

ESF 8 - FUNCTIONAL ANNEX

King County Environmental Health Services Division Emergency Response Plan

Version No. 1 June 2014

Record of Changes

| Version No. | Description of Change | Date Entered | Posted By |
|-------------|-----------------------|--------------|--|
| 1.0 | Development of Plan | June 2014 | Stella Chao, EH Deputy Director Nicole Thomsen, EH Planner Pat Murphy, HEI III |

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- Attachment #1: Contact Roster
- Attachment #2: Communications Log

List of Acronyms

| | |
|--------|---|
| DO | Public Health Duty Officer |
| DPD | Department of Planning and Development |
| DNRP | King County Department of Natural Resources and Parks |
| DPER | King County Department of Planning and Environmental Review |
| EHD | Environmental Health Services Division |
| EOC | Emergency Operations Center |
| ERT | Environmental Response Team |
| ESF | Essential Support Function |
| FEMA | Federal Emergency Management Agency |
| HCP | Healthy Communities Planning |
| HMAC | Health and Medical Area Command |
| IPM | Integrated Pest Management Control |
| NACCHO | National Association of County and City Health Officials |
| NEHA | National Environmental Health Association |
| NIMS | National Incident Management System |
| PH | Public Health |
| PICC | Public Information Contact Center |
| PIO | Public Information Officer |
| RCECC | King County Regional Communications and Emergency Coordination Center |
| TDSRS | Temporary Debris Staging and Reduction Sites |
| WA DOH | Washington State Department of Health |

Purpose

The purpose of this Emergency Response Plan (Plan) is to guide the Environmental Health Services Division (EHD) and its community and agency partners in coordinated environmental health responses in a natural or man-made disaster or a public health emergency.

Scope

The EHD Plan is an appendix to the King County Emergency Support Function (ESF) 8 and aligned with the King County Comprehensive Emergency Management Plan¹. Public Health is also named in following:

- ESF 3²
- ESF 3 Addendum³
- ESF 6⁴
- ESF 10⁵
- ESF 11⁶
- ESF 14⁷

The information in this Plan refers to the concept of operations, roles and responsibilities, and coordinated communications for activating an EHD Environmental Response Team (ERT) in support of public health emergency response plans. A review table is provided on page 13.

Emergency and disaster events have multiple environmental health impacts that may affect our community on a local or regional scale and result in catastrophic destruction of infrastructure, mass displacement of populations, and exposure of substantial numbers of people to extreme conditions for an extended period of time.

During and after a natural disaster or other emergency (such as a bioterrorist attack), the primary mission of the EHD is to provide environmental health-related services essential for protecting the community from environmental hazards and to help ensure the best possible quality of life for people in the affected areas until restoration of improved conditions. This plan outlines the general and specific response actions for which the EHD is responsible in an emergency with an emphasis on prevention and control of disease related to environmental exposures, including hazardous materials.

Activities within this scope and in support of the Centers for Disease Control Public Health Preparedness Capabilities⁸ may include:

¹ King County. Comprehensive Emergency Management Plan. December 2013

² King County. Comprehensive Emergency Management Plan. Emergency Support Function 3 – Public Works and Engineering. September 2013.

³ King County. Comprehensive Emergency Management Plan. Emergency Support Function 3 Addendum Water Infrastructure – Public Works and Engineering. September 2013.

⁴ King County. Comprehensive Emergency Management Plan. Emergency Support Function 6 – Mass Care. January 2002

⁵ King County. Comprehensive Emergency Management Plan. Emergency Support Function 10 – Local Emergency Planning Committee Hazardous Materials Plan. November 2013

⁶ King County. Comprehensive Emergency Management Plan. Emergency Support Function 11 – Agriculture and Natural Resources. December 2013

⁷ King County. Comprehensive Emergency Management Plan. Emergency Support Function 14 – Long-Term Community Recovery and Mitigation. December 2008

⁸ Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. Public Health Preparedness Capabilities: National Standards for State and Local Planning. 2011. <http://www.cdc.gov/phpr/capabilities/>

- Decide whether local capacity (i.e. county resources) is adequate or external assistance/resources are required.
- Identify and recognize potential threats and hazards.
- Assess health risks.
- Determine objectives, priorities and recommended actions.
- Perform intervention strategies, if appropriate, using available resources.

These activities emphasize health hazards associated with specific subject areas including:

- Chemical, biological and radiological⁹ contaminants
- Drinking water
- Food safety
- General sanitation
- Hazardous materials and household hazardous waste
- Mass care shelter and feeding facilities
- Solid waste and debris management
- Water recreation safety (pools and spas)
- Wastewater
- Zoonotic and vector borne disease control

Specific roles and responsibilities provided by EHD, associated with the subject areas identified above, are listed in *Table 2, Roles of Environmental Health Services Division*, beginning on page 13.

Situation Overview

A. King County Demographics and Vulnerable Populations

King County Washington is the 14th most populous county in the US, with 1.93 million people. King County represents 28.6% of Washington State's population, and as the largest population center in the State poses many opportunities and challenges.

