

EMERGENCY FUNCTION (EF) 12

UTILITIES

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EMERGENCY FUNCTION (EF) 12 UTILITIES

| | |
|-------------------------------------|---|
| Coordinating/Primary Agency: | San Mateo County Office of Emergency Services (OES) |
| Supporting Agencies: | San Mateo County Public Works San Mateo County Information Services Department (ISD) Municipal Water Districts Water Treatment Plants/Sanitary Districts Pacific Gas & Electric (PG&E) San Francisco Public Utilities Commission (SFPUC) Cellular and Telephone Companies Cable/DSL/ISP Providers Public/Private Partnerships |

I. INTRODUCTION

A. Purpose

The purpose of Emergency Function (EF) 12 is to provide guidance regarding County actions for the effective use of energy resources, and for the control and coordination of various types of energy operations involving people in distress as the result of a major emergency or disaster in San Mateo County. A continuous energy supply is critical to save lives and protect health, safety, and property, as well as to carry out other emergency response missions.

B. Mission Statement

The EF 12 stakeholders coordinate and enhance the capabilities to provide utility services through all four phases of emergency management.

C. Scope

1. This EF is applicable to situations within the County when it will be necessary to provide energy systems missions for emergencies or disasters.
2. An energy systems response will require a coordinated local response from primary agencies that provide specialized energy operations during incidents or potential incidents. This includes infrastructure damage to the following:
 - a. Electricity;
 - b. Gas/propane;
 - c. Telecommunications;
 - d. Water; and
 - e. Wastewater.

3. Additionally, the scope of EF 12 during its activation is to:
 - a. Assess energy system disruption, energy supply and demand, and requirements to restore disrupted systems.
 - b. Provide energy information, education, and conservation guidance to the public.
 - c. Monitor the escalation and effects of the incident on energy supplies and services available within the municipality, and the anticipated impact of these effects on emergency operations.
 - d. Assess the likely or potential duration of energy outages or shortages, and the resulting effect on public health and safety. If indicated, advise the County EFs of the potential for health and safety impacts caused by energy outages.
 - e. Determine the activated municipal emergency facilities that will need temporary standby power, alternate heating-fuel supplies, or similar energy services. Initiate and coordinate municipal actions to install and maintain temporary energy supplies and services for the duration of emergency operations.
 - f. Serve as the point of contact for private-sector energy suppliers and providers to coordinate operations within the County for restoration of energy supplies and services. Advise private-sector energy suppliers and providers of the County's priorities for restoration.
 - g. Upon request, coordinate, support, and facilitate emergency operations to assist energy suppliers and providers in their restoration operations.
 - h. Monitor the restoration of energy supplies and services, and advise the County EFs of the status of such efforts.
 - i. Provide assistance regarding the content and distribution of emergency public information by municipal agencies concerning energy supplies and services, energy conservation, health and safety precautions, and related matters.
 - j. Inform County officials and energy suppliers about available energy supply recovery assistance.
 - k. Provide technical assistance involving energy systems, and coordinate and execute energy system response operations through private and civilian services, using public and private resources to assist people and property in potential or actual distress.

II. POLICIES

The following policies apply to the implementation of this EF:

- A. EF 12 is to be implemented upon request of EF 5 (Emergency Management), the San Mateo County 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 San Mateo County emergency operations plan (EOP), applicable agency guidelines and policies, and all applicable regulations and statutes.

- C. All appropriate government (county and local) and private-sector resources are to be coordinated and employed as a unified response effort.
- D. 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 OES.
- E. 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 (EOC-AP) for the applicable EOC operational period.
- F. 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.
- G. The primary and support agencies participating in EF 12 operate in conformance with SEMS and NIMS and will adopt additional components of SEMS and NIMS as they are promulgated. SEMS and 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. During an emergency or disaster event, San Mateo County will experience widespread and prolonged electric power failures. With no electric power, communications will be affected and traffic signals will not operate, causing surface movement gridlock. Such outages impact other emergency public health and safety services, including the movement of petroleum products for transmission and emergency power generation.
- B. Existing stocks of crude oil, petroleum products, natural gas, and liquid natural gas will not be adequate to respond to an energy crisis, creating a need for additional products throughout the impacted and adjacent areas.
- C. Disruption of the various energy systems will severely hinder response operations.
- D. Disruption of energy systems will greatly impact chemical and industrial plants, sewer and water treatment facilities and distribution systems.
- E. Public transportation systems will be adversely impacted by a disruption in the energy system.
- F. There may be panic hoarding of fuel in some areas served by broken pipelines.

