the contract capacity to cover repair missions through their Emergency Response and Rapid Cleanup Services contract.

## **7.4 Roles and Responsibilities**

### **7.4.1 Action Officer (AO)**

The AO works in the ESF #3 element in the JFO and reports to the ESF #3 Team Leader and FEMA staff.

#### *7.4.1.1 Responsibilities*

The AO will fully coordinate the mission requirements with the local government, State, FEMA, and the other ESFs to determine the total scope of the mission. This coordination is vital in determining the target-affected population with ESF #6, quantities of FEMA, State and locally supplied inspectors through ESF #5, Emergency Management, and personnel requirements for completing the inspections. Once the mission scope is determined, the AO will coordinate with FEMA in writing the mission assignment and obtaining funding authority for the mission. The AO, representing the ESF #3 cell, and then tasks the RFO to provide the required number of qualified personnel for training at the assigned training site location. It is the responsibility of the AO to fully coordinate all actions with the RFO Mission Manager, RFO EOC and FEMA. The AO is responsible for supporting JFO and RFO reporting requirements. The AO writes an AO report daily for the ESF #3 TL. It is the responsibility of the AO in coordination with the ESF #3 Team Leader to provide FEMA a closeout letter upon physical completion of the mission. For a sample closeout letter for an Infrastructure Assessment Mission see Appendix H.

#### *7.4.1.2 Relationships*

The AO represents the ESF #3 authority to task the RFO. The IA AO is the USACE liaison with FEMA and all JFO agencies for the IA mission and serves as the single point of contact at the JFO for all activities pertaining to the assigned mission. In addition, the AO will serve as the primary liaison between the JFO and RFO on all activities relating to mission execution. This includes tasking the RFO for required actions; assuring quality personnel are deployed in a timely manner and trained professionally to meet the requirements of the mission assignments, and assuring that the mission is being properly executed. The AO works with the MM on specialized issues to ensure appropriate actions are accomplished. They must work very closely as a team to execute effectively. The AO is responsible for coordinating with any other agencies to expedite solutions to any problems that interfere with the IA mission. The AO is responsible for resolving any State and Federal issues that slow or hinder mission execution.

### **7.4.2 Mission Manager (MM)**

The MM works in the RFO for the RFO Commander.

#### *7.4.2.1 Responsibilities*

The MM is responsible for the execution of the inspection mission, development of databases and cost estimates, coordinating the personnel procurement process, coordinating the required materials procurement process, scheduling, tracking of personnel, and reporting. The MMs primary role is to manage mission personnel requirements, provide the required materials and equipment and insure timely arrival at the field operations areas. A suggested list is provided in Appendix F. The MM must coordinate with State and local governments to determine the appropriate locations where training will be conducted and inspection teams can receive their inspection assignments. It is the responsibility of the MM to insure that the inspectors in the field have all required materials and equipment. The MM is also responsible for coordinating with other PRTs that may be affected by the progress of the inspections.

#### *7.4.2.2 Relationships*

The MM must be familiar with the inspection process and have the ability to communicate mission requirements to Human Resources, Engineering, Emergency Management, Public Affairs, Safety, and other District elements. The MM obtains the required personnel and materials for field operations to ensure proper mission execution. The MM serves as the RFO Commander's primary POC for all mission execution activities.

### **7.4.3 Mission Specialist (MS)**

The Mission Specialist (MS) works in the RFO and assists the MM.

#### *7.4.3.1 Responsibilities*

The MS's responsibility is to assist the MM. The MS's primary role is reporting, maintaining a database/listing of pertinent information related to the IA mission, and serving as back up for the MM. The MS is responsible for writing the input for the daily Situation Report (SITREP) related to all IA execution activities. The MS works closely with the Mission Data Manager (MDM) and must be able to manage the mission data in the event that the MDM is not deployed.

#### *7.4.3.2 Relationships*

Mission Specialist relationships mirror those of the Mission Manager. The MS works closely with both the MM and MDM, and serves as the RFO Commander's secondary POC for all mission execution activities.

### **7.4.4 Mission Data Manager (MDM)**

The MDM works primarily in the RFO with the MS and MM.

#### *7.4.4.1 Responsibilities*

The MDM will take direction on data management needs for the mission. The MDM will normally manage an existing data management system, but should be prepared to modify the system, augment existing databases, or create a new system as needed to support specific

mission requirements. The MDM should also have a basic knowledge of the inspection process to be able to ensure mission data quality. Additionally, the MDM must also maintain data integrity and prevent data loss. Periodic Quality Assurance (QA) checks should be performed on the database to rectify data transcription errors, record loss during input or upload, and errors associated with filling out hard copy forms (e.g. transposing GPS coordinates). The MDM will also develop the data management system to provide Essential Elements of Information (EEI) output for situation reports, and produce other products such as maps that will indicate houses inspected, number of red-tagged buildings by municipality, etc.

#### *7.4.4.2 Relationships*

The MDM works closely with the MM and MS to provide information that bears on situation reports. MDMs may also interface with respective data management personnel at the local level to ensure data requirements are being met. GIS personnel may also receive input from the MDM in order to help produce map products. The MDM will further assist with transitions and mission close-out activities.

### **7.4.5 ATC-20/45 Training Officer (TO)**

The ATC-20/45 TO supports rapid inspection training requirements and works in the RFO for the Mission Manager.

#### *7.4.5.1 Responsibilities*

The TO's responsibility is to train individuals to inspect buildings for safety of occupancy or for restricted use after a major disaster in accordance with the procedures and guidelines for the building safety evaluation process known as ATC-20 Procedures for Post Earthquake Safety Evaluation of Buildings, ATC-20-1 Field Manual: Post Earthquake Safety Evaluation of Buildings ATC-26-3A Field Manual: Post Flood and Wind Storm Safety Evaluation of Postal Buildings, and ATC-45 Field Manual: Safety Evaluation of Buildings after Wind Storms and Floods.

The TO's primary role is to insure that each individual is trained in all aspects of structural safety assessment and the safety hazards associated with this type of work. The TO should ensure that each trained two-person field inspection team receives a copy of ATC-20-1, ATC-26-3a, or ATC-45 for field use during the actual field evaluations. Once all training has been performed, the TO will augment the inspection effort by becoming a member of the Specialty Inspection Team at the discretion of the MM.

#### *7.4.5.2 Relationships*

The TO receives tasking from the MM at the RFO. It is the TO's responsibility to coordinate all training requirements and location and set up the training facility with the MM. The TO supports the MM by providing status reports concerning the schedule and number of individuals trained.



#### **7.4.6 IA Program Subject Matter Expert (SME)**

The IA Program SME provides overarching leadership and advice during all phases of the emergency management cycle (i.e. preparedness, planning, response, recovery, long-term recover).

##### *7.4.6.1 Responsibilities*

The IA Program SME must have comprehensive knowledge of all aspects of mission support requirements to foster successful operations during all phases of the emergency management cycle. Responsibilities include but are not limited to developing programmatic doctrine (e.g. SOP, Mission Guide, Fact Sheets), training (e.g. Level II IA Training CD, biennial workshops), and assisting the PRT during disaster response either through reach-back support or augmenting the team in the field. IA Program SMEs can help to develop initial mission scope with the AO/ESF #3 TL to ensure response commensurate with the magnitude of the disaster and assistance requested. The IA Program SME must be flexible to meet dynamic mission requirements and can be inserted into any juncture of response and recovery efforts to ensure mission progress. Often the IA Program SME will deploy to meet initial response phase requirements and then redeploys once the mission reaches steady-state operation.

##### *7.4.6.2 Relationships*

IA Program SMEs work directly with the IA Action Officer/Program Manager and can interface all PRT elements, ESF #3 TL/ATL, FEMA Infrastructure Branch Chief, and other agencies participating in the response (e.g. EPA, HHS, DOE, Bureau of Reclamation). During the response phase, IA Program SMEs are positioned at the JFO to interface with the ESF #3 cell but can change locations to foster mission success.

#### **7.4.7 Technical Subject Matter Expert (SME)**

The Technical SME works at the RFO for the Mission Manager.

##### *7.4.7.1 Responsibilities*

For non-structural safety assessment missions, an SME may be deployed in lieu of the ATC-20/45 TO to provide guidance, instruction and serve as a resource for identification of the safety hazards related to the type of work. The SME should ensure that each qualified two-person field inspection team receives a copy of the appropriate/relevant assessment guidance/requirements for use during actual field evaluations. Once the inspection teams are deployed, the SME will remain in the RFO assisting the MM with mission execution and quality assurance.

##### *7.4.7.2 Relationships*

The SME receives a tasking from the MM at the RFO and is responsible for coordinating with the MM to ensure that the inspectors are qualified and inspections are being performed in a manner that meets the mission's needs. Once the inspectors are deployed to the field, the SME can act as a Team Leader for these inspectors.

#### **7.4.8 Supervisory Inspection Team Leader (SITL)**

The SITL works at the Emergency Field Office (EFO) under the direction of the MM.

##### *7.4.8.1 Responsibilities*

The SITL's responsibility is to coordinate daily inspection schedules with the State or local entity, coordinate with the Inspector Team Leaders (ITL) to accomplish the inspections and provide status reports. The SITL assists with procurement of ITLs and may fill ITL positions using qualified inspectors. The SITL will continually coordinate with the ITLs to insure that all inspections are completed in an efficient, timely, and safe manner. The SITL may be called upon to resolve any questions or problems that may arise from the evaluations. The SITL will also coordinate with the State or local governments during the evaluation process. The SITL must work closely with the ITL and TO to ensure that the training provided is in accordance with State and local government requirements. (For example, some localities may use bilingual placards or other special procedures.)

##### *7.4.8.2 Relationships*

The SITL receives tasking from the MM. It is the SITL's responsibility to coordinate inspection requirements with the MM and ITLs. The SITL provides the MM a consolidated report on status of ongoing and completed inspections. Also serves as the SITL for the specialty inspection teams, unless the mission has expanded beyond the basic organization of 50 two-person teams.

#### **7.4.9 Inspection Team Leader (ITL)**

The ITL works at the EFO under the direction of the SITL.

##### *7.4.9.1 Responsibilities*

The ITL's responsibility is to receive assignments for required inspections from the SITL, coordinate with inspectors to accomplish the inspections and provide status reports. The ITL must ensure that all inspections are completed in an efficient, timely and safe manner. The ITL may be called upon to resolve any questions or problems that may arise from the inspector's evaluations. The ITL maintains communication with jurisdictional staff during the evaluation process.

##### *7.4.9.2 Relationships*

The ITL receives tasking from the SITL at the EFO. It is the ITL's responsibility to coordinate with the SITL all inspector and inspection requirements. The ITL supports the SITL by providing status reports concerning the schedule and number of inspections completed.

#### **7.4.10 Safety and Occupational Health (SOH) Professional**

The SOH Professional works at the RFO and Emergency Field Office (EFO) under the direction of the RFO Lead Safety Manager and/or RFO Commander and is a member of the Safety Cadre.

#### *7.4.10.1 Responsibilities*

The SOH Professional provides daily onsite assistance to the IA PRT and prepares an SOH Situation Report memorandum to each inspection team leader with copies furnished to the SITL and RFO SOH manager. The SOH Professional shall ensure EM 385-1-1 compliance.

#### *7.4.10.2 Relationships*

The SOH Professional can work independently to assess and rectify safety deficiencies, and can receive requests for assistance by the SITLs, ITLs, ATC-20/45 TO, RFO Safety Manager, or directly by RFO Command.

#### **7.4.11 ATC 20/45 Inspectors**

Post earthquake/flood/residential inspectors work in the field directly for ITLs. In some cases inspectors will work directly for local public works personnel assigned to specific locations.

#### *7.4.11.1 Responsibilities*

Depending on the scope of the mission, inspectors could be Corps employees or contractors. The Mission Manager will request inspector support through the EOC at the RFO. The inspectors are under the direction of the Inspection Team Leaders at the EFO. The inspectors provide daily reports of the completed inspections, their postings of the inspected structures, and the status of remaining inspections. The qualifications of inspectors needed for a structural type mission are listed in Appendix E.

#### *7.4.11.2 Relationships*

Inspectors work directly for ITLs in the EFO and deploy directly to the impacted community, which warrants additional sensitivity and situational awareness.

#### **7.4.12 Water/Wastewater Infrastructure Inspectors**

Personnel supporting the water/wastewater infrastructure missions will work directly with FEMA, EPA, local public works, RFO staff, and other agencies (e.g. Health and Human Services-ESF #8) pending mission assignment. Wastewater treatment plant personnel may be used as inspectors.

#### *7.4.12.1 Responsibilities*

Depending on the scope of the mission assignment, inspectors must have either sufficient background to augment FEMA initial inspection capabilities (e.g. water/wastewater treatment and design, lift station repair, distribution systems, familiarity with water/wastewater standards, etc.), or additional background in order to make more elaborate assessments/recommendations on repairs. Responsibilities can further include working with the supported District Contracting Officer to coordinate design/build efforts using regional IDIQ capabilities. Tasks can include, but are not limited to the following:

- sampling and analysis

- assessing initial damage of public water and wastewater systems
- inventorying of public water supplies and publicly owned treatment works (POTWs) within areas affected by the incident
- surveying preliminary facility (e.g. operational status, emergency power status/need, and physical damage)
- providing laboratory support for water sample collection
- coordinating of essential commodities (fuel, treatment chemicals, and manpower needs)
- analyzing and interpreting data
- providing oversight of drinking water and wastewater system restoration and related activities

#### *7.4.12.2 Relationships*

The EPA has jurisdiction over efforts to ensure safe drinking water during disaster response and recovery efforts; water infrastructure missions will require robust coordination with the EPA. USACE water infrastructure missions will also require coordination with FEMA, local public works, state environmental agencies, as well as RFO/impacted District staff.

Inspectors associated with other Technical Assistance assessments. These inspectors will work closely with the SME in the field. Responsibilities and Relationship for these inspectors mirror those of the ATC 20/45 inspectors.

### **7.5 Operational Considerations**

#### **7.5.1 Recovery Field Office**

The MM is the point of contact for all IA mission related activities at the RFO. All IA mission related taskings from the ESF #3 cell must first be coordinated by the AO with the MM and RFO EOC. All requirements (initial and changes/updates) must be routed through the appropriate channels (State, FEMA or ESF) to the IA Action Officer for the ESF #3 Team Leader to obtain approval, funding and prioritization. The following RFO staff elements are responsible for execution of specific tasks as identified below:

##### *7.5.1.1 Contracting*

Contracting actions may be required to procure services, supplies, and equipment for the IA Team. Water/wastewater design/build missions will require significant regional contract capabilities.

##### *7.5.1.2 Real Estate and Office of Counsel*

Coordination with Real Estate and Office of Counsel normally associated with obtaining rights of entry is not required for IA missions. Access to private property is afforded to inspectors under the auspices of public safety functions.

### 7.5.1.3 Logistics

Logistical support at the RFO is provided by the LM PRT. They may be tasked to provide travel, hotel, vehicle, car rental, and provide contract lodging if necessary. It is their responsibility to inform the USACE Operations Center (UOC) so home districts may be so advised.

### 7.5.1.4 Human Resources

- Requesting Inspectors. MM requests the inspection work force through the HR PRT.
- Timekeeping. Timekeeping records for each member will be maintained by the individual and provided to the timekeeping cell at the JFO or RFO. The PRT shall follow all guidance issued by the RFO on timekeeping, including overtime requests.

### 7.5.1.5 Resource Management

The RM PRT will coordinate and issue a Military Interdepartmental Purchase Request (MIPR) (identified as a Customer Order in CEFMS), and any necessary amendments to the team member's home District (supporting command) to cover reimbursement of labor, travel, per diem and other expenses incidental to their deployment and assignment.