The County includes Seattle, 38 incorporated cities, and 19 school districts. It is home to the several diverse zip codes and school districts¹⁰. Immigrants and refugees from all over the world, including Asia, the Horn of Africa, Central America, and the former Soviet Union reside in King County. 2010 Census data show more than 1 in 3 residents is a person of color, increasing to almost half the population among children. The county, especially the southern suburbs, includes several cities and school districts in which racial minorities are now the majority population.

B. Health Inequities

Over the last two decades, three dramatic demographic changes have taken place in our county, particularly in suburban cities. Racial and ethnic diversity is not present throughout the county and, if different zip codes are compared, there are extreme disparities present. If the 10 zip codes with the highest household incomes are compared with the 10 zip codes with the lowest household incomes, there is a \$100,000 difference in income, a 10-year difference in life expectancy, and a 60% difference in the percentage of residents of color.

⁹ **NOTE:** EHD supports the lead function of the Washington State Department of Health in response to radiological contaminants.

¹⁰ King County Equity and Social Justice Annual Report, October 2013

Ten percent of the population in King County lives below the poverty level. Because of areas of our county that lack adequate systems, policies, and supports to meet challenges, King County has experienced an increase in health inequities that ranks it among the worst of the 15 most populous metropolitan counties in the US. More people in poverty reside in the suburbs than in the urban core¹¹. The changes contribute to the high and rising prevalence of chronic disease and risk factors in the suburban cities of northern and southern King County. Those suffering from chronic disease are more vulnerable before, during and after a public health emergency.

While accounting for populations suffering from health inequities, the Vulnerable Populations Plan¹² must be activated to address the needs of vulnerable populations such as people living in areas or in housing with greater environmental risks, children (requiring pediatric care), medically dependent/medically compromised, physically or developmentally disabled, immigrants, chemical and alcohol dependent, homeless and those who need palliative care and behavioral health services.

C. Hazard and Vulnerability Analysis

Each type of disaster has the potential for health impacts, including illness, death, trauma and exposure to environmental hazards. The most frequent threats to which Public Health has responded in the past were environmental health threats and disease outbreaks. Examples include:

- Sewage spills
- Oil spills
- Chemical spills
- Potential zoonotic disease outbreaks (e.g. Tularemia, Avian Influenzas H1N1 and H7N9)
- Carbon Monoxide Poisoning
- Influenza
- Tuberculosis

These environmental threats and disease outbreaks can arise from a variety of likely hazards, including¹³:

- Flooding (e.g. Howard Hanson Dam, tsunami)
- Landslide
- Earthquake
- Volcanic activity
- Severe weather
- Bioterrorism events

D. Environmental Health Services Division Capacity

EHD Programs include:

- Community Engagement: Coordinates activities around partnerships with community groups and individuals to provide stakeholder input and guidance on environmental health policy and

¹¹ See Public Health poverty data at <http://www.kingcounty.gov/healthservices/health/data/chi2009/SocialPoverty.aspx> for more details

¹² Public Health – Seattle & King County. Vulnerable Populations Response Plan. April 2014
<http://www.kingcounty.gov/healthservices/health/preparedness/VPAT.aspx>.

¹³ King County Office of Emergency Management. King County Hazard Mitigation Plan. Hazard Identification and Vulnerability Assessment. 2009.
<http://www.kingcounty.gov/safety/prepare/EmergencyManagementProfessionals/Plans/RegionalHazardMitigationPlan/2009HazardMitigationPlan.aspx>

education. These activities span the following programs: Food, Hazardous Waste Management, Healthy Community Planning, Solid Waste & Rodent Control, and Zoonotic Diseases.

- **Food Protection:** Issues permits and inspects permitted establishments, provides education to food workers, and reviews plans for proposed food establishments including farmers markets and street food vending.
- **Healthy Communities Planning:** Focuses on health promotion strategies to support healthy community development in King County by promoting environmental conditions that help all people achieve and sustain optimum health. HCP brings social, economic, and environmental factors that impact health into planning decisions about the land, transportation, and housing.
- **Local Hazardous Waste Management:** Collaborative program conducts hazardous waste contamination prevention and response efforts across several levels of the spectrum; from individual community members to small businesses and neighborhoods to reduce hazardous wastes and to provide long-term planning. Includes small business consultations, hosting customer service lines and disposal sites, and education and outreach.
- **Plumbing and Gas Piping:** Installs plumbing, including waste drains, vent piping, and gas piping; inspects systems for compliance with local regulations and the uniform plumbing code.
- **Pools, Spas, and Beaches:** Performs inspections, reviews construction plans, and issues permits. Staff review shoreline development permits, Environmental Impact Statements, and coordinate with the Corps of Engineers on environmental projects.
- **Sewage Disposal/Platting and Land Development:** Reviews on-site sewage disposal and septic system plans, educates installers and sludge haulers, investigates complaints about sewage leaks, and conducts surveys of areas with high rates of failing systems. Within unincorporated King County, staff evaluates land development projects to assure adequate water supply and sewage disposal systems.
- **Solid Waste & Rodent Control:** Staff review plans for solid waste handling facilities, and monitor and inspect solid waste treatment sites, transfer stations, and landfill disposal sites. Rodent Control Program investigates complaints, provides information and education to prevent and reduce rodent populations, and enforces relevant state and local regulations. Within the City of Seattle, inspectors conduct routine surveillance of sewer mains and place rodent bait to control the sewer rodent population. Provides inspection, investigation, and education for pet stores, adoption facilities, kennels, and grooming facilities and permits these facilities based on meeting basic health and safety standards for humans and for pets.
- **Water Quality:** Inspectors work with small public drinking water systems on proper well site locations, planning, and system installation. They also provide consultations and perform inspections.