- G. The disaster could affect sea movement of crude oil, petroleum products, liquid natural gas, and related support structures. There may be extensive pollution from leaking oil. Fires may ignite on floating oil.
- H. Natural gas lines may break and erupt in fire. Water pressure would be low or non-existent, hindering firefighting operations. Sewer systems would not function.
- I. Energy prices on products traded in commodity markets will move rapidly, and the federal government, in coordination with state and county officials, will need to provide a credible information stream on energy system damage.
- J. An energy crisis may adversely affect millions of people.
- K. The primary and support agencies will have adequate personnel and equipment available at the time of EF activation to support emergency operations. If necessary, the agencies will implement their continuity of operations plans (COOP) to support emergency operations.
- L. 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.
- M. Resources requested from mutual aid organizations and/or through the County EOC will be provided on a timely basis where needed to support emergency operations.
- N. The state and federal agencies, municipalities, and jurisdictions adjacent to San Mateo County will cooperate with the EF regarding information exchange and coordination of their emergency operations applicable to the EF.
- O. 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.

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 emergency event.

A. General

1. This EF will be activated, staffed, and implemented by the primary and support agencies whenever requested to do so by the San Mateo County OES and/or the unified command of the EOC. The primary agency may be requested to activate the EF prior to the onset of an emergency situation, immediately after its impact, 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

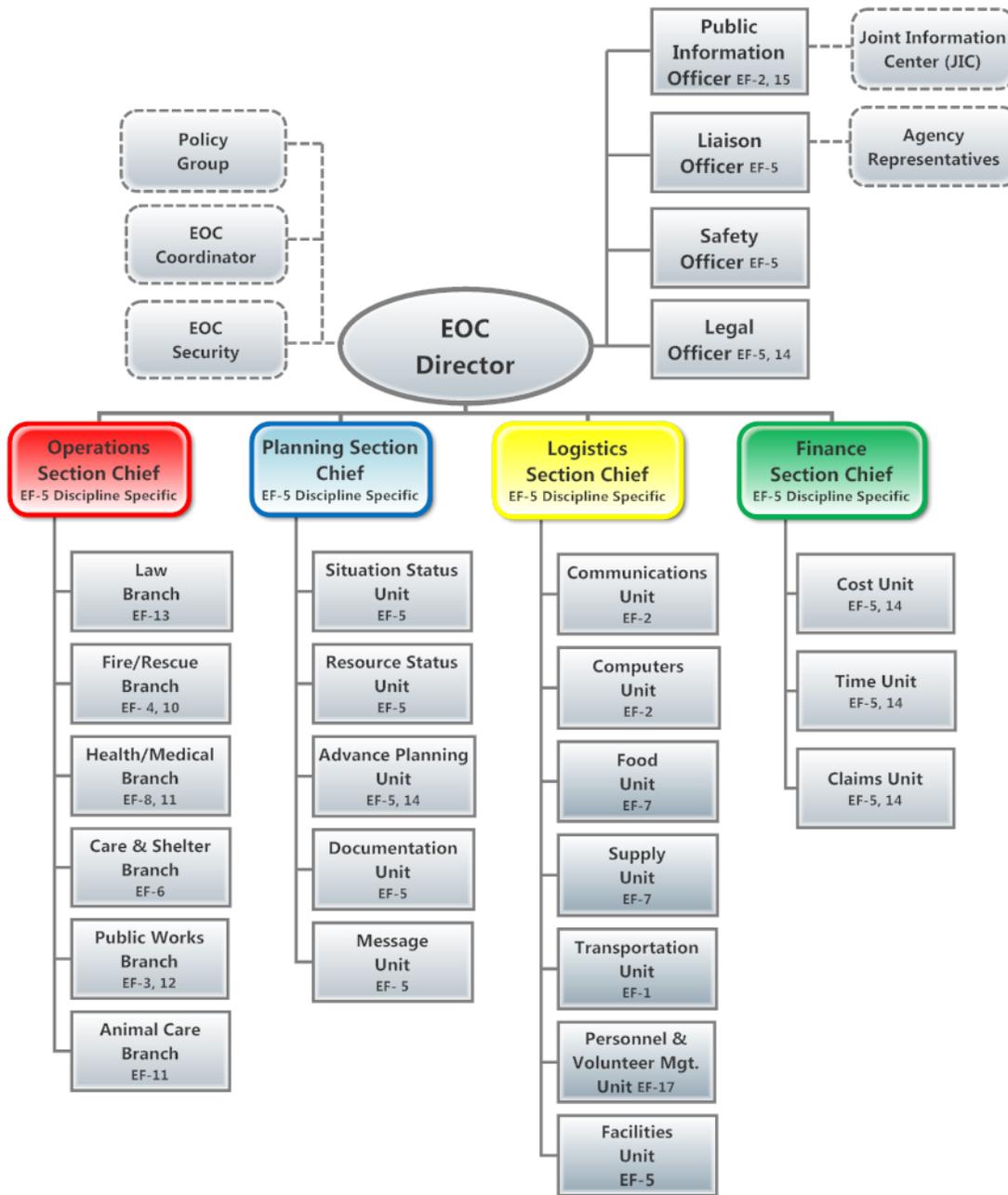
as they are needed, as well as requested mobilization of the personnel and resources of designated support agencies.