### 7.5.1.6 Public Affairs

Public Affairs should be proactive in supporting the Infrastructure Assessment operations and will coordinate collection of media and pertinent information from the Mission Managers. All contacts with the media will be through FEMA and/or the Joint Information Center (JIC). Activities will include preparing notices of inspection locations and schedules. Personnel interviews should reflect the Corps' support to locals and FEMA. PAO should also provide situational awareness training particularly to field inspectors prior to interfacing with the public.

### 7.5.1.7 Safety and Occupational Health

The SOH Professional functions at the RFO and will provide the required support to the IA PRT.

## 7.5.2 Emergency Field Office

The SITL is the point of contact for all IA mission inspections. Below are listed some of the basic purposes for coordination with the various elements:

### 7.5.2.1 Local Officials

The SITL, in conjunction with the appropriate local officials, will receive and execute the inspection requests.

### 7.5.2.2 Inspectors

The SITL is responsible for coordinating the workload at the EFO with the ITLs and Inspectors. The SITL normally manages and distributes mission assignments of the Specialty Inspection Teams

### **7.5.3 Cold Weather Applications**

It is anticipated that safety briefings during cold weather missions will include additional emphasis on mitigating hazards associated with potential exposure to extreme cold working environments. For situational awareness and planning purposes, it is important to note that receiving large numbers of inspectors into impacted areas particularly during cold weather events may significantly burden local resources. PRT members may deploy initially to a military installation or Receiving, Staging, and Onward Integration (RSOI) outside of the impacted area to obtain cold weather PPE/equipment and receive briefing specific to the impacted area (e.g. team members deploying to Alaska during the winter would typically stop in Ft Lewis Washington to obtain cold weather gear).

## **8 REPORTING AND ESSENTIAL ELEMENTS OF INFORMATION (EIS)**

While the MM is ultimately responsible for providing situation reports (SITREPs) and other upward reporting germane to the mission, the MS provides the information to the MM. The majority of this information comes from EEI output from the MDM. IA EEIs include:

### **8.1 Primary EEIs**

- Mission Authorization Amount
- Mission Obligations
- Mission Personnel
  - USACE
  - Support Agencies
  - Contract Employees
- Inspections Requested to Date (Cumulative TOTAL)
- Inspections Completed in the last 24 hours
- Inspections Completed to Date (Cumulative TOTAL)

### **8.2 By County, Parish or Municipality**

- Inspections Requested
- Inspections Completed in the last 24 hours
- Re-Inspections Completed in the last 24 hours
- Special Inspections Completed in the last 24 hours. (Special inspections include detailed structural inspections, geotechnical, water/wastewater infrastructure, electrical, mechanical, etc.)
- Total Inspections Completed to Date
- Special Considerations (e.g. safety issues)
- Estimated End-Date

### **8.3 Other Information Maintained in Data Management System for Structural Assessments (by County, Parish, etc)**

- Green-Tagged Buildings
- Yellow-Tagged Buildings
- Red-Tagged Buildings
- Water/Wastewater Infrastructure Inspections, Repairs, etc.
- Detailed Structural Inspections

## **9 MISSION SAFETY**

The SOH Office in the impacted District will be temporarily staffed with additional safety, industrial hygiene, and medical personnel as necessary to ensure a comprehensive safety and occupational health program, per EM 385-1-1. The SOH cadre supports safety and occupational health requirements in the RFO. If a RFO is not established, the impacted District shall establish an emergency operations safety office (minimum staffing to include a safety manager and administrative support person) dedicated totally to emergency operations. The MM will complete a mission specific Activity Hazard Analysis (AHA) and will review the Position Hazard Analysis (PHA) prior to beginning field inspections. A sample Safety Checklist, PHA, and AHA are listed in Appendix I; these must be adapted commensurate with actual site conditions.

## **10 TRANSITION AND CLOSE-OUT PLAN**

The MM will develop a PRT transition and mission closeout plan to foster a smooth hand-off to subsequent PRTs, as applicable, as well as identify actions required to phase down personnel and inspection/repair efforts until physical completion of the mission. This plan should be presented in a timeline format, indicating mission milestones and the proposed drawdown and re-deployment of all mission related personnel. The plan will also estimate times for compiling and submitting all mission documentation and files to the impacted District EOC for archive purposes. The plan will identify completion deadlines for all after action requirements of the RFO. A sample format for the Infrastructure Assessment Transition and Closeout Plan is in the SOP.

## **11 AFTER ACTION**

An important part of any mission is the self-assessment and review of the team performance during the event. Development of written lessons learned and analysis is the responsibility of every team member. The goal of this effort is to provide a corporate memory of successes and failures, which can be eventually integrated into training of future mission teams. The Corps of Engineers Remedial Action Program (CERAP) team may solicit unbiased observations and recommendations during and after the event. Team members are encouraged to provide lessons learned/After Action Review (AAR) comments while deployed but may also submit

comments germane to the mission after redeployment. Comments can be provided to Mission Manager, Action Officer, or other appropriate team leaders; or submitted directly to the CERAP AAR database located in ENLink under the event tab.



## APPENDIX A IA PRT Readiness Criteria

Each participating district shall maintain sufficient capability to support the mission from start to closeout. Districts shall staff and maintain at a minimum 2 full teams (primary and alternate). Districts are further encouraged to maintain additional depth within their respective AOR.

### (1) District Infrastructure Assessment PRT Composition:

Primary	Secondary	Alternates
ESF # 3 Action Officer (AO)	ESF # 3 Action Officer (AO)	Additional depth in positions encouraged commensurate with District's ability to support
Mission Manager (MM)	Mission Manager (MM)	
Mission Specialist (MS)	Mission Specialist (MS)	
Mission Data Manager (MDM)	Mission Data Manager (MDM)	
ATC-20/45 Training Officer (TO)	ATC-20/45 Training Officer (TO)	
Supervisory Inspection Team Leader (SITL)	Supervisory Inspection Team Leader (SITL)	

**(2) District Infrastructure Assessment PRT Readiness Criteria.** The Green/Amber/Red standard shall apply to the overall district PRT readiness rather than to individual tiers or teams within the PRT.

**GREEN:** The District is able to deploy a fully staffed team within 6 hours notice. Team readiness is a function of individual readiness, i.e. a team is green as long as one individual filling each of the mission positions is green. An individual is assessed as green if they are fully trained in Level I and II Training, has medical clearances (including immunizations), and available to deploy. Primary team members are able to be deployed for up to 45 days. The District must be prepared to support ongoing operations through mission completion using additional team members and/or repeat rotations. Staffing beyond a secondary team is not mandatory but Districts are encouraged to maintain as much depth within each position as volunteer pool allows.

**AMBER:** A team is amber if they are available but one or more team positions have an amber status. Individual team members are generally amber if they are available, have medical clearances, have started the training, but have not received immunizations. A Deployment PDT is in the process of finalizing individual readiness criteria.

**RED:** District PRT does not meet AMBER deployment criteria.

## APPENDIX B ATC-20 and ATC-45 Inspection Process

The Structural Safety Assessment mission is based on the Applied Technology Council (ATC) Report ATC-20 “Procedures for Post-earthquake Safety Evaluation of Buildings;” the ATC 20-2 “Addendum to the ATC-20 post-earthquake building safety evaluation procedures;” the related ATC-26-2 report “Procedures for Post-disaster Safety Evaluation of Postal Service Facilities” (which provides guidance covering flood and windstorm damages); and ATC-45, “Field Manual: Safety Evaluation of Buildings after Windstorms or Floods.” (For convenience, these procedures are normally identified by the generic term “ATC-20/ATC-45”)

The ATC-20/45 process is a three-stage triage process, involving Rapid Evaluations, Detailed Evaluations, and Engineering Evaluations. The USACE SSA mission normally starts as a Rapid Evaluation operation, but it may be expanded to include Detailed Evaluation. ***Inspections will primarily involve one- and two-story buildings.***

The **Rapid Evaluation** is the first stage. This level of evaluation identifies the obviously unsafe and the apparently safe buildings. This frees structural engineers to concentrate on situations where their higher level of expertise is required. Building inspectors, civil and structural engineers, architects, and others in basic structural design can perform this level of evaluation. Doubtful structures are designated for a more detailed visual examination, designated as a Detailed Evaluation.

The **Detailed Evaluation** is the second stage. This consists of a thorough visual examination of a structure, inside and out, and is designed to result in the rating of all structures as either safe for use, potentially dangerous (i.e., limited entry), or unsafe. Structural engineers normally perform this level, but geotechnical specialists are also needed for evaluation of geotechnical hazards. A few situations may require evaluation by electrical or mechanical engineers, or HAZMAT specialists. (Note: the Detailed Evaluation is used as the initial inspection for essential facilities, such as hospitals, operations centers, fire stations, and public shelters.)

The **Engineering Evaluation** is the third stage. It provides for a detailed engineering evaluation of damaged buildings, involving revised design calculations based on the post-damage conditions. This is a design process rather than an inspection service. USACE could provide such evaluations to military installations in the impacted area. Any request from FEMA for an Engineering Evaluation would have to be established as a separate technical assistance mission, for structural design services. It is not part of the PRT mission.

After each evaluation, buildings are posted with placards as INSPECTED, LIMITED ENTRY (or RESTRICTED USE), or UNSAFE. This is done to let owners, occupants and the public know whether inspected buildings are safe for use. A special posting category, AREA UNSAFE, is used to designate unsafe areas inside or outside a building (e.g., the area within potential striking distance of a badly cracked parapet must be posted and roped off or otherwise barricaded to prevent entry). ATC-20/45 provides standard placards some of which have been modified by some communities (i.e., bilingual posting).

The goal of the process is to provide determinations for as many buildings as possible, as quickly as possible, while making the most efficient use of persons with critical technical skills.

The Infrastructure Assessment mission includes providing limited technical advice to owners/occupants of buildings designated for Limited Entry/Restricted Use or designated as Unsafe. This includes a non-technical explanation of the hazard(s) that required that rating. For Limited Entry buildings, the advice should also identify ways to reduce the hazards involved in entering the building (i.e., to retrieve property and/or make necessary repairs).

The ATC-20/45 process provides for re-inspection of buildings, especially after significant aftershocks. Other reasons for re-inspections include: repairs; newly found damages; appeals of previous decisions; or other changes in the situation (i.e., an adjacent, unstable building has been removed).

The USACE Infrastructure Assessment PRT is a pre-trained management element. Actual inspections will be performed by personnel mobilized from throughout USACE (and from ESF #3 support agencies) or hired by the local jurisdiction. These inspectors receive “just-in-time” ATC-20/45 training when they are mobilized at the disaster site.

The full IA PRT organization has five teams. Normally four are composed of rapid evaluation inspectors, supervised by an Inspection Team Leader. The fifth is a specialty team that provides support for non-routine situations; it is under the control of the Supervisory Inspection Team Leader or the ATC-20/45 Training Officer.

For Rapid Evaluation missions, the specialty team includes electrical engineers, mechanical engineers, HAZMAT specialists, persons meeting the qualifications for detailed evaluation inspectors, and the most experienced/trained rapid evaluation inspectors.

For missions involving both Rapid and Detailed Evaluations, this team contains detailed evaluation inspectors, electrical engineers, mechanical engineers, and HAZMAT specialists. (Depending on the workload, detailed evaluation inspectors may also be assigned to the other four teams.)

Inspectors work in teams of two (or more) persons. (Single-person inspections would result in unacceptable safety and liability risks.)

When possible, a Detailed Evaluation inspection team should consist of at least two persons qualified to perform such inspections. However, sufficient personnel will not be available for such teams following a large disaster. In such cases, the second person on the inspection team should be a person from the Rapid Evaluation inspector list.

Similarly, for a large-scale event (exceeding 50 two-person field inspection teams) some of the Rapid Evaluation teams may consist of one fully qualified inspector and one person who have

less extensive technical background (i.e., a quality assurance representative who has worked only on dams and levees).

Personnel from the specialty team will perform Rapid Evaluations when they are not needed for the more technically challenging situations.

## APPENDIX C IA Mission Assignment; Sample Mission Assignment Form

Tracking Information (FEMA Use Only)

State: CA. Disaster #: CA-1250-DR	Request/Log #: 01 ROC Date/Time Rec'd: 2/11/10
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### I. Assistance Requested

Internal Reference #	Assistance Requested	Qty	Date/Time Needed	Deliver to: Name/Address/Phone
	Structural Assessment of Damaged Buildings	TBD	2/13/10	Los Angeles County
	See attached			

Requester/Phone #: FEMA P A Officer 213-452-1000  
State Approving Official (if applicable): State OES

### II. Description

Assigned Agency: USACE CESP	New MA	Amendment to MA#
Mission Statement: Request you provide sufficient qualified inspectors, trained in ATC-20 standards to assist LA. County in conducting rapid evaluations of buildings damaged by the earthquake. These inspectors will be used to evaluate damage to determine if buildings are safe for occupancy. Duration of mission is 37 days. Personnel are to report to staging area at Oak Grove Park. Please ensure that all personnel provide their own transportation and necessary equipment.		
Cost Share	Yes	No
		See attached
Total Cost Estimate: \$3,500,000	Project Completion Date: 3/12/10	
Agency POC and Phone #: Kelley Aasen		

### III. Coordination (FEMA Use Only)

Type of Assistance	State Cost Share	Fund Citation
Direct Fed'l Assistance	0, 10, 25%	1997 06 _____ 9 __ 4 25 __ D
Technical Assistance	0%	
Fed'l Operations Support	0%	Cost Share (%/\$)
Mission Assignment Coordinator (preparer) _____		
FEMA Project Officer/Branch Chief (program approval) _____		
Funds Control (funds review) _____		

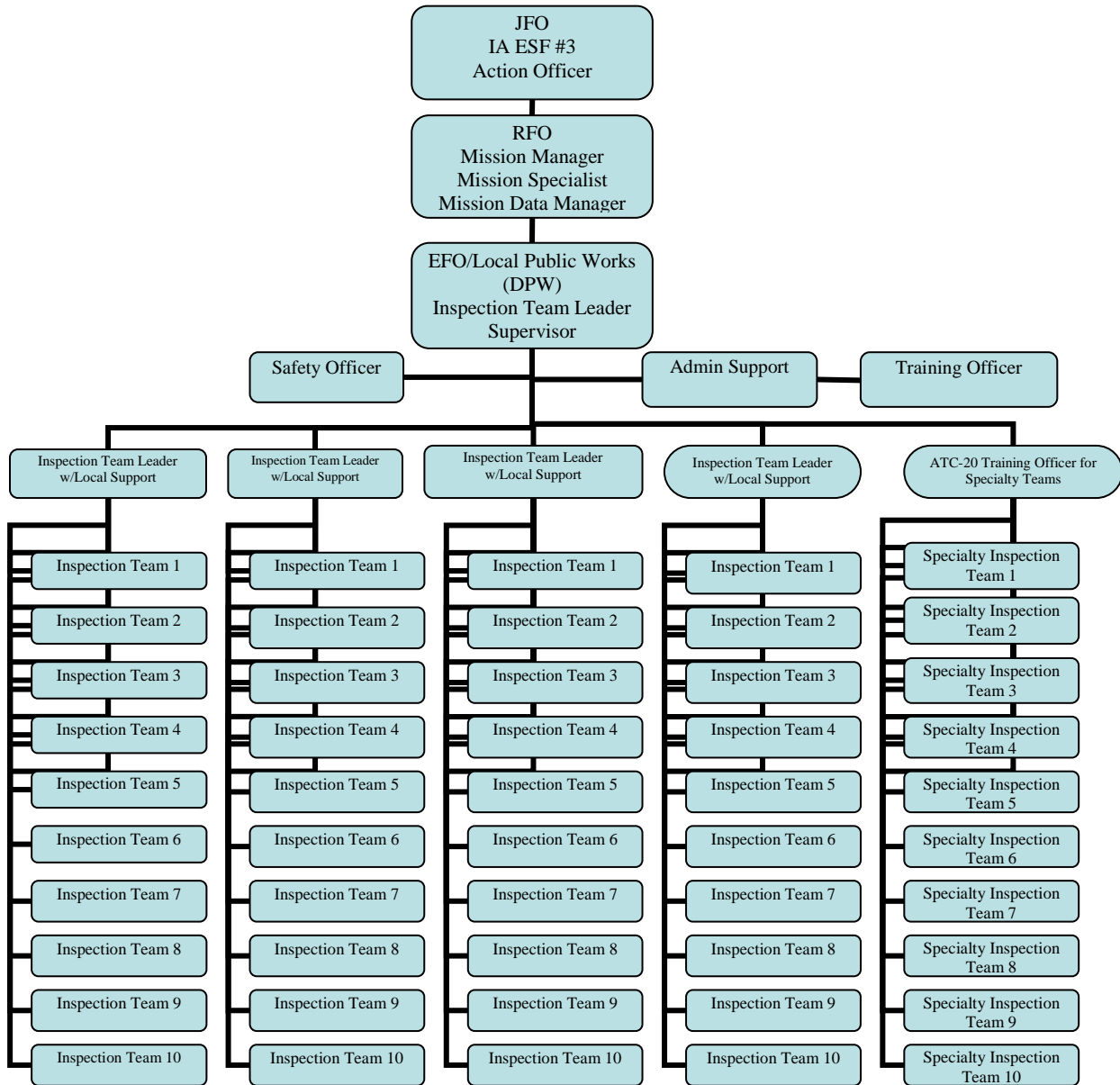
### IV. Approval

State Approving Official Joe Smithers _____
Federal Approving Official John Swanson _____

