

EMERGENCY FUNCTION (EF) 3 CONSTRUCTION AND ENGINEERING

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
	A. Purpose	1
	B. Mission Statement.....	1
	C. Scope.....	1
II.	POLICIES	2
III.	PLANNING ASSUMPTIONS	3
IV.	CONCEPT OF OPERATIONS	3
	A. General	3
	B. Organization	4
	C. Notifications.....	6
	D. Emergency Operations	6
V.	RESPONSIBILITIES.....	10
	A. Coordinating/Primary Agency	10
	B. Joint Primary Agency	11
	C. Support Agencies	11
VI.	INFORMATION COLLECTION, ANALYSIS, AND DISSEMINATION.....	12
VII.	ADMINISTRATION, FINANCE, LOGISTICS	12
	A. Resource Procurement	12
	B. Financial Management	13
	C. EF Development and Maintenance	13
VIII.	AUTHORITIES AND REFERENCES.....	14
IX.	ACRONYMS	14
X.	ATTACHMENTS	15

EMERGENCY FUNCTION (EF) 3 CONSTRUCTION AND ENGINEERING

EF Coordinator:	San Mateo County Public Works
Joint Primary Agency:	San Mateo County Public Works San Mateo County Planning and Building Department
Supporting Agencies:	San Mateo County Office of Emergency Services Cities and Special Districts Cities Building Departments California Department of Transportation (CalTrans) San Francisco Public Utilities Commission

I. INTRODUCTION

A. Purpose

The purpose of Emergency Function (EF) 3 is to provide a coordinated response from public works and engineering agencies during an emergency or disaster in San Mateo County. EF 3 can support primary emergency management objectives by providing personnel and resources for preparedness, response, recovery, and mitigation activities. EF 3 is led and coordinated by the San Mateo County Department of Public Works. EF 3 resources are used when individual agencies are overwhelmed and request additional service assistance from public works and engineering agencies.

B. Mission Statement

To provide essential public works, debris clearance and removal, and damage assessments during and following an emergency or disaster.

C. Scope

The scope of EF 3 during its activation is to:

1. Direct, coordinate, and facilitate actions, as necessary, to protect critical public infrastructure and properties at risk.
2. Assess and monitor the functionality of critical municipal infrastructure and, as needed, coordinate and direct emergency protective, repair, and/or restoration actions.
3. Support, coordinate, and facilitate assessments of the impact of an event on the jurisdiction and damages to resources and infrastructure.
4. Support the prioritization and coordination of the need for inspections, stabilization, and condemnation of damaged structures and property.
5. Provide and or obtain and coordinate engineering and technical expertise necessary to support and facilitate emergency operations.

6. Respond to requests for assistance with structural and utility services for emergency facilities activated within the municipality (see EF 12 [Utilities]).
7. Support, facilitate, and coordinate clearance, collection, storage, and disposal of disaster-related debris within the municipality, in coordination with the County, as needed.
8. Coordinate and facilitate demobilization of public works and engineering resources and capabilities.
9. Respond to requests for assistance from fire and law enforcement, and provide equipment and supplies to assist in the facilitation of access control.
10. Construct temporary emergency-access routes, including streets, roads, bridges, waterways, airfields, and any other facilities necessary to facilitate the execution of rescue operations.

II. POLICIES

The following policies apply to the implementation of this EF:

- A. The designated primary and support agencies are responsible for and committed to staffing and implementing this EF at the time of its activation by the San Mateo County Office of Emergency Management (OES).
- B. This EF will be implemented in a manner consistent with the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), the basic plan of the SMC emergency operations plan (EOP), applicable agency guidelines and policies, and all applicable regulations and statutes.
- C. The priorities for emergency operations implemented by this EF will be consistent with and supportive of the San Mateo County emergency operations center (EOC) action plan (AP) for the applicable EOC operational period.
- D. When the resources and capabilities available to this EF are limited, resource allocation will be in accordance with the priorities established by the EOC-AP, as well as by the following, in descending order of importance:
 1. Protection of human health and safety;
 2. Protection of critical infrastructure;
 3. Protection of property; and
 4. Protection of environmental quality.
- E. The primary and support agencies participating in EF 3 operate in conformance with NIMS and will adopt additional components of NIMS as they are promulgated. NIMS components include incident command system (ICS), preparedness activities, resource management mechanisms, communications and information management requirements, supporting technologies, and ongoing management and maintenance requirements.