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 are 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 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. When a disaster occurs, this EF assesses fuel and electric power damage, as well as energy supply and demand, and identifies the proposed sequence of repairs to energy systems. The EF coordinates closely with utility and state officials to provide temporary, alternate, or interim sources of emergency fuel and power.
4. The OES and/or the unified command of the EOC will activate the EF whenever the known or anticipated effects of the event require its services and capabilities.

B. Organization

1. The position of this EF in the County EOC organizational structure is shown in the organization chart below. EF 12 is positioned in the Public Works Branch of the Operations Section.

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 | | |

- The San Mateo County OES 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 when necessary.

3. The organization of the EF is expected to remain the same for both emergency-response and disaster-recovery operations.

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 primary agency maintains an up-to-date, 24-hour notification roster of its 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 by 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 12. 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 event:

- 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 will be provided by or available to the primary agency in accordance with resource typing guidelines issued by the NIMS Integration Center, ensuring the primary agency's resource inventory is current.
- 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 coordinators and the assigned personnel from the EF primary and support agencies to understand their duties

for the EF maintenance and activation, as well as to continually improve 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 related 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 municipality to expedite implementation of the EF.
- i. In accordance with San Mateo County's multi-year training and exercise program developed pursuant to the Homeland Security Exercise and Evaluation Program (HSEEP), agencies will participate in planning, implementation, and evaluation of training and exercise programs.
- j. Agencies will identify new equipment or capabilities required to prevent or respond to new or emerging threats and hazards, or to improve the ability to address existing threats.
- k. Designate representatives for the San Mateo County EOC.

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 the EF 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. Each energy supplier immediately assesses fuel and electric power damage, energy supply, and contingency procedures to repair energy systems.
- ii. Local and county energy organizations provide initial response to the scene of a disaster using locally-based resources and existing mutual aid agreements.
- iii. When the EOC is activated, the EF coordinator or designee will staff the EF 12 workstation, identify which support agencies for EF 12 are needed, and take steps to ensure that support agencies are activated or on alert, as appropriate.

- iv. Ensure the functionality of telecommunications and data management systems to be used by the EF, and take corrective actions as needed.
 - v. Access needed procedures, checklists, rosters, and inventories.
 - vi. Complete notifications of primary and support agency personnel.
 - vii. Receive an initial briefing and/or information regarding the situation and the current status of County emergency operations by other EFs.
 - viii. If indicated, direct activation and staffing of facilities outside of the EOC that are necessary for implementation of the EF.
 - ix. As indicated, respond to any initial requests from the municipalities for assistance from the EF.
 - x. Establish communications with the corresponding EF at the County EOC, if activated, and define the protocol for requesting assistance from the County EF.
 - xi. If indicated, notify mutual aid partners (as well as necessary vendors and contractors) of the activation of the EF, and determine the availability of services and resources through these organizations. Coordinate with appropriate private-sector organizations to maximize use of all resources.
 - xii. The EF 12 coordinator will assist with the collaboration and development of operational priorities based on the objectives set forth in the initial briefing.
 - xiii. 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 adequacy, 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. Assist in the identification of critical energy infrastructure and critical assets.
- v. Provide information about the impact of any damage reported to supply chain or energy infrastructure.
- vi. Respond to requests from EF personnel at incident scenes or other emergency locations (if applicable) for additional services and assistance.
- vii. Maintain complete and accurate documentation regarding emergency operations and expenditures.