**Table 1: Environmental Health Quick Facts
(2014, April)**

| Service | Number |
|--|---------|
| Food establishments, permitted | 11,313 |
| Household hazardous waste disposal locations | 4 |
| Pet facilities, permitted | 448 |
| Pool and spa facilities, permitted | 1,768 |
| Septic systems | 160,000 |
| Solid waste facilities, permitted | 26 |
| Solid waste vehicles, permitted | 56 |
| Staff, investigators | 80 |
| Wells, Group B | 15,000 |

- Zoonotic Diseases: The Public Health Veterinarian provides advice regarding rabies and other zoonotic diseases, approves quarantine plans for overseas animal shipments, responds to animal-related public health issues and fields phone calls from veterinarians, physicians and the general public.

Planning Assumptions

Deployment of EHD staff, including ERT members, occurs after first responders (police, fire, etc.) have assessed and stabilized imminent hazards.

In addition to the scope and severity of the event and state of local capacities, the following factors could affect the ability of the EHD to respond:

1. Public demand for environmental health information and services will increase during disasters.
2. Day-to-day EHD activities may be suspended or curtailed to focus on the immediate needs arising from an incident.
3. Any exceptions to standard King County or Public Health Department policies or rules that may be implemented during an incident are not intended to be precedent setting and are unique to the specific set of circumstances surrounding the incident.
4. The availability of EHD emergency response resources and personnel could be limited in a regional disaster.
5. Infrastructure impacts such as damaged bridges or road closures may limit the ability to transport staff and supplies through the region.
6. The ability to mobilize and operate the ERT may take up to 48 hours.
7. Preparedness, response, and assessment efforts must incorporate and address the unique needs and circumstances of vulnerable populations that are economically disadvantaged, homeless, have limited language proficiency, have disabilities, have special medical needs, experience cultural or geographical isolation, or are vulnerable due to age, as well as those of institutionalized and incarcerated persons. Therefore, specific measures will be taken to ensure that these populations will have accessibility to information and health services.
8. The capability of the EHD to coordinate and respond to resource requests from ESF agencies will vary.

Concept of Operations

A. Overview

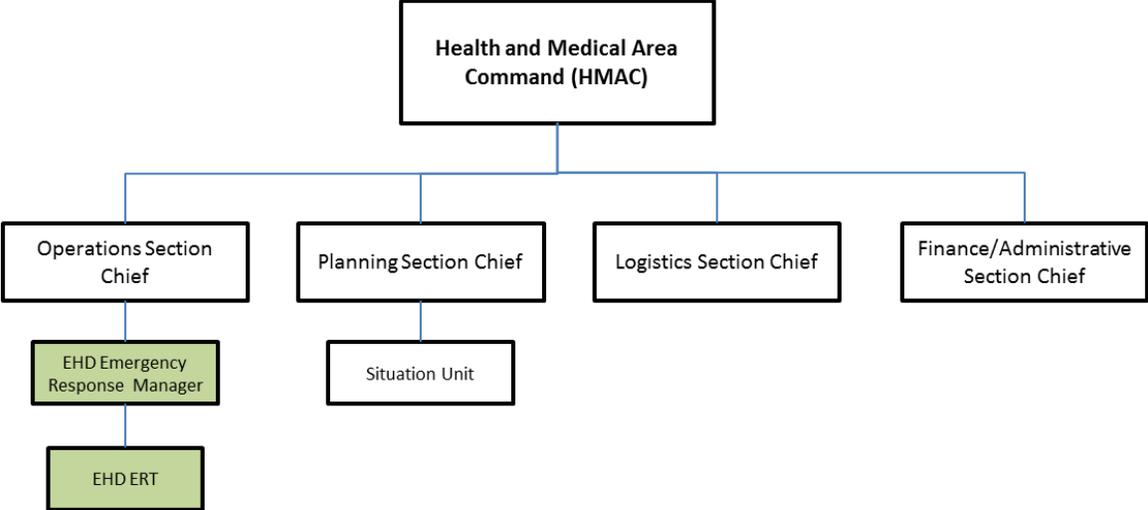
Emergency preparedness activities help the community reduce potential critical problems during and after a disaster and help the EHD respond to environmental health needs that arise from a disaster or a public health emergency. The EHD provides direct support to three primary Incident and Area Commands:

- Public Health's Health & Medical Area Command (HMAC)
- King County Regional Communications and Emergency Coordination Center (RCECC)
- City of Seattle Emergency Operations Center

HMAC is the incident management structure that will most often be utilized to manage ESF 8 activities during emergencies and disasters. (*Figure 1*) As members of the HMAC Operations Branch, the EHD supports the direction, coordination, and mobilization of health and medical resources, information, and personnel during and after emergencies and disasters. The HMAC operates at the county level and is comprised of various personnel with disaster planning and response expertise, including Public Health

emergency preparedness staff, local government staff, liaisons to local emergency management, emergency medical reserve corps, and health care providers with expertise in logistics, planning, and emergency response. For a more detailed understanding of the HMAc see ESF 8.¹⁴

Figure 1: King County HMAc Command Structure



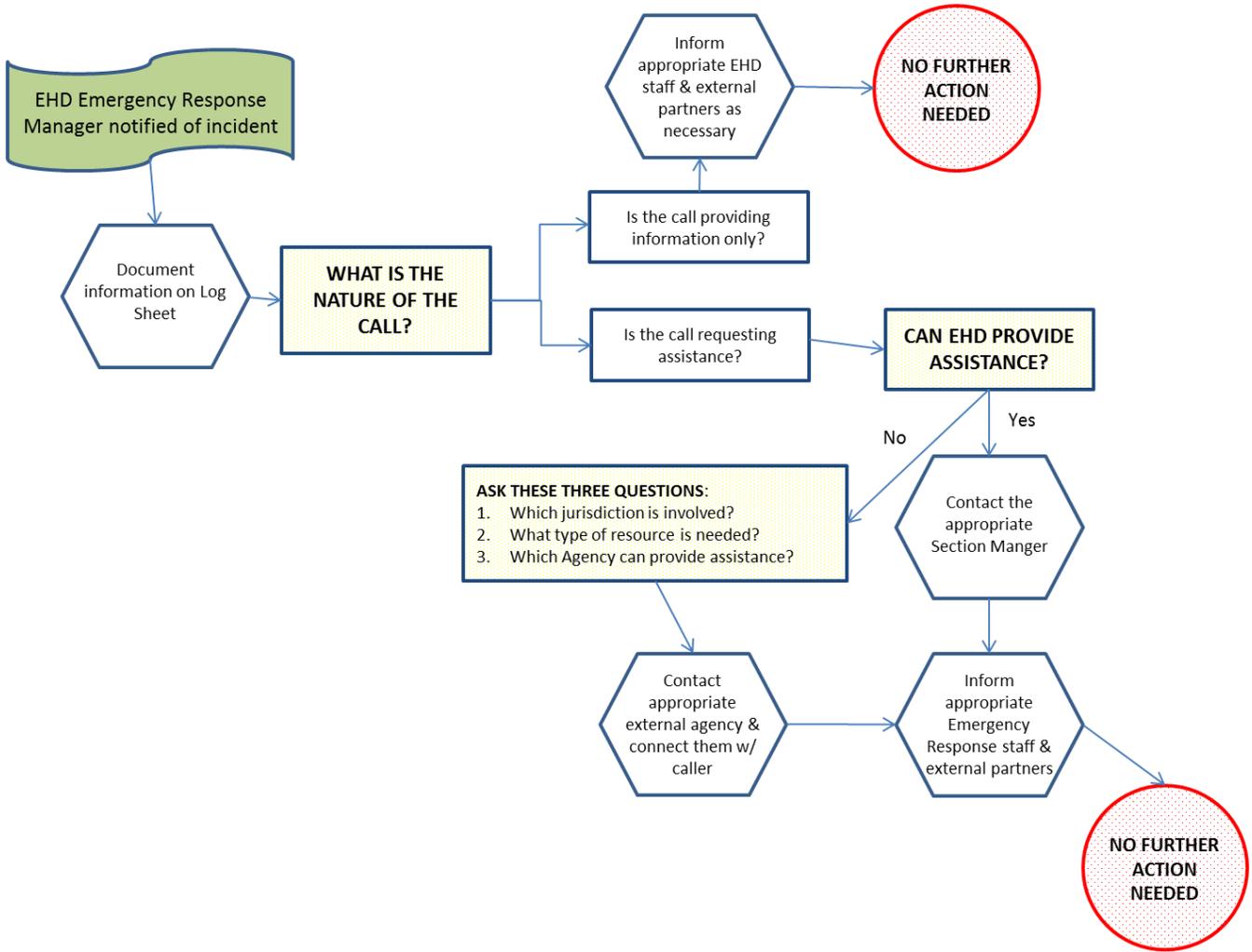
B. Notification and Activation

All or parts of this plan may be activated at any time by one of the three Incident and Area Commands; the type of response depends on the incident.

The Public Health Duty Officer (DO) is the central point of notification for events requiring response. This role is rotated amongst previously identified and trained Public Health staff. Once notified, the DO will conduct a situation assessment and notify appropriate primary and support agencies, including EHD.