III. PLANNING ASSUMPTIONS

The following planning assumptions have been used to develop this EF. If these assumptions are not valid for a specific event or circumstance, it will be necessary to modify the operational concepts and assigned responsibilities defined herein:

- A. The primary and support agencies will provide personnel and equipment available at the time of EF activation to support emergency operations.
- B. The equipment, systems, and supplies normally available to the primary and support agencies needed for emergency operations will remain functional and/or can be repaired on a timely basis to support the EF's operations.
- C. The state, federal agencies, municipalities, and jurisdictions adjacent to the jurisdiction will cooperate with the EF regarding information exchange and coordination of their emergency operations applicable to the EF.
- D. Members of the affected public will receive emergency instructions regarding protective actions, business openings and closings, and other changes to normal, daily conditions. The public will endeavor to comply with such instructions to the best of their ability.
- E. In disaster situations, interagency or intergovernmental coordination and support will be required to ensure the transportation system is maintained in an operating basis. This cooperation will require at least the support of EF 1 (See Table on Page 12)

IV. CONCEPT OF OPERATIONS

This section defines the concept of operations that will be used by the primary and support agencies to implement the EF at the time of a disaster. The concept of operations includes actions to be taken by the agencies responsible for the EF during the pre-event timeframe, as well as during emergency-response and disaster-recovery periods. The concept of operations for the EF is applicable regardless of the scope, type, or duration of an emergency or event.

A. General

1. EF 3 will be activated, staffed, and implemented by the primary and support agencies whenever directed to do so by the San Mateo County OES and/or the unified command of the County EOC. The primary agency may be directed to activate the EF prior to the onset of an emergency situation, immediately after its impact on the municipality, or at any time during the activation of the EOC. Once directed to activate the EOC, the primary agency is responsible for notification and mobilization of its personnel and resources as they are needed, as well as directing mobilization of the personnel and resources of designated support agencies.
2. Once activated, designated personnel from the primary agency will coordinate operations of the EF from its position in the EOC, where adequate communications and data management systems will be available. Coordination of the EF operations from the EOC also will be used to ensure coordination of all EF operations with emergency actions being taken by other County EFs and by the County's

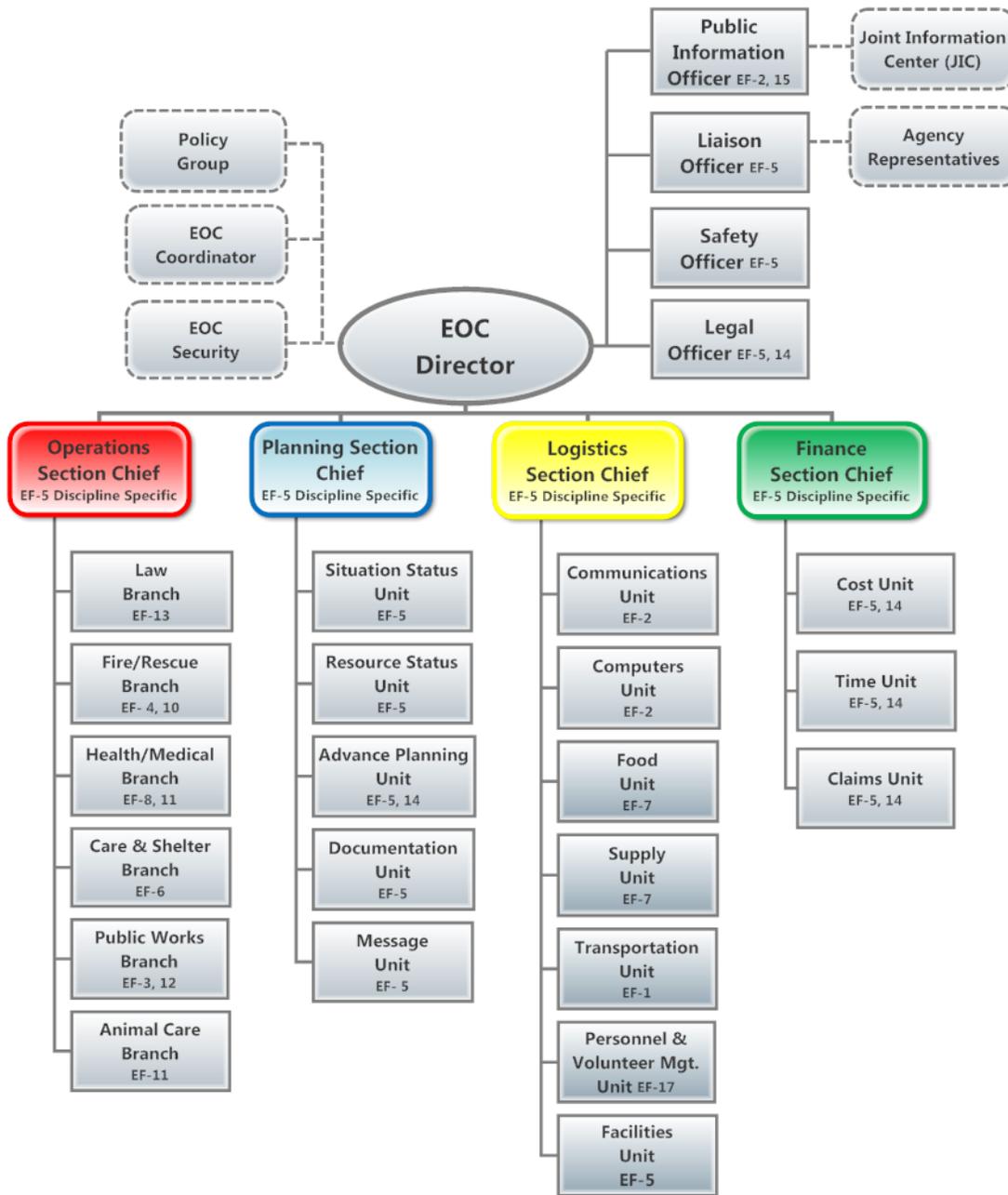
municipalities. Operational coordination by the primary agency will continue from the San Mateo County EOC until the time the EF is authorized to deactivate and terminate operations.