- viii. Maintain communications with the applicable County EF, if activated, at the County EOC; if indicated, monitor the status of requests by the EF made to the County EF for resources and assistance.
 - ix. Provide information regarding EF operations, problem areas, and resource needs to EF 5 (Emergency Management) for development of the EOC situation report (SITREP) and EOC-AP.
 - x. Participate in EOC briefings when held.
 - xi. 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).
 - xii. Assist in acquisition of specialized personnel from areas not affected by the emergency or disaster to alleviate problems.
 - xiii. Coordinate rebuilding processes to restore services to impacted individuals, businesses, and industry. This coordination should involve the establishment of priority areas or restoration based on the objectives established in the EOC-AP. Coordination should also engage EF 1 (Transportation) for transportation access, EF 3 (Construction and Engineering) for public works assistance, and EF 14 (Long-Term Recovery) for critical infrastructure restoration, as well as other appropriate EFs depending on the circumstances.
 - xiv. Allocate personnel and resources in accordance with established priorities.
 - xv. Assist energy suppliers in obtaining products, equipment, specialized personnel, and transportation to repair or restore energy systems.
 - xvi. Assist agencies and organizations in obtaining fuel for transportation, communications, and disaster-response operations.
 - xvii. Coordinate public information and provide updates to EF 15 (Public Information).
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. Advise, as applicable, activated municipal EOCs regarding the transition to recovery-phase operations.
 - d. Determine the status of current city operations and the need for continuing assistance from the EF.
 - e. Review the EOC-AP for recovery and, if indicated, adjust EF recovery actions to be consistent.

- f. Provide updated information regarding completion of EF response-phase operations to EF 5 (Emergency Management).
 - g. Implement the planned EF recovery-phase operations.
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 city EOCs of the intent to demobilize the EF. If indicated, define methods for providing continuing assistance to cities or other County 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. Determine the schedule and data needs for the after-action assessment of operations and development of corrective actions and lessons learned, and advise primary and support agency representatives accordingly.
 - f. From San Mateo County 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.
 - g. On receipt of authorization from the EOC Director, obtain approved copy of the demobilization plan.
 - h. Notify all support agencies of the ESF's demobilization.

V. RESPONSIBILITIES

This section lists the coordinating, primary, and support agencies and their respective responsibilities.

A. Coordinating/Primary Agency

- 1. San Mateo County OES
 - a. When requested, provide liaison personnel to the EOC to fill the Utilities Branch Director position. This position is responsible for:
 - i. Establishing liaison with all public utilities providing essential services in the County.
 - ii. Coordinating the use of public utilities available and upon which no restrictions have been placed by higher levels of authority.

- iii. Coordinating public/private utilities requests for assistance with the Regional Emergency Operations Center (REOC) when they cannot be filled locally.
- iv. Assisting public utilities by coordinating utility operations with government agencies.

B. Support Agencies

- 1. All support agencies will:
 - a. Provide liaisons and/or 24/7 phone contacts to the EOC when requested.
 - b. Provide situation updates to the EOC when requested.
 - c. Provide utility restoration plans and priorities to the EOC when requested.

VI. INFORMATION COLLECTION, ANALYSIS, AND DISSEMINATION

The primary function of EF 12 will be to repair and restore energy services during an emergency or disaster event in San Mateo County. As a result, EF 12 must work closely with numerous other EFs and thereby establish an effective process of communication and information collection.

Critical Coordination Points for EF 12

| | |
|--|---|
| EF 1 – Transportation | Coordinates assistance for access. |
| EF 3 – Construction and Engineering | Coordinates assistance in restoration of energy services. |
| EF 13 – Law Enforcement | Coordinates security and access to restricted areas. |

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. Resources, as a general term, refer to 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/coordinator, 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 use 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. Cities within the operational area (OA); and
 - d. 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 12 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. For reporting purposes, support entities will document their expenditures and submit them 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 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 coordinator;
 - b. As a part of the countywide process to update the all municipality EOPs and annexes;
 - c. Following any activation of the EF for response to an actual incident or an exercise;
 - d. Upon any change or development in any municipal government, or any non-governmental organization assigned responsibility for EF implementation; and
 - e. Upon the opening or closing of any major facility of the primary or support agencies that is considered vital to implementation of the EF.

VIII. AUTHORITIES AND REFERENCES

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

IX. ACRONYMS

| | |
|--------|---|
| CISD | Critical Incident Stress Debriefing |
| COOP | Continuity of Operations Plan |
| EF | Emergency Function |
| EOC | Emergency Operations Center |
| EOC-AP | Emergency Operations Center Action Plan |
| EOP | Emergency Operations Plan |
| FEMA | Federal Emergency Management Agency |
| HSEEP | Homeland Security Exercise and Evaluation Program |
| ICS | Incident Command System |
| ISD | Information Services Department |
| NIMS | National Incident Management System |
| OA | Operational Area |
| OES | Office of Emergency Services |
| PG&E | Pacific Gas and Electric |
| REOC | Regional Emergency Operations Center |
| SEMS | Standardized Emergency Management System |
| SFPUC | San Francisco Public Utilities Commission |
| SITREP | Situation Report |
| SOP | Standard Operating Procedure |

X. ATTACHMENTS

Insert Any Agency Specific Attachments here