¹⁴ King County. Comprehensive Emergency Management Plan. Emergency Support Function 8 –Health, Medical, and Mortuary Services. September 2012

Figure 2: EHD Decision Tree



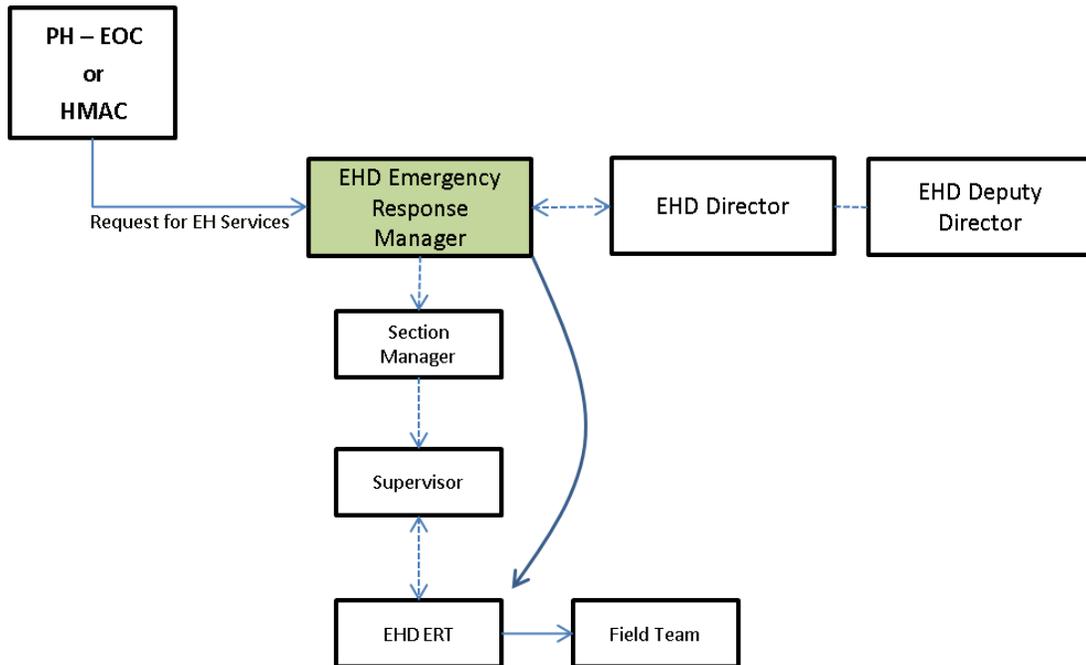
When notifications have been made, the EHD Emergency Response Manager and the Public Health DO, in consultation with the Area Commander/Preparedness Section Manager and other relevant parties, will determine the need for activation of components of this plan. The decision to activate all or parts of the plan will be made by the EHD Emergency Response Manger and the Public Health DO after evaluating the initial information received from the field and will depend on many factors, including the size and type of the incident. (Figure 2)

C. Environmental Response Team:

The EHD Emergency Response Team may be mobilized to strengthen emergency preparedness and response capacity of the EHD to identify, assess and address environmental health impacts of emergencies and disasters and fill leadership roles in an overall Public Health response. *Figure 3* depicts the reporting and command structure once activated.

The ERT includes experienced EHD staff with a range of expertise and from all Environmental Health Sections. The team initiates action by conducting a rapid initial qualitative assessment to collect information needed to begin an appropriate and timely response to the current situation/event.

Figure 3: EHD Command Structure



Organizational Responsibilities

The EHD may provide a variety of services in the event of an emergency as detailed in ESF 8 and referenced in six other ESF's. These roles and recommended actions for those roles that are general in scope are listed in *Table 2*. The table is divided into subject matters for easy identification.

Table 2: Roles of Environmental Health Services Division¹⁵

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|------------|---|-----------------|---------|---|
| General | Provide Environmental Health Support in all jurisdictions of King County. | Support | 10 | Take direction from ESF 10 incident commander (KC Office of Emergency Management). |
| | Coordinate assessment and response to disaster consequences affecting food safety, water quality, and sanitation. | Lead | 8 | |
| | Collaborate with community response agencies in identifying environmental impact, remediation, and recovery activities. | Lead | 8 | Note: EHD supports the lead function of the Washington State Department of Health in response to radiological contaminants. |
| | Coordinate and provide environmental health services , including inspections and technical guidance of water and food contamination, vector control, temporary shelters, emergency housing, schools, Temporary Debris Staging and Reduction Sites (TDSRS), and disposal of disaster-related solid waste. | Lead Support | 8 10 | <ul style="list-style-type: none"> • <u>Food Safety</u>: Provide technical assistance and consultation to persons-in-charge of food establishments regarding general food safety issues including protecting, salvaging and/or disposing of perishable foods. • <u>Water Quality</u>: Issue emergency use guidelines and operational criteria for limited operations in support of the local water districts. • <u>Solid Waste</u>: Serve as liaison among solid waste management providers, haulers and facilities. |

¹⁵ The defined “role” as either lead or support is as defined by the ESF being activated. For example, since Public Health is the lead for ESF 8 all listed roles as part of that ESF are labeled as “lead”.