3. The OES and/or the San Mateo County EOC will activate the EF whenever the known or anticipated effects of the event require its services and capabilities. Activation may be considered needed when one or more of the following has or is expected to occur:
 - a. Significant damage to the County's infrastructure has occurred or will occur.
 - b. Large-scale property damage will occur.
 - c. Engineering and/or inspections services will be required to support emergency operations within San Mateo County.

B. Organization

1. The position of this EF in the EOC organizational structure is shown in the organization chart below. EF 3 is positioned in the infrastructure support branch of the Operations Section.
2. The Public Works Director or designee serves as the coordinator and facilitator of operations implemented by the EF and, in this capacity, is assisted by the designated support agencies. The primary agency will commit its own personnel, facilities, and resources to EF operations, requesting assistance from the designated support agencies whenever necessary.
3. The organization of the EF is expected to remain the same for both emergency-response and disaster-recovery operations.

San Mateo County EOC Organizational Chart



Emergency Functions (EF)			
EF #1	Transportation	EF #10	Hazardous Materials
EF #2	Communications	EF #11	Food and Agriculture
EF #3	Construction and Engineering	EF #12	Utilities
EF #4	Fire and Rescue	EF #13	Law Enforcement
EF #5	Emergency Management	EF #14	Long-Term Recovery
EF #6	Care and Shelter	EF #15	Public Information
EF #7	Resources	EF #17	Volunteer and Donations Management
EF #8	Public Health and Medical		

C. Notifications

1. The San Mateo County OES will be responsible for notifying the EF coordinator (or EF alternate coordinator) in the primary agency of the need to activate the EF or, if indicated, to stand by in the event that EF activation is required. In turn, the EF coordinator (or alternate coordinator) is responsible for notifying the designated support agencies of the notification to activate the EF or to stand by for possible activation. The EF coordinator (or alternate coordinator at the time) is responsible for determining whether personnel from some or all of the support agencies should be notified and mobilized.
2. The EF Coordinator maintains an up-to-date, 24-hour notification roster of its agency's personnel assigned to this EF, as well as representatives of the support agencies. (This roster could be an attachment to the EF or maintained as a separate document because it will have home phone numbers and other private information).

D. Emergency Operations

This section describes the emergency operations that may be required of the primary and support agencies to be prepared for EF activation, as well as the operations to be implemented during the response and recovery phase. Actions to be taken for demobilization of the EF are also defined.