### V. Obligation (FEMA Use Only)

Mission Assignment No.: COE-SPD-01	Amt This Action: \$3,500,000	Date Obligated: 2/11/10
Amendment Number:	Cumulative Amt: \$	Initials: RAM

# APPENDIX D Standard Organizational Deployment Structure



## APPENDIX E Qualifications for Inspectors

### a. General.

Inspectors must be prepared to work long hours under adverse conditions. Disaster conditions may require irregular hours for dining and sleeping; refrigeration may not be available for those relying on perishable medicines. Driving will be required for access to work areas, and reaching the actual damage sites may involve difficult access. Employees with diabetes, circulatory or respiratory problems, back conditions, hypertension, or other known serious illnesses must be medically cleared for the anticipated hardships to which the employees may be exposed.

### b. Rapid Evaluation Inspectors.

This requires a basic knowledge of building technology. Qualified personnel include:

- (1) Engineering technicians/construction representatives with several years of experience involving building construction
- (2) Civil Engineers
- (3) Architects
- (4) Other engineers, including mechanical and electrical, with some background in building structural design and/or construction (i.e., a class in basic structural design)

### c. Detailed Evaluation Inspectors.

This requires advanced technical training and experience. Qualified personnel include:

- (1) Structural Engineers (the largest component)
- (2) Geo-technical Specialists (to evaluate geo-technical hazards)

### d. Electrical Inspectors.

Inspectors must be capable of identifying electrical hazards and unsafe situations in the field. Construction quality assurance or building code inspection experience is desirable. They should also have some knowledge of building structural design and/or construction.

### e. Mechanical Inspectors.

Inspectors must be capable of identifying unsafe mechanical situations in the field. Construction quality assurance or building code inspection experience is desirable. They should also have some knowledge of building structural design and/or construction.).

### f. HAZMAT Specialists.

Inspectors must be able to identify hazardous materials situations in the field, and be able to assess the risks involved.

### g. Water/Wastewater Infrastructure Inspectors.

Reference Water/Wastewater Infrastructure Pre-Scripted Mission Assignments (PSMAs)\*, inspectors must have sufficient background in water/wastewater treatment and design, lift station repair, distribution systems, etc, as necessary to support specific mission requirement

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\* Sub-assigning Water/Wastewater Infrastructure PSMAs to the EPA is anticipated; reference PSMAs 39-41, FEMA also reserves the option to directly assign Water/Wastewater Infrastructure Missions to EPA.

## APPENDIX F Supplies and Equipment

Checklist for each IA PRT member at time of deployment, unless noted for specific position.

1. ANSI-approved steel toe/shank safety boots (may have to obtain special boots for cold weather or wet weather)
2. Appropriate Cold/Warm weather gear/clothing for the mission
3. Hard Hats
4. Red hats, shirts and jackets (TO, ITL)
5. White Shirts (AO, MM, MS, TO)
6. Projector (TO; unless supplied by other source)
7. ATC-20-T and ATC-45 Instructors Manual with Slides (TO)
8. ATC-20, ATC-20-2, and ATC-45
9. ATC-20-1/ATC-45 as appropriate to mission (TO 50 copies)
10. Office Supplies (initial TEAM deployment only)
  - a. Paper, steno pads, pens, pencils, highlighters, 3-ring binders w/dividers, Post-its, stapler, staples, stapler remover, paper clips, binder clips, scissors, file folders
11. Magnetic or window decal Emergency Operations signs
12. Laptop Computer, with hardware and software to complete the mission.
13. Portable Printer w/ extra print cartridges and appropriate paper (acquired through RFO)
14. Cell Phone w/ charger (Consider emergency alkaline battery pack, if available) Team should use FEMA or RFO issued phones if available
15. Writable CDs
16. Digital Camera with spare battery and 2-1GB cards
17. Hand held GPS
18. Two-way radios and spare batteries
19. Laser Pointers (specialty team & ITL)
20. USB removable storage device (Jump/Flash/Thumb Drive) - 1GB minimum
21. Portable scanner -1 (SITL or MDM)
22. DC Power inverter for vehicle (for powering laptop in vehicle)
23. External mass storage device-minimum 40 GB (MDM only)
24. Government Travel Card
25. 30- to 45-day supply of any required prescription drugs/medicines, plus a copy of the prescription
26. Spare eyeglasses (if prescription), or contact lenses
27. Appropriate clothing for the climate
28. Medical screening and proof of shots paperwork
29. Government issued ID (CAC)
30. Flashlight
31. Batteries for flashlight and electronics
32. Tape Measure (specialty team & ITL)
33. Calculators
34. Plumb Bobs (specialty team & ITL)
35. Magnetic Compass (specialty team & ITL)



36. Sun Screen (where required)
37. Insect Repellent (where required)

Required Items for ATC-20/45 Inspectors:

1. Personal Identification, including driver's license
2. Official Identification
3. Backpack or document bag
4. Clipboard
5. Safety Glasses
6. Hard Hat
7. ANSI-approved steel toe/shank safety boots (may have to obtain special boots for cold weather or wet weather)
8. Red hat, shirts and jackets or vests
9. Rain Gear
10. Dust Masks
11. Paper/notebook/pens/pencils
12. Flashlight/Rechargeable batteries for electronics and recharger
13. Binoculars (small & inexpensive)
14. Gloves
15. Knee Pads
16. Government travel credit cards
17. 30- to 45-day supply of any required prescription drugs/medicines, plus a copy of the prescription
18. Spare eyeglasses (if prescription) or contact lenses
19. Appropriate clothing for the climate

Supplied by the PRT after deployment:

1. ATC-20-1 and/or ATC-45, one per field team, furnished at time of training
2. Cell phone w/extra battery, one per field team
3. Placards if appropriate
4. Staple gun/thumbtacks for placards (purchased at time of event through RFO LM)
5. Plastic page protectors for placards (purchased at time of event through RFO LM)
6. Emergency telephone contact list for local area
7. Collapsible ladders (2) for specialty team
8. Sun Screen (where required)
9. Insect Repellent (where required)

Supplied by the requesting officials:

1. Local official identification/field passes
2. Inspection Forms
3. Posting placards and markers
4. Barricade tape
5. Chalk or spray paint
6. Local maps (alternative: mapping software)

## APPENDIX G IA PRT Operational Checklists

### ESF-3 ACTION OFFICER CHECKLIST

#### 1. ORIENTATION

- Complete in processing at the RFO and/or the JFO, as required.
- Report to the ESF-3 Team Leader; receive in-briefing and in-processing at the JFO.
- Obtain the approved work schedule and expected duty hours and relay to home district.
- Identify all meetings requiring attendance at both the JFO and the RFO.
- Identify and meet all key Points of Contact at the JFO. (FCO, Ops Off, Infrastructure Branch Chief, ESF-5, DOT, etc.)
- Identify all ESF #3 and FEMA reporting requirements for the SSA mission.
- Identify and meet with all key RFO personnel (Commander, Deputy Cdr, EOC Chief, Safety, Logistics, Human Resources, Resource Management and other PRT team members).

#### 2. COORDINATION WITH MISSION MANAGER (MM) at the RFO:

- Determine initial scope of the IA mission including:
  - Total geographic area (overall size, access considerations, density of impacted area, continuous or discontinuous; total number of local jurisdictions assigned)
  - Number and types of buildings, along with a rough proportion of rapid versus detailed
  - Expected production rates (include ramp-up and draw-down) and completion dates
  - Desired end state (When is mission complete?)
- Determine magnitude of inspection personnel requirements, and evaluate potential sources
- Monitor status of inspection resources (acquisition and training).
- Provide the MM all of the primary Points of Contact for assigned jurisdictions. Determine critical areas and/or facilities for priority of effort based on FEMA and State guidance.

- Receive requests for additional resources from the MM and coordinate with FEMA.
- Continually reassess the overall scope of work to include changes in overall assigned geographical areas or the addition of detailed evaluations. Process as an amendment to the original mission. Note: Changes in work for FEMA can be accepted from verbal requests; document these by memo and get in writing as soon as possible.
- Review production numbers and completion status and discuss progress/discrepancies with the MM.
- Coordinate replacement of PRT personnel with home District if needed.

### 3. JOINT FIELD OFFICE (JFO) COORDINATION

- Identify and attend all required staff and mission coordination meetings at the JFO. Maintain daily contact with FEMA Infrastructure Branch Chief or Operations Chief and other key ESF personnel.  
Acquire awareness of information resources developed through other missions that could assist completion of IA mission.
- Determine all Federal and/or State agencies that require mission status information, and if appropriate, provide only the current or previous SITREP information as required.
- Accept requests for engineering evaluation as a new mission technical assistance. Verbal requests for these can be accepted from FEMA only by the ESF #3 Team Leader with follow up documentation required, but not from other agencies.
- Accept requests from SBA and/or other agencies: These are separate missions, requiring written requests and advance funding. **DO NOT ACCEPT VERBAL TASKINGS!**  
**Coordinate needs for additional mission funding with the FEMA Operations Chief.**
- Work with Federal and State agencies to resolve issues that slow or hinder mission execution.
- Coordinate with the Defense Coordinating Officer (DCO) to process RFO requests for DOD resource support (may include personnel, equipment, materials, facilities, etc.).  
Submit all IA mission related taskers to the RFO EOC after approval by the ESF #3 Team Leader. Ensure these have been discussed with the IA Mission Manager first.

#### 4. MISSION CLOSE-OUT ACTIONS

- Receive concurrence from FEMA that desired mission end state has been reached, and completion date.
- Coordinate with the MM to develop a transition and closeout plan for PRT (for either completion of mission or transfer to another IA PRT). This will include milestones and schedules for the drawdown and re-deployment of all inspection team and PRT personnel (See Appendix K for sample of transition and closeout plan).
- If being replaced by another PRT, ensure the incoming Action Officer is properly briefed.
- Prepare a mission closeout letter and provide to the ESF #3 Team Leader for signature and submission to FEMA. See Appendix I for a sample closeout letter.
- Complete After Action Review, provide After Action comments, Lessons Learned and mission files to the ESF #3 Team Leader.
- Identify and comply with all out-processing requirements.
- Upon return to home district, coordinate with the Resource Manager to insure that all PRT expenses are properly processed and that final billing is submitted promptly.

## MISSION MANAGER OPERATIONAL CHECKLIST

### 1. ORIENTATION

- Complete in processing at the RFO and/or the EFO, as required.
- Obtain the approved work schedule and expected duty hours and relay to home district.
- Identify all meetings requiring attendance at both the RFO and the EFO.
- Identify and meet all key Points of Contact.
- Identify all reporting requirements.
- Identify and meet with all key RFO personnel (Commander, Deputy Cdr, EOC Chief, Safety, Logistics, Human Resources, Resource Management and other PRT team members).

### 2. COORDINATION WITH ACTION OFFICER:

- Receive the MA from the AO.
- Determine initial scope including:
  - Total geographic area (overall size, access considerations, density of impacted area, continuous or discontinuous; total number of local jurisdictions assigned)
  - Number and types of buildings, along with a rough proportion of rapid versus detailed
  - Expected production rates (include ramp-up and draw-down) and completion dates.
  - Desired end state (When is mission complete?)
- Determine magnitude of inspection personnel requirements, and evaluate potential sources
- Monitor and support the Training Officer in the training of inspectors.
- Obtain from AO, all of the primary Points of Contact for assigned jurisdictions. Determine critical areas and/or facilities for priority of effort based on FEMA and State guidance.
- Provide requests for additional resources to the AO for coordination with FEMA.
- Continually reassess the overall scope of work to include changes in overall assigned geographical areas or the addition of detailed evaluations.
- Review production numbers and completion status and discuss progress/discrepancies with the AO.

- Inform AO of need to coordinate replacement PRT with home District if the mission will last longer than 29 days.

### 3. OPERATIONS:

- Coordinate with local officials to obtain sites for training sites dispatch/reporting of inspectors.
- Coordinates with EFO/RFO for acquisition of required supplies and equipment.
- Contribute and participate in RFO Commander's briefings.
- Coordinate for services of SOH professional.
- Determine necessary level of quality control, and assign C/QAQ roles within the PRT.

### 4. MISSION CLOSE-OUT ACTIONS

- Advise AO when desired mission end state will be reached, and completion date.
- Coordinate with the AO and plan transition and closeout plan for PRT (for either completion of mission or transfer to another IA PRT). This will include milestones and schedules for the drawdown and re-deployment of all inspection team and PRT personnel (See Appendix K for sample of transition and closeout plan).
- If being replaced by another PRT, ensure the incoming Mission Manager is properly briefed.
- Complete After Action Review, provide After Action comments, Lessons Learned and mission files to the AO.
- Identify and comply with all out-processing requirements.
- Upon return to home district, coordinate with the Resource Manager to insure that all PRT expenses are properly processed and that final billing is submitted promptly.

## SUPERVISORY INSPECTION TEAM LEADER OPERATIONAL CHECKLIST

### 1. ORIENTATION

- Complete in processing at the RFO and/or the JFO, as required
- Obtain the approved work schedule and expected duty hours and relay to home district.
- Coordinate mission assignment with MM.
- Number of inspections estimated
- Location requirements (geographical, political)
- Recommend number of inspectors
- Identify priorities in general and specific locations
- Conduct a general tour of effected area to identify special requirements
- Meet with sample representatives of local community
- Estimate percentage of residential, commercial and public facilities
- List any critical structures with priorities
- Assess availability of local inspections or personnel to assist mission.

### 2. SET UP EFO

- Building, phones, furniture, computer, office space and parking
- Request administrative support (Microsoft Access capability)
- Establish personnel (tracking procedures and work load management strategy)
- Complete fill-in-the-blank onsite accident prevention plan in Appendix J and provide a copy to each Inspection Team Leader for them to brief to their inspection team members
- Brief incoming inspection team leaders.
- In-Process Inspection Force
- Assist ITL in briefing ATC-20 inspectors.
- Set up system for managing work assignments
- Distribute work assignments
- Identify special problems or hazards
- Set general priorities



3. SET UP SPECIAL INSPECTION TEAM.

- Identify special expertise needs
- Inventory team members for special expertise
- Request any special expertise from RFO

## INSPECTION TEAM LEADERS OPERATIONAL CHECKLIST

- Complete in processing at the RFO.
- Attend orientation briefing to include:
  - General mission assignment - by MM
  - Overview of training process - by TO
  - Organization structure/ chain of command
  - Location of EFO
- Attend ITL Briefing by SITL
- Attend ATC-20/45 training with inspectors.
- Establish "Inspection Teams" assigned to each ITL.
- Conduct "Inspection Team" briefing.
- Assign work (issue inspection)
- Brief position hazard analysis (PHA) in Appendix I
- Brief safety considerations in Appendix I
- Brief onsite accident prevention plan provided by the SITL
- Each morning brief the safety and occupational health (SOH) situation report memorandum provided by the on-site SOH professional
- Track inspection team progress and report to SITL.
- Assist SITL with reporting requirements

## TRAINING OFFICER OPERATIONAL CHECKLIST

- Deploy with IA PRT Management Team.
- Complete in processing at the RFO.
- Attend briefing conducted by either IA-PRT Action Officer or ESF #3 Team Leader.
- Mission Assignment
- Mission Priorities
- Coordinate/determine with "SITL" on common type of damage inspectors will see.
- Based on tour of damaged area
- Contacting local officials
- Coordinate training requirements with MM at RFO.
- Classroom facility
- Projector/screen
- Handouts (including ATC-20 manuals)
- Clarify with Mission Manager, roles and responsibilities of Training Officer.
- Perform training.
- After training is completed or break in training.
- Coordinate with MM and SITL, the shift from Training Officer role to member of the specialty team, working out of the EFFO, under the SITL
- Coordinate Training Officer transition.
- Input closeout plan information to MM.

## APPENDIX H Sample Close Out Letter

RFO

DATE \_\_\_\_\_

MEMORANDUM FOR \_\_\_\_\_ District EOC

SUBJECT: Closeout of Infrastructure Assessment Mission Assignment No. \_\_\_\_\_

1. On this date, the subject USACE Infrastructure Assessment mission has been completed and the following actions been taken to provide official closeout:

- a. All property issued by the RFO has been turned over to that District's Logistics Management Office (LMO). A list is provided at Encl. 1.
- b. All FEMA property has been returned. A list is provided at Encl. 2.
- c. Daily log sheets are provided at Encl. 3.
- d. Lessons learned and after action comments have been collected and are provided at Encl. 4.
- e. Final time and attendance sheets have been forwarded under separate cover.
- f. Final input pertaining to this mission has been provided via facsimile transmission for Situation Report.
- g. All files (electronic and hard copy) transferred to ESF #3 TL and/or RFO, as applicable.

2. All remaining Infrastructure Assessment personnel have been deactivated and have begun redeployment back to their permanent duty stations.

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Infrastructure Assessment ESF-3 Action Officer

4 ENCL (as)

## APPENDIX I Safety Checklist

### 1. Building collapse

- Perform initial evaluations from a distance, using binoculars, rather than by close-up visual inspection.
- Perform inspections from the outside in—make a complete external check before entering a building.
- Pause at the doorway before entering any room.
- Always look up and down before moving forward.
- Work in teams of at least two inspectors, and stay far enough apart that one person will be able to summon help.
- Carry at least one cellular telephone or handheld radio per team.
- Carry adequate flashlights for indoor work.
- Perform inspections during daylight hours; dawn and evening periods can be used for issuing assignments and completing paperwork.

### 2. Injuries from debris

- Wear approved safety boots at all times (boots must be appropriate to the climate).
- Wear a hard hat.
- Wear appropriate clothing (long sleeves, work gloves, etc.).
- Wear safety glasses.
- Use work gloves when handling any debris.
- Carry adequate flashlights for indoor work.
- Perform inspections during daylight hours; dawn and evening periods can be used for issuing assignments and completing paperwork.

### 3. Utilities

- Be alert for downed power lines and for exposed wires, broken light bulbs, etc. within buildings.
- Be alert for gas leaks.

### 4. Hazardous Materials

- Be alert for damaged fireproofing or broken insulation on pipes and boilers in older buildings; these may indicate friable asbestos.

- Be alert to any spills of solids or liquids, unless they have been positively identified as safe materials.
  - Always approach potential spill sites from upwind.
  - Be alert for unique odors.
  - Be alert for physical reactions, such as nausea, dizziness, eye/skin irritation, or the presence of dead animals in the area.
  - The SITL (or the ITL) should coordinate with the local fire department in advance of inspections, to locate known hazardous materials storage sites.
  - Check the HAZMAT placard on a commercial building.
  - DO NOT SMOKE in any enclosed inspection area.
5. Heat/sun injuries
- Have an adequate supply of safe drinking water.
  - Use sunscreen; reapply it per the instructions for the specific product.
6. Cold injuries
- Wear adequate cold weather clothing, including insulated safety boots.
  - Use layered clothing and adjust the layers to meet the immediate conditions (so you do not become overheated in warm areas).
  - Do not let your clothing become wet, as it loses its insulating value.
  - If moisture (including melted snow) may be a problem, use suitable insulating materials, including wool and most synthetic insulators. (Cotton and down are particularly affected by moisture).
  - Be alert to hypothermia—this can occur well above freezing, particularly when wind and water are involved.
  - Use the buddy system—check each other for the initial signs of cold injury.
7. Driving
- Insure that employees have adequate time for sleep. If long commutes are required, then either provide bus transportation or reduce the workday.
  - Advise employees of special driving hazards, such as broken pavements, etc.
  - For icy driving conditions, set up field teams so that the person driving is one who has experience in winter driving.
8. Diseases
- Have all employees receive appropriate vaccinations, including tetanus, before starting work.

- Provide safe drinking water; if necessary, provide appropriate water purification equipment. (Note: to protect against viruses, a device must be registered with EPA as a “purifier,” not as a “filter.”)
- Use insect repellent; reapply it per the product’s instructions.
- Use latex (or similar) gloves when administering first aid.
- Use a mouth barrier mask for performing CPR.
- Be careful about spoiled foods, etc.

9. Inspection safety

- Work in teams of at least two persons.
- Obtain support from local and State officials for conducting inspections in areas of questionable personal safety.
- Coordinate with owners and residents before conducting inspections. (Normally the inspections will be at their requests, but sometimes owners and occupants do not coordinate with each other.)
- Use Public Affairs personnel to inform the community about the inspection program.
- Work with building occupants to identify ways to safely remove property from yellow-tagged buildings.
- Lock vehicles, both while traveling and at inspection sites.
- Be careful of animals. Even normally friendly pets are potentially harmful under the stress of a disaster situation.

**POSITION HAZARD ANALYSIS (PHA) FOR USACE EMPLOYEES**

EM 385-1-1(Proponent: CEPOA-SO)

1. Name (Last, First, MI) (Print or Type) for Multiple names, use attached signature page		2. Prepared by (Last, First, MI) (Print or Type)	
3. Job Series		4. Job Title	
6. Office Symbol		7. Command	
9. Reviewed by (SOHO) (Last, First, MI) (Print or Type)		10. Reviewed by (SOHO) (Signature)	
5. Date (DD/MM/YYYY)			
8. Primary Duty Location			

**11. Clearance/Certification Required (Check all that Apply)**

<input type="checkbox"/> Driver's License	<input type="checkbox"/> Diver	<input type="checkbox"/> Boat Operator	<input type="checkbox"/> HTRW	<input type="checkbox"/> Confined Space Entry	<input type="checkbox"/> Other <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
<input type="checkbox"/> Crane Operator	<input type="checkbox"/> Respirator	<input type="checkbox"/> First Aid/CPR	<input type="checkbox"/> CDL	<input type="checkbox"/> EM Ops PRT	

**Overall Risk Assessment Code (RAC); Use highest "Residual RAC" from #12 below:**

**Risk Assessment Code (RAC) Matrix**

<p><a href="#">Step 1: Review the "Hazards" for each "Task" in #12 below before and after identifying safety "Controls" and determine a RAC from the Matrix on the right. (Refer to DA PAM 385-30 Oct 2007 if needed)</a></p> <p><b>"Probability"</b> is an approximation of the likelihood of a hazard scenario occurring and is identified as: Frequent, Likely, Occasional, Seldom or Unlikely.</p> <p><b>"Severity"</b> is an approximation of the amount of potential harm, damage, or injury associated with a given hazard scenario or mishap and is identified as: Catastrophic, Critical, Marginal, or Negligible (These and other definitions are available in the DA PAM 385-30 link in Step 1 above)</p> <p>Step 2. Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on the PHA. Annotate the overall highest "Residual RAC" at the top of the AHA.</p>	<b>Severity</b>	<b>Probability</b>				<b>RAC Chart Legend</b>
		Frequent	Likely	Occasional	Seldom	
	Catastrophic	E	E	H	H	<b>E = Extremely High Risk</b>
	Critical	E	H	H	M	<b>H = High Risk</b>
	Marginal	H	M	M	L	<b>M = Moderate Risk</b>
	Negligible	M	L	L	L	<b>L = Low Risk</b>

**12. Position Information**

Position Tasks	Safety and /or Occupational Health Hazards	Initial RAC	Controls	Residual RAC
Perform Structural Inspections	Unsafe Structures: Building debris, downed electrical lines, uneven walking surfaces, floor openings, protruding nails, sharp metals, etc.	E	Wear proper personal protective equipment(PPE), to include hard hat, steel-toed safety boots, (eye protection, hearing protection, leather work gloves as necessary). Proper clothing, long pants, shirts/jackets. Radio or cellular phone for emergencies. Up-to-date tetanus shot. Use buddy system, Do not enter unstable structures.	M
		E	DO NOT perform inspections during severe weather or if earthquake aftershock is imminent. Be fully observant and conscious of your surroundings at all times. Look ahead, overhead, and down before taking the next step. Watch out for low hanging debris, wires, protruding nails, etc. and downed electrical lines.	M
		E	Assume electrical lines/equipment is energized. Stay away from power lines or electrical wires that are lying in water. Realize that electrical drops may have been weakened by storm or earthquake and may collapse.	M
	Household chemicals, flammables/compressed gas cylinders, asbestos	H	Avoid contact with household chemicals, compressed gas cylinders, and fuel containers, (NO SMOKING). Report suspect materials to zone commander. Presume all thermal insulation on pipes/boilers, flooring tile, roofing and building shingles contain asbestos and avoid disturbing.	L
	Lighting	M	Ensure adequate lighting is available (daylight operations, high intensity flashlight, battery operated flood-lights as needed, etc.).	L
	Confined Spaces	H	DO NOT ENTER. If entry is required, all confined space entry procedures shall be complied with.	L
	Elevators	H	Do not use until inspected and certified safe. Use stairway instead, if undamaged.	L

**Note: Example of potential hazards are as follows:**

**Safety:** Trenching, electrical, slips, fall hazards, etc...  
**Physical:** Heat/cold, noise, stress, vibration, radiation, etc...  
**Chemical:** Solvents, paints, welding, fumes, pesticides, etc...  
**Biological:** Blood borne pathogens, poison ivy, insect, fungi, etc...



## POSITION HAZARD ANALYSIS (PHA) FOR USACE EMPLOYEES

EM 385-1-1(Proponent: CEPOA-SO)

### 12. Position Information (cont.)

Position Tasks	Safety and /or Occupational Health Hazards	Initial RAC	Controls	Residual RAC	
	Hazards associated with driving: such as: Debris in roadway, damaged roads and bridges, mud and rock slides, slippery roadway, rough terrain, floods, ice/snow, inoperative traffic and street lights, missing regulatory and directional signs, downed power and communications lines, pedestrians and animals in the roadway, isolated work area, stores, and service stations closed, alcohol and driving, fatigue from long driving hours.	H	WEAR SEAT BELTS, drive defensively and obey all traffic laws, controls (flagmen, signs) and law enforcement personnel.	L	
		H	Maintain a safe speed keeping in mind that roadway ahead may have many surprises in store and evasive action may have to be taken suddenly. Maintain safe following distances between your vehicle and the vehicle in front of you. Avoid using cellular phones while driving. Vehicle maintenance is a must. Perform daily vehicle inspections.	L	
			Always keep gas tank at least half full as many gas stations may be closed. DON'T DRINK AND DRIVE Get plenty of rest to avoid driving while being fatigued. Carry spare and tire inflation kit with you in case of flat or low tire pressure. Keep ample supply of food and water in your vehicle since stores may be closed. Avoid questionable neighborhoods. Avoid driving at night, especially since traffic and streetlights may be out. Avoid driving across streams since water level may rise suddenly and unexpectedly due to rain.		
	Driving Off-road	H	WEAR SEAT BELTS Use extreme caution. Keep speeds down. Maintain control of vehicle. Use 4 wheel drive in rough terrain. Use extreme caution when traveling on trails. Carry cellular phone (see above driving hazards/controls)	L	
	Isolated Work Area: Fatigue ("burnout") dietary changes due to non-availability.	H	Keep supply of water and food (MREs) on hand. Rest when off duty, eat balanced diet when available, limit alcohol consumption, obtain food from reliable sources, handle food properly, and drink bottled water.	L	
	Chronic medical conditions	H	Bring adequate supply of medications with you, realizing that pharmacies may be closed.	L	
	Hostile population/ people,	H	Avoid conflict and leave area. Do not argue with population.	L	
	Crime	H	Stay alert. Carry small amount of cash. Avoid questionable neighborhoods. Have cellular phone on hand. Travel with others as much as possible.	L	
	Emergencies	H	Know location and phone numbers of nearest hospital or doctor, and police. Use 911 in emergencies (check that emergency numbers are valid/operable, carry first aid kit in vehicle.	L	
	Exposure to elements: heat, sun, humidity, cold, wet.	H	Wear proper clothing for conditions. Be aware of heat/cold related symptoms, avoid overexposure to sun, use sunscreen level appropriate for conditions and skin type,	L	
	Heat Stress	H	DRINK PLENTY OF FLUIDS (8 oz every 15-20 minutes), remain in shade as much as possible. Provide immediate first aid/medical attention for heat stroke condition.	L	
	Cold Stress	H	Get into heated shelter as necessary to maintain body temperature. Replace wet clothing immediately. Drink warm fluids often.	L	
	Sanitation		Avoid standing water, follow proper personal hygiene, drink bottled water, and handle food properly.	L	

**Note: Example of potential hazards are as follows:**

- Safety: Trenching, electrical, slips, fall hazards, etc...**
- Physical: Heat/cold, noise, stress, vibration, radiation, etc...**
- Chemical: Solvents, paints, welding, fumes, pesticides, etc...**
- Biological: Blood borne pathogens, poison ivy, insect, fungi, etc...**

## POSITION HAZARD ANALYSIS (PHA) FOR USACE EMPLOYEES

EM 385-1-1(Proponent: CEPOA-SO)

**12. Position Information (cont.)**

Position Tasks	Safety and /or Occupational Health Hazards	Initial RAC	Controls	Residual RAC
	Insects	H	Wear appropriate clothing (follow specific precautions for ticks). Avoid infested areas, check clothing after possible contact. Be aware of allergic reactions. Use repellent when necessary. Dengue fever, malaria is transmitted by mosquitoes (be familiar with symptoms /treatments). Treat bites immediately, notify supervisor and obtain medical care as necessary.	L
	Animals	H	Avoid animal habitats/infested areas (rodent burrows/nests). Do not corner an animal (domestic or wild), avoid contact (household pets included). If confronted, back away slowly while facing threat. Clean wound and obtain immediate medical care if bitten.	L
	Reptiles	H	Treat all reptiles as poisonous. Be familiar with first aid for bites. Obtain immediate medical care.	L
	Plants	H	Be alert for poisonous plants. Avoid contact (long sleeves, gloves, long pants, eye protection as needed), use barrier creams if available, wash affected areas after contact.	L
	Bio-medical waste (e.g. hospital waste, red bag waste, syringes, bandages, etc.)	H	Avoid all contact. Mark off contaminated areas. Notify immediate supervisor.	L
	Exposure to blood/bodily fluids (e.g. first aid treatment, accidents, etc.)	H	If exposed, notify supervisor immediately.	L
	Allergic reaction to fungus, molds	H	Report allergy symptoms to immediate supervisor	L

**Note: Example of potential hazards are as follows:**

**Safety:** Trenching, electrical, slips, fall hazards, etc...  
**Physical:** Heat/cold, noise, stress, vibration, radiation, etc...  
**Chemical:** Solvents, paints, welding, fumes, pesticides, etc...  
**Biological:** Blood borne pathogens, poison ivy, insect, fungi, etc...







# ACTIVITY HAZARDS ANALYSIS

Overall Risk Assessment Code (RAC)  
(Use highest code)

<b>M</b>
----------

Date: \_\_\_\_\_ Project: \_\_\_\_\_

Activity: Infrastructre Assessment PRT

Activity Location: Disaster Response, Varies

Prepared By: \_\_\_\_\_

### Risk Assessment Code Matrix

E = Extremely High Risk  
H = High Risk  
M = Moderate Risk  
L = Low Risk

		Probability				
		Frequent	Likely	Occasional	Seldom	Unlikely
S e v e r i t y	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L

<b>Add Identified Hazards</b>
-------------------------------

	JOB STEPS	HAZARDS	ACTIONS TO ELIMINATE OR MINIMIZE HAZARDS	RAC
X	Evaluate Building Exterior  FIRST - Perform inspection from the outside-in. Make a complete external check before entering a building.	Building collapse or partial collapse. Building has moved off its foundation. Obvious sever damage to primary structural members. Building foundation is significantly out-of-plumb. Building roof or cladding in imminent danger of collapsing or falling-off (respectively). Significant risk from falling hazards (bricks, parapet, chimneys, walls). Building is structurally safe but use is precluded by another hazard (i.e. fallen power lines, ruptured gas lines, raw sewage present, body(s) present, chemical spill present)	Don't enter building. Mark as unsafe. Barricade with caution tape if possible. Perform initial evaluation from a distance, using binoculars if possible, rather than by close-up visual inspection. Avoid areas under/ near falling hazards.	M
X	SECOND: If a building has already been posted or marked, confirm that nothing has changed and altered the noted status of the building (such as continued erosion, subsequent collapse).	Building structural is doubtful. A portion of the building has collapsed but other portions do not appear to be in danger of collapse. Roof or wall cladding damaged or missing. No significant risk from falling hazards (bricks, parapet, walls). Minor damage to secondary structural members (e.g. purlins in a pre-engineered building).	Don't enter building. Mark as restricted use.	M

# ACTIVITY HAZARDS ANALYSIS

	JOB STEPS	HAZARDS	ACTIONS TO ELIMINATE OR MINIMIZE HAZARDS	RAC
X	THIRD: Make sure that your Team Leader has clearly explained the existing or any prior marking conventions.	<p>Building walls, roof and foundation appear sound. No apparent risk identified to falling hazards. No apparent risk from utilities (electrical, natural gas). No apparent safety-related damage or other hazards present.</p> <p>OTHER: Angry citizens, aggressive dogs, long days in the field, fatigue, insects, snakes, infectious disease, rodents.</p>	<p>Building is safe to enter. Inspectors must initially inspect balconies, catwalks and canopies from outside.</p> <p>Always work in teams of at least two (2). Keep distance between aggressive people or animals. Refer to the PPE section below for guidance on protective health measures.</p>	L
X	<p>Entering structure</p> <p>Inspecting interior of structure</p> <p>NOTE: Inspect each room for hazards prior to entry and avoid such hazards if imminent danger exists. Always work in teams of at least two inspectors, each far enough apart to be able to summon help in the event of an emergency. Do not smoke during inspections.</p>	<p>Falling hazards, tripping hazards, slipping hazards.</p> <p>Spills, leaks or intrusion of stored chemicals, petroleum products or sewage. Asbestos containing materials (ACM). Damage to smoke/fire detection system. Saturated, weak or deteriorated flooring and ceilings. Human remains. Mold spores. Snakes, spiders, rodents and other pestilent insects. Energized and damaged electrical systems. Limited egress (jammed doors, damaged stairs, no lighting). Inadequate Lighting. There is a potential for hidden floor openings and structurally unsound floors and stairways. Odiferous chemicals, putrescible organic matter, natural gas leaks.</p>	<p>DO NOT ENTER AN UNSAFE BUILDING. Be aware of the potential for slips, trips and falls.</p> <p>Seek the advice of hazardous materials experts. Do not attempt clean-up. Don PPE (gloves, mask) if necessary. Be on-guard for signs of weak or damaged flooring and ceiling materials. DO NOT TOUCH HUMAN REMAINS; notify your team leader ASAP. Be aware of an exit route before you enter a building or interior room; if exits are blocked or are limited, do not enter the space. Enter only spaces that you are sure you can exit in an emergency. If you observe obviously unsafe conditions, exit the building. Look in stairwells, basements and mechanical rooms for structural damage. DO NOT ENTER CRAWL SPACES; inspect them with a flashlight from outside the area. Use caution when walking on balconies, catwalks. DO NOT ENERGIZE ELECTRICAL EQUIPMENT. Use your flashlight for illumination if necessary. Rugs or debris may cover weak, deteriorated or open flooring. When you suspect a walking surface, test ahead for weak spots or do not proceed. Be aware of the potential for strong odors inside the building. If you detect or suspect an overpowering odor or a significant natural gas leak, exit the building.</p>	M

Add Items

	EQUIPMENT	TRAINING	INSPECTION
X	Steel toed safety boots, Hard hat and work gloves, Safety glasses or dust goggles (directly vented goggles) (ANSI Z87.1), Flashlight, cell phone or portable walkie-talkie, Sunscreen, Insect Repellant	EM 385-1-1 ATC 45	<p>Structural Assessment</p> <p>General Occupational Health and Safety</p> <p>Take frequent breaks. Pace yourself.</p> <p>If you experience symptoms of illness, immediately inform your team leader.</p> <p>Wear hardhat, boots and safety glasses when near or in a building.</p>

# ACTIVITY HAZARDS ANALYSIS

Involved Personnel:

IA PRT Inspectors, Supervisory Inspection Team Leaders

Acceptance Authority (digital signature):

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## APPENDIX J Transition and Closeout Plan Sample

Infrastructure Assessment Transition Plan  
 (Last Modified 11/12/98 03:27 AM PST)

SSA PRT ACTIVITY	DATE	PERSONNEL INVOLVED	POSITION
PRT Team rotation accomplished	21-25 Oct	Five PRT Members	5-Person PRT Team
PRT Augmenter departs for home station	3-Nov	Bryan Miner	ESF #3 Action Officer
PRT Augmenter departs for home station	4-5 Nov	Tom Ryan	Data Manager
IA application deadline - Public Works	13-Nov	ALL-Coordination	All PRT Members
20 Inspectors depart for home station	13-Nov	See Attached List	ATC-20 Inspectors
20 Inspectors depart for home station	13-Nov	See Attached List	ATC-20 Inspectors
PRT member departs for home station	18-Nov	Bob Remmers	Inspection Team Leader
PRT member departs for home station	18-Nov	Shanon Chader	Inspection Team Leader
PRT member departs for home station	20-Nov	Paul Polanski	Inspection Team Leader
PRT member departs for home station	20-Nov	Carmelo Marranca	ATC-20 Training Officer
Remaining Inspectors depart for home station	25-Nov	See Attached List	ATC-20 Inspectors
Completion of IA Mission paperwork	30-Nov	PRT and ESF	All PRT Members
Files to RFO	30-Nov	Jerry Ptak	Mission Manager
Last PRT member departs for home station	1-Dec	Jerry Ptak	Mission Manager

## APPENDIX K Timelines - IA PRT Mission Execution

### IA-PRT Mission Execution Timeline (10,000 Inspections)

D+0	PRT Alerted
D+1	Receive Mission Assignment (MA)/PRT Management Cell Deploys
D+2	Mission Assignment Scoping with FEMA/State/Local Identify Resource Requirements to RFO/UOC
D+3	Inspection Team Leaders Deploy and Identify Training Facility
D+4	ATC-20/45 Inspectors (50) Arrive RFO
D+5	Train 1st 50 inspectors
D+6	Deploy 25 Inspection Teams
D+7	Full Production Rate of 375 Inspections/Day
D+9	Develop Transition/Close-out Plan
D+21	Mission Execution IPR (Re-evaluate Requirements)
D+34	Complete Inspections
D+35	Out Process Inspectors
D+36	After Action Review with Management Cell and ITL
D+37	Redeploy PRT and Support Elements

#### Assumptions:

- No-notice event
- Rapid inspections
- 15 inspections/team/day
- 25 inspection teams
- One management call for identified mission
- Inspection rate includes some downtime due to unforeseen circumstances

## IA PRT Mission Execution Timeline (50,000 Inspections)

D+0	PRT Alerted
D+1	Receive Mission Assignment (MA)/PRT Management Cell Deploys
D+2	Mission Assignment Scoping with FEMA/State/Local Identify Resource Requirements to RFO/UOC
D+3	Inspection Team Leaders Deploy and Identify Training Facility
D+4	ATC-20/45 Inspectors (50) Arrive RFO
D+5	Train 1st 50 Inspectors
D+6	Deploy 25 Inspection Teams Train 2nd 50 Inspectors
D+7	Deploy 2nd 25 Inspection Teams
D+8	Full production rate of 750 inspections/day
D+33	Begin Transition of Management Cell (2-3 day overlap)
D+36	Complete Transition of Management Cell
D+60	Mission Execution IPR (Re-evaluate Requirements) Continue to Perform Inspections and QA/QC
D+73	Complete Inspections
D+75	After Action Review with Management Cell and SITL/ITL
D+76	Redeploy PRT and Support Elements

### Assumptions:

- No-notice event
- Rapid Inspections
- Fifteen (15) Inspections/Team/Day
- 50 Inspection Teams
- Two Management Cells for Identified Mission
- Inspection Rate Includes Some Downtime Due to Unforeseen Circumstances

## APPENDIX L Acronyms

AAR	After Action Review
AFO	Area Field Office
AO	Action Officer
AOR	Area of Responsibility
ARC	American Red Cross
ATC	Applied Technology Council
C2	Command and Control
CDPP	Catastrophic Disaster Preparedness Program
CDRG	Catastrophic Disaster Response Group
CEFMS	Corps of Engineers Financial Management System
CERT	Contingency Engineering Response Team
CO	Construction-Operations Division
CONUS	Continental United States (the 48 contiguous states plus the District of Columbia)
COR	Contracting Officer's Representative
CST	Contingency Support Team
CT	Contracting Division
DCE	Defense Coordinating Element
DCO	Defense Coordinating Officer
DDE	Deputy District Engineer
DE	District Engineer
DFA	Direct Federal Assistance
DHS	Department of Homeland Security
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
DSCA	Defense Support to Civil Authorities
ECA	Evaluation and Corrective Action
EI	Essential Elements of Information
EFO	Emergency Field Office
EICC	Emergency Information and Coordination Center
EM	Emergency Management
EN	Engineering Division
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ERT	Emergency Response Team
ERT-A	Emergency Response Team – Advance Team
ESF	Emergency Support Function
EST	Emergency Support Team
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FLSA	Fair Labor Standard Act

FOS	Federal Operation Support
GAR	Governor's Authorized Representative
GSA	General Services Administration
HAZMAT	Hazardous Materials
HQUSACE	Headquarters, U.S. Army Corps of Engineers
HR	Human Resources
IA	Infrastructure Assessment
IMAT	Incident Management Assistance Team
IOF	Initial/Interim Operating Facility
ITL	Inspection Team Leader
JFO	Joint Field Office
JIC	Joint Information Center
JTF	Joint Task Force
LERT	Logistics Emergency Response Team
LMO	Logistics Management Office
LNO	Liaison Officer
LRB	Great Lakes and Ohio River Division, Buffalo District
LRD	Lakes & River Division
LTCR	Long-term Community Recovery
LTM	LERT Team Member
MA	Mission Assignment
MAC	Mission Assignment Coordinator
MAM	Mission Assignment Manager
MDM	Mission Data Manager
MIPR	Military Interdepartmental Purchase Request
MM	Mission Manager
MS	Mission Specialist
MSC	Major Subordinate Command
MVD	Mississippi Valley Division
NAD	North Atlantic Division
NAVFAC	Naval Facilities Engineering Command
NDRF	National Disaster Recovery Framework
NCS	National Communications System
NEPP	National Emergency Preparedness Program
NIMAT	National Incident Management Assistance Team
NRF	National Response Framework
NWD	Northwestern Division
NWS	Northwestern Division, Seattle District
OPCON	Operational Control
PA	Public Affairs
PAO	Public Affairs Officer
PDA	Preliminary Damage Assessment
PDS	Personal Data Sheet
PIO	Public Information Office

PL	Public Law
PM	Project Management
POC	Point of Contact
POD	Pacific Ocean Division
POTW	Publicly Owned Treatment Works
PR&C	Purchase Request and Contract
PRT	Planning and Response Team
PSMA	Pre-Scripted Mission Assignment
PTF	Presidential Task Force
QA	Quality Assurance
R2K	Readiness 2000
RCO	Readiness Contingency Operations
RFO	Recovery Field Office
RM	Resource Manager
RNA	Rapid Needs Assessment
RRCC	Regional Response Coordination Center
SAD	South Atlantic Division
SITL	Supervisory Inspection Team Leader
SitRep	Situation Report
SME	Subject Matter Expert
SOH	Safety and Occupational Health
SPD	South Pacific Division
SSA	Structural Safety Assessment
SWD	Southwestern Division
TF	Task Force
TSC	Technical Support Center
TO	Training Officer
UOC	HQUSACE Operations Center
US&R	Urban Search & Rescue
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFS	United States Forestry Service
USPHS	United States Public Health Service

## **APPENDIX M EPA Sub-tasking Support of ESF#3 Mission Assignments**

The purpose of this paper is to outline steps that will be taken by the US Army Corps of Engineers (USACE) to subtask EPA under the National Response Framework, Emergency Support Function #3 (ESF#3), specifically with respect to Water and Wastewater Sector for natural disasters (e.g., hurricanes, earthquakes). EPA will primarily support USACE with technical assistance, such as sampling and analysis, initial damage assessments, and liaisons to Federal, State, local and municipal representatives. USACE will generally take the lead on water/wastewater infrastructure repair Mission Assignments (MAs) as tasked by FEMA.

Prior to a major disaster with advance notice (e.g. hurricane) or following a major disaster without warning (e.g. earthquake), the Office of Homeland Security (OHS), Headquarters USACE, or the ESF #3 Team Leader at the NRCC, will contact:

- If ESF #10 is activated at the RRCC or JFO, the ESF #10 desk representative. The desk rep is responsible for bringing in the appropriate water program or other regional personnel as needed.
- If ESF #10 is not activated, the EPA Regional 24 hour number or, if unavailable, the National Response Center (800-424-8802). The EPA Regional EOC will provide an appropriate Regional EPA contact. The National Response Center will contact the relevant region or backup region and the region will contact USACE (Attachment 1).

The ESF #3 Team Leader (TL) and/or Infrastructure Assessment (IA) Action Officer (AO) at the RRCC, Initial Operating Facility (IOF), or JFO will establish direct contact with the EPA POC(s) identified in step 1 in order to provide situational awareness and to initiate discussion of coordination needs.

When the need is identified for state assistance for water/wastewater infrastructure, the ESF #3 TL (RRCC, IOF or JFO) will work with the EPA POC(s) identified in step 1 to develop and submit to FEMA an Assistance Request Form (ARF) using the language from applicable Water/Wastewater Pre-scripted Mission Assignments (Attachment 2).

When FEMA receives the MA, the TL will coordinate with EPA to develop a sub-tasking form (example in Attachment 3) that defines the portion of work to be executed by EPA.

Once the MA and a copy of the sub-tasking form are issued to the supported USACE District, the supported USACE District will issue a Military Interdepartmental Purchase Request (MIPR/DD Form 448) with a copy of the sub-tasking to the appropriate EPA region (EPA must receive both forms). The recipient of this package will be:

- a) If ESF #10 is activated at the RRCC or JFO, the ESF #10 desk rep. The desk rep ensures it is sent to appropriate regional personnel, including the regional finance office.

b) If ESF #10 is not activated, the 24-hour Duty Officer/REOC email. The Duty Officer/REOC ensures it is sent to the appropriate regional personnel, including the regional finance office (Attachment 4).

The USACE District will call the 24-hour Duty Officer to tell them the MIPR has been sent. Some EPA regions will also require an Interagency Agreement (example in Attachment 5).

The EPA regional finance office has the primary responsibility for ensuring the MIPR/subtask funding package is forwarded to the EPA Cincinnati Finance Center (CFC). The regional finance point of contact will provide an electronic or faxed copy of the documentation along with the appropriate EPA paperwork (Emergency Funding Authorization or EPA 1610-1 IAG form). The CFC will assign reimbursable accounting to identify cost associated with this work. Once expenses are incurred, CFC will submit invoices to USACE.

EPA will submit an SF1080 bill each month to the USACE District or Division that sent the MIPR with the proper documentation that identifies the cost. At the time of the subtask issuance, USACE will provide EPA further information regarding the need for any additional supporting documentation. Following physical completion of the mission the EPA Cincinnati Finance Center will submit proper documentation to the USACE District or Division that sent the MIPR in order to fiscally closeout the mission. The bill submitted by EPA must have documentation that supports all cost incurred before reimbursement can be made by USACE. If EPA is already set up for Intergovernmental Payment and Collection (IPAC) with USACE and the supporting documentation has not been provided within the required timeframe, a chargeback will occur.



Attachment 1 - Initial Requests for EPA Coordination/Support under ESF#3

Where there is a need for USACE or FEMA to contact EPA for regional coordination or support under ESF#3, either pre- or post-declaration for a Stafford Act incident, USACE/FEMA should:

(1) If EPA is already deployed to the ESF#10 position at the RRCC, ERT-A, or JFO, contact the ESF#10 representative. That person will alert the EPA Regional EOC (REOC) and ensure the involvement of the appropriate EPA regional personnel.

(2) If EPA is not already deployed to the ESF#10 position, contact the EPA REOC through the Regional 24-hour Duty Officer and notify him/her of the USACE POC. The Duty Officer will ensure that an appropriate EPA POC contacts the USACE POC.\*

Note: USACE/FEMA should not contact a Regional water office directly with an initial request for coordination or support.

EPA Regional 24-Hour Duty Officer Phone Numbers*	
EPA Region	24-Hour Duty Officer
1	617-723-8928
2	800-424-8802
3	215-814-3255
4	404-562-8700
5	312-353-2318
6	866-372-7745
7	913-281-0991
8	303-293-1788
9	800-300-2193
10	206-553-1263

\*If a Regional 24-hour number is not working, USACE/FEMA should contact the National Response Center for assistance at 1-800-424-8802. The NRC will contact the EPA region (or a backup region if the relevant region has been impacted).

## Attachment 2 - Water/Wastewater Infrastructure PSMAs

Title: USACE ESF #3 Water and Wastewater Assessment (FOS)

### Block II – Assistance Requested:

Pre-position experts in water and wastewater systems to provide event-specific planning and preparation for the rapid evaluation of water and wastewater facilities, treatment units, conveyance systems, and piping. This assistance includes the liaison/planning with State officials.

### Block IV – Statement of Work:

As an element of infrastructure assessment, pre-position experts in water and wastewater systems to provide event-specific planning and preparation for the rapid evaluation of water and wastewater facilities, treatment units, conveyance systems, and piping. This support also includes the liaison/planning with State officials. A subsequent MA will be issued, if necessary, for Post-Declaration structural safety or other public works assessment activities.

MA task orders will be issued for specific personnel requirements, location(s), dates, and duration of assignment(s).

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$50K

Estimate is based on a team of five (5) interagency experts for 7 days.

### ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

Note: The purpose of the task order is to direct specific activities within the scope of an existing mission assignment. A task order form may be used if no additional funding is needed and the scope of the existing MA is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include the appropriate information. New requirements outside the scope of the original MA require the issuance of a new MA.

Title: USACE ESF #3 FEMA Public Assistance for Drinking Water and Wastewater (FOS)

Block III – Assistance Requested:

Water sector experts to assist FEMA Public Assistance (PA) Program staff with water sector activities

Block IV – Statement of Work:

Provide water sector experts to assist FEMA with water sector Public Assistance (PA) activities involving public drinking water, wastewater, and storm water infrastructure needs. Tasks may include assessments, filling out worksheets, and interviewing and consulting with public entities. FEMA requires evaluation and assessment of claims for assistance to public agencies. A Task Order will be prepared to direct specific activities within the scope of this mission assignment. (Task Orders may include personnel, resource movement, locations for delivery and duty stations.)

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$360K

ESF #3 support agency to provide technical experts to work with PA program to accomplish this mission. \$360K-Deploys twelve (12) water sector professionals for 30 days includes labor (USACE only), overtime, supplies, travel and per diem.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*

Title: USACE ESF #3 Drinking Water and Wastewater Safety; Drinking Water and Wastewater System Assessment, Repair, and Recovery (DFA)

Block II – Assistance Request:

Assessments, evaluation, and design/build response and recovery actions of drinking water and wastewater systems

Block IV – Statement of Work:

Deploy personnel to coordinate and execute all necessary assessments, evaluation, and design/build response and recovery actions associated with ensuring the safety of drinking water and wastewater systems in the affected area in coordination with the appropriate State agencies, as directed by FEMA. These actions may include but are not limited to: providing laboratory support for water sample collection, analysis and data interpretation; assessing public water and wastewater systems; facilitating the contact with Federal, State and local agencies and providing oversight of drinking water and wastewater system restoration, and related activities.

A Task Order will be prepared to direct specific activities within the scope of this mission assignment (Task Orders may include personnel, resource movement, locations for delivery and duty stations.)

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$300K

ESF #3 support agency to provide assistance to accomplish this mission. \$300K – Deploys 12 professionals for 30 days, includes labor (USACE only), overtime, supplies, travel and per diem. Repair costs will vary significantly based on assessments performed.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include*

*the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*

Title: USACE ESF #3 Drinking Water & Wastewater Infrastructure/Safety TA to State (TA)

Block II – Assistance Requested:

Technical assistance to State, Tribal and/or local jurisdictions for the drinking water and wastewater infrastructure/safety mission

Block IV – Statement of Work:

Deploy personnel to provide technical assistance to State, Tribal and/or local jurisdictions to provide event specific planning and preparation for the drinking water and wastewater infrastructure/safety mission in coordination with the appropriate State agencies. Activities may include but are not limited to: sampling and analysis, initial damage assessment, liaison among Federal, State, local and municipal representatives concerning planning and execution efforts, inventorying of public water supplies and publicly owned treatment works (POTWs) within areas affected by the incident, preliminary facility surveys (e.g. operational status, emergency power status/need, and physical damage), laboratory support for water sample collection, coordination of essential commodities (fuel, treatment chemicals, and manpower needs) and coordinating data flow between State and Federal agencies.

Mission Assignment Task Orders will be issued for specific personnel requirements, location(s), dates, and duration of assignment(s).

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$300K

ESF #3 support agency to provide assistance to accomplish this mission. \$300K-Deploys a Water Sector Technical Assistance (WSTA) of 10 experts to include labor (USACE only), overtime, supplies, travel and per diem for 30 days.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include*

*the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*



Attachment 3 – ESF Mission Assignment Sub-Tasking Request Form

<b>ESF MISSION ASSIGNMENT SUBTASKING REQUEST</b>			
<b>FEMA-Assigned MA Number: COE-SWD-01</b>		<b>ESF Primary Agency: USACE</b>	
<b>Subtasked Agency: EPA Region VII</b>		<b>State: KS</b>	<b>Disaster No.: 1711-DR-KS</b>
<b>Tasking Statement/Statement of Work:</b>			
Provide Technical assistance in conjunction with KDHE for evaluation of water and wastewater treatment facilities in the following Kansas counties: Montgomery, Labette, Chautauqua, Wilson, Neosho, Franklin, Miami. Coordinate with FEMA OPS chief and KDHE for specific cities. Potential locations include: Fredonia, Coffeyville, Independence, Longton, Altoona, Neodasha, Elk City, Dearing, Erie, St. Paul, Osawatamie, Princeton. Consult with KDHE and advise FEMA as to status of facilities and any repairs required with estimated time of facility's return to service. The support functions or technical assistance provided by EPA will be performed within the limits of EPA's authorities.			
<b>Project Completion Date:</b> 30 September 2007		<b>Authorized Funding:</b> \$50,000.00	
<b>Reimbursement Procedure</b> Upon completion of scope of work, the subtasked Federal agency will submit a SF 1081, or other approved Treasury form to request reimbursement, detailing expenditures and activities to:			
U.S. Army Corps of Engineers, Tulsa District, ATTN: CESWT-OD-EM		(ESF Primary Agency)	
1645 S. 101st E. Ave, Tulsa, OK 74128-4609		(Address)	
The ESF primary agency will:			
<ul style="list-style-type: none"> <li>(1) Review the reimbursement request and recommend approval or disapproval within 10 workdays of receipt.</li> <li>(2) Return approved reimbursement requests to subtasked agencies that use the Intra-governmental Payment and Collection (IPAC) system for transaction processing and simultaneously forwarding supporting documentation to the DFC.</li> <li>(3) Forward approved reimbursement requests from non-IPAC agencies to the Disaster Finance Center. The Disaster Finance Center will send payment directly to the subtasked agency for non-IPAC agencies.</li> </ul>			
<b>Statutory Authority:</b>		Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, as amended, 42 U.S.C 5121-5201.	
<b>Authorizing Officials:</b>			
<i>The work described in the above tasking statement will be completed in support of the Federal Response Plan.</i>			
		Date	
Peter Navesky, ESF-3 Team Leader		Date	
<b>Following signatures please provide information copy to FEMA MAC and Project Officer.</b>			


Attachment 4 - Sending the MIPR (with copy of MA sub-tasking) to EPA

The ESF #3 Team Leader sends the MA/sub-tasking to the USACE District to prepare the MIPR. Once prepared, the USACE District should send the MIPR to:

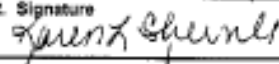

- (1) If EPA is already deployed to the RRCC or JFO ESF #10 desk, send the MIPR to the ESF #10 desk at the RRCC or JFO.
- (2) If EPA is not already deployed to the ESF #10 position, send the MIPR to the REOC and call the 24-hour Duty Officer to tell them the MIPR has been sent.

EPA Regional 24-Hour Duty Officer E-Mail	
EPA Region	REOC E-mail Address
1	<a href="mailto:rrc.r1@epa.gov">rrc.r1@epa.gov</a>
2	<a href="mailto:r2_rrc@epa.gov">r2_rrc@epa.gov</a>
3	<a href="mailto:rrc.r3@epa.gov">rrc.r3@epa.gov</a>
4	<a href="mailto:r4rrcdutyosc@epa.gov">r4rrcdutyosc@epa.gov</a>
5	<a href="mailto:r5eoc@epa.gov">r5eoc@epa.gov</a>
6	<a href="mailto:r6_rrc@epa.gov">r6_rrc@epa.gov</a>
7	<a href="mailto:r7_rrc@epa.gov">r7_rrc@epa.gov</a>
8	<a href="mailto:rrc.r8@epa.gov">rrc.r8@epa.gov</a>
9	<a href="mailto:r9_rrc@epa.gov">r9_rrc@epa.gov</a>
10	<a href="mailto:r10_rrc@epa.gov">r10_rrc@epa.gov</a>

Attachment 5 – EPA Interagency Agreement

 <p>United States Environmental Protection Agency Washington, DC 20460</p> <p><b>Interagency Agreement</b></p> <p><b>Amendment</b></p> <p><b>Part 1 - General Information</b></p>	<p>1. EPA IAG Identification Number RW-96-95225501 - 1</p>	<p>4. Funding Location by Region EPA R7</p>																																									
	<p>2. Other Agency IAG ID Number 96</p>	<p>5. Program Office Abbreviation Region 7</p>																																									
	<p>3. Type of Action Decrease</p>																																										
<p>6. Name and Address of EPA Organization US Environmental Protection Agency Superfund Division 901 North 5th Street Kansas City, KS 66101 DUNS: 029128894</p>	<p>7. Name and Address of Other Agency Corps of Engineers-Army 1645 South 101st East Avenue Tulsa, OK 74128 DUNS: DOD967273</p>																																										
<p>8. Project Title and Description Water/Wastewater Treatment Facilities Evaluation This amendment decreases the allotted amount of \$50,000 on this Interagency Agreement because no work was started or done.</p>																																											
<p>9. EPA Project Officer (Name, Address, Phone Number) Dave Williams 901 North Fifth Street Kansas City, KS 66101 913-551-7825</p>	<p>10. Other Agency Project Officer (Name, Address, Phone Number) Peter Navesky 1645 South 101st East Avenue Tulsa, OK 74128 918-669-7327</p>																																										
<p>11. Project Period 07/13/2007 to 10/01/2007</p>	<p>12. Budget Period 07/13/2007 to 10/01/2007</p>																																										
<p>13. Scope of Work See Scope of Work on file in folder. EPA Grants Specialist for this IAG is Annora Ogletree 913-551-7233</p>																																											
<p>14. Statutory Authority for Both Transfer of Funds and Project Activities CERCLA: Secs. 105(a)(4) &amp; 115; Disaster Relief &amp; Emergency Assistance Act 1988</p>		<p>15. Other Agency Type Federal Agency</p>																																									
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									-50,000																																		

Part II - Approved Budget		EPA IAG Identification Number RW-95-95226501 - 1
22. Budget Categories		Itemization of Total Project Estimated Cost to Date
(a) Personnel	\$-40,000	\$0
(b) Fringe Benefits	\$-10,000	\$0
(c) Travel		\$0
(d) Equipment		\$0
(e) Supplies		\$0
(f) Procurement / Assistance		\$0
(g) Construction		\$0
(h) Other		\$0
(i) Total Direct Charges	\$-50,000	\$0
(j) Indirect Costs: Rate % Base \$	\$0	\$0
(k) Total (EPA Share %) (Other Agency Share 100.00 %)	\$-50,000	\$0
23. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA funds? (Identify all equipment costing \$1,000 or more)		<input type="checkbox"/> No
24. Are any of these funds being used on extramural agreements? (See Item 22f.)		<input checked="" type="checkbox"/> No
Type of Extramural Agreement		
Contractor/Recipient Name (if known)	Total Extramural Amount Under This Project	Percent Funded by EPA (if known)
	Total \$ 0.00	
Part III - Funding Methods and Billing Instructions		
25. (Note: EPA Agency Location Code (ALC) - 68010727)		
Request for repayment of actual costs must be ferized on SF 1080 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002.		
Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002.		
Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hdqrs. Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460.		
26. Reimbursement Agreement Repayment		
Funding Agency's Treasury Symbol	687/80108	<input type="checkbox"/> Two-Year
Other Agency's IAG Identification Number	96	EPA Program Office Allowance Holder/Resp. Center No.
Other Agency's Billing Address (include ALC or Station Symbol Number)	Other Agency's Billing Instructions and Frequency	

Part IV - Acceptance Conditions		EPA Identification Number
		RW-96-95226501 - 1
27. General Conditions		
The other agency covenants and agrees that it will expeditiously initiate and complete the project for which funds have been awarded under this agreement.		
28. Special Conditions (Attach additional sheets if needed)		
<p align="center"><b>Part V - Offer and Acceptance</b></p> <p><b>Note:</b> 1) For Disbursement actions, the agreement/amendment must be signed by the other agency official in duplicate and one original returned to the Grants Administration Division for Headquarters agreements or to the appropriate EPA Regional IAG administration office within 3 calendar weeks after receipt or within any extension of time as may be granted by EPA. The agreement/amendment must be forwarded to the address cited in item 29 after acceptance signature.</p> <p>Receipt of a written refusal or failure to return the properly executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement/amendment by the other agency subsequent to the document being signed by the EPA Action Official, which the Action Official determines to materially alter the agreement/amendment, shall void the agreement/amendment.</p> <p>2) For Reimbursement actions, the other agency will initiate the action and forward two original agreements/amendments to the appropriate EPA program office for signature. The agreements/amendments will then be forwarded to the appropriate EPA IAG administration office for acceptance signature on behalf of the EPA. One original copy will be returned to the other agency after acceptance.</p>		
EPA IAG Administration Office (for administrative assistance)		EPA Program Office (for technical assistance)
29. Organization/Address		30. Organization/Address
US EPA R7 Grants management Office 901 North 5th Street Kansas City, KS 66101		US Environmental Protection Agency Region 7 901 North Fifth Street Kansas City, KS 66101
<p align="center"><b>Certification</b></p> <p>All signers certify that the statements made on this form and all attachments thereto are true, accurate, and complete. Signers acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.</p>		
Decision Official on Behalf of the Environment Protection Agency Program Office		
31. Signature	Typed Name and Title	Date
Action on Behalf of the Environment Protection Agency		
32. Signature	Typed Name and Title	Date
	Karen L. Sherill, Grants Management Officer	11/14/07
Authorizing Official on Behalf of the Other Agency		
33. Signature	Typed Name and Title	Date
	Peter Navesky, Technical Project Officer	11/29/07

**APPENDIX N Sample ATC 20/45 Inspection Forms & Water/Wastewater  
Infrastructure Inspection Forms**

# ATC-20 Rapid Evaluation Safety Assessment Form

## Inspection

Inspector ID: \_\_\_\_\_ Inspection date and time: \_\_\_\_\_  AM  PM  
 Affiliation: \_\_\_\_\_ Areas inspected:  Exterior only  Exterior and interior

## Building Description

Building name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Building contact/phone: \_\_\_\_\_  
 Number of stories above ground: \_\_\_\_\_ below ground: \_\_\_\_\_  
 Approx. "Footprint area" (square feet): \_\_\_\_\_  
 Number of residential units: \_\_\_\_\_  
 Number of residential units not habitable: \_\_\_\_\_

## Type of Construction

Wood frame  Concrete shear wall  
 Steel frame  Unreinforced masonry  
 Tilt-up concrete  Reinforced masonry  
 Concrete frame  Other: \_\_\_\_\_

## Primary Occupancy

Dwelling  Commercial  Government  
 Other residential  Offices  Historic  
 Public assembly  Industrial  School  
 Emergency services  Other: \_\_\_\_\_

## Evaluation

Investigate the building for the conditions below and check the appropriate column.

Observed Conditions:	Estimated Building Damage (excluding contents)		
	Minor/None	Moderate	Severe
Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building or story leaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Racking damage to walls, other structural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chimney, parapet, or other falling hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground slope movement or cracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: \_\_\_\_\_

## Posting

Choose a posting based on the evaluation and team judgment. *Severe* conditions endangering the overall building are grounds for an Unsafe posting. Localized *Severe* and overall *Moderate* conditions may allow a Restricted Use posting. Post INSPECTED placard at main entrance. Post RESTRICTED USE and UNSAFE placards at all entrances.

INSPECTED (Green placard)  RESTRICTED USE (Yellow placard)  UNSAFE (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_

## Further Actions Check the boxes below only if further actions are needed.

Barricades needed in the following areas: \_\_\_\_\_  
 Detailed Evaluation recommended:  Structural  Geotechnical  Other: \_\_\_\_\_  
 Other recommendations: \_\_\_\_\_

Comments: \_\_\_\_\_

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# ATC-45 Rapid Evaluation Safety Assessment Form

## Inspection

Inspector ID: \_\_\_\_\_ Inspection date: \_\_\_\_\_  
 Affiliation: \_\_\_\_\_ Inspection time: \_\_\_\_\_  AM  PM  
 Areas inspected:  Exterior only  Exterior and interior

## Building Description

Building name: \_\_\_\_\_ Type of Building  
 Address: \_\_\_\_\_  Mid-rise or high-rise  Pre-fabricated  
 \_\_\_\_\_  Low-rise multi-family  One- or two-family dwelling  
 \_\_\_\_\_  Low-rise commercial  
 Building contact/phone: \_\_\_\_\_ Primary Occupancy  
 Number of stories: \_\_\_\_\_  Dwelling  Commercial  Government  
 "Footprint area" (square feet): \_\_\_\_\_  Other residential  Offices  Historic  
 Number of residential units: \_\_\_\_\_  Public assembly  Industrial  School  
 \_\_\_\_\_  Emergency services  Other: \_\_\_\_\_

## Evaluation

Investigate the building for the conditions below and check the appropriate column. **Estimated Building Damage (excluding contents)**

Observed Conditions:	Minor/None	Moderate	Severe	Estimated Building Damage (excluding contents)
Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None
Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%
Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%
Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%
Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%
Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%

See back of form for further comments.

## Posting

Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.

**INSPECTED** (Green placard)  **RESTRICTED USE** (Yellow placard)  **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: \_\_\_\_\_

Number of residential units vacated: \_\_\_\_\_

## Further Actions Check the boxes below only if further actions are needed.

Barricades needed in the following areas: \_\_\_\_\_  
 \_\_\_\_\_  
 Detailed Evaluation recommended:  Structural  Geotechnical  Other: \_\_\_\_\_  
 Substantial Damage determination recommended  
 Other recommendations: \_\_\_\_\_  
 \_\_\_\_\_  
 See back of form for further comments.

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# ATC-20 Detailed Evaluation Safety Assessment Form

## Inspection

Inspector ID: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Inspection date and time: \_\_\_\_\_  AM  PM

## Final Posting from page 2

- Inspected  
 Restricted Use  
 Unsafe

## Building Description

Building name: \_\_\_\_\_

Address: \_\_\_\_\_

Building contact/phone: \_\_\_\_\_

Number of stories above ground: \_\_\_\_\_ below ground: \_\_\_\_\_

Approx. "Footprint area" (square feet): \_\_\_\_\_

Number of residential units: \_\_\_\_\_

Number of residential units not habitable: \_\_\_\_\_

## Type of Construction

- Wood frame       Concrete shear wall  
 Steel frame       Unreinforced masonry  
 Tilt-up concrete       Reinforced masonry  
 Concrete frame       Other: \_\_\_\_\_

## Primary Occupancy

- Dwelling       Commercial       Government  
 Other residential       Offices       Historic  
 Public assembly       Industrial       School  
 Emergency services       Other: \_\_\_\_\_

## Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

	Minor/None	Moderate	Severe	Comments
<b>Overall hazards:</b>				
Collapse or partial collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building or story leaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Structural hazards:</b>				
Foundations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Roofs, floors (vertical loads)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Columns, pilasters, corbels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Diaphragms, horizontal bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Walls, vertical bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Precast connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Nonstructural hazards:</b>				
Parapets, ornamentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cladding, glazing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ceilings, light fixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Interior walls, partitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stairs, exits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Electric, gas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Geotechnical hazards:</b>				
Slope failure, debris	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ground movement, fissures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

General Comments: \_\_\_\_\_

Continue on page 2



# ATC-45 Detailed Evaluation Safety Assessment Form

## Inspection

Inspector ID: \_\_\_\_\_ Inspection date: \_\_\_\_\_

Affiliation: \_\_\_\_\_ Inspection time: \_\_\_\_\_  AM  PM

## Final Posting from page 2

- Inspected  
 Restricted Use  
 Unsafe

## Building Description

Building name: \_\_\_\_\_

Address: \_\_\_\_\_

Building contact/phone: \_\_\_\_\_

Number of stories: \_\_\_\_\_

"Footprint area" (square feet): \_\_\_\_\_

Number of residential units: \_\_\_\_\_

### Type of Building

- Mid-rise or High-rise  
 Low-rise multi-family  
 Low-rise commercial  
 Pre-fabricated  
 One- or two-family dwelling  
 Other: \_\_\_\_\_

### Primary Occupancy

- Dwelling  
 Other residential  
 Public assembly  
 Emergency services  
 Commercial  
 Offices  
 Industrial  
 Other: \_\_\_\_\_  
 Government  
 Historic  
 School

## Evaluation

Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.

	Minor/None	Moderate	Severe	Comments
<b>Overall hazards:</b>				
Collapse or partial collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building or story lean or drift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fractured or displaced foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Structural hazards:</b>				
Failure of significant element/connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Column, pier, or bearing wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Roof/floor framing or connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Superstructure/foundation connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Moment frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Diaphragm/horizontal bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Vertical bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Shear wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Nonstructural hazards:</b>				
Parapets, ornamentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Canopy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cladding, glazing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ceilings, light fixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stairs, exits, access walkways, gratings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Interior walls, partitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mechanical & electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building contents, other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Geotechnical hazards:</b>				
Slope failure, debris impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ground movement, erosion, sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Differential settlement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Continue on page 2





United States Environmental Protection Agency  
Washington, D. C. 20460

Form approved.  
OBM No. 2040-0057  
Approval Expires 8-31-98

## Water Compliance Inspection Report

### Section A: National Data System Coding (i.e., CS)

Inspection Code	NPDES	YY/MM/DD	Inspection type	Inspector	Face Type
1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ] 11 [ ] 12 [ ] 13 [ ] 14 [ ] 15 [ ] 16 [ ] 17 [ ] 18 [ ] 19 [ ] 20 [ ]					
Remarks					
21 [ ] 22 [ ] 23 [ ] 24 [ ] 25 [ ] 26 [ ] 27 [ ] 28 [ ] 29 [ ] 30 [ ] 31 [ ] 32 [ ] 33 [ ] 34 [ ] 35 [ ] 36 [ ] 37 [ ] 38 [ ] 39 [ ] 40 [ ] 41 [ ] 42 [ ] 43 [ ] 44 [ ] 45 [ ] 46 [ ] 47 [ ] 48 [ ] 49 [ ] 50 [ ] 51 [ ] 52 [ ] 53 [ ] 54 [ ] 55 [ ] 56 [ ] 57 [ ] 58 [ ] 59 [ ] 60 [ ] 61 [ ] 62 [ ] 63 [ ] 64 [ ] 65 [ ] 66 [ ] 67 [ ] 68 [ ] 69 [ ] 70 [ ] 71 [ ] 72 [ ] 73 [ ] 74 [ ] 75 [ ] 76 [ ] 77 [ ] 78 [ ] 79 [ ] 80 [ ]					
Inspection Work Days	Facility Self-Monitoring Evaluation Rating	B1	QA	Reserved	
67 [ ] 68 [ ] 69 [ ] 70 [ ] 71 [ ] 72 [ ] 73 [ ] 74 [ ] 75 [ ] 76 [ ] 77 [ ] 78 [ ] 79 [ ] 80 [ ]					

### Section B: Facility Data

Name and location of Facility Inspected (For Industrial users discharging to POTW, also provide POTW Name and NPDES permit number)	Entry Time/date	Permit effective Date
	Exit Time/date	Permit expiration Date
Person(s) On-site Representative(s) Title(s)/Phone and Fax Number(s)	Other Facility dates	
Name address of Responsible Official Title/Phone/Fax Number	Contacted <input type="checkbox"/> yes <input type="checkbox"/> No	

### Section C: Areas Evaluated during Inspection (Check only those areas evaluated)

<input type="checkbox"/> Permit	<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> CSO/SBO (Sewer overflow)
<input type="checkbox"/> Records/ Reports	<input type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Pollution Prevention
<input type="checkbox"/> Facility site Review	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia
<input type="checkbox"/> Effluent/Receiving Waters	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Other

### Section D: Summary of Findings/ Comments (Attach additional sheets of narrative and checklists as necessary)

Name(s) and signature(s) of Inspector(s)	Agency/ Office/ Phone and Fax Numbers	Date
Signature of Management QA Reviewer	Agency/ Office/ Phone and Fax Numbers	Date

<b>Section F thru L: Complete on all in sections, as appropriate. N/A = Not Applicable</b>		Permit No.
<b>Section F: Facility and Permit Background</b>		
ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY (Including City, County and ZIP code)	DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE	
	FINDINGS:	
<b>Section G: Records and Reports</b>		
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (further explanation attached _____)		
<b>(a) ADEQUATE RECORDS MAINTAINED OF:</b>		
(i) SAMPLING DATE, TIME, EXACT LOCATION		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(ii) ANALYSIS DATE, TIME		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(v) ANALYTICAL RESULTS (e.g., consistent with self monitoring report data)		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) MONITORING RECORDS (e.g. flow, pH, DO, etc) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g. continuous monitoring instrumentation, calibration and maintenance records).		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) LABEQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING LOGS FOR EACH TREATMENT UNIT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) QUALITY ASSURANCE RECORDS KEPT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICALLY OWNED TREATMENT WORKS		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>Section H: Permit Verification</b>		
INSPECTION OBSERVATION VERIFY THE PERMIT <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (further explanation attached _____)		
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) FACILITY IS AS DESCRIBED IN PERMIT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) PRINCIPAL PRODUCT(C) AND PRODUCTION RATE CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(h) CORRECT NAME AND LOCATION OF RECEIVING WATERS		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(i) ALL DISCHARGES ARE PERMITTED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>Section I: Operation and Maintenance</b>		
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) ADEQUATE ALARM SYSTEM FOR POWER EQUIPMENT FAILURES AVAILABLE		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) SLUDGE AND SOLIDS ADEQUATELY DISPOSED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) ALL TREATMENT UNITS IN SERVICE		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(g) QUALIFIED OPERATING STAFF PROVIDED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(j) INSTRUCTION FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(l) SPCC PLAN AVAILABLE		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A

		Permit No.
<b>Section J: Compliance Schedules</b>		
PERMITTEE IS MEETING COMPLIANCE SCHEDULE		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A (Further explanation attached _____)
CHECK APPROPRIATE PHASE(S)		
(A) <input type="checkbox"/> THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.		
(B) <input type="checkbox"/> PROPER AGREEMENT HAS BEEN MADE FOR FINANCING (mortgagee commitments, grants, etc.)		
(C) <input type="checkbox"/> CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.		
(D) <input type="checkbox"/> DESIGN PLANS AND SPECIFICATION HAVE BEEN COMPLETED.		
(E) <input type="checkbox"/> CONSTRUCTION HAS COMMENCED.		
(F) <input type="checkbox"/> CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.		
(G) <input type="checkbox"/> CONSTRUCTION HAS BEEN COMPLETED		
(H) <input type="checkbox"/> START UP HAS COMMENCED.		
(I) <input type="checkbox"/> THE PERMITTEE HAS REQUESTED AND EXTENSION OF TIME.		
<b>Section K: Self Monitoring Program</b>		
Part 1 – Flow measurement (further explanation attached _____)		
PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Details:		
(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
TYPE OF DEVICE: <input type="checkbox"/> WEIR <input type="checkbox"/> PARSHALL FLUME <input type="checkbox"/> MAGMETER <input type="checkbox"/> VENTURI METER <input type="checkbox"/> OTHER (specify _____)		
(b) CALIBRATION FREQUENCY ADEQUATE. (date of last calibration _____)		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) primary FLOW measuring device properly OPERATED AND MAINTAINED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Part 2 – Sampling (further explanation attached _____)		
PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Details:		
(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(c) PERMITTEE IS USING METHODS OF SAMPLING AGREE WITH PERMIT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
IF NO: <input type="checkbox"/> GRAB <input type="checkbox"/> MANUAL COMPOSITE <input type="checkbox"/> AUTOMATIC COMPOSITE (FREQUENCY _____)		
(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(i) SAMPLES REFRIGERATED DURING COMPOSITION		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(ii) PROPER PRESERVATION TECHNIQUES USED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(iv) SAMPLES HOLDING TIMES PRIOR TO ANALYSIS IN CONFORMANCE WITH 40 CFR 136.3		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(e) MONITORING AND ANALYSIS BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF MONITORING REPORT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Part 3 – Laboratory (further explanation attached _____)		
PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Details:		
(a) EPA approved analytical testing procedures used. (40CFR 136.3)		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(B) IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED. PROPER APPROVAL HAS BEEN OBTAINED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(C) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(D) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(E) QUALITY CONTROL PROCEDURES USED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(F) DUPLICATE SAMPLES ARE ANALYZED. _____ % OF TIME.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(G) SPIKED SAMPLES ARE USED. _____ % OF TIME.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(H) COMMERCIAL LABORATORY USED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
(I) COMMERCIAL LABORATORY STATE CERTIFIED.		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
LAB NAME _____		
LAB ADDRESS _____		

**Section L: Effluent/ Receiving Water Observation** (Further explanation attached )

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER

(Section M and N Complete as Appropriate for Sampling Inspections)

**Section M: Sampling Inspection Procedures and Observations** ( further explanation attached )

- (a)  GRAB SAMPLES OBTAINED
- (b)  COMPOSITE OBTAINED
- (c)  FLOW PROPORTIONED SAMPLE
- (d)  AUTOMATIC SAMPLER USED
- (e)  SAMPLE SPLIT WITH PERMITTEE
- (f)  CHAIN OF CUSTODY EMPLOYED
- (g)  SAMPLE OBTAINED FROM FACILITY SAMPLING DEVICE

COMPOSITING FREQUENCY \_\_\_\_\_ PRESERVATION \_\_\_\_\_

SAMPLE REFRIGERATED DURING COMPOSITING:  YES  NO  N/A

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE \_\_\_\_\_

**Section N: Collection System and Sanitary Sewer Overflow (SSOs)**

Who is responsible for the collection system (name and phone number)? \_\_\_\_\_

Who answered the following Questions: \_\_\_\_\_

What is your typical capital improvement budget for the collection system? \$ \_\_\_\_\_

How many miles of sanitary sewer lines are in the collection system? \_\_\_\_\_ miles

How many miles of sanitary sewer lines are cleaned in a typical year? \_\_\_\_\_ miles

What is the average age of the sanitary sewer lines? \_\_\_\_\_ years

Any Hydraulic and/or organic overloads experienced.  YES  NO

ANY BYPASSING SINCE LAST INSPECTION.  YES  NO

How do you document responses to complaints for sewer back-ups, sewage leaks, overflows, etc.?

How many basement back-up complaints do you respond to in a year? \_\_\_\_\_

Do you have any discharges (SSOs) from the collection system? :  YES  NO

Do you report discharges (SSOs) to regulatory agency? :  YES  NO  Copies

Describe the types of discharge:



**Water and Wastewater Evaluation and Assessment Report**

Team Member Names:

Plant POC & Phone Number:

Service Area:

Type of Facility:

Cause of Damage:

Present Capacity:

Summary of Damages:

Direct Discharges? Yes/No/NA

Lift Stations? Yes/No/NA

Electrical? Yes/No/NA

Pumps? Yes/No/NA

Conveyance System? Yes/No/NA

Buildings and Infrastructure? Yes/No/NA

Other:

Recommendations:

**Essential Infrastructure Assessment  
FACILITY ASSESSMENT**

**FACILITY INFORMATION**

<b>Name:</b>				
<b>Type:</b>	<input type="checkbox"/> Fire	<input type="checkbox"/> Water Treatment/ Distribution	<input type="checkbox"/> Roads/ Bridges	<input type="checkbox"/> Telecommunications
	<input type="checkbox"/> EMS	<input type="checkbox"/> Wastewater Collection/	<input type="checkbox"/> Public Transit	<input type="checkbox"/> Municipal/ Administrative
	<input type="checkbox"/> Law Enforcement/ Police	<input type="checkbox"/> Fuel Storage/ Distribution	<input type="checkbox"/> Airport	<input type="checkbox"/> School
	<input type="checkbox"/> Hospital	<input type="checkbox"/> Natural Gas Distribution	<input type="checkbox"/> Port/Harbor	<input type="checkbox"/> Court/Jail
	<input type="checkbox"/> Other Healthcare	<input type="checkbox"/> Power Generation/ Transmission/ Distribution		
<b>Address:</b>				
<b>City:</b>		<b>Longitude:</b>		
<b>Zip Code:</b>		<b>Latitude:</b>		

**FACILITY OWNER**

<b>Organization:</b>			
<b>Type:</b>	<input type="checkbox"/> State	<input type="checkbox"/> Local	<input type="checkbox"/> Tribal
	<input type="checkbox"/> Other Public	<input type="checkbox"/> Private/PNP	
<b>Contact:</b>		<b>Title:</b>	
<b>Phone #:</b>		<b>Email:</b>	

**SITUATION**

<b>Description of Damage:</b>				
<b>Operating Capacity:</b>	<input type="checkbox"/> Not Operating	<input type="checkbox"/> <40% Capacity	<input type="checkbox"/> 40%–80% Capacity	<input type="checkbox"/> >80% Capacity
	<input type="checkbox"/> Threat to Life/Safety	<input type="checkbox"/> Loss of Essential Service	<input type="checkbox"/> Restriction of Access	
<b>Impact:</b>	<input type="checkbox"/> Economic Loss	<input type="checkbox"/> Limits Community Recovery		

<b>Comments on Impact:</b>			

**Essential Infrastructure Assessment  
FACILITY ASSESSMENT**

**EMERGENCY WORK REQUIRED**

**Temporary Repairs:**

Yes

No

**Temporary Facilities:**

Yes

No

**Description:**

**Description:**

**Estimated Cost:**

**Estimated Cost:**

**REQUIREMENTS FOR PERMANENT RESTORATION**

**Restoration  
Required:**

Minor Repair

Major Repair

Replacement

**Comments on Restoration Needs:**

**Restoration  
Time Frame:**

<30 Days

30 Days to 6 Months

>6 Months

**Estimated Cost for  
Restoration:**

**ADDITIONAL COMMENTS**

**ASSESSOR INFORMATION**

**Name:**

**Organization:**

**Phone #.**

**Date:**

## **APPENDIX O IA PRT PSMA's**

Title: USACE ESF#3 Infrastructure Assessment (FOS)

Block II – Assistance Requested:

Pre-position Infrastructure Assessment PRT management team to provide event-specific planning and preparation for the rapid evaluation of residential and light commercial structures. This assistance includes the liaison/planning with State officials

Block IV – Statement of Work:

Initial scoping efforts may include determining need for nonstructural assessments such as more detailed structural inspections of public buildings to determine viability of mass care facilities, as well as electrical, mechanical, geotechnical, etc., in conjunction with FEMA request(s). A subsequent MA will be issued, if necessary, for Post-Declaration structural safety or other public works assessment activities.

MA task orders will be issued for specific personnel requirements, location(s), dates, and duration of assignment(s).

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$35K

IA PRT management team support is comprised of three (3) team members for 7 days.

*Note: The purpose of the task order is to direct specific activities within the scope of an existing MA. A task order form may be used if no additional funding is needed and the scope of the existing MA is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include the appropriate information. New requirements outside the scope of the original MA require the issuance of a new MA.*

Title: USACE ESF #3 Water and Wastewater Assessment (FOS)

Block II – Assistance Requested:

Pre-position experts in water and wastewater systems to provide event-specific planning and preparation for the rapid evaluation of water and wastewater facilities, treatment units, conveyance systems, and piping. This assistance includes the liaison/planning with State officials.

Block IV – Statement of Work:

As an element of infrastructure assessment, pre-position experts in water and wastewater systems to provide event-specific planning and preparation for the rapid evaluation of water and wastewater facilities, treatment units, conveyance systems, and piping. This support also includes the liaison/planning with State officials. A subsequent MA will be issued, if necessary, for Post-Declaration structural safety or other public works assessment activities.

MA task orders will be issued for specific personnel requirements, location(s), dates, and duration of assignment(s).

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$50K

Estimate is based on a team of five (5) interagency experts for 7 days.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the task order is to direct specific activities within the scope of an existing mission assignment. A task order form may be used if no additional funding is needed and the scope of the existing MA is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include the appropriate information. New requirements outside the scope of the original MA require the issuance of a new MA.*

Title: USACE ESF #3 Infrastructure Assessment (FOS)

Block II - Description of Requested Assistance - Deploy Infrastructure Assessment PRT and support personnel to execute rapid structural assessments of affected infrastructure.

Block IV -Justification/Statement of Work Deploy Infrastructure Assessment (IA, formerly Structural Safety Assessment) PRT to provide rapid structural evaluations of primarily residential buildings in State/local government jurisdictions(s) to determine whether damaged or potentially damaged buildings are safe for use or if entry should be restricted or prohibited. The communities identified above will designate the specific buildings to be evaluated and will coordinate access in accordance with all applicable Federal, State and local mandates. This mission may include logistical and other support necessary to perform the evaluations. This mission may be expanded or include, per FEMA request, public works assessments, including but not limited to detailed structural evaluations of public buildings and non-structural evaluations (such as electrical, mechanical, geotechnical, etc), to augment local jurisdiction capabilities as needed.

A Task Order will be prepared to direct specific activities within the scope of this mission assignment. (Task Orders may include personnel, resource movement, locations for delivery and duty stations.)

*[Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*

Total Cost Estimate: - \$3.5M

The full IA PRT with 50 inspectors (25 teams of 2) for up to 37 days can accomplish 10,000 inspections.]

Title: USACE ESF #3 FEMA Public Assistance for Drinking Water and Wastewater (FOS)

Block III – Assistance Requested:

Water sector experts to assist FEMA Public Assistance (PA) Program staff with water sector activities

Block IV – Statement of Work:

Provide water sector experts to assist FEMA with water sector Public Assistance (PA) activities involving public drinking water, wastewater, and storm water infrastructure needs. Tasks may include assessments, filling out worksheets, and interviewing and consulting with public entities. FEMA requires evaluation and assessment of claims for assistance to public agencies.

A Task Order will be prepared to direct specific activities within the scope of this mission assignment. (Task Orders may include personnel, resource movement, locations for delivery and duty stations.)

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$360K

ESF #3 support agency to provide technical experts to work with PA program to accomplish this mission. \$360K-Deploys twelve (12) water sector professionals for 30 days, includes labor (USACE only), overtime, supplies, travel and per diem.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*

Title: USACE ESF #3 Drinking Water & Wastewater Infrastructure/Safety TA to State (TA)

Block II – Assistance Requested:

Technical assistance to State, Tribal and/or local jurisdictions for the drinking water and wastewater infrastructure/safety mission

Block IV – Statement of Work:

Deploy personnel to provide technical assistance to State, Tribal and/or local jurisdictions to provide event specific planning and preparation for the drinking water and wastewater infrastructure/safety mission in coordination with the appropriate State agencies. Activities may include but are not limited to: sampling and analysis, initial damage assessment, liaison among Federal, State, local and municipal representatives concerning planning and execution efforts, inventorying of public water supplies and publicly owned treatment works (POTWs) within areas affected by the incident, preliminary facility surveys (e.g., operational status, emergency power status/need, and physical damage), laboratory support for water sample collection, coordination of essential commodities (fuel, treatment chemicals, and manpower needs) and coordinating data flow between State and Federal agencies.

Mission Assignment Task Orders will be issued for specific personnel requirements, location(s), dates, and duration of assignment(s).

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$300K

ESF #3 support agency to provide assistance to accomplish this mission. \$300K-Deploys a Water Sector Technical Assistance (WSTA) of 10 experts to include labor (USACE only), overtime, supplies, travel and per diem for 30 days.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include*



*the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*

Title: USACE ESF #3 Drinking Water and Wastewater Safety and Drinking Water and Wastewater System Assessment, Repair, and Recovery (DFA)

Block II – Assistance Request:

Assessments, evaluation, and design/build response and recovery actions of drinking water and wastewater systems

Block IV – Statement of Work:

Deploy personnel to coordinate and execute all necessary assessments, evaluation, and design/build response and recovery actions associated with ensuring the safety of drinking water and wastewater systems in the affected area in coordination with the appropriate State agencies, as directed by FEMA. These actions may include but are not limited to, providing laboratory support for water sample collection, analysis and data interpretation; assessing public water and wastewater systems; facilitating the contact with Federal, State and local agencies and providing oversight of drinking water and wastewater system restoration, and related activities.

A Task Order will be prepared to direct specific activities within the scope of this mission assignment. (Task Orders may include personnel, resource movement, locations for delivery and duty stations.)

All equipment and supply purchases must be coordinated with FEMA. Prior FEMA approval is necessary to ensure reimbursement.

Total Cost Estimate: \$300K

ESF #3 support agency to provide assistance to accomplish this mission. \$300K – Deploys 12 professionals for 30 days, includes labor (USACE only), overtime, supplies, travel and per diem. Repair costs will vary significantly based on assessments performed.

ADDITIONAL INFORMATION:

As the coordination agency for ESF #3, USACE is in the process of assessing its overall role in the infrastructure protection, assessment and repair arena as outlined in the National Response Framework. USACE and EPA have specifically targeted the water and wastewater sector/infrastructure to determine how both agencies can work in coordination under the ESF #3 structure to develop teams, processes and procedures to rapidly assessment and repair this critical infrastructure following a natural or manmade disaster. EPA is currently conducting planning sessions, to help better define the capabilities and roles for each agency as we develop interagency/intergovernmental teams and funding and contracting strategies. These actions will better equip the Federal government to respond to this need in efficient and effective manner and could be expanded to include other supporting agencies as requirements are better defined.

*Note: The purpose of the Task Order is to direct specific activities within the scope of an existing mission assignment. A Task Order form may be used if no additional funding is needed and the scope of the existing mission assignment is not changed. If at a later time additional funding or completion date extensions are required, an amendment to the MA shall be issued to include*

*the appropriate information. New requirements outside the scope of the original Mission Assignment require the issuance of a new MA.*

## **APPENDIX P FEST-A Members**

Officer in Charge (OIC)

Non-Commissioned Officer in Charge (NCOIC)

Civil Engineer

Mechanical Engineer

Electrical Engineer

Environmental Engineer

Contracting Specialist

Cartographer

## Appendix Q Training Required by Position

	<b>USACE Civil Level 1</b>	<b>IS 100.FWa</b>	<b>IS 200b</b>	<b>IS 700a</b>	<b>Infrastructure Assessment Level II</b>
Action Officer	x	x	x	x	x
Mission Manager	x	x	x	x	x
Mission Specialist	x	x		x	x
Supervisory Inspection Team Leader (SITL)	x	x		x	x
Mission Data Manager	x	x		x	x
ATC-20/45 Training Officer	x	x		x	x