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|----------------|---|-----------------|---------|--|
| General Cont. | Coordinate countywide surveillance of potential problems related to public water supplies; sewage disposal system failures; solid waste accumulation and disposal; food storage; preparation and serving areas (i.e. shelters, food kitchens, etc.) disease carrying animals and insects, and natural gas leaks. | Support | 11, 14 | <ul style="list-style-type: none"> • <u>Vector/Zoonotics</u>: Assist in surveillance for animal viruses through liaison with the State Departments of Agriculture and Fish & Wildlife. |
| Communications | Work with the Public Health Public Information Officer to develop and disseminate risk communication messages to the public concerning zoonotic disease transmission, food safety, drinking water safety, waste disposal, and other environmental health issues. | Lead Support | 8 11 | <ul style="list-style-type: none"> • <u>Food Safety</u>: Provide information and guidance to include: protection of perishable foods and the sorting and disposal of potentially contaminated food. • <u>Drinking Water</u>: Disseminate “boil water” and “do not drink” guidelines at in support of and at the request of local water utilities. • <u>Mass Care Facilities</u>: General personal hygiene practices to minimize the spread of disease. • <u>Vectors</u>: <ol style="list-style-type: none"> 1) How to avoid mosquito and tick bites and safe use of insect repellents. 2) Rodent control measures. • <u>Solid Waste</u>: Guidance on where and how to dispose of solid waste, if typical service is disrupted. |

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|----------------|---|---------|---------------|---|
| Drinking Water | Assess the health impacts of potable water supplies, including subject matter consultation on testing and inspection where these apply; as resources allow. | Support | 3 Addendum | <ul style="list-style-type: none"> • Provide limited technical assistance to small community and non-community Group A water systems identified by DOH Regional Office; including special purpose investigations. • Technical assistance in support of DOH for Group B water systems. |
| | Investigate possible water borne illnesses. | Support | 11 | |
| | Provide well test kits and water quality testing for small public and private water wells.¹⁶ | Support | 11 | Delete. Guidance should be given to use bottled water until small and private system purveyors can test their system. |
| Food | Investigate possible food borne illnesses. | Support | 11 | Note: this may include response to shellfish related outbreaks (e.g. PSP). |

¹⁶ Environmental Health Services Division does not and has not provided this capacity. Further work needs to be completed in removing this from ESF 11.

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|-----------------------------------|---|---------|-----|--|
| Hazardous Materials ¹⁷ | Follow appropriate reporting procedures for any hazardous materials incident. | Support | 10 | <ul style="list-style-type: none"> Report chemical incidents to Washington State Department of Ecology. Radiological incidents re to be reported to Washington State Department of Health. |
| | PH is the lead agency for screening suspect hazardous and non-regulated small quantity hazardous materials for proper disposal that might be generated from clean-up sites. | Lead | 10 | |
| | Respond to the KC Regional Communications and Emergency Coordination Center if activated for a hazardous materials event. | Support | 10 | Stated roll is sufficiently specific. |
| | Characterize food materials bound for disposal through the Waste Characterization Program. | Support | 11 | Food wastes should go to Solid Waste first, and then, if they have questions, they should contact Waste Characterization Program. |

¹⁷ The Local Hazardous Waste Management Program in King County (LHWMP) does not have a formal emergency plan. Instead they have participated in a number of local jurisdictions developments of disaster debris plans as part of solid waste utilities disaster debris plans. See Chapter 11 of the 2010 LHWMP Plan Update, <http://www.lhwmp.org/home/AboutUs/planupdate.aspx>.

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|---|---|-----------------|--------|---|
| Mass Care Shelters & Emergency Feeding Facilities | Support mass care sheltering plans throughout the county in coordination with the American Red Cross and ESF 6 Mass Care agencies by completing environmental health assessments at shelters. | Lead Support | 8 6 | <ul style="list-style-type: none"> ● Provide technical assistance to on emergency facility layout and location. ● Provide technical assistance to ensure safe food handling practices and personal hygiene for workers and attendees. ● Ensure toilets and hand washing stations are in compliance with standards (numbers of facilities provided, properly supplied, etc.). Provide technical support on alternative sewage disposal options, if needed. ● Provide technical assistance on management of solid waste. ● Identify and assist with vector/pest-related concerns and promote IPMC. ● Advise on the location and needs for household pets and service animals, such as temporary shelters. |
| | Provide food and drinking water safety consultation and disease prevention information to providers of emergency mass food and water distribution. | Support | 11 | |
| | Evaluate ¹⁸ mass food and water distribution and preparation centers to assure proper sanitation and safe food handling practices. | Support | 11 | |

¹⁸ Not sure why emphasis is on evaluation when we will be providing an inspection. Need to follow-up on this with potential recommendations to modify.