1. Pre-Event Preparedness

The EF coordinator has management oversight for EF 3. To ensure readiness to activate the EF, the primary and support agencies will check that the following actions are taken prior to the onset of an emergency:

- a. Detailed standard operating procedures (SOP), action checklists, and job aides needed by EF personnel will be developed and available for use.
- b. Equipment inventories and personnel rosters necessary for EF implementation will be up-to-date and immediately available. Categorizing and classifying response and recovery resources must be provided by or available to the primary agency in accordance with resource-typing guidelines issued by the NIMS Integration Center.
- c. As indicated, agencies will ensure that primary and support agency personnel designated for EF implementation have received all necessary and required training and are appropriately credentialed and certified in accordance with guidelines issued by the NIMS Integration Center.
- d. Agencies will assist the designated alternate EF coordinator(s) and the assigned personnel from the EF primary and support agencies in understanding their duties for the EF maintenance and activation, as well as continually improving their capabilities for effective EF implementation.
- e. Agencies will coordinate pre-incident efforts with private-sector organizations as they relate to the EF.

- f. Agencies will coordinate EF preparedness activities relating to all levels of planning for response and recovery operations.
 - g. Facilities, systems, equipment, and supplies that are necessary for EF implementation will be protected from the effects of the event to the greatest extent feasible.
 - h. If indicated, personnel will be pre-deployed to protected locations or facilities within the County, to expedite implementation of the EF.
 - i. Agencies will identify new equipment or capabilities required to: (1) prevent or respond to new or emerging threats and hazards, or (2) improve the ability to address existing threats.
 - j. Agencies will designate representatives for the San Mateo County EOC.
 - k. Agencies will maintain a list of construction contractors and engineering firms with active County contracts that would be available for infrastructure repairs.
 - l. Agencies will coordinate planning with EF 3 support agencies and other EFs to refine construction and engineering operations.
 - m. Agencies will identify anticipated resource shortfalls.
2. Response Operations

Response operations are conducted during an event and are necessary to protect people, provide services to people harmed by the event, and mitigate further property or environmental damage, if feasible. Response operations for EF 3 are considered in two phases: (1) initial actions for the period when the EF is first activated, and (2) continuing actions that are to be implemented, as needed, during each EOC operational period for the response phase until the EF is able to transition to recovery operations. In all cases, the response operations are general guidelines for action, and may be modified as needed to adjust to the particular circumstances of the situation. The phases of the response operations are described below:

a. Initial Actions

The following initial actions, as indicated, are to be completed during the first EOC operational period for activation of the EF:

- i. When the EOC is activated, the EF coordinator (or designee) will open the Department Operations Center (DOC) and send a representative to the EOC to staff the EF 3 workstation, identify which support agencies for EF3 are needed, and take steps to ensure that support agencies are activated or on alert as appropriate.
- ii. Ensure the functionality of telecommunications and data management systems to be used by the EF, and take corrective actions as needed.
- iii. Access needed procedures, checklists, rosters, and inventories.
- iv. Complete notifications of primary- and support-agency personnel.

- v. Receive an initial briefing and/or information regarding the situation and the status of County's emergency operations.
 - vi. If indicated, direct activation and staffing of facilities outside of the EOC/DOC that are necessary for implementation of the EF, including the following:
 - 1) Staging areas; and
 - 2) Base or camp needs.
 - vii. If indicated, notify mutual aid partners, as well as necessary vendors and contractors, of the activation of the EF, determine the availability of services and resources through these organizations, and coordinate with appropriate private-sector organizations to maximize use of all resources.
 - viii. Assist with the collaboration and development of operational priorities based on the objectives set forth in the initial briefing.
 - ix. Obtain preliminary damage-assessment reports for impacted critical infrastructure and other property.
 - x. Pre-position response resources when it is apparent that construction and engineering resources will be necessary. Relocate construction and engineering resources when it is apparent that health and safety are at risk by the likely impacts of the emergency situation.
 - xi. Monitor, direct, and coordinate construction and engineering resources and response activities.
 - xii. Participate in EOC briefings, and provide input to the planning section to assist in the preparation of the incident action plans (EOC-AP) and situation reports (SITREP).
 - xiii. Prioritize and implement emergency clearing of debris from transportation routes to provide access for emergency-response personnel, equipment, and supplies in areas affected by an emergency or disaster (coordinate with EF 1 [Transportation] and EF 12 [Utilities]).
 - xiv. Provide life safety services, as required and appropriate.
 - xv. Implement necessary initial actions specific to the EF based on direction and objectives set forth by the EF 5 (Emergency Management) coordinator.
- b. Continuing Actions

The following continuing actions would be repeated, when indicated, during each operational period for the duration of the response period, and until the transition to recovery operations by the EF:

- i. Monitor EF staffing and resource availability and capabilities, and take corrective actions when necessary.
- ii. Review the EOC-AP for the operational period and prioritize EF operations and resource allocation in accordance with its directives.

- iii. Monitor EF emergency actions initiated and/or continuing from the previous operational period until completion.
- iv. Respond to requests from EF personnel at incident scenes or other emergency locations, if applicable, for additional services and assistance.
- v. Maintain complete and accurate documentation regarding emergency operations and expenditures.
- vi. Maintain communication with activated municipal EOCs, and respond to requests for assistance and resources.
- vii. Provide information regarding EF operations, problem areas, and resource needs to EF 5 (Emergency Management) for development of the EOC SITREP and EOC-AP.
- viii. Participate in EOC briefings when held.
- ix. As EF response actions near completion, anticipate and plan for transitioning the EF to recovery-phase operations and provide EF recovery plans to EF 5 (Emergency Management).

3. Recovery Operations

- a. Ensure the completion of all response-phase emergency operations and the resolution of all requests for assistance.
- b. Advise all activated EF support agencies of the initiation of recovery-phase operations, and provide coordination and guidance regarding needed support agency actions.
- c. Determine the status of current county operations and the need for continuing assistance from the EF.
- d. Review the EOC-AP for recovery and, if indicated, adjust EF recovery actions for consistency.
- e. Provide updated information regarding completion of EF response-phase operations to EF 5 (Emergency Management).
- f. Implement the planned EF recovery-phase operations to include, but not be limited to, the following:
 - i. Perform damage assessment to transportation critical infrastructure.
 - ii. Assist EF 12 (Utilities) with road-clearing priorities.
 - iii. Coordinate with EF 12 on assistance needed for utility restoration.
 - iv. Provide damage-assessment estimates to EF 5 (Emergency Management).
 - v. Identify, prioritize, and coordinate to repair and restore local roads, bridges, and culverts according to County plans, policies, and procedures.
 - vi. Ensure all appropriate County plans, policies, and procedures are followed when determining qualified contractors offering recovery and restoration services.

4. Demobilization Operations

As EF recovery phase operations near completion, implement actions necessary to support EF demobilization when authorized by the EF 5 (Emergency Management) coordinator (including but not limited to) the following:

- a. Advise activated primary agency personnel, support agencies, and EOC staff of the intent to demobilize the EF; if indicated, define methods for providing continuing assistance to any agencies following EF deactivation.
- b. Review all EF operational and financial documentation to ensure completeness and accuracy.
- c. Account for all deployed EF personnel, equipment, and supplies.
- d. Identify EF systems, equipment, or supplies damaged or depleted during EF operations, and assign responsibility for repair or restoration.
- e. From EF 8 (Public Health and Medical), determine the availability of services for critical incident stress debriefings (CISD) for emergency workers, and ensure that primary and support agency personnel are advised on ways to access CISD assistance.
- f. Upon receipt of authorization from the EOC, obtain approved copy of the demobilization plan prepared by the Planning Section to demobilize the EF, and provide completed EF documentation to San Mateo County OES. Notify County EOC, if activated, and all support agencies of the demobilization of the EF.

V. RESPONSIBILITIES

A. Coordinating/Primary Agency

This section lists each coordinating/primary agency and their respective responsibilities.

1. San Mateo County Department of Public Works
 - a. Provide a liaison to the EOC when requested.
 - b. Function as lead agency in the implementation of this EF.
 - c. Inspect and make necessary emergency repair of the department's mains, pump stations, treatment plants, and community systems.
 - d. Inspect and repair County roads, bridges, and traffic control equipment.
 - e. Support activities related to the inspection, repair, or relocation of County facilities.
 - f. Perform or contract for major recovery work to restore damages to public facilities or infrastructure.
 - g. Provide the EOC with complete damage assessment and priority repair information when requested.

- h. Provide traffic control signs and barricades for road closures, detours, and potential road hazards. Provide operational control of traffic signals and flashers under county jurisdiction.
- i. Assess and repair traffic control devices and traffic management systems.
- j. Provide debris removal for emergency protective measures, emergency and temporary repairs, and/or construction on County land, roads, bridges, and facilities.
- k. Provide construction and emergency equipment, supplies, and personnel for response and recovery activities.
- l. Coordinate demolition and disposal of appropriately identified facilities.
- m. Support public works field operations.
- n. Provide, procure, and maintain equipment.

B. Joint Primary Agency

This section lists each joint primary agency and their respective responsibilities.

1. San Mateo County Planning and Building Department
 - a. Lead agency for the inspection of County facilities and other appropriate buildings or homes in San Mateo County unincorporated areas for structural integrity when indicated.
 - b. Coordinate with the San Mateo County Department of Public Works, Facilities Division for inspection, repair, or relocation of County facilities.
 - c. Expedite the issuance of building permits necessary for the recovery process.

C. Support Agencies

This section lists each support agency and their respective responsibilities.

1. San Mateo County Office of Emergency Service/Emergency Operations Center
 - a. Identify and prioritize emergency response and recovery operations related to this EF.
 - b. Coordinate resource requests.
 - c. Collect and compile initial damage assessment information in compliance with California OES/Federal Emergency Management Agency (FEMA) requirements for potential presidential declaration of emergency.
2. San Mateo County Department of Public Works, Facilities Division
 - a. Support the EOC in maintaining an operational back-up power source.
 - b. Coordinate with the San Mateo County Department of Planning and Building for the inspection of County facilities.

VI. INFORMATION COLLECTION, ANALYSIS, AND DISSEMINATION

The primary function of EF 3 will be to facilitate road clearance, debris removal, and damage assessments; and to assist other response and recovery operations. As a result, EF 3 must work closely with numerous other EFs to establish an effective process of communication and information collection.

Critical Coordination Points for EF 3

EF 2 – Communications	Obtains information to provide air traffic information and transportation conditions to determine routes and methods for getting mobile communications assets into the area.
EF 5 – Emergency Management	Provides damage assessment information.
EF 7 – Resources	Coordinates identification and provision of fuel, land, and limited manpower with other departments in countywide emergencies.
EF 12 – Utilities	Coordinates the restoration of utilities.
EF 13 – Law Enforcement	Coordinates provision of traffic services.
EF 15 – Public Information	Provides public information and warnings.

VII. ADMINISTRATION, FINANCE, LOGISTICS

A. Resource Procurement

This section describes the ways in which the EF will procure or obtain resources that may be required for implementation of the EF. Resources, as a general term, encompass the personnel, equipment, systems, and supplies, as well as highly specialized services that may be needed for EF implementation.

1. In all cases, the primary agency, with continuing representation in the EOC, will serve as the point of coordination to identify resources needed for EF implementation. The primary agency will also be responsible for requesting and directing mobilization of the resources.
2. When resources are needed, the primary-agency representative will utilize one or more of the following for securing and deploying the needed resources in the most timely and cost-effective manner:
 - a. Resources under the direct control of the primary agency;
 - b. EF support agencies;
 - c. Other activated EF representatives in the County EOC;

- d. Mutual aid agreements; and
- e. Private-sector vendors or contractors that would have the resources available.
3. The EF coordinator will be responsible for determining the process of procurement authorization established by the EF 5 (Emergency Management) coordinator and EF 7 (Resources).
4. In all cases, the primary agency EF representative will have information readily available regarding the categories or types of resources relevant to EF operations to facilitate requesting additional resources.

B. Financial Management

1. EF 3 is responsible for managing financial matters related to resources that are procured and used during an incident. During a response, each agency/department is responsible for recording and tracking its own expenditures and seeking reimbursement from the appropriate resource after the event.
2. Support entities will document their expenditures and submit them for reporting purposes directly to the Finance and Administration Section or a designated finance service officer as soon as possible.

C. EF Development and Maintenance

1. The EF coordinator is responsible for EF development and maintenance, which is to be completed with assistance and cooperation of OES and the designated support agencies.
2. The EF coordinator will review the EF as well as associated SOPs, checklists, and other documentation, and modify them (if indicated) in response to any of the following events:
 - a. Upon request of the EF 5 (Emergency Management) coordinator;
 - b. Following any activation of the EF for response to an actual incident or an exercise;
 - c. Following any change or development in any County government, or any non-governmental organization (NGO) assigned responsibility for EF implementation; and
 - d. Upon the opening or closing of any major facility of the primary or support agencies considered vital to implementation of the EF.

VIII. AUTHORITIES AND REFERENCES

The authorities and references documented in the basic plan of the San Mateo County EOP are considered applicable to this EF.

IX. ACRONYMS

Caltrans	California Department of Transportation
CISD	Critical Incident Stress Debriefing
COOP	Continuity of Operations Plan
DOC	Department Operations Center
EF	Emergency Function
EOC	Emergency Operations Center
EOC-AP	Emergency Operations Center Action Plan
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
IAP	Incident Action Plan
ICS	Incident Command System
NGO	Non-governmental Organization
NIMS	National Incident Management System
OES	Office of Emergency Services
SEMS	Standardized Emergency Management System
SITREP	Situation Report
SOP	Standard Operating Procedures

X. ATTACHMENTS

Insert agency specific attachments here