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|-------------|---|---------|-----|---|
| Solid Waste | Ensure ¹⁹ that solid waste facilities return to services as soon as possible following an incident; and to assist in opening alternative facilities when necessary to do so. | Support | 3 | <ul style="list-style-type: none"> • Coordinate with appropriate contacts with known operators and haulers and recyclers (e.g. KC Solid Waste, Waste Management, Rabanco) to determine extent of damage and potential disruption. • Provide increased regulatory oversight, if needed, and issue waivers. • Provide technical and regulatory assistance with the location and opening of alternative facilities. |
| Wastewater | Assess the health impacts of wastewater spills and overflows; as resources allow. | Support | 3 | Provide technical support to King County DNRP and local utilities. |

¹⁹ Not sure why emphasis is on ensuring services when our roles are more support in nature. Need to follow-up on this with potential recommendations to modify

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|------------------|---|---------|-----|--|
| Zoonotic Disease | Coordinate the response of regional veterinarian services and animal care groups, in partnership with King County Animal Care and Control, as appropriate | Lead | 8 | |
| | Assist in surveillance for animal viruses through liaison with the State Departments of Agriculture and Fish & Wildlife. ²⁰ | Lead | 8 | |
| | Investigate possible zoonotic disease outbreaks. | Support | 11 | <ul style="list-style-type: none"> • Support Washington State response to agricultural zoonotic disease outbreaks • Conduct disease investigation activities for zoonotic disease outbreaks in pets in coordination with PH Communicable Disease-Epidemiology. |
| | Direct response activities to vector-borne public health emergencies. ²¹ | Lead | 8 | Ensure appropriate infection control measures to minimize disease risk to animals and people. |

²⁰ Not sure why emphasis is on animal virus to the exclusion of parasites and bacteria. Need to follow-up on this with potential recommendations to modify.

²¹ Not sure why emphasis is on vector-borne. Need to follow-up on this with potential recommendations to modify.

| Topic Area | Role as Stated in ESF's (quoted) | Role | ESF | Recommended Action |
|-----------------------|----------------------------------|---------|-----|--|
| Plumbing & Gas Piping | Not listed in an ESF. | Support | | <ul style="list-style-type: none"> • Support the coordinate and provision of environmental health services, in partnership with KC DPER and Seattle DPD to assess damage to structures. This includes inspections and technical guidance of plumbing systems, and fuel gas piping systems (natural gas and propane) in structures. • Support the inspection of gas piping or drinking water system damage or repair. |

Command Responsibilities

A. EHD Emergency Response Manager

- Assesses the environmental public health impacts and potential consequences posed by the emergency and determine appropriate course of action.
- Activates EHD Command Structure as appropriate.
- Activates staff to the Public Information Contact Center (PICC) as appropriate.
- Maintains 24/7 availability and serve as the primary point of notification for environmental public health emergencies in King County.
- Maintains and disseminate the ERT roster to all section managers, supervisors and ERT members.
- Maintains the 800MHz radio including rotational scheduling.
- Coordinates with the Public Health Public Information Officer (PIO) to develop and disseminate risk communication messages to the public concerning environmental public health issues.
- Reports to the HMAC Operations Lead or other EOC Operations Lead, as appropriate. This includes periodic situation reports.
- Participate as part of the CDC regional Bio-Watch notification system.

B. EH Environmental Response Team

- Reports to the Supervisor and appropriate Section Manager.
- Serves as EHD representative to the activated Incident Area Command Center.
- Plans and leads the early and rapid assessment, evaluation, and surveillance of an incident to determine environmental public health hazards that may be present or potentially may evolve as an incident develops.
- Identifies and plan mitigations for a wide range of potential environmental health hazards.
- Identifies and plans initial Environmental Health strategies, resources and actions that may be needed to:
 - Preserve and protect human health
 - Prevent further disease and/or injury
 - Ensure the well-being of and address emergency needs of populations
 - Assist with recovery of critical infrastructure
- Determines additional EH staffing and resources needed to respond, mitigate and provide expertise and information pertinent to the identified hazards.
- Provides just-in time trainings for Field Teams on their role and topics such as Incident Command Structure, ESF responsibilities, specific response actions, safety, environmental hazards, and personal protective equipment requirements.
- Engages and collaborates with response partners.

C. EHD Field Teams

- Reports to the EH ERT.
- Conducts on-going response activities in response to the identified health hazards associated with specific subject areas.
- Documents all field-related activities using the Communication Log.

- D. Section Manager – Communications Role only, Emergency Response Manager has Direct Authority
- Identifies appropriate Supervisor to activate based on assessment of potential environmental public health impacts and geographical location of emergency.
 - Reports to the Emergency Response Manager.
- E. Supervisor — Communications Role only, Emergency Response Manager has Direct Authority
- Reports to the appropriate Section Manager
 - Identifies and manages the EHD ERT.
 - Directs the EHD ERT daily activities and responsibilities during an incident.

Public Communications

The EHD Emergency Response Manager, working with the Public Health PIO, will ensure the general public is provided with appropriate, timely, accurate, and useful information regarding an emergency. Risk communication messages regarding an incident will be provided directly through public affairs and other appropriate sources.

If needed, HMAC may activate the PICC to provide non-diagnostic/non-medical information, instructions and resource referral in an effort to help minimize or alleviate calls to agency partners throughout King County.

When engaging in risk communication, it is important to follow these best practices:

- Listen to your audience and respond to their needs. Communicate with the community in a culturally appropriate manner.
- Establish credibility within the community you are working with.
- Be timely with your response.
- Use direct and simple language.
- Stick to the facts. Do not speculate. Acknowledge when you do not know something, and then find out the answer.
- Be empathetic and genuine with your response. It is OK to show emotion.
- Provide the community with a course of action. Let the community know what it needs to be doing during the incident.

Public information that may be provided by EHD includes:

- Issuance of drinking water safety guidance (e.g. “do not drink” and “boil water”)
- Carbon monoxide
- Emergency sewage disposal methods
- Vector control measures
- Hazardous household materials storage and precautionary measures and spillage containment (gas cans, chlorine bottles, pool chemicals,...)
- Methods to detect and prevent contamination and spoilage in household food stores
- Emergency procedures for handling and disposal of household waste, if normal pick-up is interrupted
- Emergency protection efforts regarding air pollution or other potential biological or chemical exposures

Training & Exercises

On-going training and practice is essential to support Environmental Health Response Team personnel to ensure they are comfortable in performing their duties in an emergency. Training should be up-to-date, consistent, and relevant and, if possible, conducted within a multi-disciplinary environment. Minimum ERT training requirements are listed in *Table 3*. Testing and validating equipment through training and exercises is important to ensure readiness.

The Emergency Response Manager is responsible for identifying members of the ERT and monitoring and coordinating proper training for the ERT.

Preparedness training and exercises must be consistent with federal, state, and local funding and grant requirements, including National Incident Management System (NIMS) and National Association of County and City Health Officers (NACCHO) Project Public Health Ready. After-action reports and improvement plans from real-world events and functional exercises should be used to provide a basis for continuing training and exercise topics and curricula.

- The exercise goal is to evaluate the effectiveness of the training and planning through a series of exercises incorporating multiple response partners, and designed to determine future planning and training priorities and identify gaps in response. A functional or full-scale exercise will be held every other year as funding allows or as directed by grant requirements.
- Public Health Preparedness and Environmental Health Surge Response Team staff will receive an orientation of the plan each time significant revisions are made.
- Personal preparedness training will be scheduled at a minimum of 1 hour annually.
- A list of current EH emergency response training records will be maintained and kept in the Preparedness Section Training and Exercise Program database.
- Potential EHD staff, including ERT, will receive topical training on different sections of the plan.
- Environmental Health Surge Response Team staff will be invited to participate in Public Health Preparedness facilitated discussions or table-top exercises to validate different components of the plan.

EHD may assist and work with other agencies or departments within King County when responding to an emergency. If the required response actions fall outside of day-to-day environmental health activities, just-in-time training regarding their roles and responsibilities will be provided to each member of the EHD ERT prior to participation in the response. Just-in-time training may include:

- Blood Borne Pathogen
- Hazardous Waste Operations and Emergency Response
- Documentation
- Cultural awareness

Table 3: ERT Minimum Training Requirements

| Training | Location | Time |
|--|---|------------------------|
| Incident Command System: 100, 200, 700, and 800 | On-line | 12.5 hours |
| Incident Command System: 300 | Classroom | 2 days |
| Environmental Health Training Emergency Response OR Environmental Health Training Emergency Response | CDC @ FEMA Training Center in Anniston, AL Online via NEHA | 32 hrs 21 hours |
| Basic First Aid & CPR | Classroom | 8 hours |
| Public Health-Seattle & King County Emergency Support Function 8 Overview | Classroom | 2 hours |
| Psychological First Aid | Classroom | 2 hours |
| Respirator Fit Test & Training (N95 only) | Classroom | 2 hours |
| Personal Preparedness Training | Classroom | 2 hours |

Plan Development & Maintenance

This document will be posted in electronic format on the Public Health Preparedness Section’s shared drive as well as with the King County Office of Emergency Management. Hard copies are kept in the

- Preparedness Section Training and Exercise Program Manager’s office.
- King County Regional Communications and Emergency Coordination Center.

Each PH Duty Officer also receives an electronic copy of this plan.

Within the EHD the plan will be, at a minimum, maintained in hard copy with the EHD Emergency Response Manager and on the web-based SharePoint Emergency Preparedness site.

This plan will be reviewed and updated at least every three years and as needed following an emergency response and exercises. The review process will be:

- To update information, including contact names and phone numbers of personnel (Attachment #1).
- Public Health Preparedness staff will receive a copy of the plan each time significant revisions are made for review and input.
- The Emergency Response Manager will work with EHD staff to lead the review.

Attachment #1: Contact Roster

(Removed)

Attachment #2: Communications Log

COMMUNICATIONS LOG

Reporting Official: _____ **Date:** _____ **Time:** _____

1. Type of Occurrence:

2. Where it Occurred:

3. When it Occurred:

4. Environmental Assessment:

5. Actions Taken:

Name of Person Completing Form (Print):

Contact Info:

Name of Person To Whom Form is Addressed (Print):

Contact info: