



STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE  
HSERC7.MIN/BFS-2

DRAFT MEETING SUMMARY  
HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1991 2:00 P.M.

HSERC Commission Members and Representatives:

Dr. John C. Lewin, Chairman, HSERC, DOH  
Bruce Anderson, Ph.D., Vice Chairman, HSERC, DOH  
Roy Price for Adjutant General Alexis Lum, DOD  
Gerald Kinro for Yukio Kitagawa, DOA  
Thomas Batey for Major Brigadier General Edward V. Richardson, DOD  
Jennifer Shishido for Mario R. Ramil, DLIR  
William W. Paty, DLNR  
Murry Towill, DBED  
Ronald Hirano for Edward Y. Hirata, DOT  
Harlan Hashimoto for Jerrold M. Michael, UH School of Public Health  
Jiggie Hommon, American Red Cross  
Chief Lomosad for Clifford Ikeda, Kauai LEPC Co-chairman  
Sel Menor, Maui LEPC Co-chairman  
George Kekuna, Oahu LEPC Chairman  
Harry Kim, Hawaii LEPC Chairman

Other Attendees:

Captain Richard C. Vlaun, USCG  
LCDR Gregory Jones, USCG  
LT Eric Mosher, USCG  
LTJ6 Larry Hewett, USCG  
Joe Reed, Oahu Civil Defense  
MG Alexis Lum, TAG  
Maurice Kaya, DBED  
Nell Cammack, OMPO  
Captain Heddaeus, PRI  
W. Aldenderfer, PRI  
Peter Freeman, PRI  
Susan Kushoki, PRI  
F. David Hoffman, VP Petroleum Operations, PRI  
Chief Ron Davis, Maui County Fire Dept.  
John Bowen, University of Hawaii  
Cpt. Carter Davis, HFD  
Cpt. Michael Brede Sr., HPD

Cpt. Edward Lingo, HPD  
Rusty Nall, PENCO  
Paul Young, State Fire Council  
Ralph Moore, State DOT  
Tom Batey, State Civil Defense  
Harding Fragas, Jr., Hawaii County Fire Dept.  
Kenneth Thong, C&C of Honolulu Transportation  
Stafford Kiguchi, PRI  
Gerald Kinro, DOA  
Dave Lyman, Hawaii Pilots Association  
Chi-pin Chang, DLNR  
Dave Tunison, PRI  
Robert Crowell, DOT Harbors  
Michael Choy, Hawaiian Electric Co.  
Bill Bonnet, Hawaiian Electric Co.  
Donald P. Astrab, Honolulu Board of Water Supply  
Sandra A. Simms, C&C of Honolulu Corporation Counsel's Office  
Alex Ho, C&C of Honolulu Public Works  
Mary Foote, Brewer Environmental Industries, Inc.  
Mark Ingoglia, DOH\HEER  
Philip Moravcik, DOH\HEER  
Bruce Schlieman, DOH\HEER

#### I. OPENING REMARKS

HSERC Vice-chairman Dr. Anderson called the meeting to order, and outlined the agenda. Primary topics on the agenda included: State of Hawaii Chemical and Oil Emergency Preparedness Program; Regional Plans and Response Team Up-dates by the U.S. Coast Guard; Review of the Star Connecticut Incident; and finally, an open session for comments and discussion.

#### II. WELCOME TO NEW HSERC MEMBERS

Dr. Bruce Anderson welcomed new HSERC members for attending the meeting. The Vice-chairman then introduced a 15 minute video tape on Emergency Planning and Community Right-to-know.

#### III. STATE OF HAWAII'S CHEMICAL AND OIL EMERGENCY PREPAREDNESS PROGRAM

##### A. SARA Title III Progress

Mr. Mark Ingoglia reported that of 267 facility reports that have been received by the DOH/HEER Office, 200 letters were sent out for corrections. Of these 200 letters, only 50% have been appropriately corrected. During the end of January, the HEER Office will send out a reminder letter to facilities for submitting 1990 SARA Title III data by March 1, 1991. Kauai Title III facility data has been filed with the state on electronic media.

All counties are conducting hazard analyses, and no estimate on a completion date is currently available.

Draft state and county plans are in place, and a Title III Data Management Plan utilizing CAMEO software has been established. The state has received a \$70,000 Title III Data Management Grant from U.S. EPA Headquarters for Community Right-to-know data access.

#### B. Local Emergency Planning Committees (LEPCs)

HLEPC: Mr. Harry Kim stated that the Big Island was not in compliance with SARA Title III. Furthermore, additional training and legislation are required to provide more resources for first responders. Mr. Kim also wanted to have the roles of the LEPCs and the HSERC defined.

KLEPC: Chief Lomosad reported that the Kauai LEPC should have a workable Emergency Response Plan by May of 1991. Chief Lomosad stated that 20 first responders have been trained to level A capability, and that at least one more should be trained in order to have three teams of 7 people each. Thus, each of the three teams could work an 8-hour shift so they could respond 24-hours a day. Chief Lomosad also indicated that a few more first responders should be trained for back-up, and that state funds would be sought for an emergency response vehicle.

OLEPC: Mr. George Kekuna stated the OLEPC goals for '91, and they include: site visits to 33 facilities, implement the IBM version of CAMEO, and meet in the near future for an LEPC up-date. Longer term goals were to increase education programs on hazardous materials handling, disposal, etc. Mr. Kekuna also stated that the LEPC wanted to emphasize public education and awareness programs on hazardous materials in the community. Comments offered were: OLEPC is not getting copies (CC'ed) on letters that cite their requests. Mr. Kekuna also requested the SERC to inform them about new SARA III rules. The question on how to dispose of explosive materials in the future was also raised. OLEPC also wanted to know the procedures for responding to spills clarified; such as the relationship between HFD Hazmat 1 and the DOH/HEER Office.

MLEPC: Mr. Sel Menor reported that a county Hazmat Officer has been hired, and is currently being trained. The Hazmat Officer will be working on the Maui County emergency response plan. The fire department has 8 people trained as first responders with slots available for 18 more. Mr. Menor stated that more training and resources for response personnel are required.

#### C. Spills Up-date

Mr. Philip Moravcik stated that the DOH/HEER Office has received 311 spill notifications during 1990, and that this represents a 100% increase from those received during 1989. Of the 311 spill notifications, 58% (182) were petroleum, and of these 54% (98) were ocean based spills. The majority of notifications originated from Oahu, which totaled 260. The Big Island had 17 notifications,

Kauai and Maui each had 12, Lanai had 1, and Molokai had none. There were also 17 open ocean spill notifications.

Mr. Moravcik then provided a brief report on major spills and response cleanup operations, which included the following sites: Hilo copper, chromium, arsenate spill; Pearl City jet fuel pipeline leak; Maili oil barrel waste sites; Poamoho explosive waste detonation; Kawaihae Pioneer Lumber pentachlorophenol waste site; and Hawaiian Tuna Packers ammonia release.

#### D. Training, Exercises, and Activities

Mr. Bruce Schlieman reported on workshops and trainings that were conducted during 1990, and also announced trainings and exercises that have been scheduled for 1991. Among the up-coming trainings are: Chemistry of Hazardous Materials (to be held on Maui during March, 1991); Tactical Considerations for Hazardous Materials Response (also on Maui during April, 1991); Uniform Fire Code Workshop (1 session per county during May, 1991); and on Kauai, a U.S. EPA Tabletop Emergency Response Exercise is scheduled for May, 1991. In addition, the Department of Health is working with Kapiolani Community College on the feasibility of producing 8-hour Hazardous Materials awareness training videotapes.

#### E. Funding and Legislation

Dr. Anderson provided an update on Hawaii's Environmental Response Law. Dr. Anderson reported that the Response Law's revolving fund was encountering cost recovery problems. These problems stem from midnight dumping, and non-solvent responsible parties. Therefore, the state needs to identify other funding sources to supply the revolving fund so emergency public health and environmental hazards can be cleaned up and disposed of promptly. Dr. Anderson stated that \$500K will be requested from the 1991 legislative session for the next two years (\$250K per year). Dr. Anderson also reported that the Hawaii Environmental Response Law regulations are currently being revised, and that hopefully by the end of the 1991 legislative session draft rules will have been finalized.

### IV. REGIONAL PLANS AND RESPONSE TEAM UP-DATES BY THE U.S. COAST GUARD

A. Current Activities of the Oceania Regional Response Team  
Lt. Eric Mosher provided an overview of the Oceanic Regional Response Team meeting that was held in Honolulu on December 17, and 18, 1990. The primary topic that was covered at the meeting was the Oil Pollution Act of 1990 (OPA). For the purposes of the HSERC meeting, Lt. Mosher focused on the role of State participation with regard to the OPA. Lt. Mosher stated that the OPA Liability Trust Fund has one billion dollars to cover cleanup costs and damages not compensated for by the spiller, and would include natural resource and economic damages. Payments of up to \$500 million per spill could be incurred by trustees for assessing damages to natural resources and in developing and implementing



restoration, rehabilitation, replacement and acquisition plans. One million has been allocated to the U.S. Coast Guard's 14th District (which includes Hawaii). There are research and development funds (\$600K) available to through the OPA for oil spill studies. Lt. Mosher also reviewed the concept of the Area Response Committee (ARC), which will be comprised of federal, state, and local agency representatives. The ARC is tasked with developing an Area Contingency Plan, which should be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility.

Lt. Larry Hewett provided background information on the National Regional Response Team (NRRT). Lt. Hewett stated that the NRRT reviews LEPC plans, and keeps informed on the latest technological means of managing oil spills. Lt. Hewett recommended that the State agencies monitor the draft regulations for the OPA, and determine how the new law will affect the authorities, responsibilities, and resources of the various agencies. Lt. Hewett also stated that two work groups had been formed to identify preliminary constituents and responsibilities for developing an Area Contingency Plan (ACP) for Hawaii. One group will study the feasibility of using in-situ burning, bioremediation, and the use of dispersants on ocean oil spills. The other group will identify sensitive areas for the ACP.

## V. REVIEW OF THE STAR CONNECTICUT INCIDENT

### A. Star Connecticut Incident

Captain Richard C. Vlaun, U.S. Coast Guard, Federal On-scene Coordinator for the State of Hawaii, provided a chronological review of the Star Connecticut incident off Barbers Point. Captain Vlaun stated that the weather and sea conditions were calm on the day of the Star Connecticut grounding. When the Star Connecticut went aground, a six inch hole was opened up in the bow. Water flowed in, until the water column was about thirty feet in the tanker compartment. The large volume of water weighed the tanker down on the reef, and large water pumps had to be flown out by the Department of Defense, in order to pump the water out. On the high tide, the vessel was removed from the reef, and the hole in the bow was repaired. Luckily, no oil was lost from the Star Connecticut. Captain Vlaun then provided some information on programs to mitigate the possibility of marine oil spills from occurring in Hawaiian waters, which included the following: defined weather and sea criteria that would allow for the safe loading or off-loading procedures; pre-planned emergency action procedures; requirement for tug assistance for incoming and outgoing tankers; federal pilotage during docking and casting-off procedures; traffic system controller for marine navigation from Diamond Head to Barbers Point; identifying tanker routes; and installing more aids to navigation. Captain Vlaun stated that improvements were underway at PRI's Single Point Mooring, such as; the installation of quick release couplings, and the new requirement of maintaining a bridge

watch during the loading and off-loading procedure.

B. Mitigation measures for PRI's Single Point Mooring  
Mr. F. David Hoffman, Vice President of Petroleum Operations for PRI, provided a presentation on PRI's Single Point Mooring (SPM) operations off Barbers Point. Mr. Hoffman began by stating that the SPM is safe and efficient, and is a proven state of the art technology for docking tankers. Mr. Hoffman said the Exxon Houston and the Star Connecticut incidents were caused by human error. The Exxon Houston broke away from the SPM after a tethering chain broke, and the Star Connecticut Captain had called at the SPM 7 other times without an incident. Mr. Hoffman stated that 85% of oil spills are caused by human error. Mitigation measures to be implemented at the SPM include: live bridge watch during loading and off-loading operations; a bow look-out; a tug astern and a stand-by tug available; tanker engines to remain on immediate stand-by, and the requirement to have the Master aboard the tanker when it is within the three mile limit. In addition, the Clean Islands Council, a petroleum consortium of which PRI is a member, has purchased additional oil spill response equipment, including a boat and a barge. According to Mr. Hoffman, the SPM receives 100 ships per year, of which 40 are product tankers like the Star Connecticut. Mr. Hoffman stated that the product tankers could be off-loaded at the Deep Draft Harbor, and that PRI has invested in a \$10 million dollar pipeline to the Deep Draft Harbor.

## VI. OPEN SESSION

### A. Announcements

EPA Chemical Preparedness and Prevention Office is coordinating the Peer Exchange Program for LEPC members. This allows LEPCs to exchange personnel. For more information, call Sarith Guerra at (202)962-3649, or; Kathy Jones at (202)475-8353.

### B. Discussion

Dr. Anderson then opened the meeting up to comments and discourse. Mr. Price, Vice Adjutant General for the Hawaii State Civil Defense, stated that the HSERC was not operating like a commission, and that there were no administrative rules to follow. Mr. Price also wanted to have meetings scheduled more regularly, and more frequently. Mr. Price suggested that the HSERC meet quarterly. Mr. Harry Kim, Chairman of the Hawaii LEPC, also commented on the lack of administrative procedures during the HSERC meetings. Mr. Kim also wanted to know who sets the agendas and the priorities for the HSERC meetings. Mr. Kim suggested that a stenographer should be hired to take down the minutes of the HSERC meetings. Mr. Kim thought the HSERC meetings were not following SARA Title III requirements, and that the HSERC meetings should be limited to SARA Title III business. Mr. George Kekuna, Chairman of the Oahu LEPC, wanted to know who was on the HSERC. Mr. Price and Mr. Kim requested the development of administrative rules for HSERC

meetings, and Mr. Kim requested an HSERC meeting to establish LEPC and HSERC responsibilities with regard to SARA Title III requirements. Dr. Anderson then stated that at the next HSERC meeting, the respective responsibilities of the LEPC and the HSERC would be discussed, and that the agenda would be coordinated with the LEPCs. Dr. Anderson reiterated that the HSERC meetings were, by law, open to the public. Mr. Kim suggested that an HSERC executive committee be formed to develop administrative procedures, and to identify the responsibilities of the LEPCs and the HSERC as required under SARA Title III.

Mr. Price then made a motion to adjourn the meeting at 4:35 pm, and it was seconded.

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERCM7.MIN-RG3

MEETING SUMMARY  
HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1991 2:00 P.M.

HSERC Commission Members and Representatives:

Dr. John C. Lewin, Chairman, HSERC, DOH  
Bruce Anderson, PhD., Vice Chairman, HSERC, DOH  
Roy Price for Adjutant General Alexis Lum, DOD  
Gerald Kinro for Yukio Kitagawa, DOA  
Thomas Batey for Major Brigadier General Edward V. Richardson, DOD  
Jennifer Shishido for Mario R. Ramil, DLIR  
William W. Paty, DLNR  
Murry Towill, DBED  
Ronald Hirano for Edward Y. Hirata, DOT  
Harlan Hashimoto for Jerrold M. Michael, UH School of Public Health  
Jiggie Hommon, American Red Cross  
Chief Lomosad for Clifford Ikeda, Kauai LEPC Co-chairman  
Sel Menor, Maui LEPC Co-chairman  
George Kekuna, Oahu LEPC Chairman  
Harry Kim, Hawaii LEPC Chairman

Other Attendees:

Captain Richard C. Vlaun, USCG  
LCDR Gregory Jones, USCG  
LT Eric Mosher, USCG  
LTJ6 Larry Hewett, USCG  
Joe Reed, Oahu Civil Defense  
MG Alexis Lum, TAG  
Maurice Kaya, DBED  
Nell Cammack, OMPO  
Captain Heddaeus, PRI  
W. Aldenderfer, PRI  
Peter Freeman, PRI  
Susan Kushoki, PRI  
F. David Hoffman, VP Petroleum Operations, PRI

Chief Ron Davis, Maui County Fire Dept.  
John Bowen, University of Hawaii  
Cpt. Carter Davis, HFD  
Cpt. Michael Brede Sr., HPD  
Cpt. Edward Lingo, HPD  
Rusty Nall, PENCO  
Paul Young, State Fire Council  
Ralph Moore, State DOT  
Tom Batey, State Civil Defense  
Harding Fragas, Jr., Hawaii County Fire Dept.  
Kenneth Thong, C&C of Honolulu Transportation  
Stafford Kiguchi, PRI  
Gerald Kinro, DOA  
Dave Lyman, Hawaii Pilots Association  
Chi-pin Chang, DLNR  
Dave Tunison, PRI  
Robert Crowell, DOT Harbors  
Michael Choy, Hawaiian Electric Co.  
Bill Bonnet, Hawaiian Electric Co.  
Donald P. Astrab, Honolulu Board of Water Supply  
Sandra A. Simms, C&C of Honolulu Corporation Counsel's Office  
Alex Ho, C&C of Honolulu Public Works  
Mary Foote, Brewer Environmental Industries, Inc.  
Mark Ingolia, DOH\HEER  
Philip Moravcik, DOH\HEER  
Bruce Schlieman, DOH\HEER

## I. OPENING REMARKS

HSERC Vice-chairman Dr. Anderson called the meeting to order, and outlined the agenda. Primary topics on the agenda included: State of Hawaii Chemical and Oil Emergency Preparedness Program; Regional Plans and Response Team Up-dates by the U.S. Coast Guard; Review of the Star Connecticut Incident; and finally, an open session for comments and discussion.

## II. WELCOME TO NEW HSERC MEMBERS

Dr. Bruce Anderson welcomed new HSERC members for attending the meeting. The Vice-chairman then introduced a 15 minute video tape on Emergency Planning and Community Right-to-know.

## III. STATE OF HAWAII'S CHEMICAL AND OIL EMERGENCY PREPAREDNESS PROGRAM

### A. SARA Title III Progress

Mr. Mark Ingolia reported that of 267 facility reports that have been received by the DOH/HEER Office, 200 letters were sent out for corrections. Of these 200 letters, only 50% have been appropriately

corrected. During the end of January, the HEER Office will send out a reminder letter to facilities for submitting 1990 SARA Title III data by March 1, 1991. Kauai Title III facility data has been filed with the state on electronic media. All counties are conducting hazard analyses, and no estimate on a completion date is currently available.

Draft state and county plans are in place, and a Title III Data Management Plan utilizing CAMEO software has been established. The state has received a \$70,000 Title III Data Management Grant from U.S. EPA Headquarters for Community Right-to-know data access.

#### B. Local Emergency Planning Committees (LEPCs)

HLEPC: Mr. Harry Kim stated that the Big Island was not in compliance with SARA Title III. Furthermore, additional training and legislation are required to provide more resources for first responders. Mr. Kim also wanted to have the roles of the LEPCs and the HSERC defined.

KLEPC: Chief Lomosad reported that the Kauai LEPC should have a workable Emergency Response Plan by May of 1991. Chief Lomosad stated that 20 first responders have been trained to level A capability, and that at least one more should be trained in order to have three teams of 7 people each. Thus, each of the three teams could work an 8-hour shift so they could respond 24-hours a day. Chief Lomosad also indicated that a few more first responders should be trained for back-up, and that state funds would be sought for an emergency response vehicle.

OLEPC: Mr. George Kekuna stated the OLEPC goals for '91, and they include: site visits to 33 facilities, implement the IBM version of CAMEO, and meet in the near future for an LEPC up-date. Longer term goals were to increase education programs on hazardous materials handling, disposal, etc. Mr. Kekuna also stated that the LEPC wanted to emphasize public education and awareness programs on hazardous materials in the community. Comments offered were: OLEPC is not getting copies (CC'ed) on letters that cite their requests. Mr. Kekuna also requested the SERC to inform them about new SARA III rules. The question on how to dispose of explosive materials in the future was also raised. OLEPC also wanted to know the procedures for responding to spills clarified; such as the relationship between HFD Hazmat 1 and the DOH/HEER Office.

MLEPC: Mr. Sel Menor reported that a county Hazmat Officer has been hired, and is currently being trained. The Hazmat Officer will be working on the Maui County emergency response plan. The fire department has 8 people trained as first responders with slots available for 18 more. Mr. Menor stated that more training and resources for response personnel are required.

#### C. Spills Up-date

Mr. Philip Moravcik stated that the DOH/HEER Office has received 311 spill notifications during 1990, and that this represents a 100% increase from those received during 1989. Of the 311 spill notifications, 58% (182) were petroleum, and of these 54% (98) were ocean based spills. The majority of notifications originated from Oahu, which totaled 260. The Big Island had 17 notifications, Kauai and Maui each had 12, Lanai had 1, and Molokai had none. There were also 17 open ocean spill notifications.

Mr. Moravcik then provided a brief report on major spills and response cleanup operations, which included the following sites: Hilo copper, chromium, arsenate spill; Pearl City jet fuel pipeline leak; Maili oil barrel waste sites; Poamoho explosive waste detonation; Kawaihae Pioneer Lumber pentachlorophenol waste site; and Hawaiian Tuna Packers ammonia release.

#### D. Training, Exercises, and Activities

Mr. Bruce Schlieman reported on workshops and trainings that were conducted during 1990, and also announced trainings and exercises that have been scheduled for 1991. Among the up-coming trainings are: Chemistry of Hazardous Materials (to be held on Maui during March, 1991); Tactical Considerations for Hazardous Materials Response (also on Maui during April, 1991); Uniform Fire Code Workshop (1 session per county during May, 1991); and on Kauai, a U.S. EPA Tabletop Emergency Response Exercise is scheduled for May, 1991. In addition, the Department of Health is working with Kapiolani Community College on the feasibility of producing 8-hour Hazardous Materials awareness training videotapes.

#### E. Funding and Legislation

Dr. Anderson provided an update on Hawaii's Environmental Response Law. Dr. Anderson reported that the Response Law's revolving fund was encountering cost recovery problems. These problems stem from midnight dumping, and non-solvent responsible parties. Therefore, the state needs to identify other funding sources to supply the revolving fund so emergency public health and environmental hazards can be cleaned up and disposed of promptly. Dr. Anderson stated that \$500K will be requested from the 1991 legislative session for the next two years (\$250K per year). Dr. Anderson also reported that the Hawaii Environmental Response Law regulations are currently being revised, and that hopefully by the end of the 1991 legislative session draft rules will have been finalized.

### IV. REGIONAL PLANS AND RESPONSE TEAM UP-DATES BY THE U.S. COAST GUARD

#### A. Current Activities of the Oceania Regional Response Team

Lt. Eric Mosher provided an overview of the Oceanic Regional Response Team meeting that was held in Honolulu on December 17, and 18, 1990. The primary topic that was covered at the meeting was the Oil Pollution Act of 1990 (OPA). For the purposes of the HSERC meeting, Lt. Mosher focused on the role of State participation with regard to the OPA. Lt. Mosher stated that the OPA Liability Trust Fund has one billion dollars to cover cleanup costs and damages not compensated for by the spiller, and would include natural resource and economic damages. Payments of up to \$500 million per spill could be incurred by trustees for assessing damages to natural resources and in developing and implementing restoration, rehabilitation, replacement and acquisition plans. One million has been allocated to the U.S. Coast Guard's 14th District (which includes Hawaii). There are research and development funds (\$600K) available to through the OPA for oil spill studies. Lt. Mosher also reviewed the concept of the Area Response Committee (ARC), which will be comprised of federal, state, and local agency representatives. The ARC is tasked with developing an Area Contingency Plan, which should be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility.

Lt. Larry Hewett provided background information on the National Regional Response Team (NRRT). Lt. Hewett stated that the NRRT reviews LEPC plans, and keeps informed on the latest technological means of managing oil spills. Lt. Hewett recommended that the State agencies monitor the draft regulations for the OPA, and determine how the new law will affect the authorities, responsibilities, and resources of the various agencies. Lt. Hewett also stated that two work groups had been formed to identify preliminary constituents and responsibilities for developing an Area Contingency Plan (ACP) for Hawaii. One group will study the feasibility of using in-situ burning, bioremediation, and the use of dispersants on ocean oil spills. The other group will identify sensitive areas for the ACP.

## V. REVIEW OF THE STAR CONNECTICUT INCIDENT

### A. Star Connecticut Incident

Captain Richard C. Vlaun, U.S. Coast Guard, Federal On-scene Coordinator for the State of Hawaii, provided a chronological review of the Star Connecticut incident off Barbers Point. Captain Vlaun stated that the weather and sea conditions were calm on the day of the Star Connecticut grounding. When the Star Connecticut went aground, a six inch hole was opened up in the bow. Water flowed in, until the water column was about thirty feet in the tanker compartment. The large volume of water weighed the tanker down on the reef, and large water pumps had to be flown out by the Department of Defense, in order to pump the water out. On the high tide, the vessel was removed from the reef, and the hole in the bow was repaired. Luckily, no oil was lost from the Star Connecticut. Captain Vlaun then provided some information on programs to mitigate the possibility of marine oil spills from occurring in Hawaiian waters, which included the following: defined weather and sea criteria that would allow for the safe loading or off-loading procedures; pre-planned emergency action procedures; requirement for tug assistance for incoming and outgoing tankers; federal pilotage during docking and casting-off procedures; traffic system controller for marine navigation from Diamond Head to Barbers Point; identifying tanker routes; and installing more aids to navigation. Captain Vlaun stated that improvements were underway at PRI's Single Point Mooring, such as; the installation of quick release couplings, and the new requirement of maintaining a bridge watch during the loading and off-loading procedure.

### B. Mitigation measures for PRI's Single Point Mooring

Mr. F. David Hoffman, Vice President of Petroleum Operations for PRI, provided a presentation on PRI's Single Point Mooring (SPM) operations off Barbers Point. Mr. Hoffman began by stating that the SPM is safe and efficient, and is a proven state of the art technology for docking tankers. Mr. Hoffman said the Exxon Houston and the Star Connecticut incidents were caused by human error. The Exxon Houston broke away from the SPM after a tethering chain broke, and the Star Connecticut Captain had called at the SPM 7 other times without an incident. Mr. Hoffman stated that 85% of oil spills are caused by human error. Mitigation measures to be implemented at the SPM include: live bridge watch during loading and off-loading operations; a bow look-out; a tug astern and a stand-by tug available; tanker engines to remain on immediate stand-by, and the requirement to have the Master aboard the tanker when it is within the three mile limit. In addition, the Clean Islands Council, a petroleum consortium of which PRI is a member, has purchased additional oil spill response equipment, including a boat and a barge. According to Mr. Hoffman, the SPM receives 100 ships per year, of which 40 are product tankers like the Star Connecticut. Mr. Hoffman stated that the product tankers could be off-loaded at the Deep Draft Harbor, and that PRI has invested in a \$10 million dollar pipeline to the Deep Draft Harbor.

## VI. OPEN SESSION

### A. Announcements

EPA Chemical Preparedness and Prevention Office is coordinating the Peer Exchange Program for LEPC members. This allows LEPCs to exchange personnel. For more information, call Sarith Guerra at (202)962-3649, or; Kathy Jones at (202)475-8353.

### B. Discussion

Dr. Anderson then opened the meeting up to comments and discourse. Mr. Price, Vice Adjutant General for the Hawaii State Civil Defense, stated that the HSERC was not operating like a commission, and that



there were no administrative rules to follow. Mr. Price also wanted to have meetings scheduled more regularly, and more frequently. Mr. Price suggested that the HSERC meet quarterly. Mr. Harry Kim, Chairman of the Hawaii LEPC, also commented on the lack of administrative procedures during the HSERC meetings. Mr. Kim also wanted to know who sets the agendas and the priorities for the HSERC meetings. Mr. Kim suggested that a stenographer should be hired to take down the minutes of the HSERC meetings. Mr. Kim thought the HSERC meetings were not following SARA Title III requirements, and that the HSERC meetings should be limited to SARA Title III business. Mr. George Kekuna, Chairman of the Oahu LEPC, wanted to know who was on the HSERC. Mr. Price and Mr. Kim requested the development of administrative rules for HSERC meetings, and Mr. Kim requested an HSERC meeting to establish LEPC and HSERC responsibilities with regard to SARA Title III requirements. Dr. Anderson then stated that at the next HSERC meeting, the respective responsibilities of the LEPC and the HSERC would be discussed, and that the agenda would be coordinated with the LEPCs. Dr. Anderson reiterated that the HSERC meetings were, by law, open to the public. Mr. Kim further stated that all requirements of a official commission should indeed be followed. Mr. Kim also suggested that an HSERC executive committee be formed to develop administrative procedures, and to identify the responsibilities of the LEPCs and the HSERC as required under SARA Title III.

Mr. Price then made a motion to adjourn the meeting at 4:35 pm, and it was seconded.

This finalized Meeting Summary is respectfully submitted to the Hawaii State Emergency Response Commission.

Respectfully submitted,

  
\_\_\_\_\_  
J. MARK INGOZIA

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
 MEETING #7  
 BOARD ROOM, 3RD FLOOR  
 STATE DEPARTMENT OF HEALTH  
 MONDAY, JANUARY 14, 1991 AT 2:00 P.M.

NAME	AGENCY	PHONE#
✓ GEORGE KEKUNA	CxCOF HONOLULU	523-4121
✓ Harry Kuni	COH Hawaii	935-0031
✓ Roy O'Brien	S.C.D	732-2161
✓ MG Alexs Linn	TAG	11
✓ Maurice Kaya	DBED	548-4150
✓ Nell CAMMACK	OMPO	548-8544
✓ Wm. E. HEDDAEUS	PRI	547-3498
✓ W <sup>m</sup> AUSENDERFERC	PRI	547-3395
✓ PETER FREEMAN	PRI	547 3422
✓ RON DAVIS	MAUI County fire chief	243-7562
✓ JOHN BOWEN	UH	935-2885
✓ LCDR Gregory Jones	USO Honolulu / Port Operations	541-2068
✓ CARTER DAVIS	Honolulu FIRE	422-0827
✓ MICHAEL BREDE SR.	HPD	943-3364
✓ EDWARD LINGO	Capt. HPD CD Coordinator	943-3364
✓ SELBERG MENOR	MAUI County C.D.	243-9921
✓ Susan Kusowski	PRI	547-3425
✓ Rusty Nall	PENCO	545-5195
✓ Jennifer Shishido	State, DLIR-DOSH	548-5480
✓ PAUL B. YOUNG	STATE FIRE COUNCIL	942-9167
✓ ALEXANDRO LOMASAO	Kauai County FIREDEPT.	2484721
✓ RALPH MOORE	STATE DOT	548-3188
✓ TOM BATEY	SCD	734-2161
✓ HARDING FRAGAS JR.	HI. COUNTY FIRE	961-8336
✓ JOE REED	ORANU Civil Defense	523-4121
✓ KENNETH THONG	% of Hon. ATS	527-5002

STAFFORD KIBOUKI

PRI

547-3453

GERALD KINRO

Dept of Hq

548-7124

✓ LT ERIC HOSMER

USCG

541-2114

✓ LTJG LARRY HEWETT

USCG - DIY

541-2114

DAVE LYMAN

HAWAII PILOTS ASSOCIATION

531-4478

CHI-PIN CHANG

DLNR

548-7641

Dave Tunison

PRI

547-3193

Robert Crowell

DOT (Harbors)

548-6711

Michael Choy

Hawaiian Electric Co.

543-5679

Donald P. Astrab, Ph.D.

Honolulu, BWS

527-5283

Sandra A Simms

Cs Cas Honolulu -  
Corporation Counsel's office

523-4116

Dep Public Works  
Environ Engineer

? ALEX HO

DPW, C&C OF HONOLULU

523-4150

BILL BONNET

HAWAIIAN ELECTRIC CO.

543-5673

Mary Foote

Brewer Environmental Industries, Inc.

533-4411

HARLAN HASHIMOTO

UNIV OF HAWAII / SCH PUB HLTH

956-8894

PHILIP MORAVCIK

HEER / DOH

543-8249

Bruce Schlieman

DOH / HEER

543-8249

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEMBER LIST (2/7/91)

ERCLIST.WP

John C. Lewin, M.D., Chairman  
Hawaii State Emergency Response Commission  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801  
Ph: 548-6506

Bruce S. Anderson, Ph.D, Vice Chairman  
Hawaii State Emergency Response Commission  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801  
Ph: 548-4139

Mr. Yukio Kitagawa, Chairperson  
Board of Agriculture  
P.O. Box 22159  
Honolulu, Hawaii 96822-0159  
Ph: 548-7101  
Representative: Dr. Po-Yung Lai, Head,  
Plant Industry Division  
Ph: 548-7124

Major Brigadier General Edward V. Richardson  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495  
Ph: 734-2195  
Representatives: Thomas O. Batey, Chief  
Ph: 734-2161

Mr. Mario R. Ramil, Director  
Department of Labor and Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Mr. Ramil  
Ph: 548-3150  
Representative: David M. Komori, Administrative Assistant  
Ph: 548-3903

Mr. William W. Paty, Chairperson  
Board of Land and Natural Resources  
1151 Punchbowl Street, Room 130  
Honolulu, Hawaii 96813

Hawaii State Emergency Response Commission  
Member List  
Page 2

Murry Towill, Director  
Department of Business and Economic Development  
P.O. Box 2359  
Honolulu, Hawaii 96804  
Ph: 548-691

Mr. Edward Y. Hirata, Director  
Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Mr. Hirata  
Ph: 548-2055  
Representative: Ronald Hirano, Deputy Director  
Ph: 548-2055

Jerrold M. Michael, Dean  
School of Public Health  
University of Hawaii  
1960 East-West Road  
Ph: 948-8491  
Representative: Harlan H. Hashimoto  
Environmental Science and Engineering  
Ph: 948-8894  
956-

Ms. Jiggie Hommom, Manager  
Hawaii State Chapter  
American Red Cross  
P.O. Box 3948  
Honolulu, Hawaii 96812  
Ph: 734-2101

Director (Awaiting appointment for new director)  
Office of Environmental Quality Control  
550 Halekauwila Street, Room 301  
Honolulu, Hawaii 96813  
Ph: 548-6915

Mr. Clifford Ikeda  
Kauai LEPC Co-Chairman  
4444 Rice Street, Rm 230  
Lihue, Hawaii 96766  
Phone: 245-4001

Mr. Sel Menor, Co-Chairman  
Maui County Civil Defense Agency  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 244-7721

Mr. George Kekuna, Director  
Oahu Civil Defense Agency  
650 South King Street  
Honolulu, Hawaii 96813

Hawaii State Emergency Response Commission  
Member List  
Page 3

Mr. Harry Kim, Administrator  
Hawaii County Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720

TELECOPIER TRANSMITTAL SHEET  
Civil Defense Division, State of Hawaii  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495

Telecopier Number: (808) 737-4150

Verification Number: (808) 734-2161

RICOH FAX 70E

DATE: November 15, 1990

TIME: 8:43 a.m.

NUMBER OF PAGES (excluding transmittal sheet): 4

TO: Oahu Civil Defense Agency

Dr. Bruce Anderson, DOH

FROM: Roy C. Price, Sr.

Vice Director of Civil Defense

ATTN:

COMMENTS: These were forwarded to the Governor on November 14 for his  
consideration.

**DRAFT** - 11/14/90

Mr. Chuck P. Woodland  
Regional Manager  
Chevron USA, Inc.  
1001 Bishop Street, Suite 1000  
Honolulu, Hawaii 96813-3410

Dear Mr. Woodland:

The incident and potential major disaster involving the Star Connecticut have once again raised serious concern over the dangers facing the Hawaiian Islands from oil spills. As you are well aware, our fears became reality in March 1989 when the Exxon Houston broke from its mooring, ran aground and spilled more than 30,000 gallons of oil fouling beaches and disturbing the delicate ecological balance of life in our coastal waters.

Fortunately, a repeat of that disaster did not occur with the Star Connecticut. However, the potential was there and the danger was very real. Besides the physical danger to our land, water, sea life and to our people, the economic impact of a major oil spill would be catastrophic.

While the incidents referenced did not involve your facilities, I am concerned over the potential for major oil spills in Hawaii. I request that you advise the State of your mitigation measures that will be taken to preclude similar vessel groundings or mishaps.



With kindest regards,

Sincerely,

JOHN WAIHEE

cc: Commander, 14th Coast Guard District  
Department of Health

**DRAFT** - 11/14/90

Mr. Robert G. Reed III  
Chief Executive Officer  
Pacific Resources, Inc.  
P. O. Box 3379  
Honolulu, Hawaii 96842

Dear Mr. Reed:

The incident and potential major disaster involving the Star Connecticut have once again raised serious concern over the dangers facing the Hawaiian Islands from oil spills. As you are well aware, our fears became reality in March 1989 when the Exxon Houston broke from its mooring, ran aground and spilled more than 30,000 gallons of oil fouling beaches and disturbing the delicate ecological balance of life in our coastal waters.

Fortunately, a repeat of that disaster did not occur with the Star Connecticut. However, the potential was there and the danger was very real. Besides the physical danger to our land, water, sea life and to our people, the economic impact of a major oil spill would be catastrophic.

I request that you advise the State of mitigation actions that will be taken to preclude any future vessel groundings and the potential for major oil spills. I intend to have the State Emergency Response Commission review the mitigation actions.

With kindest regards,

Sincerely,

JOHN WAIHEE

cc: Commander, 14th Coast Guard District  
Department of Health

January 14, 1991

ORRT12.90/BFS2

OCEANIA REGIONAL RESPONSE TEAM  
MEETING OF DECEMBER 17 AND 18, 1990

The following outline provides topics that were presented in the ORRT meeting that would involve a cooperative effort with federal, state and local agencies. These topics are associated with the Oil Pollution Act of 1990.

1. Track Oil Pollution Act of 1990

Regulations will be appearing in the Federal Register, so agencies should track the regulations in order to define their roles, responsibilities, and authorities.

2. Area Spill Studies

Analyze worst case scenario and determine resources (equipment and manpower) will be required to respond to the incident. Determine the availability of these resources, and the time frame in which they could be accessed.

3. Area Response Committee (ARC)

a. Federal, state, and local agencies working together to prepare an Area Contingency Plan (ACP) for designated area (Hawaiian Islands). The ACP should be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge. See attachment for more information on the ACP.

b. Federal, state and local agencies working together to enhance contingency planning. Assure pre-planning of joint response efforts, procedures for mechanical recovery, dispersal, shoreline cleanup, protection of sensitive environmental areas, and protection, rescue and rehabilitation of fisheries and wildlife.

c. Federal, state and local agencies working together to expedite decisions for the use of dispersants and other mitigating substances and devices.

d. Drill and exercise area contingency plan.

4. Oil Pollution Research Funds

\$600,000 available to University or research group for oil pollution related studies.

# AREA CONTINGENCY PLAN

- WHEN IMPLEMENTED IN CONJUNCTION WITH THE NATIONAL CONTINGENCY PLAN (NCP) SHOULD:

(1)-BE ADEQUATE TO REMOVE A WORST CASE DISCHARGE AND TO MITIGATE OR PREVENT A SUBSTANTIAL THREAT OF SUCH A DISCHARGE, FROM A VESSEL, OFFSHORE FACILITY, OR ONSHORE FACILITY.

(2)- DESCRIBE THE AREA COVERED BY THE PLAN. INCLUDE AREAS OF SPECIAL ECONOMIC OR ENVIRONMENTAL IMPORTANCE.

(3)- DESCRIBE RESPONSIBILITIES OF AN OWNER OR OPERATOR AND OF FEDERAL, STATE AND LOCAL AGENCIES IN REMOVING A DISCHARGE AND IN MITIGATING OR PREVENTING A SUBSTANTIAL THREAT OF A DISCHARGE.

(4)- LIST EQUIPMENT, DISPERSANTS, OTHER MITIGATING SUBSTANCES AND DEVICES, AND PERSONNEL AVAILABLE TO EFFECT IMMEDIATE REMOVAL OF A DISCHARGE OR PREVENT/MITIGATE THREAT OF A DISCHARGE.

(5)- DESCRIBE PROCEDURES FOR EXPEDITED USE OF DISPERSANTS.

(6)-DESCRIBE INTEGRATION INTO OTHER CONTINGENCY PLANS.

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERCAG7

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7

BOARD ROOM, 3RD FLOOR

STATE DEPARTMENT OF HEALTH

MONDAY, JANUARY 14, 1990 2:00 P.M.

*BFS to take  
Notes for HSERC  
Minutes → to send out  
List of Attendees →  
Name, Addresses + phone #, Agency  
→ Make up form*

AGENDA

- I. Introductory and Opening Remarks
- II. Welcome to the New HSERC members
- III. State of Hawaii's Chemical and Oil Emergency Preparedness Program
  - A. Title III Progress Mark  
*outline*
  - B. Local Emergency Planning Committees *List LEPs*  
*Hawaii, Maui,*
  - C. Spills Update *Phil*  
*outline (distrib draft report)*
  - D. Training, Exercises and Activities *Bruce + Mark*  
*outline*
- IV. Regional Plans and Response Team and U.S. Coast Guard Update
  - A. Current activities of the Oceania Regional Response Team  
*USCG provide overview of RRT Mtng* *USCG - General Mtng*  
*Bruce A. State*
- V. Review of Star Connecticut Incident  
*USCG Capt Vivan → star Connecticut Incident*  
*PAI (Names) → Mitigation measures at single point mooring presentation*
- VI. Other
- VII. Closing Remarks/Adjournment

DRAFT MEETING SUMMARY  
HAWAII STATE EMERGENCY RESPONSE COMMISSION MEETING #6  
STATE CAPITAL, ROOM 214  
NOVEMBER 8 1989, 9:00 A.M.

HSERC6/NG

SERC Commission Member and Representative Attendees:

Dr. John Lewin, Chairman, HSERC, DOH  
Bruce Anderson, Ph.D., Vice-Chairman, HSERC, DOH  
Gerald Kinro for Yukio Kitagawa, DOA  
Richard Kawakami for Roger Ulveling, DBED  
Harlan Hashimoto, Ph.D. for Jerald Michael, School of Public Health  
Thomas Kam for William Paty, DLNR  
Ron Hirano for Ed Hirata, DOT  
Hal Barks for Mario Ramil, DLIR  
Roy Price for Adjutant General Alexis Lum, DOD  
Jiggie Hommom, Red Cross  
Clyde Yamauchi for Marvin Miura, OEQC

Other Attendees:

Gregory Jones, USCG  
Captain Piche, USCG  
Walter Nishimura, City DOH  
Captain DeCosta, Honolulu Police Department  
Lt. Michael Brede, Honolulu Police Department  
Yvonne Mercuri, Mayor's Office of Information and Complaint  
George Souza, C&C Office of Information and Complaint  
Chief Kahooohanohano, Honolulu Fire Department  
Thomas Duarte, Maui Fire Department  
Harry Kim, Hawaii Civil Defense  
Sel Menor, Maui Civil Defense  
Ms. Nishioka, Hawaiian Electric Company  
George Kekuna, Oahu Civil Defense  
Dr. J.K. Simms, DOH-EMS  
Grace Simmons, DOH-Solid and Hazardous Waste Branch  
Thomas Vendetta, City and County Civil Service  
Lt. Eric Mosher, USCG-14th District  
Ed Kalinowski, Department of Emergency Medical Services  
David Tunison, Pacific Resources Inc.

Billy Chaves, Brewer Chemical  
Walter Nishimura, City and County Health  
Jennifer Shishido, DLIR  
Charmaine Kamaka, Hawaii County Safety  
Donald P. Astrab Ph.D., City and County BWS  
Kennth Thong, City and County DTS  
Bill Bonnet, HECO  
Mark Ingoglia, HEER  
Jeff Klein, HEER  
Nancy Woo-Larkin, HEER/EPA  
Nancy Gilder, HEER

## I. OPENING REMARKS

Dr. John Lewin outlined the meeting's agenda to cover the Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials, Hawaii's emergency preparedness program, and county representation on the SERC.

## II. Status of Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials.

Ms. Nancy Gilder reported that the agenda of the conference had not changed significantly. The arrangements for the two guest speakers, one from Alaska and one from California, had been finalized. The registration flyers would be sent out to the SERC mailing list and there would be an advertisement in the newspapers for the public to register. Interested parties should register immediately for there is limited seating.



### III. Hawaii's Emergency Response Program

#### A. Hawaii's Oil and Hazardous Substances Emergency Response Plan.

Mark Ingoglia went over the modifications to Draft V. Big Island, Maui, and Oahu LEPCs said their Mayor's offices did not have enough time to review the draft.

Discussion followed on the PIO section of the plan. The counties mentioned their mayors would want control over information disseminated to the public during an incident. It is the intention of the plan that DOH have a centralized, coordinated public information officer to act out of a joint information center. Joint, meaning to include federal, state, and county PIOs with DOH being the coordinator.

It was suggested that a distinction be made between major, medium, and minor incidents and their respective PIO strategy. Dr. Lewin and Dr. Anderson also suggested expanding the PIO section and working with the counties on it and adding it as an Appendix to the plan.

Dr. Lewin then asked for a move to approve the plan. It was so moved and seconded.

#### B. Results of the Statewide Training Needs Assessment.

Nancy Woo-Larkin reported the results of the Statewide Training Needs survey to determine the number of personnel needed to receive

chemical emergency response training. The training categories correspond with the six categories in the Training Guidelines and there were numbers for each category. Each county participated in the survey and the total number of personnel needed across all categories is estimated at 6786.

#### C. Training and Exercise Update

ATSDR training is planned for November 14-16 on Oahu, and CAMEO training is planned for on December 11-15th.

#### IV. County Representation

A survey of SERC members revealed the desire to include county representation on the HSERC. Dr. Anderson suggested that the mayors appoint a SERC representative in that the mayors originally recommended LEPC members. It was mentioned that the mayors be appointed themselves to the SERC and can send a designate if they so desire.

A motion was made that the mayors be requested to appoint a person to represent the county on the HSERC. It passed.

#### V. Proposed legislative package

Five positions for the HEER program are being requested as OSCs for emergency response. The Draft is also asking for \$120,000 for training funds.

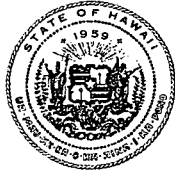
DOH is in the process of amending the State Environmental Emergency Response Law, adding enforcement sections and clarifying its authority.

Once the proposal passes the AG it will be circulated to the HSERC for review and comment.

#### VI. Other Business

Chief Kahooohanohano asked about establishing a fund to reimburse Honolulu Fire Department if and when they are asked to send the HAZMAT Team to the outer islands. It was suggested that a memorandum of agreement be written to address this upcoming issue.

The meeting was adjourned by the Vice-chairman and it was noted that the SERC may meet during the session for an update on relevant SERC legislation.



STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERC7.MTG/BFS2

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1991 AT 2:00 P.M.

Staff Meeting Notes

- I. Introductory and Opening Remarks  
Dr. Bruce Anderson, Deputy Director, DOH
- II. Welcome to the New HSERC Members  
Video Tape on the Emergency Planning and Community  
Right-to-Know (15 min)  
Dr. Bruce Anderson, Deputy Director, DOH
- III. State of Hawaii's Chemical and Oil Emergency  
Preparedness Program
  - A. Title III Progress Mark Ingoglia, Manager, HEER
    1. 300 Facility Reports
      - All Reviewed
      - Approximately 200 letters sent out to facility owners
      - At best, 50% of the letters have been correctly responded to
      - Counties imputing data (Kauai has filed with State)
      - Reminder letter prepared for mail out (end of January) for 1990 Data submittal to be returned by 1 March, 1991
      - Counties conducting hazard analyses - no estimate on completion
    2. Draft State and County Plans in Place
    3. Established Title III Data Management Plan utilizing CAMEO software
    4. Received \$70k Title III Data Management Grant from EPA Headquarters for Community Right to Know Data Access

B. Local Emergency Planning Committees (LEPCs)

Hawaii LEPC  
Kauai LEPC  
Oahu LEPC  
Maui LEPC

C. Spills Update Philip Moravcik, HEER, DOH  
(Distribute Draft 1990 Spill Report)

- 311 Notifications
- 100% increase in notifications from last year
- Majority of notifications on Oahu
- Major spills and response cleanup operations
  - Hilo copper chromium arsenic spill
  - Pearl City jet fuel pipeline leak
  - Maile oil barrel waste sites
    - 4,700 gallons of halogenated waste oil
    - 10,000 gallons of off specification oil
  - Explosive waste detonation project
  - Pioneer Lumber pentachlorophenol waste site
  - Hawaiian Tuna Packers ammonia release  
(first successful cost recovery)

D. Training, Exercises and Activities

Bruce Schlieman, HEER, DOH

- March, 1990: CAMEO Title III Data Management Workshop and 2 follow-up meetings
- April/May, 1990: 2 forty-hour Hazardous Materials Incident Response Operations
- May, 1990: 80 hour Chemistry of HazMats
- November, 1990: 80 hour Tactical Considerations for HazMat Response
- December, 1990: National Governors Association Conference on Title III (3 LEPC reps, and 1 SERC rep)
- December, 1990: Dept of Interior/State Natural Resources Damage Assessment Workshop
- January, 1991: National CAMEO Conference and Workshop ( 5 LEPC reps and 1 SERC rep)
- March, 1991: Chemistry of HazMats
- April, 1991: Tactical Considerations for HazMat Response
- May, 1991: Kauai EPA Tabletop Response Exercise
- May, 1991: Uniform Fire Code Hazmat Workshop (4 sessions, one for each county)
- HazMat 8-hour awareness - ongoing
- KCC/DOH Project for 8-hour awareness training

IV. Regional Plans and Response Team and U.S. Coast Guard Update

A. Current activities of the Oceania Regional Response Team

- overview of ORRT meeting  
Petty Officer Larry Hewett
- State perspective on ORRT activities  
Dr. Bruce Anderson, Deputy Director, DOH

V. Review of Star Connecticut Incident

- A. Review of Star Connecticut incident  
Captain Richard C. Vlaun, FOSC, USCG, MSO
- B. Mitigation measures for PRI's Single Point Mooring  
Mr. F. David Hoffman, Vice President of Petroleum  
Operations, PRI  
Captain Bill Heddeaus, HIRI Port Captain

VI. Other

- A. Third Annual National Superfund Environmental  
Evaluation Workshop: February 5-7, 1991 (contact  
Mark Sprenger at 201/906-6825; or Doug Steele at  
415/744-2312). Distribute copies
- B. EPA Office of Chemical Preparedness and Prevention  
Office is coordinating the International City  
Management Association Environmental Peer Exchange  
Program for LEPC members (for info call Sarith  
Guerra at 202/962-3649; or Kathy Jones at  
202/475-8353). Distribute copies

JOHN WAIHEE  
GOVERNOR OF HAWAII



SENT  
1/8/91 @ 3:52 pm

JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

FIVE WATERFRONT PLAZA  
500 ALA MOANA BOULEVARD, S. 250  
HONOLULU, HI 96813  
FAX # (808) 548-7237

FACSIMILE REQUEST AND COVER SHEET  
(Use Black or Blue Ink Only)

DATE: 1/8/91

TO: Karen Inoue

OFFICE/PHONE NO.: FAX 547-3084

SUBJECT: HSERC Meeting on 1/14/91 at 2pm

ORGANIZATION CODE/MAIL STOP: PRJ → Presentation @ HSERC  
Meeting

FROM: Bruce Schlieman

OFFICE/PHONE: 543-8249

SIGNATURE OF SENDER: Bruce Schlieman

No. of pages transmitted (Including Cover Sheet) 3

NOTE: If you did not receive all of the pages of this transmittal or if your pages are illegible, please call the office from which you received this material.

Comments regarding the PRI presentation for  
the HSERC Meeting on 1/14/91:

Will provide presentation under "Review of  
Star Connecticut Incident" listed on Agenda.

The presentation should not be overly technical,  
and should focus on efforts by PRI to  
mitigate spills <sup>and</sup> groundings at the  
single buoy mooring. A presentation by  
the US Coast Guard will provide a review  
of the Star Connecticut incident prior to  
the PRI presentation.

A copy of the Agenda is attached:

Please call me if you have further questions  
on the HSERC meeting or PRI's presentation.

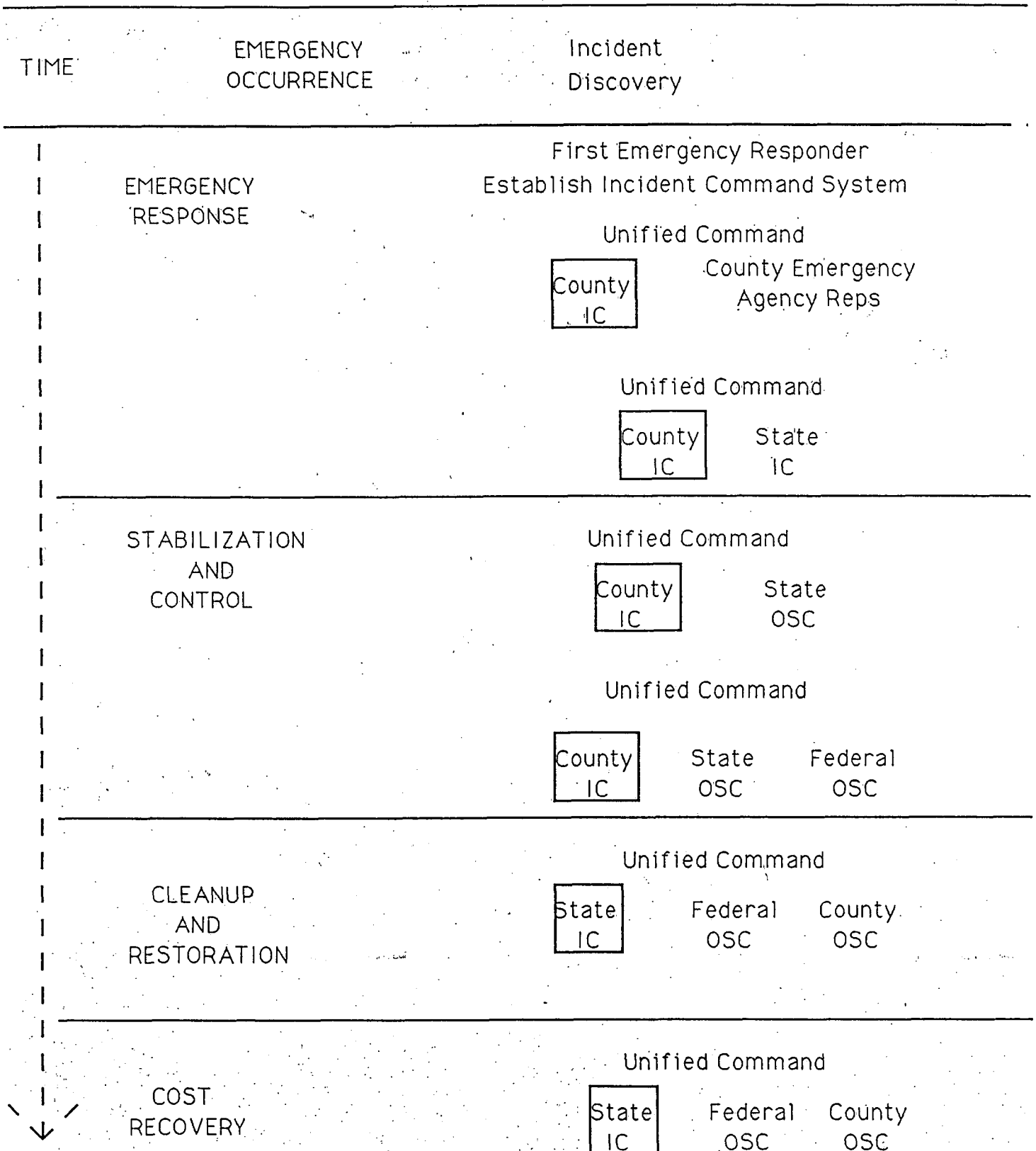
Thank you for cooperation and effort in  
assembling PRI's presentation to the HSERC

Grace



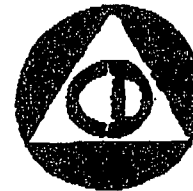
FIGURE IV

Incident Management Generalized Diagram





OAHU CIVIL DEFENSE AGENCY



FAX HEADER SHEET

DATE: 01/10/91

TO: Bruce Schlieman

AGENCY: State Dept of Health - HEER

FROM: Chris Takano

FAX: (808) 524-3439 VOICE: (808) 523-4121

HEADER SHEET + 1 SHEET(S) TO FOLLOW

PLEASE ACKNOWLEDGE RECEIPT IF CHECKED.       

REMARKS:

Bruce -  
Numbers for Police and fire  
departments are a little inflated.  
They have received some training.

CHEMICAL EMERGENCY RESPONSE  
TRAINING SURVEY  
FOR  
CITY AND COUNTY OF HONOLULU

AUGUST 1989

DEPARTMENT	CATEGORIES*					
	1	2	3	4	5	6
Dept. Public Works	250	125	100	-	-	-
Building Dept.	7	-	-	-	-	-
Dept. Transportation Services	1	-	-	-	-	-
Auditorium	1	-	-	-	-	-
Health Dept.	150	150	-	-	150	-
Police Dept.	1700	-	20	-	2	-
Board of Water Supply	5	-	3	-	-	-
Fire Dept.	100	100	30	60	-	-
Corp Counsel	2	-	1	-	-	-
Dept. Parks & Recreation	57	57	29	12	12	22
Oahu Civil Defense	26	3	7	1	3	3
Civil Service	2	1	-	-	-	1
Managing Director	2	-	-	-	-	-
Totals	2304	436	190	72	167	26

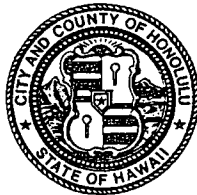
\* Training Categories

- 1 - First Responder Training
- 2 - Hazardous Materials Incident Response
- 3 - Hazardous Materials Supervisor Training
- 4 - Hazardous Materials Specialist Training
- 5 - Hazardous Materials Response Exercise
- 6 - Re-certification Course - for those who received Hazardous Materials Incident Response Training and need to take refresher course every year

FIRE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

1455 SOUTH BERETANIA STREET, ROOM 305  
HONOLULU, HAWAII 96814

FRANK F. FASI  
MAYOR



LIONEL E. CAMARA  
FIRE CHIEF

DONALD S.M. CHANG  
DEPUTY FIRE CHIEF

November 30, 1990

TO: GEORGE L. KEKUNA  
DEPUTY DIRECTOR DESIGNATE OF CIVIL DEFENSE

FROM: LIONEL E. CAMARA, FIRE CHIEF

SUBJECT: CAMEO TRAINING

The Fire Department request CAMEO training for members and relief members of the Hazardous Materials Response Team. The following is a list of personnel:

Captain Alexander Beck	FFII Edward Hunter
Captain Robert Butchart	FFII Nathan Kapule
Captain John Leong	FFII Earle Kealoha
FFIII Stephen Barrett	FFII Kenneth Krumm
FFIII Guy Katayama	FFII James Perkins
FFIII Walter Oda	FFII John Whalen
FFII John Bowers	FF1 Harold Ogata
FFII Vernon Enriques	FF1 Robert Methered
FFII Guy Fujio	

In addition, I request four members of the Fire Alarm Bureau, one from each shift, receive CAMEO training.

If you have any questions, please contact Captain Carter Davis at 422-0827.

A handwritten signature in cursive script that reads "Lionel E. Camara".

LIONEL E. CAMARA  
Fire Chief

**ANNOUNCEMENT**

**THIRD ANNUAL NATIONAL  
SUPERFUND ENVIRONMENTAL EVALUATION WORKSHOP**

The Hazardous Waste Management Division of Region IX and the Office of Emergency and Remedial Response will host a workshop for the EPA and Natural Resource Trustees concerning environmental assessments at Superfund sites. This three-day workshop will be held February 5-7, 1991 in San Diego, California. The workshop will be highlighted by technical lecture/workshop-format presentations on specific environmental assessment techniques. In addition, each region will provide updates on ecological assessments and other aspects of environmental assessments connected with Superfund.

The workshop is designed for Remedial Project Managers, On-Scene Coordinators, Federal and State Ecologists, Contaminants Specialists from the U.S. Fish and Wildlife Service, and Coastal Resource Coordinators from the National Oceanographic and Atmospheric Administration.

A list of tentative workshop topics is attached for your review, as is information on hotel and workshop accommodations. Please direct any questions to:

Mark Sprenger, US EPA/Environmental Response Team

201-906-6825 or FTS 340-6845

Doug Steele, US EPA Region IX

415-744-2312 or FTS 484-2312

To facilitate compilation of an attendees list, please fill out the stub below and return to the address indicated by January 18, 1991.

-----  
NAME \_\_\_\_\_ TITLE \_\_\_\_\_

AFFILIATION \_\_\_\_\_

Workshop participants are responsible for their own travel arrangements and sleeping accommodations (see attached).

Environmental Response Team  
ATTN: Mark Sprenger  
2890 Woodbridge Avenue  
Building 18, MS 101  
Edison, NJ 08837-3679

## LIST OF TENTATIVE WORKSHOP TOPICS

1. Welcome and Introduction
2. Freshwater Toxicity Tests
3. Marine Toxicity Tests
4. Macroinvertebrate Surveys
5. Natural Resource Damage Claim Procedures
6. Terrestrial Plant Assessment Techniques
7. Terrestrial Mammal Assessment Techniques
8. Fish Collection Procedures
9. Ecological Database Utilization

Plus, specific Regional agendas

## WORKSHOP FACILITIES

The Third Annual National Superfund Environmental Evaluation Workshop will be held February 5-7, 1991 at the Kona Kai Hotel, 1551 Shelter Island Drive, San Diego, CA. The hotel is convenient to both the San Diego airport and the Amtrak train station, and a selection of dining options. The hotel itself includes a restaurant, lounge, swimming pools, health club, and tennis and racquetball courts. A jogging trail and fishing pier are located across the street.

The government lodging rate at the Kona Kai is \$67.00 per day single occupancy. Attendees must have federal identification to ensure this rate. Workshop participants are responsible for their own room reservations - a Reservation Card is enclosed for this purpose, and is to be returned to the hotel. A block of rooms will be held until January 4, 1991 for attendees; reservations made after this date will be accepted on a "space available" basis. Please note: The hotel is divided into two sections, The Club and The Inn. Rooms are the same in each section, however, The Inn is a (very) short walk from The Club where all Workshop activities will take place. Please recognize that some reservations will be made in The Inn location.

The Kona Kai operates a complimentary airport shuttle. This shuttle circulates through the airport on a regular basis. Please see the attached "Directions" Sheet for shuttle pick-up locations, or call 222-3495 upon your arrival to ensure pick-up. Arrangements can also be made through the hotel for group transportation to restaurants and sites. For those attendees renting cars, directions for driving from the airport are attached.

For further information, contact the Kona Kai at either of these phone numbers: in CA, 1-800-231-9589; in all other states, 1-800-325-2218.





DIRECTIONS  
TO CATCH THE KONA KAI AIRPORT SHUTTLE

From the West Terminal (Alaska, American, American Eagle, Delta, Eastern, Northwest and Pan Am airlines):

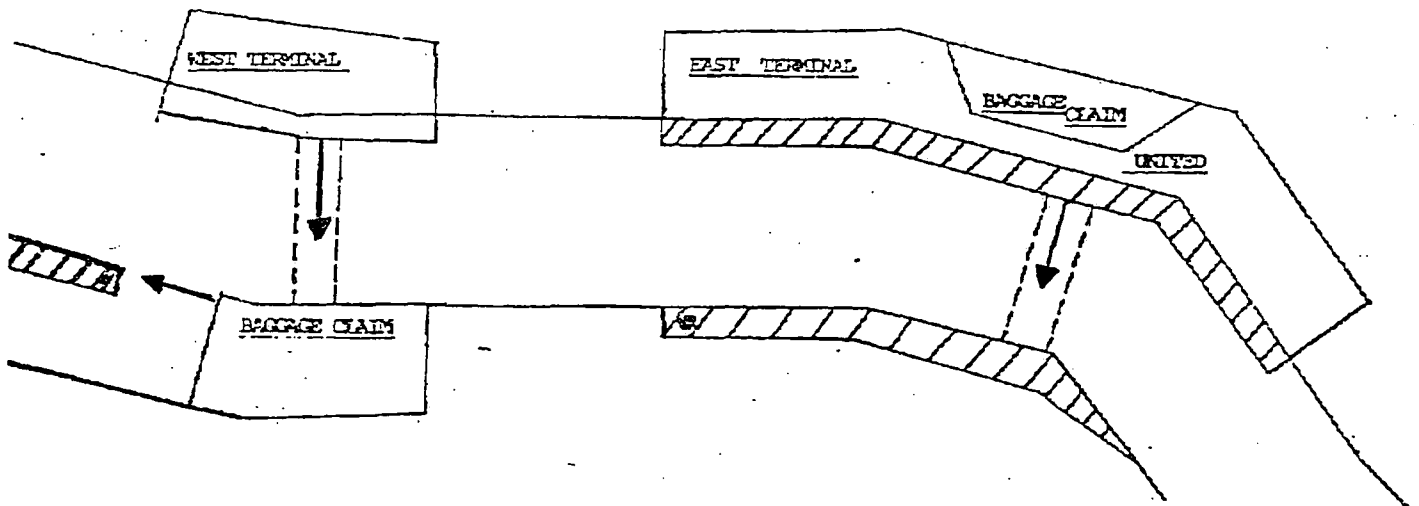
Exit the Airport at the far end of the Terminal, marked "Bus & Limo".

Wait for the Shuttle at the "Bus & Limo" pickup.

From the East Terminal (US Air, America West, Braniff, Continental, Piedmont, United, Southwest, Sunwest and TWA airlines):

Exit the Terminal by the front doors.

Wait for the Shuttle in front of United Airlines.





RECEIVED  
OFFICE OF THE DIRECTOR  
DEPT. OF HEALTH



## Title III Peer Exchange Program

A joint project between ICMA's Environmental Programs and EPA's Chemical Emergency Preparedness and Prevention Office  
November 13, 1990

Mr. Bruce S. Anderson, Ph.D.  
Vice-Chair  
Hawaii State Emergency Response Commission  
Hawaii Dept. of Health  
P.O. Box 3378  
Honolulu, HI 96801

Dear Mr. Anderson:

As you know, the responsibility for emergency preparedness and response ultimately rests with local government officials and agencies. It is imperative that these local government officials, and other individuals who participate in Local Emergency Planning Committees (LEPC), understand the requirements of the Emergency Planning and Community Right-to-Know Act (also known as Title III of the Superfund Amendments and Reauthorization Act of 1986) and what is necessary to prepare their communities for hazardous materials emergencies.

One avenue for educating members of LEPCs is communicating with peers who have developed successful programs and/or have faced similar issues. As a result of a grant from EPA's Office of Cooperative Environmental Management (OCEM) supported by the Chemical Emergency Preparedness and Prevention Office (CEPPO), the International City Management Association (ICMA) will now be able to coordinate LEPC peer exchanges through ICMA's environmental peer exchange program. ICMA is the professional and education association for top appointed administrators in local government. EPA and the National Governors' Association are in the process of establishing a similar exchange program for State Emergency Response Commissions (SERCs).

The ICMA Environmental Peer Exchange program has been in place for more than a year. Currently, the program matches communities that need assistance and advice with communities that have successfully addressed environmental issues, such as solid waste management. This program has coordinated successful peer matches involving over 60 communities. The initial Title III component of the ICMA/EPA peer exchange program will include approximately 20 peer exchanges. Some of these exchanges will involve more than one recipient community or LEPC. An environmental roundtable of advisors knowledgeable in hazardous emergency preparedness



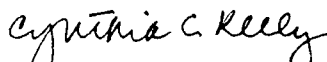
will form the core cadre of the peer advisors. This pilot program is designed so that in subsequent years it can continue and expand. Thus, the program will also identify as many local officials as possible to participate in the peer network.


In an effort to keep all parties informed, LEPCs applying for a peer exchange will be asked to send a copy of the application to the appropriate SERC and EPA regional office, as well as ICMA. Program staff at ICMA will also provide CEPPPO with periodic updates of all peer exchanges and program activities. CEPPPO will, in turn, keep the SERCs and regional EPA offices up to date on activities.

We would like all SERCs to notify the LEPCs under their jurisdiction about Title III Peer Exchange Program. Enclosed is some background information on the program and applications for distribution.

If you have any questions or comments, please do not hesitate to call Sarith Guerra, Program Manager, ICMA Environmental Peer Exchange Program at 202/962-3649 or Kathy Jones, Program Analyst, EPA Office of Chemical Preparedness and Prevention Office at 202/475-8353.

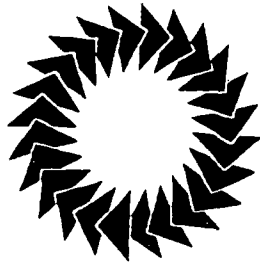
Sincerely,

  
Cynthia C. Kelly, Director  
ICMA Environmental Programs

  
James Makris, Director  
EPA Chemical Emergency  
Preparedness and Prevention  
Office

Enclosures

cc: Donna Fletcher, EPA Office of Cooperative Environmental  
Management



## **ICMA's Environmental Peer Exchange Program: Title III: Emergency Planning and Community Right-to-Know**

Federal and state mandates....local public safety responsibilities....emergency planning and response....training standards....inadequate funding. The challenges of developing and managing a local emergency response plan can seem insurmountable. As a community leader, you want an effective plan. Yet lack of adequate information, experience, or technical expertise can make it difficult to meet your community's needs.

To assist local emergency planning committees (LEPC) in meeting these challenges, the International City Management Association (ICMA), the professional association of appointed administrators serving cities, counties, regional councils, and other local governments, has initiated an EPA-funded Title III Peer Exchange Program through ICMA's Environmental Peer Exchange Program.

**The Title III Peer Exchange Program** will provide community leaders with the advice they need from those who understand local emergency planning concerns best—their peers. Taking advantage of ICMA's national network of government officials, this program enables elected officials and top managers in local government to meet for one or two days of on-site assistance. By meeting face-to-face, each participant obtains first-hand knowledge of how another community is meeting a particular challenge. The lessons learned in each exchange are documented and used to assist other communities.

The program will also offer LEPC members an opportunity to improve communication and cooperation with their counterparts in other localities and with the private sector and to increase citizen awareness and involvement in Title III activities.

If you think your LEPC/community would benefit by participating in this program, as a recipient or advisor, write ICMA at 777 North Capitol Street, N.E., Washington, D.C. 20002, or call:

Sarith Guerra  
Project Manager  
Environmental Peer Exchange Program  
(202) 962-3649

or call your State Emergency Response Commission.



**ICMA/EPA Environmental Peer Exchange Application**  
**Title III: Emergency Planning and Community Right-to-Know**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Jurisdiction: \_\_\_\_\_ Population: \_\_\_\_\_

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

Phone: \_\_\_\_\_ Form of Government: \_\_\_\_\_

LEPC: \_\_\_\_\_

Please complete this form if you would like ICMA to arrange for an exchange between you and a peer from another jurisdiction to address Title III issues. Funding restrictions may mean that not every request for a peer exchange will be met, but we will make every effort to include your community in our program.

1. In what area(s) would you like to offer or receive assistance? Please indicate whether you are interested in being an advisor (A) or recipient (R):

- |  |  |
|--|--|
| <input type="checkbox"/> general hazardous materials                 | <input type="checkbox"/> compliance/enforcement                  |
| <input type="checkbox"/> emergency planning                          | <input type="checkbox"/> of reporting requirements               |
| <input type="checkbox"/> information management                      | <input type="checkbox"/> hazard analysis                         |
| <input type="checkbox"/> public notification                         | <input type="checkbox"/> risk communication                      |
| <input type="checkbox"/> citizen requests for information            | <input type="checkbox"/> exercises/simulations                   |
| <input type="checkbox"/> training of response and<br>medical workers | <input type="checkbox"/> industry cooperation/<br>joint projects |

other (please specify): \_\_\_\_\_  
\_\_\_\_\_

2. Provide some background on your situation. What obstacles have you faced? Who are the key individuals involved? How are other governments (i.e., neighboring cities/towns, the county, regional authorities, the state) involved? What has been done to date? What does state law require? (use extra paper if necessary)

3. FOR THOSE REQUESTING ASSISTANCE:

a. If you can, list five specific questions/issues that you would like a peer advisor to answer.

b. Do you have any suggestions of peers with whom you would like to exchange information or who may also be interested in the exchange program?

4. FOR THOSE OFFERING ASSISTANCE: Please list your specific areas of expertise.

If you have any questions, please call Sarith Guerra, Project Manager, Environmental Peer Exchange Program, at 202/962-3649. Thank you! We will contact you shortly.

Please send a copy of this application to:

Sarith Guerra  
Environmental Peer Exchange Program  
ICMA  
777 North Capitol St., NE, Suite 500  
Washington, DC 20002

*Please send a copy of this application to your SERC and EPA regional office for their information. Thank you.*

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERCAG7

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1990 2:00 P.M.

AGENDA

- I. Introductory and Opening Remarks
- II. Welcome to the New HSERC members
- III. State of Hawaii's Chemical and Oil Emergency Preparedness Program
  - A. Title III Progress
  - B. Local Emergency Planning Committees
  - C. Spills Update
  - D. Training, Exercises and Activities
- IV. Regional Plans and Response Team and U.S. Coast Guard Update
  - A. Current activities of the Oceania Regional Response Team
- V. Review of Star Connecticut Incident
- VI. Other
- VII. Closing Remarks/Adjournment

**MEETING SUMMARY**

**HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #7  
STATE CAPITAL, CONFERENCE ROOM 212  
MONDAY, JUNE 26, 1989, 9:00 A.M.**

Member Attendees:

Tom Brown, State Civil Defense  
Doug Erway, State Civil Defense  
Joe Reed, Oahu Civil Defense Agency  
Thom Diggs, Oahu Civil Defense Agency  
Paul Takamiya, Oahu Civil Defense Agency  
Gerald Kinro, DOA  
Charmaine Kamaka, Hawaii County Safety  
David H. Nakagawa, DOH-Maui  
Thomas Kam, DLNR  
Leroy Hokoana, Maui Fire Department  
LCDR Kenneth Keane, USCG  
Selbero Menor, Maui Civil Defense  
Tom Bello, Hawaii Fire Department  
Tom Vendetta, C&C Civil Service  
Clyde Takekuma, Kauai District Health Office  
Clifford Ikeda, Kauai Civil Defense  
Hal Barks, DLIR/DOSH  
Harold Matsuura, Hawaii-DOH  
Wendell Hatada, Hawaii Civil Defense Agency  
Mark Ingoglia, DOH  
Andria Benner, DOH/EPA  
Nancy Woo-Larkin DOH/EPA  
Jeff Klein, DOH  
Nancy Gilder, DOH

**I. OPENING REMARKS**

The Meeting Summary of the May 22nd meeting was reviewed by Mark Ingoglia. He noted that the training dates in the Summary were incorrect and that the Training Schedule enclosed with the Meeting Summary is the most up-to-date.

Update on Kekaha landfill - It was noted that three barrels of unidentified wastes were still on site, labeled, and cordoned, awaiting final results of analysis. (Final Update: test results



indicate contents of barrels are not hazardous waste.)

## II. REVIEW OF SCHEDULE - NANCY WOO

Nancy went over a schedule hand-out. The main upcoming events are the Emergency Response Plan, the Training Guidelines, and the HAZMAT Conference. All are going to be presented to HSERC for approval at their meeting August 1, 1989.

A new Section V Hazardous Materials Response Exercise was added to the Training Guidelines. If there are no additional comments, the Guidelines will be presented to HSERC at the August meeting.

## III. CHANGES AND AMENDMENTS TO THE EMERGENCY RESPONSE PLAN - NANCY GILDER.

There was a hand-out listing the suggested comments from TSERC members as well as changes made by HEER. Discussion followed during the reading of the comments. The following suggestions were made:

- \* A section should be added that describes "multiple events", (e.g., more than one emergency at a time), and how resources will be allocated.
- \* It was suggested that there be an on-scene PIO (Public Information Officer). Discussion revealed that procedures be established in accordance with standard Civil Defense procedures where the PIO generally speaks from the appropriate EOC (Emergency Operation Center).
- \* The media cannot be denied from being on-the-scene. However they should be referred to the EOC and look to them for details.
- \* USCG trains their people to answer only facts relating to their particular job and not to speculate.
- \* There was discussion about the SOSC (State On-Scene Coordinator) being designated by position, or by name. The function should be clearly stated. For when the plan is adopted it will be law and the parties will be liable for their roles.
  - It was noted that the District Health Administrator (DHA) is a separate position from the District Health Services Administrator (DHSA) who has an M.D.
- \* The use of volunteers should not be encouraged during clean-up unless the contractor assumes liability; and then only used during oil not chemical spill clean-up.

#### IV. HAZMAT CONFERENCE

The suggested audience for the conference was: policy-makers, mayors, key councilmembers, affected State/County Department heads, key legislators, LEPCs, private industry. It will be well publicized and open to the public.

A suggestion was made that a "pre-meeting" for agency representatives who are emergency responders be held, to package their reactions to potential questions from the media about the federal, state and county's response capabilities.

Other suggested activities that would bring attention to the fall 1989 conference.

- Invite the mayors to attend the debriefing of the Honolulu Full-Field Exercise.
- Encourage the Governor to sign a Proclamation designating a HAZMAT Awareness/Emergency Preparedness Week.

Some thought a day long conference would be too long to get busy and important officials to attend. TSERC was asked for comments on the format of the schedule and it was agreed that the HSERC will decide.

#### IV. SHELTERING IN PLACE

There was an article enclosed with the agenda packet about "Sheltering in Place". It was noted that Oahu Civil Defense references it in their LEPC Plan and a question was raised regarding who makes the determination whether to use it. Oahu Civil Defense said the CEC (Community Emergency Coordinator) is responsible.

A separate comment was made that sheltering in place is useful only in situations where there is not enough time for an evacuation.

#### VI. CLOSING REMARKS

The next HSERC meeting is scheduled for August 1st. Please attend, it will be at the DOH Board Room.

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

**STATE OF HAWAII**  
**DEPARTMENT OF HEALTH**

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER

June 14, 1989

**MEMORANDUM**

TO: Senator Gerald Hagino, Senate Majority Leader  
FROM: Nancy Gilder, Department of Health  
SUBJECT: Conference Room Reservation

I have contacted the Senate Majority Attorneys office to make arrangements to reserve Conference Room #212 for June 26th, 9:00 a.m. - 12:00 p.m..

The Department of Health will be holding a meeting for the Hawaii State Emergency Response Commission Technical Subcommittee. People from state and county agencies from all the counties will meet to help prepare the state's Emergency Response plan and training guidelines for oil and chemical spills.

If you have any questions, please contact Nancy Gilder at X2076.

STATE OF HAWAII  
DEPARTMENT OF HEALTH

EMERGENCY RESPONSE PERSONNEL TRAINING AND EXERCISE SCHEDULE

Incident Response Training, Personal Protection Training

\* 40 hour session provided by the Coast Guard

Kauai - July 10-14  
Hilo - July 17-21 (?)  
Maui - August 7-11

Chemistry of Hazardous Materials

\* FEMA sponsored

Hilo - June 19-30  
Instructors: John Bowen and Joseph Mehlretter

Hazardous Materials Tactical Considerations

\* FEMA sponsored

Hilo - August 21 - September 1  
Instructors: John Bowen and Carter Davis

Honolulu Full Field Exercise

\* EPA sponsored  
\* Field Leader: Ellery Savage

Planning meeting with all involved agencies - August 29th.  
Pre-exercise briefing - October 19th.  
Full field exercises - October 20th.

Maui Tabletop Exercise

\* EPA sponsored  
\* Field Leader: TAT Contractor

Planning meeting with all involved agencies - August 30th.  
Pre-exercise briefing - October 23rd.  
Tabletop exercise - October 24th.

6/13/89



*no need give this  
to HSEERC*

**MEETING SUMMARY**

**HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #7  
STATE CAPITAL, CONFERENCE ROOM 212  
MONDAY, JUNE 26, 1989, 9:00 A.M.**

Member Attendees:

Tom Brown, State Civil Defense  
Doug Erway, State Civil Defense  
Joe Reed, Oahu Civil Defense Agency  
Thom Diggs, Oahu Civil Defense Agency  
Paul Takamiya, Oahu Civil Defense Agency  
Gerald Kinro, DOA  
Charmaine Kamaka, Hawaii County Safety  
David H. Nakagawa, DOH-Maui  
Thomas Kam, DLNR  
Leroy Hokoana, Maui Fire Department  
LCDR Kenneth Keane, USCG  
Selbero Menor, Maui Civil Defense  
Tom Bello, Hawaii Fire Department  
Tom Vendetta, C&C Civil Service  
Clyde Takekuma, Kauai District Health Office  
Clifford Ikeda, Kauai Civil Defense  
Hal Barks, DLIR/DOSH  
Harold Matsuura, Hawaii-DOH  
Wendell Hatada, Hawaii Civil Defense Agency  
Mark Ingoglia, DOH  
Andria Benner, DOH/EPA  
Nancy Woo-Larkin DOH/EPA  
Jeff Klein, DOH  
Nancy Gilder, DOH

**I. OPENING REMARKS**

The Meeting Summary of the May 22nd meeting was reviewed by Mark Ingoglia. He noted that the training dates in the Summary were incorrect and that the Training Schedule enclosed with the Meeting Summary is the most up-to-date.

Update on Kekaha landfill - It was noted that three barrels of unidentified wastes were still on site, labeled, and cordoned, awaiting final results of analysis. (Final Update: test results indicate contents of barrels are not hazardous waste.)

## II. REVIEW OF SCHEDULE - NANCY WOO

Nancy went over a schedule hand-out. The main upcoming events are the Emergency Response Plan, the Training Guidelines, and the HAZMAT Conference. All are going to be presented to HSERC for approval at their meeting August 1, 1989.

A new Section V Hazardous Materials Response Exercise was added to the Training Guidelines. If there are no additional comments, the Guidelines will be presented to HSERC at the August meeting.

## III. CHANGES AND AMENDMENTS TO THE EMERGENCY RESPONSE PLAN - NANCY GILDER.

There was a hand-out listing the suggested comments from TSERC members as well as changes made by HEER. Discussion followed during the reading of the comments. The following suggestions were made:

- \* A section should be added that describes "multiple events", (e.g., more than one emergency at a time), and how resources will be allocated.

- \* It was suggested that there be an on-scene PIO (Public Information Officer). Discussion revealed that procedures be established in accordance with standard Civil Defense procedures where the PIO generally speaks from the appropriate EOC (Emergency Operation Center).

- \* The media cannot be denied from being on-the-scene. However they should be referred to the EOC and look to them for details.

- \* USCG trains their people to answer only facts relating to their particular job and not to speculate.

- \* There was discussion about the SOSC (State On-Scene Coordinator) being designated by position, or by name. The function should be clearly stated. For when the plan is adopted it will be law and the parties will be liable for their roles.

-It was noted that the District Health Administrator (DHA) is a separate position from the District Health Services Administrator (DHSA) who has an M.D.

- \* The use of volunteers should not be encouraged during clean-up unless the contractor assumes liability; and then only used during oil not chemical spill clean-up.



#### IV. HAZMAT CONFERENCE

The suggested audience for the conference was: policy-makers, mayors, key councilmembers, affected State/County Department heads, key legislators, LEPCs, private industry. It will be well publicized and open to the public.

A suggestion was made that a "pre-meeting" for agency representatives who are emergency responders be held, to package their reactions to potential questions from the media about the federal, state and county's response capabilities.

Other suggested activities that would bring attention to the fall 1989 conference.

- Invite the mayors to attend the debriefing of the Honolulu Full-Field Exercise.
- Encourage the Governor to sign a Proclamation designating a HAZMAT Awareness/Emergency Preparedness Week.

Some thought a day long conference would be too long to get busy and important officials to attend. TSERC was asked for comments on the format of the schedule and it was agreed that the HSERC will decide.

#### IV. SHELTERING IN PLACE

There was an article enclosed with the agenda packet about "Sheltering in Place". It was noted that Oahu Civil Defense references it in their LEPC Plan and a question was raised regarding who makes the determination whether to use it. Oahu Civil Defense said the CEC (Community Emergency Coordinator) is responsible.

A separate comment was made that sheltering in place is useful only in situations where there is not enough time for an evacuation.

#### VI. CLOSING REMARKS

The next HSERC meeting is scheduled for August 1st. Please attend, it will be at the DOH Board Room.

**HAWAII STATE EMERGENCY RESPONSE COMMISSION**  
**TECHNICAL SUBCOMMITTEE MEETING #7**  
**HAWAII STATE CAPITAL, ROOM #212**  
**MONDAY, 26 JUNE 1989, 9:00 A.M.**

**SIGN-IN SHEET**

NAME	ADDRESS	PHONE NUMBER
TOM BROWN	SLD	734-2161
DOUG ERWAY	SLD	11
JOE REED	OCDA	523-4121
Thom Duggs	OCDA	523-9121
Paul Takamiya	OCDA	527-5488
GERALD KIRO	DOA	548-7124
Nancy Wood Larkin	DOH	548-2076
ANDRIA BENNETT	DOH	548-2076
JEFF KLEIN	DOA-HERR	" "
CHARMAINE KAMAKA	25 Aupuni St. Hilo	961-8215
DAVID H. NAKAGAWA	DOH-Main	244-4255
Thomas Kam	DLNR	548-7642
LARRY HOLCOMB	Fire - Maui	242-7561
LCDR KENNETH HEANE	U.S. COAST GUARD	541-2068
Salvatore M. Moore	Main Civil Defense	773-9971
Tom Bell's	FIRE - Hawaii	935-2978
Tom Verotta	Civil Service - CSC	523-4880
Dr. M. Takamiya	KAUAI - SLD	245-4523
Clarence Loo	Kauai ED	245-4001



SIGN-IN SHEET

NAME

ADDRESS

PHONE NUMBER

HAL BARKS IDLIR/IDSH 545-2155

Harold Matsumura P.O. Box 916 Hilo HI 96720 9617275

W. DELL HATADA 34A RAINBOW DR. HILO 9350031

Handwritten sign-in sheet with columns for Name, Address, and Phone Number. The first three rows contain handwritten entries: HAL BARKS (IDLIR/IDSH, 545-2155), Harold Matsumura (P.O. Box 916 Hilo HI 96720, 9617275), and W. DELL HATADA (34A RAINBOW DR. HILO, 9350031). The remaining rows are empty.

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERCAG7

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1990 2:00 P.M.

AGENDA

- I. Introductory and Opening Remarks
- II. Welcome to the New HSERC members
- III. State of Hawaii's Chemical and Oil Emergency Preparedness Program
  - A. Title III Progress
  - B. Local Emergency Planning Committees
  - C. Spills Update
  - D. Training, Exercises and Activities
- IV. Regional Plans and Response Team and U.S. Coast Guard Update
  - A. Current activities of the Oceania Regional Response Team
- V. Review of Star Connecticut Incident
- VI. Other
- VII. Closing Remarks/Adjournment

DRAFT MEETING SUMMARY HSERC6/NG  
HAWAII STATE EMERGENCY RESPONSE COMMISSION MEETING #6  
STATE CAPITAL, ROOM 214  
NOVEMBER 8 1989, 9:00 A.M.

SERC Commission Member and Representative Attendees:

Dr. John Lewin, Chairman, HSERC, DOH  
Bruce Anderson, Ph.D., Vice-Chairman, HSERC, DOH  
Gerald Kinro for Yukio Kitagawa, DOA  
Richard Kawakami for Roger Ulveling, DBED  
Harlan Hashimoto, Ph.D. for Jerald Michael, School of Public Health  
Thomas Kam for William Paty, DLNR  
Ron Hirano for Ed Hirata, DOT  
Hal Barks for Mario Ramil, DLIR  
Roy Price for Adjutant General Alexis Lum, DOD  
Jiggie Hommom, Red Cross  
Clyde Yamauchi for Marvin Miura, OEQC

Other Attendees:

Gregory Jones, USCG  
Captain Piche, USCG  
Walter Nishimura, City DOH  
Captain DeCosta, Honolulu Police Department  
Lt. Michael Brede, Honolulu Police Department  
Yvonne Mercuri, Mayor's Office of Information and Complaint  
George Souza, C&C Office of Information and Complaint  
Chief Kahooanohano, Honolulu Fire Department  
Thomas Duarte, Maui Fire Department  
Harry Kim, Hawaii Civil Defense  
Sel Menor, Maui Civil Defense  
Ms. Nishioka, Hawaiian Electric Company  
George Kekuna, Oahu Civil Defense  
Dr. J.K. Simms, DOH-EMS  
Grace Simmons, DOH-Solid and Hazardous Waste Branch  
Thomas Vendetta, City and County Civil Service  
Lt. Eric Mosher, USCG-14th District  
Ed Kalinowski, Department of Emergency Medical Services  
David Tunison, Pacific Resources Inc.

Billy Chaves, Brewer Chemical  
Walter Nishimura, City and County Health  
Jennifer Shishido, DLIR  
Charmaine Kamaka, Hawaii County Safety  
Donald P. Astrab Ph.D., City and County BWS  
Kennth Thong, City and County DTS  
Bill Bonnet, HECO  
Mark Ingoglia, HEER  
Jeff Klein, HEER  
Nancy Woo-Larkin, HEER/EPA  
Nancy Gilder, HEER

## I. OPENING REMARKS

Dr. John Lewin outlined the meeting's agenda to cover the Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials, Hawaii's emergency preparedness program, and county representation on the SERC.

## II. Status of Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials.

Ms. Nancy Gilder reported that the agenda of the conference had not changed significantly. The arrangements for the two guest speakers, one from Alaska and one from California, had been finalized. The registration flyers would be sent out to the SERC mailing list and there would be an advertisement in the newspapers for the public to register. Interested parties should register immediately for there is limited seating.

### III. Hawaii's Emergency Response Program

#### A. Hawaii's Oil and Hazardous Substances Emergency Response Plan.

Mark Ingoglia went over the modifications to Draft V. Big Island, Maui, and Oahu LEPCs said their Mayor's offices did not have enough time to review the draft.

Discussion followed on the PIO section of the plan. The counties mentioned their mayors would want control over information disseminated to the public during an incident. It is the intention of the plan that DOH have a centralized, coordinated public information officer to act out of a joint information center. Joint, meaning to include federal, state, and county PIOs with DOH being the coordinator.

It was suggested that a distinction be made between major, medium, and minor incidents and their respective PIO strategy. Dr. Lewin and Dr. Anderson also suggested expanding the PIO section and working with the counties on it and adding it as an Appendix to the plan.

Dr. Lewin then asked for a move to approve the plan. It was so moved and seconded.

#### B. Results of the Statewide Training Needs Assessment.

Nancy Woo-Larkin reported the results of the Statewide Training Needs survey to determine the number of personnel needed to receive

chemical emergency response training. The training categories correspond with the six categories in the Training Guidelines and there were numbers for each category. Each county participated in the survey and the total number of personnel needed across all categories is estimated at 6786.

#### C. Training and Exercise Update

ATSDR training is planned for November 14-16 on Oahu, and CAMEO training is planned for on December 11-15th.

#### IV. County Representation

A survey of SERC members revealed the desire to include county representation on the HSERC. Dr. Anderson suggested that the mayors appoint a SERC representative in that the mayors originally recommended LEPC members. It was mentioned that the mayors be appointed themselves to the SERC and can send a designate if they so desire.

A motion was made that the mayors be requested to appoint a person to represent the county on the HSERC. It passed.

#### V. Proposed legislative package

Five positions for the HEER program are being requested as OSCs for emergency response. The Draft is also asking for \$120,000 for training funds.

DOH is in the process of amending the State Environmental Emergency Response Law, adding enforcement sections and clarifying its authority.

Once the proposal passes the AG it will be circulated to the HSERC for review and comment.

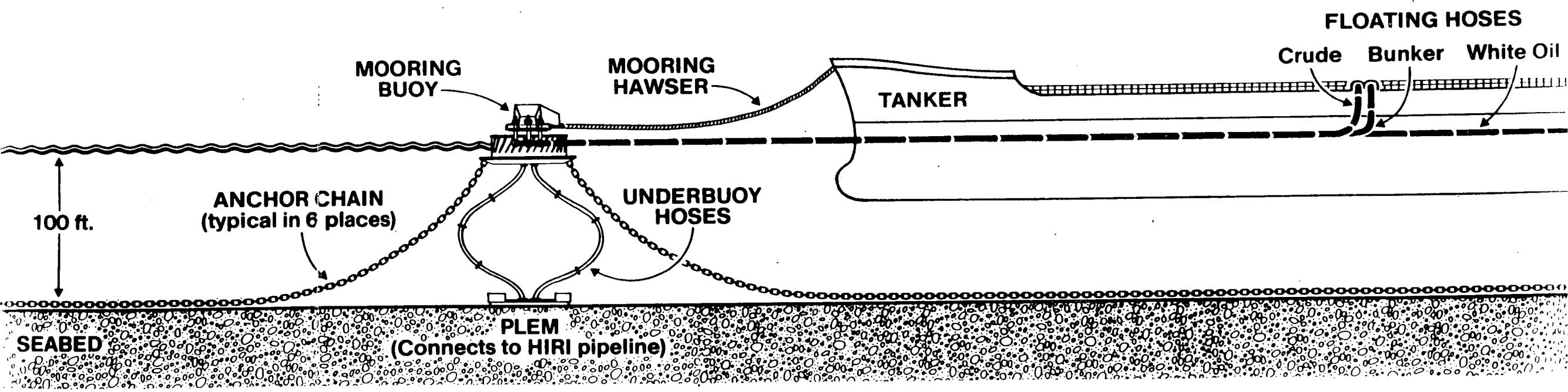
#### VI. Other Business

Chief Kahoochanohano asked about establishing a fund to reimburse Honolulu Fire Department if and when they are asked to send the HAZMAT Team to the outer islands. It was suggested that a memorandum of agreement be written to address this upcoming issue.

The meeting was adjourned by the Vice-chairman and it was noted that the SERC may meet during the session for an update on relevant SERC legislation.

# **PRI's SINGLE POINT MOORING**

**(Located 1.5 miles offshore Barbers Point)**





MARINE ENVIRONMENTAL PROTECTION MEASURES AT SPM

- A) NARROWING WEATHER OPERATING WINDOWS
- B) STAND BY TUG
- C) LIVE BRIDGE WATCH
- D) BOW LOOKOUT
- E) ENGINES ON IMMEDIATE STAND BY

\* \* \*

- F) OIL CONTAINMENT BOOMS ON SCENE
- G) LOAD MONITORING DEVICE
- H) QUICK RELEASE COUPLING UNIT
- I) CURRENT MONITORING DEVICE
- J) CURRENT STUDIES
- K) UPGRADING CIC CAPABILITY
- L) SPILL RESPONSE VESSEL

CLEAN ISLANDS COUNCIL  
VESSEL AND EQUIPMENT FACT SHEET

OIL SPILL RESPONSE VESSEL

SIZE: 130' x 30' x 8'

ENGINES: Two 16 cylinder diesel engines

CRUISING RANGE: 5,000 miles at 10 knots

MAXIMUM SPEED: 12 knots

ELECTRICAL SERVICE GENERATORS: Two 75 kw generators

FIRE MONITOR: 500 gallons per minute

OIL STORAGE TANK: 1,500 gallon recovered waste oil storage  
tank

CRANE: 18 ton hydraulic crane

SEPARATING TANK: 90 barrel oil/water separating tank

CREW: Four crew members

CAPTAIN: Jim Calvert

MAJOR OIL SPILL CONTAINMENT EQUIPMENT

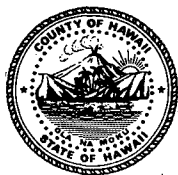
OIL SKIMMERS: Two GT-185 oil skimmers operated by a six-  
cylinder diesel/hydraulic powerpack

CONTAINMENT BOOMS: 1,500 feet of "Expandi 4300" open water  
inflatable containment boom on a  
hydraulic reel

1,500 feet helicopter transportable boom  
in two rotopacks

OIL STORAGE BAGS: Six 1,000 gallon portable oil storage  
bags

DISPERSANT SYSTEM: A calibrated oil dispersant application  
system



## Office of the Mayor

Lorraine R. Inouye  
Mayor

25 Aupuni Street, Rm. 213 • Hilo, Hawaii 96720 • (808) 961-8211 • Fax (808) 961-6553

RECEIVED  
OFFICE OF THE DIRECTOR  
DEPT. OF HEALTH

'91 JAN 14 A9:12

January 10, 1991

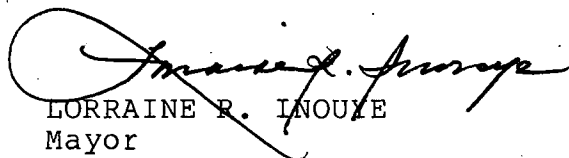
John C. Lewin, M.D.  
Director of Health  
State Department of Health  
P. O. Box 3378  
Honolulu, Hawaii 96801

Dear Dr. Lewin:

Thank you for your letter of December 4, 1990 requesting County of Hawaii representation on the Hawaii State Emergency Response Commission.

I have appointed Civil Defense Administrator Harry Kim as my representative on the Commission. He will attend the meeting at 2:00 p.m. on January 14 and will present the update you have requested on chemical emergency response preparedness..

Aloha,

  
LORRAINE R. INOUE  
Mayor

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH AND  
CHAIRMAN OF THE HAWAII STATE  
EMERGENCY RESPONSE COMMISSION

DEAR SERC COMMISSION MEMBERS:

THE STATUS OF MAUI COUNTY RELATING TO CHEMICAL EMERGENCY  
RESPONSE PREPAREDNESS IS AS FOLLOWS:

1. THROUGH COOPERATION OF THE STATE DEPARTMENT OF HEALTH, HEER, AND THE MAUI COUNTY DEPARTMENT OF FIRE CONTROL WITH THE MAYORS SUPPORT, CLASSES FOR 18 MAUI COUNTY FIREFIGHTERS AND 4 OTHERS WILL BE HELD IN MARCH AND APRIL, 1991 TO CERTIFY SAME AS HAZARDOUS MATERIALS SPECIALISTS. ABOUT APRIL 26, 1991 THE MAUI COUNTY RESCUE TEAM WILL HAVE A LEVEL A HAZARDOUS MATERIALS RESPONSE TEAM AVAILABLE. THE STATE PROVIDED FUNDS FOR THE CLASSES AND MAUI COUNTY PROVIDED OVERTIME FOR THE TRAINING PARTICIPANTS AND FUNDS FOR PURCHASE OF HAZARDOUS MATERIALS RESPONSE EQUIPMENT.
2. TITLE III DATA HAS BEEN ENTERED INTO THE CAMEO SOFTWARE COMPUTER PROGRAM AND RISK ASSESSMENT HAS BEGUN FOR ALL EXTREMELY HAZARDOUS MATERIALS FACILITIES. ESTIMATED COMPLETION DATE FOR EMERGENCY PLANNING FOR ALL EHS FACILITIES IS JULY 1991.
3. POLICE/FIRE CENTRAL DISPATCH HAS CAMEO LOADED ONTO A COMPUTER AT THEIR DISPATCH OFFICE. THE MAUI COUNTY HAZMAT OFFICER IS BEING CERTIFIED TO BECOME A CAMEO INSTRUCTOR AND WILL INSTRUCT ALL DISPATCHERS IN USE OF CAMEO AND ALSO IDENTIFY ALL FACILITIES AND OCCUPANCIES THAT MAY BE HAZARDOUS MATERIALS SITES TO DISPATCH PERSONNEL.
4. TRAINING OF ALL FIRE DEPARTMENT, POLICE AND EMS PERSONNEL TO

MEET OSHA 1910.120 WILL BEGIN IN FEBRUARY 1991. HAZARDOUS MATERIALS OPERATIONS FOR THE FIRE DEPARTMENT COMPANIES OF 24 HOURS AND FIRST RESPONDER AWARENESS CLASSES OF EIGHT HOURS FOR THE POLICE AND EMS PERSONNEL. TRAINING OF ALL RESPONSE PERSONNEL TO BE COMPLETED BY FEBRUARY 1992.

5. PROBLEMS INCLUDE LACK OF FUNDS FOR ALL NECESSARY EQUIPMENT. WORK LOAD ON ONE HAZARDOUS MATERIALS OFFICER. FUNDING FOR INSPECTION OF HAZARDOUS MATERIALS FACILITIES AND ENFORCEMENT OF DEPARTMENT OF TRANSPORTATION RULES REGARDING TRANSPORTATION OF HAZARDOUS MATERIALS. TWENTY FOUR HOUR RESPONSE AVAILABILITY OF A HAZARDOUS MATERIALS SAFETY OFFICER.

RESPECTFULLY YOURS,

Joseph Blackburn  
Maui County Hazmat Officer,

Jeff / Bruce  
review / comment  
*(Signature)*

DEC 10 1990

Kauai County  
Local Emergency Planning Committee Meeting  
Kauai CD Emergency Operating Center  
December 18, 1990 -- 9:30 AM

**A G E N D A**

- I. Call To Order ..... Clifford Ikeda, Chairman
- II. Introductions
- III. Activity Report ..... Clifford Ikeda, Chairman  
Alejandro Lomosad, Fire Chief
- IV. Old Business
  - A. -----
  - B. -----
- V. New Business
  - A. Annual Review of LEPC Plan
  - B. Reorganization of LEPC
  - C. -----
- VI. Member Comments & Concerns ..... LEPC Members
- VII. Announcements
  - A. 1991 Meeting Dates (suggested) ..... 25 Apr, 2 Aug, and 12 Dec
  - B. EPA assisted HazMat Exercise ..... 8 May 1991
- VIII. Adjournment

TAB A

BASIC PLAN

- 1.[2] All County and State Departments shall provide first responders with sufficient awareness training so they are able to recognize that an emergency response situation exists and make certain that the County Hazardous Materials Emergency Response Team is alerted. The first responder who arrives at the hazardous material incident site shall:
  - a. assume the position of Interim Incident Commander [until relieved by the ranking fire official on scene], and,
  - b. assess the situation, and,
  - c. contact '911' and activate the emergency response system, and,
  - d. initiate actions to protect the public.
  
- 2.[3] Incident Command will be assumed by the County in the order of (a) initial first responder on-scene, (b) ranking fire fighter on-scene, and, (c) the leader of the County Hazardous Materials Emergency Response Team [Incident Commander], who shall:
  - a. Establish an Incident Command Post.
  - b. Designate operational sector and commanders as necessary.
  - c. Perform all function of an Incident Commander.
  
- 3.[4] On-Scene Incident Commander will be relieved:
  - a. When the incident becomes a major event and requires activation of the County Emergency Operating Center (EOC) at which time command is transferred to the senior command officer of the Kauai Civil Defense Agency for the term of the activation period. The field IC becomes the Operations Officer for the duration of the EOC activation period.
  - b. During the cleanup and restoration period at which time command will be turned over to the State On-Scene Coordinator (Department of Health).
  - c. When the function is lawfully taken over by high authority (State or Federal).



4. [1.] The County Hazardous Materials Emergency Response Team shall respond to hazardous materials emergencies unless:
- a. the site is declared 'a National Security Zone', or,
  - b. the incident occurs on a federally controlled site which has hazardous materials handling resources, or,
  - c. the site is within an established perimeter having a 24-hour State or federal government subsidized fire service organization.
5. For oil spills that threaten or are in navigable waters, the USCG is the lead agency, incident commander, and first responder; the county government will play a supportive and coordinative role based upon USCG request.

## RESPONSIBILITIES AND FUNCTIONS

GENERAL RESPONSIBILITIES. Each department, agency and organization is responsible for the safety of its own personnel, including training in the dangers of hazardous materials, protective measures, and the provision of protective clothing and equipment.

All government departments and agencies shall update their departmental response plans at least annually as directed by the Mayor of the County of Kauai and Governor of the State of Hawaii. It is expected that private industries will do likewise.

### Local Government Duties and Responsibilities

#### A. Kauai Fire Department

1. Develop and maintain SOP and checklists for the Hazardous Materials Emergency Response Team which includes but is not limited to:
  - o protection of the public and response personnel
  - o method by which chemicals are to be identified
  - o implementation of mitigation actions
  - o site safety plan

- o decontamination procedures
  - o inventory of chemical response equipment.
2. Identify community facilities that are subject to the reporting requirements of the Act. Fire personnel will familiarize themselves with the facility by pre-plan visitations and by completing a 'Facility Profile' form for each site.
  3. Maintain an updated copy of this plan at each fire station with volumes of Facility Profiles within and adjoining the fire districts in which each station is located. A complete set of this plan shall be maintained at Fire Headquarters.
  4. Take necessary fire prevention actions and provide emergency medical care as necessary.
  5. Verify incidents and select appropriate objectives and tactics to control and stabilize the situation.
  6. Determine or estimate evacuation zone and coordinate movement of police, if necessary.
  7. Provide an (d) Incident Commander who will command and manage overall on-scene operations and activities.
  8. Activate Hazardous Materials Emergency Response Team and departmental procedures.
  9. Determine identification of substance(s). if [is] possible.
  10. Regard safety and lives of those involved while controlling and stabilizing incident.
  11. Ascertain that the county hazardous materials coordinator is notified.
  12. Assess the incident and request activation of EOC if required.
  13. Establish work and exclusion zones, and access control points.
  14. Coordinate public disaster information in accordance with established guidelines.

B. Kauai Police Department

1. Respond to any possible hazardous materials release without unduly exposing themselves.
2. Dispatch and notify fire and emergency services as necessary.
3. Isolate the area of the release.
4. Identify substance(s) and spiller. if possible.
5. Relay warning and direct evacuation of affected area if necessary.
6. Restrict or reroute traffic , control crowds and provide perimeter security of site.
7. Conduct investigation of incident not in the realms of the Department of Health and forward report to appropriate agency for action.
8. Pre-plan by identifying routes of evacuation of incident and security control point(s) for each facility that poses a threat to the safety and health of the public.

C. Department of Public Works

1. Provide personnel and equipment to contain and clean spill.
2. Provide barricade materials and logistic support as required.
3. Establish and maintain a list of chemical response equipment and supplies.

D. Kauai Civil Defense Agency

1. Activate the EOC if condition warrants; accept transfer of command from field when agreed upon.
2. Notify the LEPC, State Emergency Planning Committee (SERC), USCG-Marine Safety Office, Honolulu, and appropriate government, private and volunteer services.

3. Provide the field command post with chemical related information as requested and necessary.
4. Issue warning and evacuation instructions.
5. Coordinate off-scene activities with on-scene coordinators, sector commanders, and Incident Commander (Field Operations Officer).

E. Public Information Officer

1. Coordinate disaster public information between on-scene and off-scene operations to ensure its accuracy and adequacy.
2. Provide an on-scene information officer to manage and coordinate media activities upon request of the Incident Commander.
3. Coordinate news releases and other information with the State and federal government.

F. County Departments/Agencies

1. Complete responsibilities as outlined and identified in the County of Kauai Emergency Operations Plan.

State Government Duties and Responsibilities

A. Department of Health (DOH)

1. Provide a State On-Scene Coordinator (SOSC) who shall be the:
  - o District Health Service Administrator, or,
  - o District Health Administrator (DHA), or,
  - o designated representative.

The SOSC shall immediately report to the scene of the incident.

2. Provide technical assistance and advice on necessary protective actions.

3. Provide assistance in hazard determination.
4. Evaluate the environmental impacts of a spill, and possible public health effects.
5. Provide support to hospital emergency room for contamination control and toxicological information access.
6. Collect or oversee "split sampling" of the substance(s) for lab analysis ascertaining that such procedure is witnessed and proper chain of custody is followed.
7. Provide technical support for measuring concentration of materials.
8. Collect and analyze air, water, soil, vegetation or tissue samples.
9. Identify clean-up requirements.
10. Work with private industry to insure that cleanup/restoration is done to specified standards.
11. Ensure that waste materials are disposed of in an appropriate manner.
12. Investigate cause(s) and pursue enforcement action if appropriate.
13. Assess public health environmental impacts.
14. Enforce compliance with SARA Title III requirements.

B. Emergency Medical Services (EMS)

1. Provide a trained and qualified EMS Sector Officer who shall establish medical sector operations.
2. Administer care and treatment to victims.
3. Assure medical personnel, victims and vehicles are properly decontaminated.
4. Coordinate activities with medical care facilities.

C. Department of Transportation (DOT)

1. Close state highway, harbor or airport and re-route traffic as requested and necessary.
2. Provide barricades and personnel to implement a closure and/or detour.
3. Provide technical assistance with regards to transportation and hazardous materials spill incidents.
4. In cooperation with DOH, coordinate clean-up operations for spills that occur on state highways, harbors, and airport property.

D. Department of Land and Natural Resources (DLNR)

1. Respond to incidents that could degrade state land or waters where fish or wildlife or their habitat would be adversely affected.
2. Evaluate and document impact on fish and wildlife and estimates value of damages for losses of fish, wildlife, or habitat.
3. Provide advice and counsel as necessary.
4. For an incident affecting a state park, Parks and Recreation personnel, shall assist in crowd and/or traffic control and provide equipment and facilities.

E. Department of Agriculture

1. Provide on-site technical support for agricultural chemical spills.
2. Evaluate adverse impacts of an accident on agricultural resources.
3. Provide support for the sampling and analysis of pesticides and other agricultural chemicals.

F. Department of Labor and Industrial Relations

1. Provide support for air monitoring to emergency responders, and ensure that occupational safety and health is not compromised.

2. Provide technical support for chemical analysis of air contaminants.

G. Department of Business and Economic Development

1. Provide support for information on economic impacts of an incident and remedial actions.

H. Office of State Planning

1. Provide support for information and expertise on coastal resources and access through the Coastal Zone Management Program.
2. Provide statewide land use planning support in the event of a remedial response investigation.

### Specific Responsibilities of Federal Agencies

The following section briefly summarizes federal agency technical assistance outlined in the National Contingency Plan.

A. The USCG shall provide:

1. Expertise and management of Federal Programs in domestic/international fields, port safety and security, maritime law enforcement, ship navigation, safety of vessels and marine facilities.
2. Predesignated federal on-scene coordinator (FOSC) for oil and hazardous substance emergencies in the coastal zone if a federal response is required, and FOSC support for inland hazardous material emergencies until relieved by EPA.

B. The EPA shall provide:

1. Expertise on environmental effects on oil discharges or releases of hazardous materials, pollutants, or contaminants, and environmental pollution control techniques.

2. An on-scene coordinator (FOSC) for the inland zone if a federal response is required after initial USCG FOSC role is completed for the inland zone. EPA requires 24 to 48 hours time to respond to a hazardous material release in Hawaii due to travel time from the mainland.
  3. Scientific support coordinator for responses to inland areas.
- C. The U.S. Department of Defense (USDOD) shall assume incident command if an incident involves defense-related materials or if the incident occurs on a military facility. It shall act as the lead response agency within the designated National Security Zone.
- D. The U.S. Department of Transportation (USDOT) shall provide expertise in the requirements for packaging, handling and transporting regulated hazardous materials.
- E. The U.S. Department of Commerce (DOC), through National Oceanic and Atmospheric Administration (NOAA), shall provide:
1. Scientific expertise on living marine resources and their habitat.
  2. Scientific Support Coordinator (SSC) who will coordinate scientific support for response and contingency planning in coastal and marine seas.
  3. Hazard analysis, prediction of movement and dispersion of oil and chemicals through trajectory modeling, and information on sensitive coastal environments.
  4. Information on actual and predicted hydrologic, and oceanographic conditions for marine, coastal, and inland water, and charts including tide and circulation information for coastal and territorial waters.
  5. Information on actual and predicted meteorological conditions through the National Weather Service.
- F. The U.S. Navy is knowledgeable in ship salvage, shipboard damage control and diving. It has an extensive array of specialized equipment and personnel that can be used for collection, containment and removal of pollution materials.



- G. The U.S. Department of Health and Human Services (DHHS) is responsible for providing assistance on all matters related to the assessment of health hazards and protection of both response workers' and the public's health. This includes the Agency for Toxic Substances and Disease Registry (ATSDR) which provides advice to health care providers in cases of public health emergencies and coordinates assistance from the Center for Disease Control (CDC), NIOSH and the FDA.
- H. The U.S. Federal Emergency Management Agency (FEMA) provides advice and assistance to the FOSC on coordinating civil emergency planning and mitigation efforts with other federal agencies, State and local governments, and the private sectors. In the event of a major disaster declaration or emergency determination by the President, FEMA will coordinate all federal disaster or emergency actions with the State of Hawaii Civil Defense Division.
- I. The U.S. Department of Interior (DOI) has jurisdiction over the National Park System, National Wildlife Refuges and Fish Hatcheries, certain forest and grazing lands, and water projects in western states. In addition, bureaus and offices have relevant expertise as follows:
1. Fish and Wildlife Service: Fish and Wildlife, including endangered and threatened species, migratory birds, certain marine mammals; habitats, resource contaminants; laboratory research facilities.
  2. Geological Survey: Geology, hydrology (groundwater and surface), and natural hazards.

### Responsibilities of Private Industry

All private industry is expected to be responsible for:

1. Familiarizing themselves and ensuring that their emergency operations plans are consistent, with this response plan.
2. Reporting releases of hazardous materials subject to notification under Title III, and following procedures outlined under Section 304 of the Act.

3. Facility owners/operators shall provide the LEPC with internal procedures that will be followed in responding to a release of hazardous material(s). These procedures shall be a part of this plan and located with each Facility Profile.
4. Cleanup and site restoration when required to do so by law or when industry in its discretion decides to do so.
5. Providing expertise and resources to local and/or state government to mitigate the effects of a hazardous materials incident.
6. Providing notification to the public if the release poses a threat to public health or life, and/or the environment.

#### Responsibilities of Volunteer Organizations

##### A. Radio Amateur Communications Emergency Services (RACES)

1. Provide qualified personnel and equipment for supplementary communications which shall include, but not be limited to:
  - a. telephony and telegraphy communications
  - b. facsimile and data (packet, AMTOR, RTTY, etc.) communications
  - c. slow and fast scan television

TAB B

TRAINING

## TRAINING

Each department and agency (including private industry) is responsible for its employees' health and safety. It is the employer's responsibility to make certain that employees who may be exposed to hazardous materials be trained in accordance with State and Federal laws (Title 12, Chapter 99 of the Hawaii State Administrative Rules and 29 CFR 1910.120, respectively) and other applicable directives.

Guidelines were developed to describe the level of training that should be provided state and county employees. Employers should utilize these guidelines as a tool.

Courses should be designed with the elements described for each category but should also be tailored for particular employee groups. For example, if an employee group is concerned with chemical emergencies involving motor vehicles, then that particular training course should include specific case studies involving highway spills and address how respective job functions relate to such incidents.

Employers are expected to provide the proper and required training for each of their employees prior to their work assignment. Refresher training will be scheduled and provided according to the mandates set by laws and standards.

The Kauai LEPC has adopted the five training categories and training guidelines that were developed by the Technical Subcommittee of the SERC. These guidelines can be found in the State of Hawaii Emergency Response Plan.

TAB C

PLAN EVALUATION

## PLAN EVALUATION

This plan may undergo evaluation through actual emergencies, disaster exercises (tabletop, functional or full scale), or by improving and enhancing emergency response personnel training skills. The county hazardous materials coordinator shall ascertain that at least a part of this plan is exercised annually by any of the aforementioned methods.

It is important that a planning team convene after incident critiques to review comments and make suggestions to the LEPC to change or amend this plan.

This plan will be reviewed annually prior to December 31 by each member of the LEPC. All changes and/or revisions to that plan shall be forwarded to the SERC for review and approval.

## INTRODUCTION

- A. In late 1987, the County of Kauai was identified and designated by the State Department of Health as one of four emergency planning districts as required under the provisions of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), more commonly known as The Emergency Planning and Community Right-To-Know Act (hereinafter referred to as 'the Act'). Community members from varying background and occupation were selected to serve on Local Emergency Planning Committees (LEPCs). The committees were tasked with developing and maintaining an emergency response plan as cited under Section 303 of the Act.

The Kauai County Hazardous Materials Emergency Response Plan consists of this document, accompanying Standard Operating Procedures (SOP), and seven (7) volumes (each representing an island fire district) of information on each registered facility on Kauai.

- B. Needs and Assumptions

The isolation of the Hawaiian Island chain and restricted inter-island transportation places the County of Kauai at a disadvantage because of the limited access to a pool of readily available trained personnel, equipment and supplies. [Further, the expected July 1990 dissolution of the U.S. Coast Guard (USCG) Hazardous Materials Team which presently is tasked with emergency response, will place the county in an even worse position. It is thus evident that] Local facilities and government services must maintain [at least be in] a reasonable state of readiness [by July 1990] to respond to emergencies involving hazardous materials. Personnel must be trained, supplies and materials procured and maintained, and programs developed, coordinated, managed and administered.

The assumptions on which this plan is based on are:

- o Government and private personnel will be trained in accordance with Chapter 99, Hazardous Waste Operations and Emergency Response, Title 12 of the Administrative Rules, Department of Labor and Industrial Relations, State of Hawaii and other applicable laws.
- o Response equipment meeting the standards set forth by the National Fire Council and other adequate supplies and materials will be readily available.

- o State and Federal Hazardous Materials Response Teams, and other technical support agencies will respond with technical expertise, equipment and other resources upon request.
- o Facilities identified under the Act will comply with reporting requirements.
- o Private agencies involved in the manufacture, use, storage, and transportation of hazardous materials will cooperate with government in preparing for and responding to hazardous materials incidents.
- o Local Government will have primary responsibility in managing and administering the hazardous materials emergency response program.

#### C. Activation of Plan

1. The Mayor and/or State Deputy Director of Civil Defense for the County of Kauai is assigned the responsibility of assigning an individual to the position of LEPC Community Emergency Coordinator; facility emergency coordinators are identified in the telephone notification list and facility profile index.
2. The LEPC Community Emergency Coordinator and facility emergency coordinators shall make determinations necessary to implement the plan.
3. This plan shall be immediately activated when any of the following conditions are met:
  - a. A release of a substance is equal to or exceeds the reportable quantity (RQ) as established under Section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
  - b. A release of a hazardous substance, pollutant or contaminant exceeds one pound and is one for which a reportable quantity has not been established under section 103(a) of CERCLA.

#### D. Concept of Operations

The mission of all responders to a hazardous materials incident is "to effect a more favorable outcome."





STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERC7.MTG/BFS2

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1991 AT 2:00 P.M.

Staff Meeting Notes

- I. Introductory and Opening Remarks  
Dr. Bruce Anderson, Deputy Director, DOH
- II. Welcome to the New HSERC Members  
Video Tape on the Emergency Planning and Community  
Right-to-Know (15 min)  
Dr. Bruce Anderson, Deputy Director, DOH
- III. State of Hawaii's Chemical and Oil Emergency  
Preparedness Program
- A. Title III Progress Mark Ingoglia, Manager, HEER 8-10
1. 300 Facility Reports - *172 Oahu Maui 32*  
*267* - All Reviewed *35 Hawaii Kauai 28*
    - Approximately 200 letters sent out to facility owners
    - At best, 50% of the letters have been correctly responded to
    - Counties imputing data (Kauai has filed with State)
    - Reminder letter prepared for mail out (end of January) for 1990 Data submittal to be returned by 1 March, 1991
    - Counties conducting hazard analyses - no estimate on completion
  2. Draft State and County Plans in Place
  3. Established Title III Data Management Plan utilizing CAMEO software
  4. Received \$70k Title III Data Management Grant from EPA Headquarters for Community Right to Know Data Access

- B. Local Emergency Planning Committees (LEPCs)  
 Hawaii LEPC  
 Kauai LEPC  
 Oahu LEPC  
 Maui LEPC

10 min

- C. Spills Update Philip Moravcik, HEER, DOH  
 (Distribute Draft 1990 Spill Report)

5-10

- 311 Notifications
- 100% increase in notifications from last year
- Majority of notifications on Oahu
- Major spills and response cleanup operations
  - Hilo copper chromium arsenic spill
  - Pearl City jet fuel pipeline leak
  - Maile oil barrel waste sites
    - 4,700 gallons of halogenated waste oil
    - 10,000 gallons of off specification oil
  - Explosive waste detonation project
  - Pioneer Lumber pentachlorophenol waste site
  - Hawaiian Tuna Packers ammonia release  
 (first successful cost recovery)

- D. Training, Exercises and Activities Bruce Schlieman, HEER, DOH

5-10

- March, 1990: CAMEO Title III Data Management Workshop and 2 follow-up meetings
- April/May, 1990: 2 forty-hour Hazardous Materials Incident Response Operations
- May, 1990: 80 hour Chemistry of HazMats
- November, 1990: 80 hour Tactical Considerations for HazMat Response
- December, 1990: National Governors Association Conference on Title III (3 LEPC reps, and 1 SERC rep)
- December, 1990: Dept of Interior/State Natural Resources Damage Assessment Workshop
- January, 1991: National CAMEO Conference and Workshop ( 5 LEPC reps and 1 SERC rep)
- March, 1991: Chemistry of HazMats
- April, 1991: Tactical Considerations for HazMat Response
- May, 1991: Kauai EPA Tabletop Response Exercise
- May, 1991: Uniform Fire Code Hazmat Workshop (4 sessions, one for each county)
- HazMat 8-hour awareness - ongoing
- KCC/DOH Project for 8-hour awareness training

Emerg. Resp. 3 EHS - OSC 5 to perm  
 • 1 planner  
 Ren. Resp. • 60,000 Transy  
 2 eng  
 1 Geog.  
 1 sec.  
 \$250/250 K for fund + penaltia

E. Legislative Activities

IV. Regional Plans and Response Team and U.S. Coast Guard Update

- A. Current activities of the Oceania Regional Response Team

- overview of ORRT meeting 5 min  
 Petty Officer Larry Hewett
- State perspective on ORRT activities  
 Dr. Bruce Anderson, Deputy Director, DOH 5 min

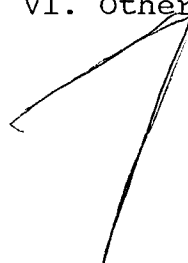
V. Review of Star Connecticut Incident

30 min

Date?  
Report

- A. Review of Star Connecticut incident  
Captain Richard C. Vlaun, FOSC, USCG, MSO
- B. Mitigation measures for PRI's Single Point Mooring  
Mr. F. David Hoffman, Vice President of Petroleum  
Operations, PRI  
Captain Bill Heddeaus, HIRI Port Captain

VI. Other



- A. Third Annual National Superfund Environmental  
Evaluation Workshop: February 5-7, 1991 (contact  
Mark Sprenger at 201/906-6825; or Doug Steele at  
415/744-2312). Distribute copies
- B. EPA Office of Chemical Preparedness and Prevention  
Office is coordinating the International City  
Management Association Environmental Peer Exchange  
Program for LEPC members (for info call Sarith  
Guerra at 202/962-3649; or Kathy Jones at  
202/475-8353). Distribute copies

Bruce

2 min

OCEANIA REGIONAL RESPONSE TEAM  
MEETING OF DECEMBER 17 AND 18, 1990

The following outline provides topics that were presented in the ORRT meeting that would involve a cooperative effort with federal, state and local agencies. These topics are associated with the Oil Pollution Act of 1990.

1. Track Oil Pollution Act of 1990

Regulations will be appearing in the Federal Register, so agencies should track the regulations in order to define their roles, responsibilities, and authorities.

2. Area Spill Studies

Analyze worst case scenario and determine resources (equipment and manpower) will be required to respond to the incident. Determine the availability of these resources, and the time frame in which they could be accessed.

3. Area Response Committee (ARC)

a. Federal, state, and local agencies working together to prepare an Area Contingency Plan (ACP) for designated area (Hawaiian Islands). The ACP should be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge. See attachment for more information on the ACP.

b. Federal, state and local agencies working together to enhance contingency planning. Assure pre-planning of joint response efforts, procedures for mechanical recovery, dispersal, shoreline cleanup, protection of sensitive environmental areas, and protection, rescue and rehabilitation of fisheries and wildlife.

c. Federal, state and local agencies working together to expedite decisions for the use of dispersants and other mitigating substances and devices.

d. Drill and exercise area contingency plan.

4. Oil Pollution Research Funds

\$600,000 available to University or research group for oil pollution related studies.

# AREA CONTINGENCY PLAN

- WHEN IMPLEMENTED IN CONJUNCTION WITH THE NATIONAL CONTINGENCY PLAN (NCP) SHOULD:

(1)-BE ADEQUATE TO REMOVE A WORST CASE DISCHARGE AND TO MITIGATE OR PREVENT A SUBSTANTIAL THREAT OF SUCH A DISCHARGE, FROM A VESSEL, OFFSHORE FACILITY, OR ONSHORE FACILITY.

(2)- DESCRIBE THE AREA COVERED BY THE PLAN. INCLUDE AREAS OF SPECIAL ECONOMIC OR ENVIRONMENTAL IMPORTANCE.

(3)- DESCRIBE RESPONSIBILITIES OF AN OWNER OR OPERATOR AND OF FEDERAL, STATE AND LOCAL AGENCIES IN REMOVING A DISCHARGE AND IN MITIGATING OR PREVENTING A SUBSTANTIAL THREAT OF A DISCHARGE.

(4)- LIST EQUIPMENT, DISPERSANTS, OTHER MITIGATING SUBSTANCES AND DEVICES, AND PERSONNEL AVAILABLE TO EFFECT IMMEDIATE REMOVAL OF A DISCHARGE OR PREVENT/MITIGATE THREAT OF A DISCHARGE.

(5)- DESCRIBE PROCEDURES FOR EXPEDITED USE OF DISPERSANTS.

(6)-DESCRIBE INTEGRATION INTO OTHER CONTINGENCY PLANS.

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERCAG7

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1990 2:00 P.M.

AGENDA

- I. Introductory and Opening Remarks
- II. Welcome to the New HSERC members
- III. State of Hawaii's Chemical and Oil Emergency Preparedness Program
  - A. Title III Progress
  - B. Local Emergency Planning Committees
  - C. Spills Update
  - D. Training, Exercises and Activities
- IV. Regional Plans and Response Team and U.S. Coast Guard Update
  - A. Current activities of the Oceania Regional Response Team
- V. Review of Star Connecticut Incident
- VI. Other
- VII. Closing Remarks/Adjournment

DRAFT MEETING SUMMARY  
HAWAII STATE EMERGENCY RESPONSE COMMISSION MEETING #6  
STATE CAPITAL, ROOM 214  
NOVEMBER 8 1989, 9:00 A.M.

HSERC6/NG

SERC Commission Member and Representative Attendees:

Dr. John Lewin, Chairman, HSERC, DOH  
Bruce Anderson, Ph.D., Vice-Chairman, HSERC, DOH  
Gerald Kinro for Yukio Kitagawa, DOA  
Richard Kawakami for Roger Ulveling, DBED  
Harlan Hashimoto, Ph.D. for Jerald Michael, School of Public Health  
Thomas Kam for William Paty, DLNR  
Ron Hirano for Ed Hirata, DOT  
Hal Barks for Mario Ramil, DLIR  
Roy Price for Adjutant General Alexis Lum, DOD  
Jiggie Hommom, Red Cross  
Clyde Yamauchi for Marvin Miura, OEQC

Other Attendees:

Gregory Jones, USCG  
Captain Piche, USCG  
Walter Nishimura, City DOH  
Captain DeCosta, Honolulu Police Department  
Lt. Michael Brede, Honolulu Police Department  
Yvonne Mercuri, Mayor's Office of Information and Complaint  
George Souza, C&C Office of Information and Complaint  
Chief Kahoochanohano, Honolulu Fire Department  
Thomas Duarte, Maui Fire Department  
Harry Kim, Hawaii Civil Defense  
Sel Menor, Maui Civil Defense  
Ms. Nishioka, Hawaiian Electric Company  
George Kekuna, Oahu Civil Defense  
Dr. J.K. Simms, DOH-EMS  
Grace Simmons, DOH-Solid and Hazardous Waste Branch  
Thomas Vendetta, City and County Civil Service  
Lt. Eric Mosher, USCG-14th District  
Ed Kalinowski, Department of Emergency Medical Services  
David Tunison, Pacific Resources Inc.

Billy Chaves, Brewer Chemical  
Walter Nishimura, City and County Health  
Jennifer Shishido, DLIR  
Charmaine Kamaka, Hawaii County Safety  
Donald P. Astrab Ph.D., City and County BWS  
Kennth Thong, City and County DTS  
Bill Bonnet, HECO  
Mark Ingoglia, HEER  
Jeff Klein, HEER  
Nancy Woo-Larkin, HEER/EPA  
Nancy Gilder, HEER

## I. OPENING REMARKS

Dr. John Lewin outlined the meeting's agenda to cover the Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials, Hawaii's emergency preparedness program, and county representation on the SERC.

## II. Status of Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials.

Ms. Nancy Gilder reported that the agenda of the conference had not changed significantly. The arrangements for the two guest speakers, one from Alaska and one from California, had been finalized. The registration flyers would be sent out to the SERC mailing list and there would be an advertisement in the newspapers for the public to register. Interested parties should register immediately for there is limited seating.



### III. Hawaii's Emergency Response Program

#### A. Hawaii's Oil and Hazardous Substances Emergency Response Plan.

Mark Ingoglia went over the modifications to Draft V. Big Island, Maui, and Oahu LEPCs said their Mayor's offices did not have enough time to review the draft.

Discussion followed on the PIO section of the plan. The counties mentioned their mayors would want control over information disseminated to the public during an incident. It is the intention of the plan that DOH have a centralized, coordinated public information officer to act out of a joint information center. Joint, meaning to include federal, state, and county PIOs with DOH being the coordinator.

It was suggested that a distinction be made between major, medium, and minor incidents and their respective PIO strategy. Dr. Lewin and Dr. Anderson also suggested expanding the PIO section and working with the counties on it and adding it as an Appendix to the plan.

Dr. Lewin then asked for a move to approve the plan. It was so moved and seconded.

#### B. Results of the Statewide Training Needs Assessment.

Nancy Woo-Larkin reported the results of the Statewide Training Needs survey to determine the number of personnel needed to receive

chemical emergency response training. The training categories correspond with the six categories in the Training Guidelines and there were numbers for each category. Each county participated in the survey and the total number of personnel needed across all categories is estimated at 6786.

#### C. Training and Exercise Update

ATSDR training is planned for November 14-16 on Oahu, and CAMEO training is planned for on December 11-15th.

#### IV. County Representation

A survey of SERC members revealed the desire to include county representation on the HSERC. Dr. Anderson suggested that the mayors appoint a SERC representative in that the mayors originally recommended LEPC members. It was mentioned that the mayors be appointed themselves to the SERC and can send a designate if they so desire.

A motion was made that the mayors be requested to appoint a person to represent the county on the HSERC. It passed.

#### V. Proposed legislative package

Five positions for the HEER program are being requested as OSCs for emergency response. The Draft is also asking for \$120,000 for training funds.

DOH is in the process of amending the State Environmental Emergency Response Law, adding enforcement sections and clarifying its authority.

Once the proposal passes the AG it will be circulated to the HSERC for review and comment.

#### VI. Other Business

Chief Kahooohanohano asked about establishing a fund to reimburse Honolulu Fire Department if and when they are asked to send the HAZMAT Team to the outer islands. It was suggested that a memorandum of agreement be written to address this upcoming issue.

The meeting was adjourned by the Vice-chairman and it was noted that the SERC may meet during the session for an update on relevant SERC legislation.

# 1990 OIL AND HAZARDOUS SUBSTANCE SPILL REPORT

## Background

This is the second annual report of oil and hazardous substance spill incidents reported to the Hawaii State Department of Health's (DOH) Office of Hazard Evaluation and Emergency Response (HEER). This office began tracking spill notifications received and responded to by the Department in 1988.

Releases of hazardous substances above specific quantities known as reportable quantities (RQ) are required to be reported to the State, county, and federal government agencies under two acts, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, better known as Superfund, and under the Superfund Amendments and Reauthorization Act (SARA), Title III, also known as the Emergency Planning and Community Right-to-Know Act. In addition to the required reporting, industry and private citizens often report spills and releases if they are concerned that public health and welfare, the environment, or natural resources may be adversely affected.

## Review of Spill Reporting

During calendar year 1990, the HEER Office of the Hawaii State Department of Health experienced a dramatic increase in the number of oil and hazardous substance emergency notifications received compared to calendar year 1989. The number of notifications received by the HEER office increased from 162 incidents in 1989 to 312\* in 1990.

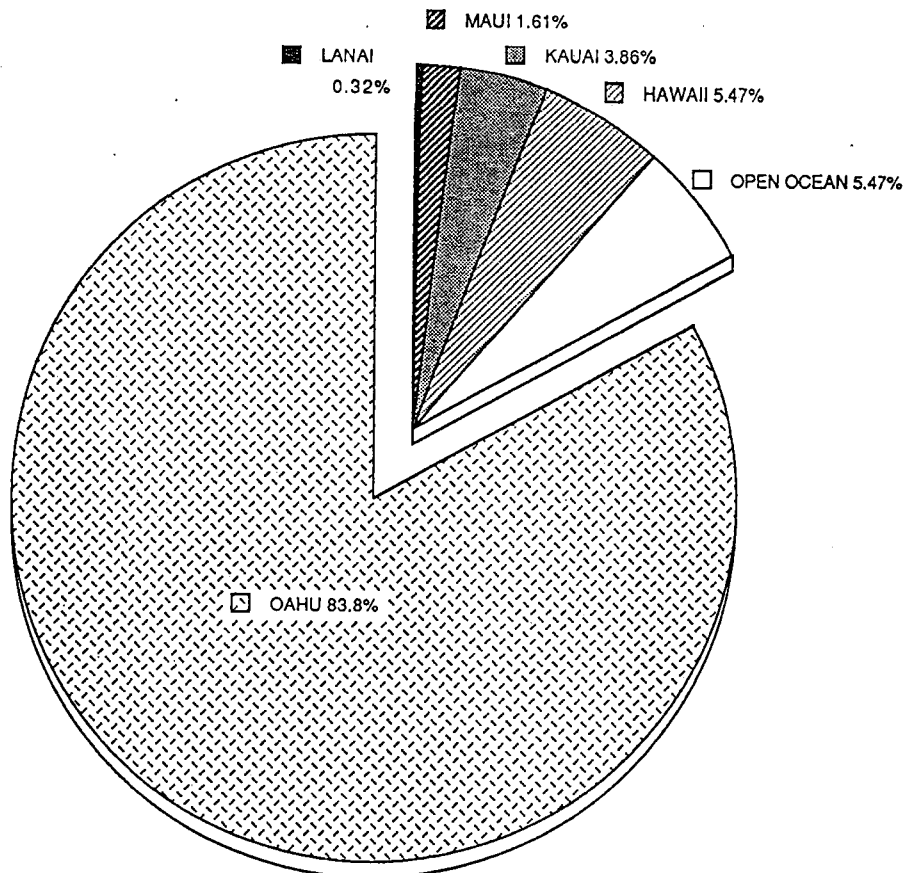
An analysis of the 312 notifications of oil and hazardous substance releases received in 1990, the 162 notifications received in 1989 and the 62 notices received in 1988, indicates that the greatest number of notifications were received from the County of Oahu. This data is presented in Table 1 and in Figure 1.

\* This number is not final. There are still several reports in process.

**Table 1, Incidents Reported By County, 1988 - 1990**

County	1988	1989	1990
Oahu	46 (74.2%)	115 (70.1%)	259 (83.8%)
Hawaii	2 (3.2%)	13 (7.9%)	17 (5.47%)
Kauai	6 (9.7%)	17 (10.4%)	12 (3.9%)
Maui	7 (11.3%)	12 (7.3%)	5 (1.6%)
Open Ocean	1 (1.6%)	5 (3.0%)	17 (5.47%)
<b>total</b>	<b>62</b>	<b>162</b>	<b>312</b>

**Figure 1, Incidents Reported By County, 1988 - 1990**



Petroleum was the most commonly reported material released in 1990, accounting for 58.3% of all reported spills. The petroleum releases include sightings of oil sheens, black oil, tar balls on beaches, and fuels (such as jet fuel and gasoline). Diesel fuel and oil accounted for the majority of the notifications of petroleum type releases. In a large number of incidents it is not possible to say what type of petroleum product is involved. The fact that a small amount of oil or other petroleum product makes a very evident sheen on

the water surface helps to account for the large number of reports this type of spill.

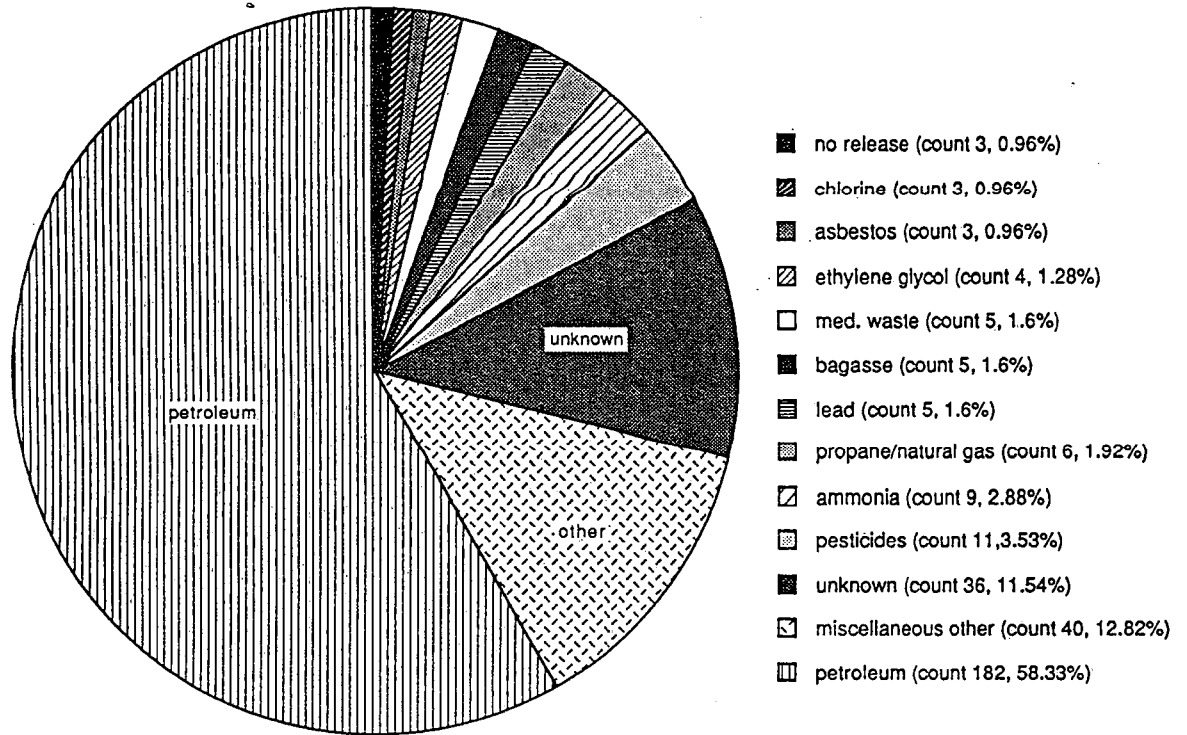
Miscellaneous other substances accounted for 12.8% of reported spills in 1990. These included such materials as paint, soap, mercury, and sulfuric acid from car batteries.

Unknowns are the next largest category of reported spills. Spills of unknown materials are particularly problematic because they must be treated as worst case scenarios. The remaining categories of spilled materials each accounted for less than 4% of the total number of spills. Table 2 and Figure 2 summarize the distribution of spills by substance.

**Table 2, Incidents Reported By Substance in 1990**

<b>Substance</b>	<b>Number of Spills</b>	<b>Percent of total</b>
Petroleum	182	58.3
Pesticides	11	3.5
Ammonia	9	2.9
Propane/natural gas	6	1.9
Lead	5	1.6
Bagasse	5	1.6
Medical Waste	5	1.6
Ethylene glycol	4	1.3
Asbestos	3	0.9
Chlorine	3	0.9
No release	3	0.9
Miscellaneous	40	12.8
Unknown	36	11.5

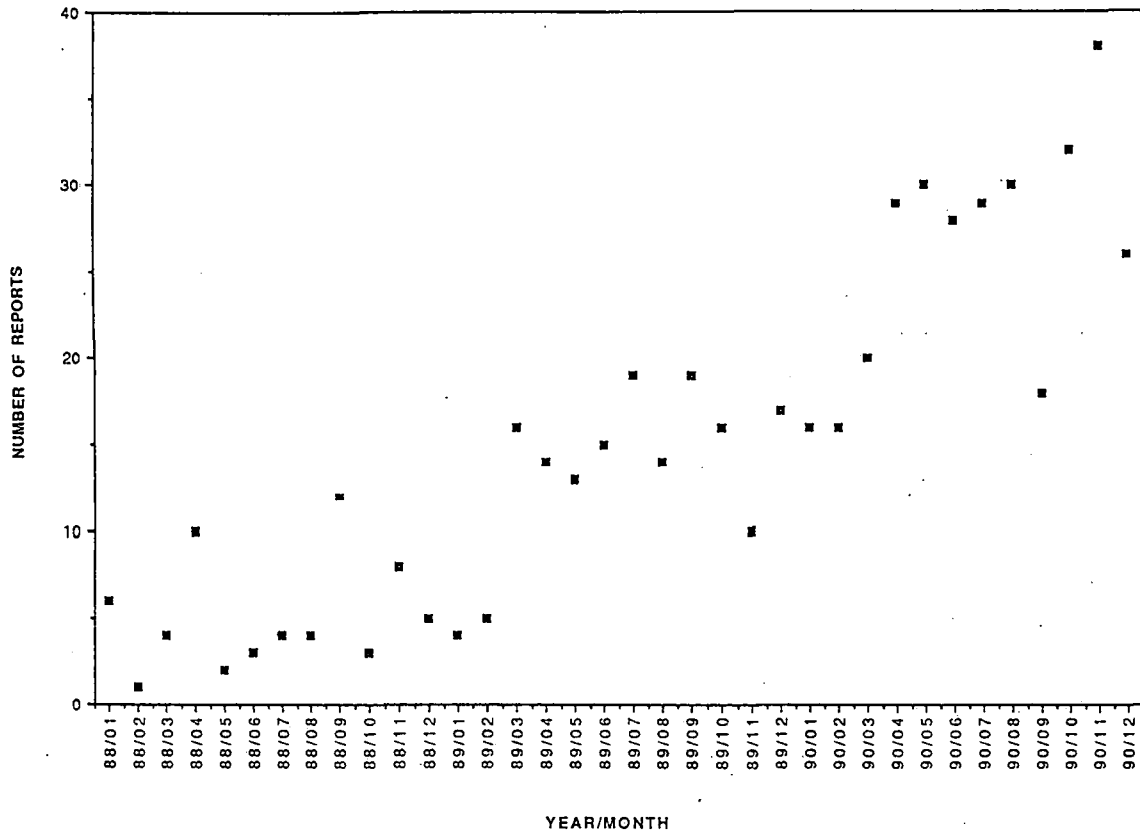
Figure 2, Incidents Reported By Substance in 1990



## Discussion

Figure 3 illustrates the increase in spill reports received by the Office of HEER over the last three years. The increase in the number of spill reports in 1990 is probably not due to an actual increase in the occurrence of spills over the previous year; rather the increase appears to be associated with a greater awareness of the notification and reporting process. Private citizens and industry are becoming increasingly aware of the importance of reporting and the legal responsibility they have to notify a public agency in the event of a spill.

Figure 3, Number of Spill Reports By Month 1988 - 1990



The data reflects not only an increased knowledge of the regulatory requirements regarding hazardous substances and wastes, but also an increased awareness of the potential environmental and public health risks posed by improper handling or disposal of these substances. The improving coordination and cooperation between county, State, and federal agencies involved in spill response and notification has resulted in more interagency communication and cross-reporting of specific incidents.

Though people are becoming more aware of the hazards of clean-up and the disposal of hazardous materials, they are also becoming more aware of the high cost of clean-up and disposal. These high costs have created an economic incentive to improperly dispose of hazardous waste. Broad public cooperation in reporting improper or illegal dumping activities to authorities is necessary to create positive conditions for pollution prevention. Such public involvement supports the majority of industries and private citizens that manage and recycle their hazardous wastes properly.



## **Conclusions**

It is anticipated that the number of reports of oil and hazardous substance spill incidents will continue to grow with public awareness of the impact of releases of hazardous materials and chemicals.

In conclusion, the tables and figures included in this report display the spill distribution trends in the State of Hawaii over the past years. While the limited data may not be complete, it does show a clear increase in the number of spill reports between 1988 and 1990. This increase appears to indicate a growing awareness within the State of the potential risks associated with spills and releases and how they can affect public health and the environment.

Only through prompt notification of oil and hazardous substance releases to the proper authorities is it possible for county, state, and federal agencies to coordinate an effective response. Included in the Appendix I is the Hawaii SARA Title III, Section 304, Hazardous Substance Release Notification Guideline which provides State and county phone numbers where oil and hazardous substance releases can be reported to the appropriate authorities.

# OIL POLLUTION ACT OF 1990.

## ISSUES THAT INVOLVE THE STATES.

1. THE STATES WILL STILL HAVE THE AUTHORITY TO IMPOSE UNLIMITED LIABILITY ON THE RESPONSIBLE PARTIES OF OIL SPILLS.

2. OIL POLLUTION RESPONSE EQUIPMENT WILL BE PRE-STAGED IN HAWAII AND MANAGED BY THE COAST GUARD DISTRICT ASSIST TEAMS.

3. THE UNIVERSITY OF HAWAII AS PART OF THE REGIONAL OIL POLLUTION RESEARCH PROGRAM WILL APPLY FOR A \$600 THOUSAND PER YEAR GRANT FOR OIL POLLUTION RESEARCH AND DEVELOPMENT.

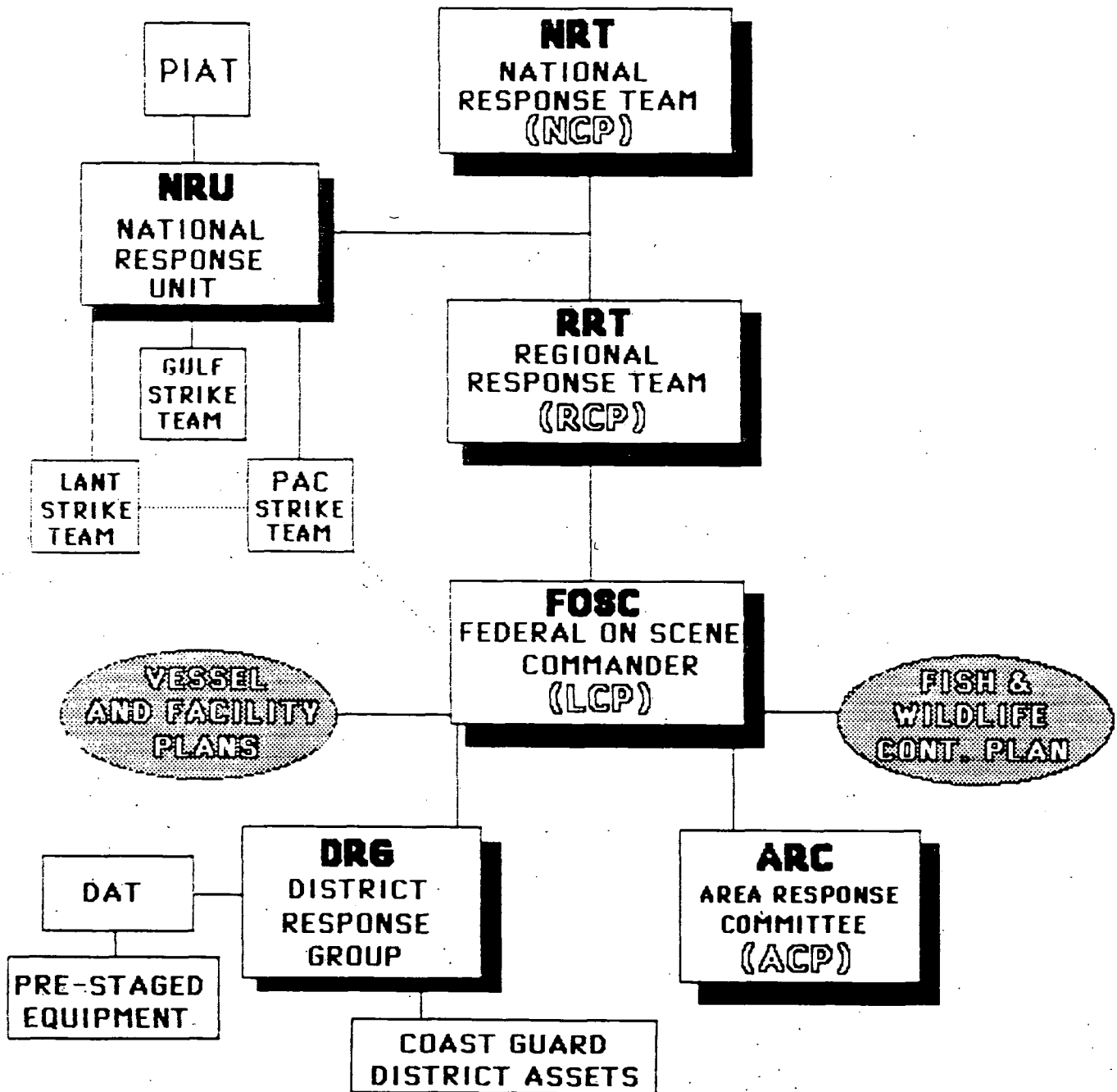
4. UP TO \$500 MILLION PER SPILL CAN BE SPENT REPAIRING NATURAL RESOURCES DAMAGES.

5. THE FUND ALSO ALLOWS FOR REIMBURSEMENT TO INDIVIDUALS WHO CLAIM LOSS OF LIVLIHOOD DUE TO THE SPILL.

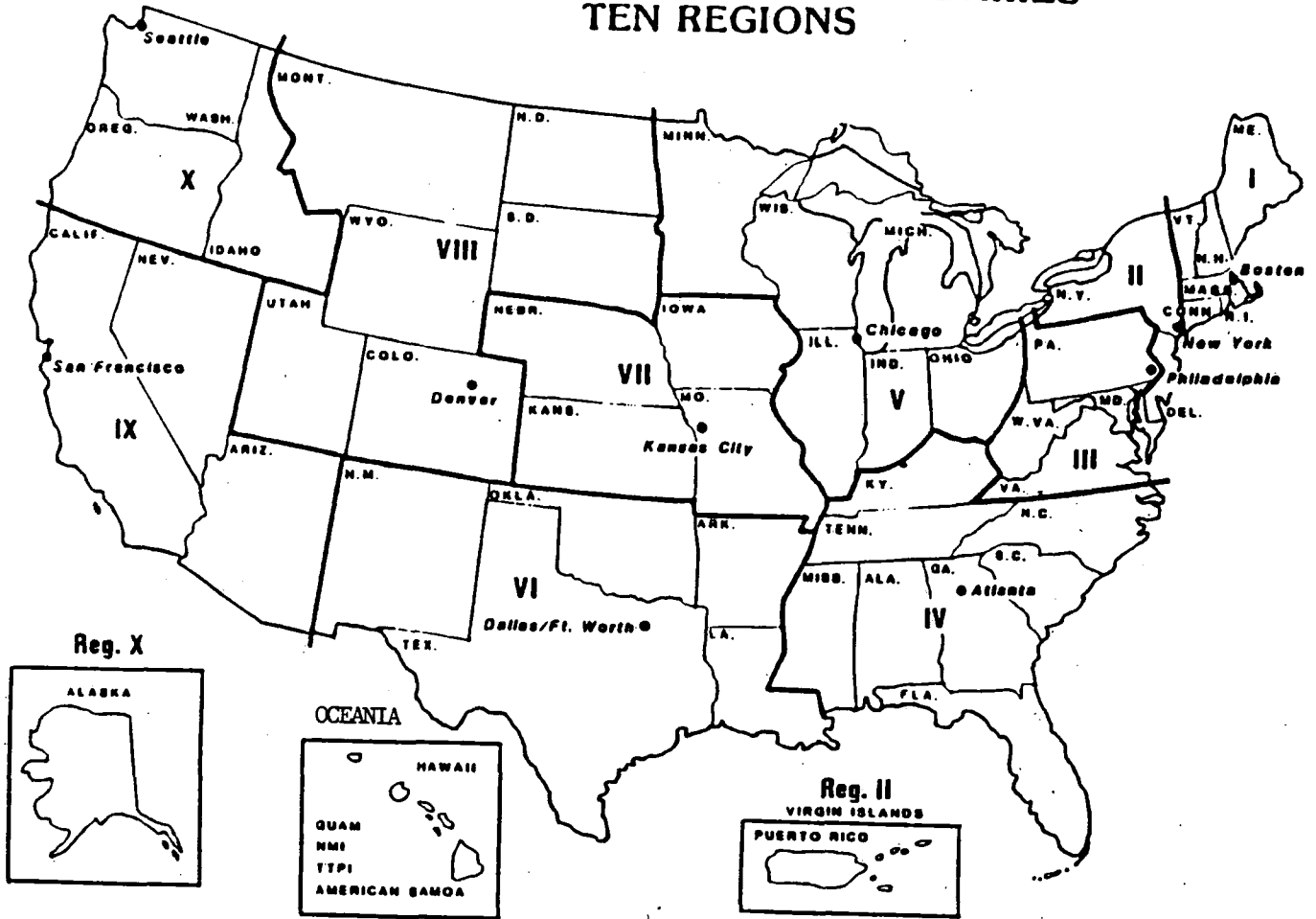
6. ESTABLISHMENT OF AREA RESPONSE COMMITTEES.

7. LOCAL OIL POLLUTION EXERCISES WILL BE COORDINATED BY DISTRICT RESPONSE GROUPS.

# NATIONAL RESPONSE ORGANIZATION



# STANDARD REGIONAL BOUNDARIES TEN REGIONS



**KEY**

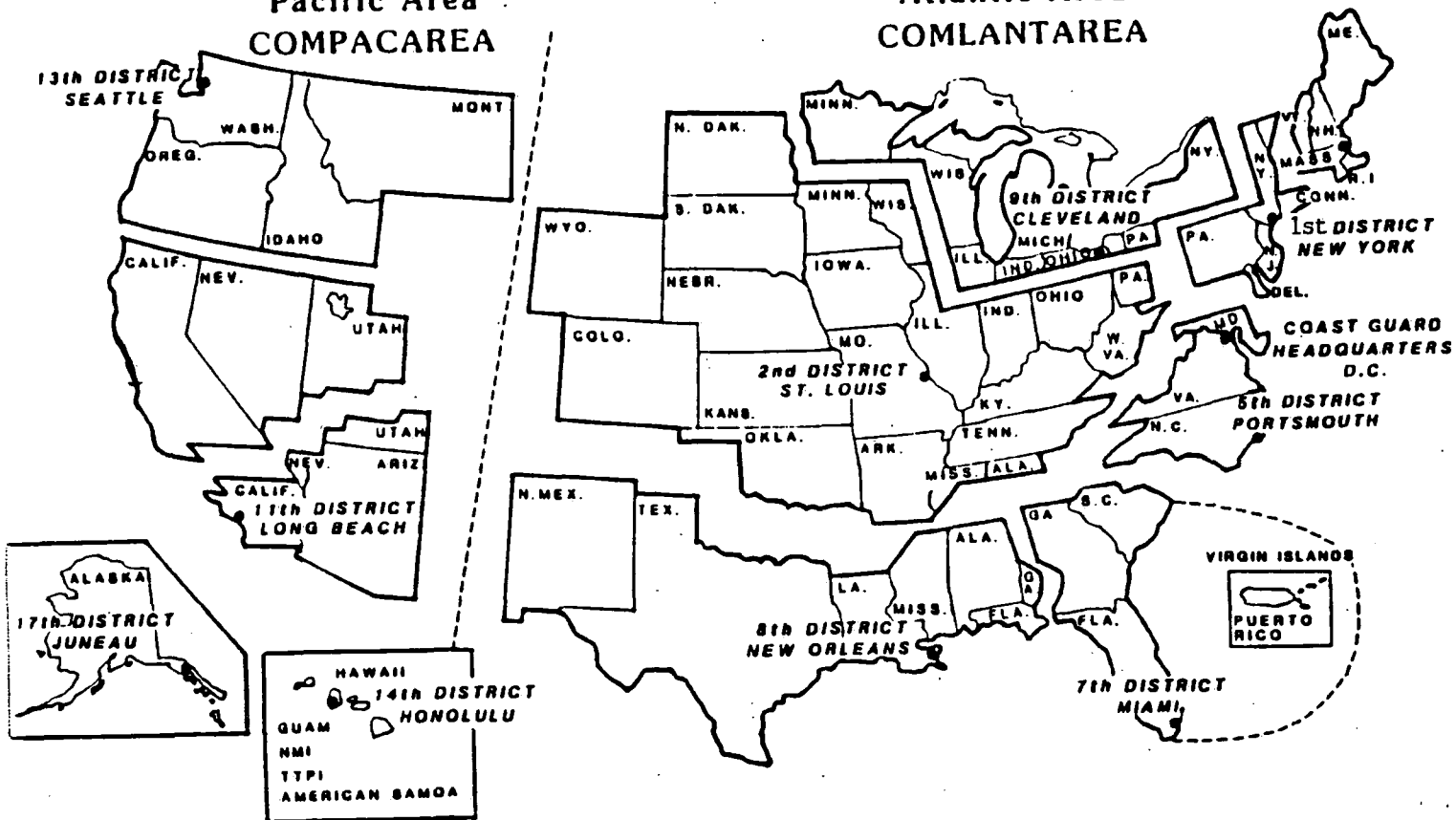
NMI : Northern Mariana Islands

TTPI : Trust Territory of the Pacific Islands

# U.S. COAST GUARD DISTRICTS

## Pacific Area COMPACAREA

## Atlantic Area COMLANTAREA

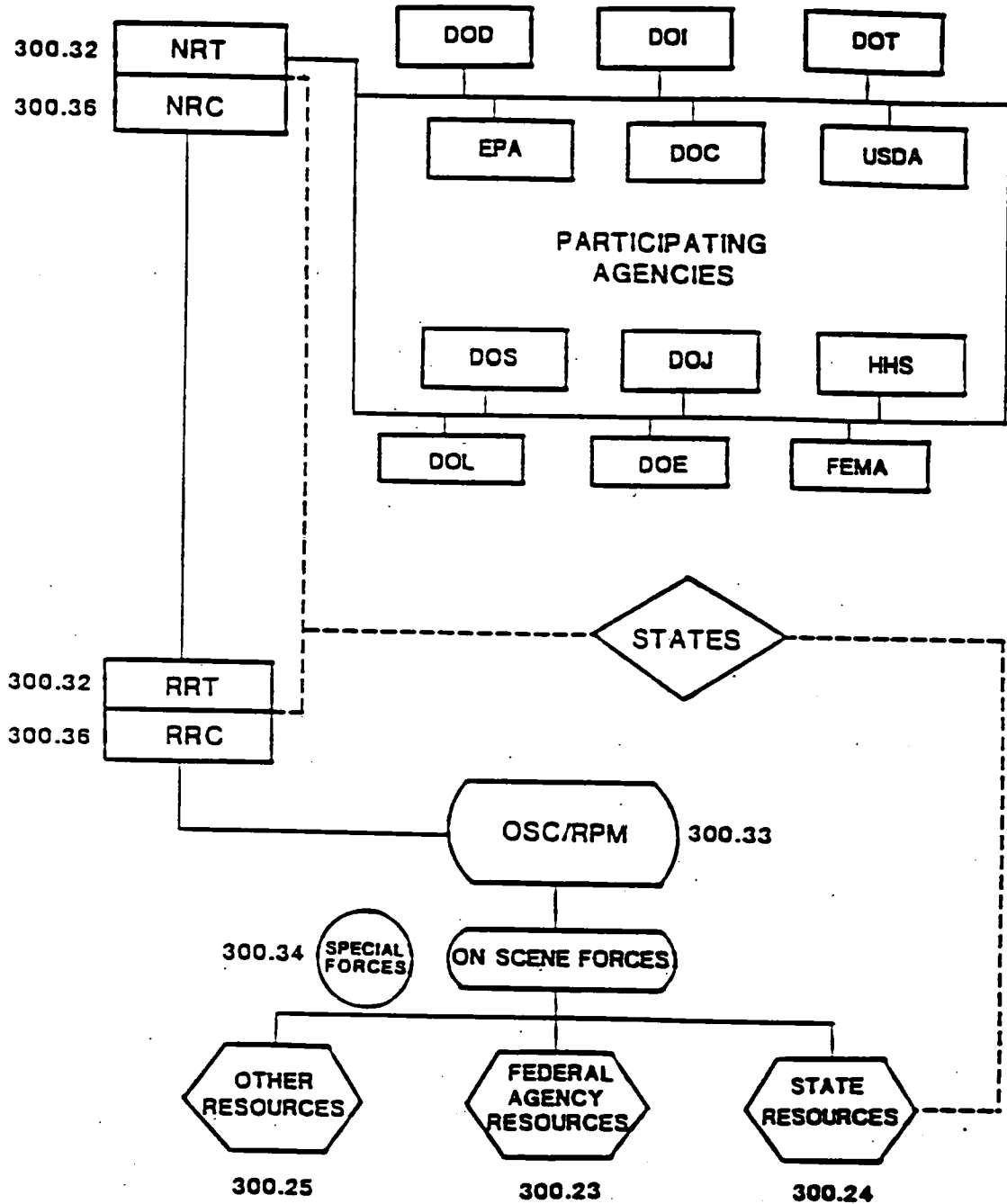


### KEY

NMI: Northern Mariana Islands

TTPi: Trust Territory of the Pacific Islands

# NATIONAL CONTINGENCY PLAN CONCEPTS



# **NATIONAL RESPONSE UNIT** **(NRU)**

**- WILL BE ESTABLISHED AT ELIZABETH CITY, NC**

**- RESPONSIBILITIES WILL INCLUDE:**

**(1)- COMPILE AND MAINTAIN A COMPREHENSIVE DATA LIBRARY OF SPILL REMOVAL RESOURCES, PERSONNEL, AND EQUIPMENT AVAILABLE WORLDWIDE.**

**(2)- PROVIDE TECHNICAL ASSISTANCE, EQUIPMENT AND OTHER RESOURCES REQUESTED BY THE FOSC.**

**(3)- COORDINATE USE OF PRIVATE AND PUBLIC PERSONNEL AND EQUIPMENT TO REMOVE A WORST CASE DISCHARGE.**

**(4)- PROVIDE TECHNICAL ASSISTANCE IN PREPARATION OF AREA CONTINGENCY PLANS.**

**(5)- ADMINISTER COAST GUARD STRIKE TEAMS.**

**(6)- MAINTAIN FILES OF ALL AREA CONTINGENCY PLANS.**

# **TANK VESSEL AND FACILITY** **RESPONSE PLANS**

## **APPLICABILITY:**

- (1)-TANK VESSELS DEFINED UNDER 46 USC 2101**
- (2)-AN OFFSHORE FACILITY**
- (3)-AN ONSHORE FACILITY THAT BECAUSE OF LOCATION COULD REASONABLY BE EXPECTED TO CAUSE SUBSTANTIAL HARM TO THE ENVIRONMENT BY DISCHARGING INTO OR ON U.S. NAVIGABLE WATERS, ADJOINING SHORELINES OR THE EXCLUSIVE ECONOMIC ZONE.**

## **PLAN REQUIREMENTS:**

- (1)- MUST BE CONSISTENT WITH ACP AND NCP**
- (2)- IDENTIFY QUALIFIED INDIVIDUALS HAVING FULL AUTHORITY TO IMPLEMENT REMOVAL ACTIONS.**
- (3)- IDENTIFY MITIGATION/REMOVAL RESOURCES FOR REMOVAL TO MAXIMUM EXTENT PRACTICABLE OF A WORST CASE DISCHARGE OR THREAT OF DISCHARGE.**
- (4)- DESCRIBE TRAINING, EQUIPMENT TESTING, PERIODIC UNANNOUNCED DRILLS, AND RESPONSE ACTIONS BY PERSONNEL TO ENSURE SAFETY & MITIGATE OR PREVENT A DISCHARGE.**



# **COAST GUARD DISTRICT RESPONSE GROUP (DRG)**

**- COAST GUARD PERSONNEL AND EQUIPMENT OF EACH PORT WITHIN THE DISTRICT.**

**- PRE-POSITIONED EQUIPMENT.**

**- DISTRICT RESPONSE ADVISORY STAFF.**

## **RESPONSIBILITIES:**

**(1)- PROVIDE TECHNICAL ASSISTANCE, EQUIPMENT, AND OTHER RESOURCES WHEN REQUIRED TO THE FOSC.**

**(2)- MAINTAIN ALL COAST GUARD RESPONSE EQUIPMENT WITHIN DISTRICT.**

**(3)- PROVIDE TECHNICAL ASSISTANCE IN THE PREPARATION OF AREA CONTINGENCY PLANS.**

**(4)- SHALL REVIEW EACH OF THOSE PLANS THAT EFFECT ITS AREA OF GEOGRAPHIC RESPONSIBILITY.**

# **DISTRICT ADVISORY TEAM (DAT)**

**- 6 PERSON STAFF COMPRISED OF MILITARY AND CIVILIAN PERSONNEL WITH THE FOLLOWING RESPONSIBILITIES:**

**(1)- PROVIDE TECHNICAL ASSISTANCE TO FOSC.**

**(2)- MAINTAIN PRE-STAGED EQUIPMENT.**

**(3)- PROVIDE TECHNICAL ASSISTANCE AND REVIEW AREA CONTINGENCY PLANS.**

**(4)- COORDINATE DRILLS/EXERCISES OF CONTINGENCY PLANS.**

**(5)- CREATE AND MAINTAIN A DATA BASE CONTAINING DISTRICT AND MAINLAND RESOURCES FOR POLLUTION ABATEMENT EQUIPMENT, PRODUCTS AND REMOVAL COMPANIES.**

# **PRE-STAGED EQUIPMENT**

- 1800 FEET OF HIGH SEA CONTAINMENT BOOM**
- A VESSEL OF OPPORTUNITY SKIMMING SYSTEM (VOSS)**
- AIR DEPLOYABLE ANTI-POLLUTION TRANSFER SYSTEM (ADAPTS).**

# **AREA RESPONSE COMMITTEE** **(ARC)**

**MEMBERS: FEDERAL, STATE AND LOCAL AGENCIES.**

**DIRECTION:**

**(1) – PREPARE AN AREA CONTINGENCY PLAN FOR ITS AREA.**

**(2) – WORK WITH STATE AND LOCAL OFFICIALS TO ENHANCE CONTINGENCY PLANNING. ASSURE PREPLANNING OF JOINT RESPONSE EFFORTS, PROCEDURES FOR MECHANICAL RECOVERY, DISPERSAL, SHORELINE CLEANUP, PROTECTION OF SENSITIVE ENVIRONMENTAL AREAS, AND PROTECTION, RESCUE AND REHABILITATION OF FISHERIES AND WILDLIFE.**

**(3) – WORK WITH STATE AND LOCAL OFFICIALS TO EXPEDITE DECISIONS FOR THE USE OF DISPERSANTS AND OTHER MITIGATING SUBSTANCES AND DEVICES.**

**(4) – DRILL AND EXERCISE AREA CONTINGENCY PLAN.**

# **AREA CONTINGENCY PLAN**

**- WHEN IMPLEMENTED IN CONJUNCTION WITH THE NATIONAL CONTINGENCY PLAN (NCP) SHOULD:**

**(1)-BE ADEQUATE TO REMOVE A WORST CASE DISCHARGE AND TO MITIGATE OR PREVENT A SUBSTANTIAL THREAT OF SUCH A DISCHARGE, FROM A VESSEL, OFFSHORE FACILITY, OR ONSHORE FACILITY.**

**(2)- DESCRIBE THE AREA COVERED BY THE PLAN. INCLUDE AREAS OF SPECIAL ECONOMIC OR ENVIRONMENTAL IMPORTANCE.**

**(3)- DESCRIBE RESPONSIBILITIES OF AN OWNER OR OPERATOR AND OF FEDERAL, STATE AND LOCAL AGENCIES IN REMOVING A DISCHARGE AND IN MITIGATING OR PREVENTING A SUBSTANTIAL THREAT OF A DISCHARGE.**

**(4)- LIST EQUIPMENT, DISPERSANTS, OTHER MITIGATING SUBSTANCES AND DEVICES, AND PERSONNEL AVAILABLE TO EFFECT IMMEDIATE REMOVAL OF A DISCHARGE OR PREVENT/MITIGATE THREAT OF A DISCHARGE.**

**(5)- DESCRIBE PROCEDURES FOR EXPEDITED USE OF DISPERSANTS.**

**(6)-DESCRIBE INTEGRATION INTO OTHER CONTINGENCY PLANS.**

# **OIL POLLUTION LIABILITY** **TRUST FUND**

**- \$1 BILLION AVAILABLE TO COVER CLEANUP COSTS AND DAMAGES NOT COMPENSATED BY THE SPILLER.**

**-\$1 MILLION ALLOCATED TO 14TH DISTRICT FOR FY-91.**

**-PAYMENT OF REMOVAL COSTS, INCLUDING THE COSTS OF MONITORING REMOVAL ACTIONS CONSISTENT WITH THE NCP.**

**- COSTS INCURRED BY TRUSTEES FOR ASSESSING DAMAGE TO NATURAL RESOURCES AND DEVELOPING AND IMPLEMENTING RESTORATION, REHABILITATION, REPLACEMENT AND ACQUISITION PLANS.**

**- ECONOMIC DAMAGES**

**- ADMINISTRATIVE, OPERATIONAL, AND PERSONNEL COSTS ASSOCIATED WITH THE ACT.**

**- PAYMENTS FROM THE FUND ARE LIMITED TO \$1 BILLION PER SPILL, OF WHICH NO MORE THAN \$500 MILLION MAY BE SPENT ON NATURAL RESOURCE DAMAGES.**

**- \$25 MILLION EACH FISCAL YEAR AVAILABLE TO THE COAST GUARD FOR OPERATING EXPENSES.**

**-\$30 MILLION EACH FISCAL YEAR THROUGH FY-92 TO ESTABLISH THE NATIONAL RESPONSE SYSTEM. INCLUDES PURCHASE AND PREPOSITIONING OF OIL SPILL REMOVAL EQUIPMENT.**

**- \$27.25 MILLION EACH FISCAL YEAR FOR RESEARCH AND DEVELOPMENT.**

# **OIL POLLUTION ACT FUNDING**

**- TRAINING WILL BE FUNDED ONCE IMPLEMENTING REGULATIONS ARE PUBLISHED.**

**- EQUIPMENT:**

**- \$30 MILLION THROUGH FY-92 SHALL BE AVAILABLE TO ESTABLISH THE NATIONAL RESPONSE SYSTEM INCLUDING THE PURCHASE AND PREPOSITIONING OF OIL SPILL REMOVAL EQUIPMENT.**

**-RESEARCH AND DEVELOPMENT:**

**(1) - \$27.25 MILLION WILL BE AVAILABLE EACH FISCAL YEAR.**

**(2) - FOR EACH OF THE FISCAL YEARS 1991 THROUGH 1995 \$6 MILLION SHALL BE AVAILABLE TO CARRY OUT THE REGIONAL RESEARCH PROGRAM.**

**(3) - \$600,000 FOR EACH OF THE 10 REGIONS (COAST GUARD DISTRICTS)**

**(4) - ANY UNIVERSITY OR OTHER RESEARCH INSTITUTION, OR GROUP OF UNIVERSITIES OR RESEARCH INSTITUTIONS MAY APPLY FOR A GRANT FOR THE REGIONAL RESEARCH PROGRAM.**

**(5) - APPLICATIONS WILL BE REVIEWED BY THE INTERAGENCY COMMITTEE.**

**(6) - INTERAGENCY COMMITTEE IS COMPRISED OF VARIOUS FEDERAL AGENCIES WITH THE DEPARTMENT OF TRANSPORTATION AS CHAIRMAN.**



JOHN WAIHEE  
GOVERNOR OF HAWAII



Jack Lewin

JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
HEER OFFICE

HSERC7.MTG/BFS2

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #7  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
MONDAY, JANUARY 14, 1991 AT 2:00 P.M.

Staff Meeting Notes

- I. Introductory and Opening Remarks  
Dr. Bruce Anderson, Deputy Director, DOH
- II. Welcome to the New HSERC Members  
Video Tape on the Emergency Planning and Community  
Right-to-Know (15 min)  
Dr. Bruce Anderson, Deputy Director, DOH
- III. State of Hawaii's Chemical and Oil Emergency  
Preparedness Program
  - A. Title III Progress Mark Ingoglia, Manager, HEER
    1. 300 Facility Progress Reports
      - All Reviewed
      - Approximately 200 letters sent out to facility owners
      - At best, 50% of the letters have been correctly responded to
      - Counties imputing data (Kauai has filed with State)
      - Reminder letter prepared for mail out (end of January) for 1990 Data submittal to be returned by 1 March, 1991
      - Counties conducting hazard analyses - no estimate on completion
    2. Draft State and County Plans in Place
    3. Established Title III Data Management Plan utilizing CAMEO software
    4. Received \$70k Title III Data Management Grant from EPA Headquarters for Community Right to Know Data Access

- B. Local Emergency Planning Committees (LEPCs)  
Hawaii LEPC  
Kauai LEPC  
Oahu LEPC  
Maui LEPC

- C. Spills Update. Philip Moravcik, HEER, DOH  
(Distribute Draft 1990 Spill Report)
- 311 Notifications
  - 100% increase in notifications from last year
  - Majority of notifications on Oahu
  - Major spills and response cleanup operations
    - Hilo copper chromium arsenic spill
    - Pearl City jet fuel pipeline leak
    - Maile oil barrel waste sites
      - 4,700 gallons of halogenated waste oil
      - 10,000 gallons of off specification oil
    - Explosive waste detonation project
    - Pioneer Lumber pentachlorophenol waste site
    - Hawaiian Tuna Packers ammonia release  
(first successful cost recovery)

- D. Training, Exercises and Activities  
Bruce Schlieman, HEER, DOH
- March, 1990: CAMEO Title III Data Management Workshop and 2 follow-up meetings
  - April/May, 1990: 2 forty-hour Hazardous Materials Incident Response Operations
  - May, 1990: 80 hour Chemistry of HazMats
  - November, 1990: 80 hour Tactical Considerations for HazMat Response
  - December, 1990: National Governors Association Conference on Title III (3 LEPC reps, and 1 SERC rep)
  - December, 1990: Dept of Interior/State Natural Resources Damage Assessment Workshop
  - January, 1991: National CAMEO Conference and Workshop ( 5 LEPC reps and 1 SERC rep)
  - March, 1991: Chemistry of HazMats
  - April, 1991: Tactical Considerations for HazMat Response
  - May, 1991: Kauai EPA Tabletop Response Exercise
  - May, 1991: Uniform Fire Code Hazmat Workshop (4 sessions, one for each county)
  - HazMat 8-hour awareness - ongoing
  - KCC/DOH Project for 8-hour awareness training

IV. Regional Plans and Response Team and U.S. Coast Guard Updates

- A. Current activities of the Oceania Regional Response Team
- overview of ORRT meeting  
Petty Officer Larry Hewett
  - State perspective on ORRT activities  
Dr. Bruce Anderson, Deputy Director, DOH

V. Review of Star Connecticut Incident

- A. Review of Star Connecticut incident  
Captain Richard C. Vlaun, FOSC, USCG, MSO
- B. Mitigation measures for PRI's Single Point Mooring  
Mr. F. David Hoffman, Vice President of Petroleum  
Operations, PRI  
Captain Bill Heddeaus, HIRI Port Captain

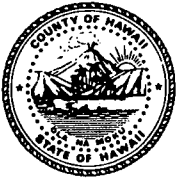
VI. Other

- A. Third Annual National Superfund Environmental  
Evaluation Workshop: February 5-7, 1991 (contact  
Mark Sprenger at 201/906-6825; or Doug Steele at  
415/744-2312). Distribute copies
- B. EPA Office of Chemical Preparedness and Prevention  
Office is coordinating the International City  
Management Association Environmental Peer Exchange  
Program for LEPC members (for info call Sarith  
Guerra at 202/962-3649; or Kathy Jones at  
202/475-8353). Distribute copies

Lorraine R. Inouye  
Mayor

Daniel Ayala  
Fire Chief

Harding Fragas, Jr.  
Deputy Fire Chief



## Fire Department

466 Kinoole Street • Hilo, Hawaii 96720 • (808) 961-8297

RECEIVED  
OFFICE OF THE DIRECTOR  
DEPT. OF HEALTH

January 3, 1991


'91 JAN -4 A10:59

Dr. John C. Lewin  
Director of Health  
P. O. Box 3378  
Honolulu, Hawaii 96801

Dear Dr. Lewin:

With reference to the HSERC meeting which will be held on January 14, 1991, my Deputy, Harding Fragas, Jr., will be representing me at meeting.

Sincerely,

  
DANIEL AYALA  
Fire Chief

DA/mo





JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

October 17, 1989

*Andria*

In reply, please refer to:  
EPHSD/HEER  
HSERCM-6/NG

MEMORANDUM

To: The Hawaii State Emergency Response Commission  
(HSERC) Members

From: John C. Lewin, M.D., Chairman,  
The Hawaii State Emergency Response Commission

Subject: HSERC MEETING NOTICE and  
COUNTY REPRESENTATION ON THE HSERC

HSERC MEETING NOTICE

This is to invite you to the next meeting of the Hawaii State Emergency Response Commission (HSERC) to be held Wednesday November 8, 1989 at the State Capital Conference Room #214.

The enclosed agenda will list the topics to be discussed. The first order of business is to provide an update on the planning activities for the Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials to be held December 7, 1989 at the Ramada Renaissance Ala Moana Hotel.

State Civil Defense and the HSERC have reviewed Draft V of Hawaii's Oil and Hazardous Substances Emergency Response Plan. Approval at this meeting is anticipated.

The proposal of county representation on the HSERC will be discussed at this meeting. The floor will be open for discussion to explore this matter fully in order to make a recommendation to the Governor to modify the HSERC membership.

Enclosed for your review are the following documents:

- \* Agenda for the November 8, 1989 HSERC meeting
- \* HSERC Meeting Summary of August 1, 1989

- \* Hawaii's Oil and Hazardous Substances Emergency Response Plan (Draft V)
- \* Results of the Statewide Training Needs Assessment (To be distributed at the meeting)
- \* Draft agenda for the Governor's Conference on Oil and Hazardous Substance Emergency Response for Public Officials

COUNTY REPRESENTATION ON THE HSERC

At the last HSERC meeting held on August 1st, it was suggested that counties be represented on the Hawaii State Emergency Response Commission (HSERC). We would like to put this proposition before you, the HSERC for your opinion and comment.

There is no legal mechanism which suggests the composition of the state emergency response commission (SERC). In the Superfund Amendment and Reauthorization Act of 1986, (SARA), Section 301 Establishment of State Commissions, Planning Districts, and Local Committees. (a) Establishment of State Emergency Response Commissions the law reads: "The Governor may designate as the State emergency response commission one or more existing emergency response organizations that are State-sponsored or appointed. The Governor shall, to the extent practicable, appoint persons to the State emergency response commission who have technical expertise in the emergency response field."

The National Governor's Association collected data on SARA Title III from all the states and territories of the United States. The results are published in a document entitled Emergency Planning and Community Right-To-Know Act: A Status of State Actions-1989. Fifty-four percent of the state and territory State Emergency Response Commission (SERCs) have local government representation. The remaining forty-six percent are dominated by state officials, with representation by private industry and environmental groups.

SARA Title III does embody the essence of State and county cooperation in two separate planning bodies, the SERC and the local emergency planning committees (LEPC). The only requirement for SERC membership is emergency response technical expertise in as stated in SARA Title III. We want to encourage coordination between the State and counties on the achievement of a competent

Hawaii State Emergency  
Response Commission Members  
October 17, 1988  
Page 3

level of emergency preparedness for the State. Involving a representative from each county could assist in that goal.

At the HSERC meeting scheduled for November 8, 1989, I would like to thoroughly discuss this issue to the point of resolution. It would appear that in Hawaii the Chairperson of each LEPC would be the most appropriate person to be appointed as the county representative on the HSERC. The HSERC can then make a recommendation to the Governor to modify the SERC membership. We will be surveying the HSERC members prior to the meeting for your opinion.

*John C. Lewin*

305

JOHN C. LEWIN, M.D.

Enclosures  
cc: TSERC Members



JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #6  
STATE CAPITAL, CONFERENCE ROOM 214  
WEDNESDAY NOVEMBER 8, 1989, 9:00 A.M.

AGENDA

- I. Opening Remarks
- II. Status of the Governor's Conference on Oil and Hazardous Substances Emergency Response for Public Officials
  - A. Speaker's Presentations
- III. State of Hawaii's Oil and Hazardous Substances Emergency Preparedness Program
  - A. Hawaii's Oil and Hazardous Substances Emergency Response Plan (Draft V)
  - B. Results of the Statewide Training Needs Assessment
  - C. Training and Exercise Update
- IV. County Representation on the HSERC
- V. Proposed legislative package for the upcoming legislative session
- VI. Other Business
- VII. Closing Remarks/Adjournment





STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER  
HSERCMS/NG

MEETING SUMMARY  
HAWAII STATE EMERGENCY RESPONSE COMMISSION MEETING #5  
DEPARTMENT OF HEALTH BOARD ROOM  
1 AUGUST 1989, 9:00 A.M.

SERC Commission Member Attendees:

Dr. John Lewin, Chairman, HSERC, DOH  
Bruce Anderson Ph.D., Vice-Chairman, HSERC, DOH  
Robert Boesch, for Suzanne Peterson, DOA  
Tom Smyth for Roger Ulveling, DBED  
Harlon Hashimoto Ph.D., School of Public Health  
Major General Alexis Lum, DOD  
Tom Kam for William Paty, DLNR  
Ron Hirano for Edward Hirata, DOT  
Jiggie Hommom, Red Cross  
Clyde Yamachi for Marvin Miura, OEQC

Other Attendees:

Rusty Nall, PENCO  
Jerry Willis, Clean Island Council  
Erwin Kawata, Honolulu Board of Water Supply  
Robert Roberts, HSPA  
Gerald Kinro, DOA  
Gregory Jones, USCG  
Captain Piche, USCG  
Captain Tanos, USCG  
Bruce Klimek, USCG  
Walter Nishimura, City DOH  
Barbara Sherwood, EMS-KCC  
Captain DeCosta, Honolulu Police Department  
George Souza, C&C Office of Information and Complaint  
Chief Kahoochanohano, Honolulu Fire Department  
Thomas Duarte, Maui Fire Department  
Roy Price, SCD  
Tom Batey, SCD  
Harry Kim, Hawaii Civil Defense  
Sel Menor, Maui Civil Defense  
Ken Higa, UNOCAL  
Ms. Nishioka, Hawaiian Electric Company

Joe Reed, Oahu Civil Defense  
Thom Diggs, Oahu Civil Defense  
Richard Kawakami, DBED  
Eugene Lee, C&C DPW  
Carter Davis, Honolulu Fire Department  
Danny Dagdagan, PRI  
George Kekuna, Oahu Civil Defense  
Donna Maiava, DOH-EMS  
Dr. J.K. Simms, DOH-EMS  
Grace Simmons, DOH-Solid and Hazardous Waste Branch  
Dr. Ron Metler, Kauai District Health Office

## I. OPENING REMARKS

Dr. John Lewin, Chairman, spoke to the purpose of the meeting which was to review the progress made since the last HSERC meeting, and to approve Hawaii's Oil and Hazardous Substances Emergency Response Plan and Training Guidelines.

## II. STATE OF HAWAII OIL AND CHEMICAL EMERGENCY PREPAREDNESS PROGRAM

### A. Title III Progress

Mr. Jeff Klein gave a brief report of Title III. The total number of facilities that have reported Tier IIs to HSERC at this date is 203, excluding gas stations (Oahu-122, Kauai-25, Hawaii-24, and Maui-32). Difficulties with Data Management were noted: 1) turnover in trained personnel creates discontinuity in data management; 2) the need to coordinate information with the LEPCs and Fire Departments to ensure that the data received by one corresponds with data received by the others; and 3) the difficulties of acting as an emergency responder and other functions, as well as working on Title III issues.

### B. Local Emergency Planning Committees

Ms. Nancy Gilder provided an update on the LEPCs. Due to last November's county elections there were changes in some LEPCs. For example, Hawaii is modifying its LEPC membership list and looking forward to more participation by the new administration. Kauai has assigned Mr. Clifford Ikeda as Hazardous Materials Specialist in charge of Title III. He is undertaking a "Plan of Action" charting LEPC activities through July 1990. The LEPC emergency response plan is also being revamped. Maui has assigned the mayor's Executive Assistant Valorie Peris as a Co-Vice-Chairperson to replace Floyd Miyazono. Maui is meeting with facility owners/managers to complete the facility profiles as

required under SARA Title III. They are also reviewing and updating their Plan.

The Honolulu LEPC has organized four Standing Committees: 1) Legislative, 2) Community Awareness/Right-to-Know, 3) Hazard Vulnerability Analysis, and 4) Planning. They have made twenty-two site visits and have prepared an emergency response plan for each facility. This represents a "risk mapping" of Oahu showing transportation routes to and from the facilities, and a hazard vulnerability area of 1/2 mile radius. The county has authorized and funded a Hazardous Materials Planning Officer to be filled by September 1.

#### C. Training Exercises Update

Nancy Woo-Larkin presented the upcoming training exercise schedule. Honolulu will have a full field exercise October 20, 1989. The pre-exercise briefing will be October 19th. Maui will hold a tabletop exercise October 24, 1989. The pre-exercise briefing will be October 23rd.

#### D. Spills Update

Jeff Klein provided a spill update. In 1988 the Department of Health responded to 45 spills. As of July 31, 1989, the total for the year is 73 which is a 278% increase. Oil is the predominant material being spilled. Two reasons were given for the increase: 1) greater public awareness, and 2) increased ability of the program to respond.

### III. REGIONAL RESPONSE TEAM AND USCG UPDATE

The USCG noted that the Dispersant Agreement between the EPA and the Coast Guard has been signed. They reported that the RRT plan is being revised in response to the Valdez incident, at which time it was evaluated. It will address a worst case scenario, looking at the maximum potential spill, and the maximum "realistic" spill. Six billets funded by EPA will maintain a level A response support for the State only until June 1990.

### IV. INITIATIVES AND PROPOSALS

#### A. Hawaii's Oil and Hazardous Substances Emergency Response Plan

Dr. Lewin moved to adopt the plan and open the floor for discussion. It was seconded.

The following was offered as necessary changes to the plan:

\* State Civil Defense noted that the plan is too specific. For example in the incident command structure, and assigning the Fire Department as the IC. They suggested changing the words "will" to "should".

\* SCD also suggested the section on State Information Systems was misleading. In that the CAMEO system is not networked to every agency such as the Civil Defense, it is not an encompassing state information system. Carter Davis mentioned the upcoming capability for CAMEO interaction with other systems. DOH and SCD will meet to further discuss this issue.

\* As a supplement to the State of Hawaii Plan for Emergency Preparedness Volume III, it should be general in format, consistent, and allow for flexibility. It should make reference to Volume III as necessary.

\* The method requesting federal assistance which requires the Governor's approval needs to be coordinated through FEMA and needs to be cross-referenced and not established separately.

\* Finally, it was suggested to better define the Red Cross's role in sheltering.

#### B. Training Guidelines

Nancy Woo-Larkin reviewed the 5 training categories and requested the HSERC approval of the Training Guidelines in order to move forward with the survey for the statewide need for training. Once staff complete the training needs assessment the TSERC will design an ongoing training program and request funding for the training in the future Department biennium budget submission. DBED noted there was no mention of private industry in the guidelines.

#### C. Governor' Proclamation

From previous TSERC meetings came a suggestion for a Governor's Proclamation of a HAZMAT Week and/or an Emergency Preparedness Week to raise public awareness of the issue of oil and hazardous substances spills and Hawaii' state of preparedness. The Proclamation should be made around the time of the proposed Governor's Conference on Oil and Hazardous Substances and Hawaii's Emergency Response for Public Officials planned for the fall.

#### D. HAZMAT Conference

A draft agenda for the Governor's Conference on Oil and Hazardous Substances and Hawaii's Emergency Response for Public Officials was opened for discussion to the Commission and the general audience. The following comments were offered:

- \* Another topic, perhaps more related to Honolulu, such as transporting chemicals, or a potential spill at the harbors be included at the conference.
- \* A field exercise should be held at the same time to "exercise" the plan.
- \* A session for the private sector be should be included.
- \* Vendors should be provided an opportunity to display their equipment and videos of equipment in use.
- \* DOSH assistance should be solicited due to their experience in similar undertakings.

#### IV. OTHER BUSINESS

The Fire Department has 15 positions for a Honolulu HAZMAT Team included in the Fire Department's budget on the condition that the Department exert effort on the State to recover part of the \$306,000.00 for salaries.

Hawaii County's LEPC Chairman requested County representation on the HSERC. Dr. Anderson said the Commission would give it serious consideration. Due to the fact that the Governor appoints the SERC membership, he would have to develop a recommendation.

#### V. CLOSING REMARKS/ADJOURNMENT

Dr. Anderson asked everyone for their continued support in emergency response preparedness for the state of Hawaii.

Samir F. Araman  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-2076

Tom Bello  
Hawaii Fire Department  
466 Kinooole Street  
Hilo, Hawaii 96720  
Phone: 935-2978

Dr. John Bowen  
University of Hawaii  
P O Box 1115  
Hilo, Hawaii 96721-1115

Mr. Harold Barks,  
Administrator  
Occupational Safety & Health  
Div.  
Labor & Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4155

Tom Brown  
State Civil Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-2161

Dan Chang  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-6767

Mr. Carter Davis, Fire Captain  
Hazardous Materials Instructor  
890 Valkenburgh Street  
Honolulu, Hawaii 96818  
Phone: 422-1001

Mr. Doug Erway  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495  
Phone: 734-2161

Neal Gyotoku  
County of Hawaii  
Phone: 935-0031

Harlan Hashimoto, Ph.D.  
University of Hawaii-School of  
Public Health  
1960 East-West Road  
Honolulu, Hawaii 96822  
Phone: 948-8037

Fire Chief Leroy Hokoana  
Maui Fire Department  
21 Kinipopo Street  
Wailuku, Hawaii 96793  
Phone: 244-5250

Mr. Clifford Ikeda, Kauai LEPC  
Co-Chairman  
Kauai Civil Defense  
4444 Rice Street, Room 230  
Lihue, Hawaii 96766  
Phone: 245-4001

Mark Ingoglia  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-2076

Arlene Kabei  
Department of Health-HWP  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
Phone: 548-2270

Mr. Thomas Kam  
Department of Land and Natural  
Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-7541

Charmaine Kamaka  
County of Hawaii-Safety  
Phone: 961-8215

Kenneth Keane  
US Coast Guard Marine Safety  
Office  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909

Mr. Harry Kim, Administrator  
Hawaii Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Mr. Gerald Kinro  
Department of Agriculture  
1428 South King Street  
Honolulu, Hawaii 96814-2512  
Phone: 548-7124

Alejandro Lomosad  
Kauai Fire Department  
4223 Rice Street  
Lihue, Hawaii 96766  
Phone: 245-4721

Mr. Harold Matsuura  
Chief Sanitarian  
P O Box 916  
Hilo, Hawaii 96721-0916  
Phone: 961-7275, 7371

Premlata Menon, Ph.D.  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-2076

Mr. Sel Menor, Administrator  
Maui Civil Defense  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 244-7721

Mr. Ralph Moore  
Hazardous Materials Specialist  
Hawaii Department of  
Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-3188

David H. Nakagawa  
Department of Health-Maui  
54 High Street  
Wailuku, Hawaii 96793  
Phone: 244-4255

Masayoshi Ogata  
Department of Occupational  
Safety and Health  
Phone: 548-5480

Mr. Joe Reed, Planner  
Oahu Civil Defense  
650 S. King Street, Basement  
Honolulu, Hawaii 96813  
Phone: 523-4121

Anthonu Salis  
Department of Occupational  
Safety and Health  
Phone: 548-2511

Ronald Takahashi  
County of Hawaii  
Phone: 961-8361

Mr. Paul Takamiya  
Oahu Civil Defense Agency  
650 South King Street  
Honolulu, Hawaii 96813  
Phone 527-5489

Mr. Clyde Takekuma, Chief  
Sanitarian  
Kauai Environmental Branch  
P O Box 671  
Lihue, Hawaii 96766  
Phone: 245-4323

Tom Vendetta  
City & County of Honolulu  
Phone: 523-4880

**STATE OF HAWAII**  
**CHEMICAL EMERGENCY RESPONSE TRAINING**  
**GUIDELINES**

**HAWAII STATE EMERGENCY RESPONSE COMMITTEE**

**AUGUST 1989**



TABLE OF CONTENTS

Introduction ..... 1

Training Categories

I. Hazardous Materials First Responder

    Awareness Training ..... 3

II. Hazardous Materials Incident Response

    Training ..... 4

III. Hazardous Materials Supervisor's Training ..... 7

IV. Hazardous Materials Specialist Training ..... 8

V. Hazardous Materials Response Exercise ..... 11

References ..... 13

## INTRODUCTION

The purpose of this document is to provide guidance for Hawaii state and local governmental agencies on the level of training recommended for supervisors and staff who may come in contact with hazardous materials.

## **BACKGROUND AND PURPOSE**

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) 1986, the State of Hawaii is required to enhance its ability to respond to chemical emergencies. The Hawaii State Emergency Response Commission was formed to oversee this process. A technical subcommittee was formed to assist the commission and was tasked with ensuring that state and county officials and personnel are adequately trained for chemical emergency response. Due to the complexity of the training needs and requirements, the technical subcommittee developed guidelines to clearly describe what level of training should be provided to state and county employees. The guidelines are outlined in five different categories in this document. It must be emphasized that ultimately, each employer is responsible for their employee's health and safety. This document is a tool to help state and county supervisors meet this responsibility.

The elements described for each category are the basic, fundamental topics which should be included for the specific worker category. Each course should be designed with these elements in mind but should also be tailored for that particular target audience. For example, if the target audience is concerned with chemical emergencies involving motor vehicles, then that particular training course should include specific case studies involving highway spills and address how their job function relates to such incidents.

It should also be noted that although these are guidelines, employees and their supervisors, who may be exposed to hazardous materials or wastes during their normal course of work, must be trained in accordance with State and Federal laws (Title 12, Chapter 99 of the Hawaii State Administrative Rules and 29 CFR 1910.120 respectively). These requirements are described in the guidelines under Category I First Responder Awareness Training, II Hazardous Materials Incident Response Training and Category III Hazardous Materials Training for Supervisors.

Training guidelines have been developed for the following five categories:

1. First Responder Awareness Training

This training category is targeted for people who may be the first to respond to a hazardous materials incident and would respond in a defensive fashion without actually trying to stop the release.

2. Hazardous Materials Incident Response Training

This training category is targeted for any person who may be exposed to hazardous materials releases or emergencies during the course of their employment. Basic personal protection measures are covered in this training course along with recognition, identification, toxicology, risk assessment monitoring and basic chemical emergency response planning and tactical considerations.

3. Hazardous Materials Training for Supervisors

This training category is specifically for supervisors of employees who may come in contact with hazardous materials. Category 2 is a prerequisite for this course.

4. Hazardous Materials Specialist Training

This training category is targeted for people who respond to chemical emergencies, and conduct the investigation and clean-up of a hazardous materials release. Their duties would include entering the contaminated zone, investigating the situation and implementing the appropriate clean-up measures. Advanced chemistry and tactical training are covered in this course in addition to topics identified in Categories 1 and 2.

5. Hazardous Materials Response Exercise

This training category is targeted for state and local personnel who may respond to a chemical emergency incident. They should have taken training in one of four previously mentioned categories. The purpose of the exercise is to promote hazardous materials response preparedness; test or evaluate emergency hazardous materials operations, policies, plans and procedures as well as train personnel in hazardous materials management duties and to demonstrate capability.

## TRAINING CATEGORIES

The following sections identify the minimal training criteria recommended for each category. Additional training is recommended depending on the individual's need and interest.

### **Category I      Hazardous Material First Responder Training**

**Hazardous Materials First Responder:** A person(s) who in the course of their normal duties may be first on scene during a hazardous materials incident and would respond in a defensive fashion without actually trying to stop the release.

**Purpose:** Training in this category should provide the first responder with the ability to utilize basic reference tools available in order to recognize and identify hazardous materials. They should also be aware of the health risk associated with various chemicals and be able to notify the appropriate response agency. This training provided in this category should meet or exceed training requirements under 29 CFR 1910.120 (g)(6)(ii). The training provided should cover the following areas:

- A. Recognition of hazardous materials in an emergency:
  - 1) the nine United National (UN)/Department of Transportation (DOT) hazardous materials classes, the major hazards of each class and provide examples
  - 2) the six groups of clues for detecting the presence of hazardous materials
  - 3) typical locations in the community or facility where hazardous materials are manufactured, transported, stored, used or disposed of
  - 4) the placards, labels, markings and shipping papers used in the transportation of hazardous materials and know their advantages and limitations during the process of recognizing hazardous materials
  - 5) the types of specialized marking systems found at fixed facilities such as NFPA 704M and pesticide labeling
  - 6) three sources of specific information to help identify hazardous materials
- B. Identification of hazardous materials and determination of appropriate response action including:

- 1) identification or classification the hazardous material involved in an emergency using markings, placards, labels, shipping papers or personal contacts
  - 2) the use of the DOT Emergency Response Guidebook in assessing hazards, response actions and determining isolation and evacuation distances
  - 3) the problems in specifically identifying hazardous materials
  - 4) identification of the shipping papers found in various modes of transportation, the individuals responsible for the papers, and location where carried and found during an incident; and
  - 5) identification of basic hazardous materials containers and bulk and nonbulk packaging
- C. The role of the first responder at the scene of a hazardous materials incident
- D. Recognition of the need for additional resources and determination of appropriate notifications
- E. Scene management (incident Command System, isolate immediate site, deny entry, evacuate)
- F. Health and Safety procedures including:
- 1) how hazardous materials incidents are different from other emergencies
  - 2) six ways by which hazardous materials are harmful to people at incidents
  - 3) the general routes of entry for human exposure to hazardous materials
  - 4) the limitations of street clothes or work uniforms at the scene of hazardous materials incidents
  - 5) the threats posed to the environment by hazardous materials releases
  - 6) the precautions necessary when rendering emergency medical care to victims of hazardous materials incidents

**Category II Hazardous Materials Incident Response Training**

This training is recommended for anyone who may come in contact with or exposed to hazardous materials release or emergency during the course of their employment. This course should meet or exceed training requirements as defined under 29 CFR 1910.120 (q)(6)(iii), and (iv).

**Purpose:** Training in this category should:

- . make an individual aware of the health risk associated with hazardous materials;
- . provide workers with the knowledge and skill necessary to perform chemical emergency response or remedial response work with minimal risk to their health and safety;
- . make workers aware of the purpose and limitation of safety equipment; and
- . ensure workers can safely respond to, avoid or escape from emergencies according to appropriate plans and procedures.

Training should cover the following topics:

- A. Understanding of chemistry and physical properties of hazardous materials
  - 1) chemical and physical properties, chemical reactions, chemical compatibilities
- B. Toxicology
  - 1) dosage, routes of exposure, toxic effects, Immediately Dangerous to Life of Health (IDLH) values, Permissible Exposure Limits (PELs), Recommended Exposure Limits (RELs), Threshold Limit Values (TLVs)
- C. Industrial Hygiene
  - 1) selection and monitoring of personal protective clothing and equipment
  - 2) calculation of doses and exposure levels, evaluation of hazards, selection of worker health and safety protective measures
- D. Rights and responsibilities of workers under OSHA
  - 1) applicable provisions of Title 29 of the Code of

Federal Regulations (the Occupational Safety & Health Act)

- E. Monitoring Equipment
  - 1) functions, capabilities, selection, use, limitations, and maintenance
- F. Hazard Evaluation
  - 1) sampling techniques
  - 2) evaluation of field and lab results
  - 3) risk assessment
- G. Site safety plans
  - 1) safe practices, safety briefings and meetings
  - 2) standard operating procedures, site safety map
- H. Plans and Standard operating procedures (SOPs)
  - 1) SOP development, compliance and hands-on practice
  - 2) Knowledge of the Regional Response Team, State Emergency Response and local emergency response plans
- I. Engineering controls
  - 1) the use of barriers, isolation, and distance to minimize hazards
- J. Personal protective clothing and equipment (PPE)
  - 1) assignment, sizing, fit-testing, maintenance of air purifying respirators, use, limitations, and hands-on training
  - 2) selection of PPE
  - 3) ergonomics
- K. Medical program
  - 1) medical monitoring and requirements of such a program under 29 CFR 1910.120, first aid, stress recognition

2) advanced first aid, cardiopulmonary resuscitation emergency drills

3) design, planning and implementation

L. Decontamination

1) hands-on training using simulated field conditions

2) design and maintenance

M. Legal and regulatory aspects

1) applicable safety and health regulations (OSHA, EPA, etc.)

2) response to emergencies, follow-up investigation and documentation

**Category III Hazardous Materials Supervisor's Training**

This category is for persons that supervise personnel that may be exposed to hazardous materials during the course of their employment. The prerequisite for this course should be Hazardous Materials Personal Protection Training outlined in Category II.

**Purpose:** To provide guidance to supervisors of operations where workers may be exposed to hazardous material incidents. Training in this category should cover the following topics:

- A) Regulatory review of the following laws:  
Comprehensive Environmental Response, Compensation, And Liability Act (CERCLA) as amended by the Superfund Amendments Reauthorization Act (SARA), Resource Conservation and Recovery Act (RCRA), and Occupational Safety and Health Act.
- B) The Incident Command System and the role of Incident Commander and On-Scene Coordinator
- C) Compliance with 29 CFR 1910.120 and other regulations
- D) Contingency planning and organization (including the role of government agencies)
- E) Industrial hygiene
  - 1) selection and monitoring of personnel protective equipment
  - 2) calculation of doses



- 3) hazard evaluation
  - 4) selection of protective measures
- F) Hazard Evaluation
- 1) techniques of sampling
  - 2) evaluation of field and laboratory results
  - 3) hazardous characterization and identification
  - 4) risk assessment
- G) Development and management of standard operating procedures
- 1) sampling plans
  - 2) health and safety plans
  - 3) medical monitoring plan
  - 4) heat stress monitoring
  - 5) work plan
  - 6) security plan (site entry and control)
  - 7) logistics plan
  - 8) record keeping and logs
- H) Communication, public safety and community relations
- 1) press
  - 2) local community
  - 3) state and local officials

**Category IV Hazardous Materials Specialist Training**

**Hazardous Materials Specialist:** A person(s) who in the course of their normal duties may enter into the hot or contaminated zone at a controlled or uncontrolled hazardous material site, emergency or incident. Training in this category should include all the training objectives as in the first responder category plus the following topic areas:

- A. Development and implementation of a site safety plan

including:

- 1) the components of a safety plan for a hazardous materials incident
- 2) identification criteria for determining the location of the control zones for a hazardous materials incident
- 3) identification criteria for modifying the evacuation areas set up by the first responder
- 4) the signs and symptoms of exposure to that hazardous material given a specific hazardous materials
- 5) the signs and symptoms of heat stress
- 6) implementation a safety plan given a simulated hazardous materials incident

B. Classification, identification and verification of known and unknown materials by using basic monitoring equipment including:

- 1) the twenty-five (25) DOT hazard categories, the basic hazard posed by each
- 2) the precautions to be observed and followed when dealing with the twenty-five hazard categories
- 3) the source of, definition of, and circumstances for the use of the terms "hazardous substances," "hazardous chemicals," "hazardous wastes"
- 4) the advantages and disadvantages of various resource references and monitoring and detection instruments
- 5) the decision-making process for identification of unknown chemical, biological or radiological hazards

C) The government and private sector agencies that offer aid during a hazardous materials incident, including their role and the type of aid or resources available

D) Simulated emergency response which reviews:

- 1) health and safety
- 2) site entry and reconnaissance

- 3) reference information
  - 4) resources
  - 5) decontamination procedures
  - 6) operation
- E) Selection and use of proper specialized personal protective equipment including:
- 1) interpretation of a chemical compatibility chart
  - 2) the maintenance, testing and storage procedures for the personal protective clothing provided
  - 3) the proper donning, doffing, and usage of specialized protective clothing
- F) Knowledge in hazard and risk assessment techniques including:
- 1) size and type of container and quantity involved, nature of the container stress, potential behavior of the container and its contents, level of resources available, exposure potential to people, property, environmental and systems, weather conditions and topography
  - 2) the various monitoring equipment used to monitor and detect the hazards of toxicity, flammability, reactivity, radioactivity, corrosivity, oxygen deficiency etc.
  - 3) the proper usage, interpretation and limitations of available monitoring equipment
  - 4) the maintenance and testing procedures for available monitoring equipment
- G) Advanced hazardous material control, containment, and or confinement including:
- 1) the basic design and construction features of containers and bulk and nonbulk packaging used to store, process or transport hazardous materials including drums, cylinders, carboys, boxes or bags, cans or bottles, tank trucks and trailers, fixed tanks, portable tanks and intermodal containers and piping

- 2) the methods and precautions for controlling, containing, and confining hazardous materials releases of the nine UN/DOT hazard classes
  - 3) the options is implementing hazardous material control, containment and confinement procedures
  - 4) the proper selection and use of available tools, equipment
- H) Decontamination procedures including:
- 1) the advantages and limitations of dilution, absorption, chemical degradation, disposal, isolation
  - 2) the considerations associated with the placement, locations and setup of the decontamination site
  - 3) the sources of technical information for performing decontamination operations
- I) Record keeping and termination procedures including:
- 1) the activities required in terminating the emergency phase of an incident
  - 2) the preparation of the locally required report with supporting documentation as necessary
- J) Basic chemical, biological and radiological terminology and behavior
- K) Medical and base-line monitoring of personnel

**Category V Hazardous Materials Response Exercise**

Exercises are designed for anyone who may respond or be involved in a chemical emergency response incident. The exercise should participants should have received training in one of the four categories previously mentioned. Exercises combine individual and group training to create a realistic practical exercise event.

**Purpose:** To reveal planning weaknesses, resource gaps, improve coordination, clarify roles and responsibilities, improve individual performance and gain public recognition of the hazardous materials response program. These exercises will be coordinated by Hawaii Department of Health and State Civil Defense. Requirements for various scenario exercises will be

integrated into the overall exercise needs of the State.  
Exercises will be conducted at the following levels:

1. Table-top exercise
2. Functional exercise (EOC exercise)
3. Full-scale exercise (Field exercise)

Exercises consist of the performance of duties, tasks and operations very similar to the way they would be performed in a real emergency or chemical emergency incident.

## REFERENCES

1. Comprehensive and Environmental Response, Compensation and Liability Act as amended by Superfund Amendment Reauthorization Act, 42 U.S.C. Sections 9601-9675.
2. Thomas H. Seymour, "Review of the Superfund Worker Training Standards" presented at the 1988 National Governor's Association Conference on Title III, Washington, D.C.
3. 29 CFR 1910 Hazardous Waste Operations and Emergency Response; Final Rule, Department of Labor, March 6, 1989.
4. Hawaii's Administrative Rules, Title 12, Chapter 99, Hazardous Waste Operations and Emergency Response, Hawaii Department of Labor and Industrial Relations.
5. National Institute for Occupational Safety and Health, "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities", October 1985.

ANDRIA

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER

NG123

July 17, 1989

MEMORANDUM

TO: Hawaii State Emergency Response Commission

FROM: Director of Health

SUBJECT: Announcement of Upcoming HSERC Meeting

The purpose of this memorandum is to invite you to attend this year's first meeting of the Hawaii State Emergency Response Commission (HSERC) on Tuesday, August 1, at the State Department of Health. Since the last Commission meeting, many significant events have occurred, such as the Valdez oil spill which demonstrated the devastating environmental damage such an incident can cause. It emphasized the importance of coordinated Federal, State, and County preparedness for response to oil and hazardous substance emergencies.

The enclosed agenda lists the topics to be discussed at the meeting. The Technical Subcommittee of the Emergency Response Commission (TSERC) has worked diligently to prepare Hawaii's Oil and Hazardous Substances Emergency Response Plan and the Chemical Emergency Response Training Guidelines to insure preparedness for the State of Hawaii. Members of the TSERC are also training the "first responders" to an oil or hazardous materials emergency. Statewide personnel training and exercises are scheduled through October, 1989, and additional courses are being planned. In addition, the TSERC is proposing that an Oil and Hazardous Substances Conference be held for the State of Hawaii. The purpose of this conference would be to educate State and County officials, local agencies, and legislators concerning the importance of legislative and budgetary support to enhance the State's emergency response capability.

Hawaii State Emergency Response Commission  
July 17, 1989.  
Page 2

Several important TSERC-developed documents are also enclosed for your review. These documents reflect the TSERC's commitment to establish a comprehensive, integrated emergency response program for the State. The specific materials include:

- \* Hawaii's Oil and Hazardous Substances Emergency Response Plan (Draft IV)
- \* Chemical Emergency Response Training Guidelines (Draft III)
- \* Draft Agenda for State Oil and Hazardous Substances Conference
- \* Emergency Response Personnel Training and Exercise Schedule
- \* HSERC Meeting Summary of August 8, 1988
- \* Mailing lists for the TSERC and HSERC

Please take time to review these documents prior to the meeting in order to facilitate discussion.

Many valuable topics and important decisions will be discussed at this August 1st HSERC meeting. I personally plan to chair this meeting because of the significance of the issues. I would appreciate very much the attendance of all Commission members, especially the Directors.

Thank you very much for your support and involvement.



\_\_\_\_\_  
JOHN C. LEWIN, M.D.

Enclosures

cc: TSERC Members



JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
MEETING #5  
BOARD ROOM, 3RD FLOOR  
STATE DEPARTMENT OF HEALTH  
TUESDAY, AUGUST 1, 1989, 9:00 A.M.

AGENDA

- I. Opening Remarks
  
- II. State of Hawaii's Chemical and Oil Emergency Preparedness Program
  - A. Title III Progress
  - B. Local Emergency Planning Committees
  - C. Spills Update
  - D. Training, Exercises and Activities
  
- III. Regional Response Team and U.S. Coast Guard Update
  - A. Oceania Regional Response Team Plan
  
- IV. Initiatives and Proposals
  - A. Hawaii's Oil and Hazardous Substances Emergency Response Plan (Draft IV)
  - B. Chemical Emergency Response Training Guidelines (Draft III) and Upcoming Needs Assessment

C. State proclamation designating a  
HAZMAT Awareness/Emergency Preparedness Week  
by the Governor

D. State Oil and Hazardous Substances Conference

V. Other Business

VI. Closing Remarks/Adjournment

**HAWAII'S  
OIL AND HAZARDOUS SUBSTANCES  
EMERGENCY RESPONSE PLAN**

Supplemental to State of Hawaii Plan  
for Emergency Preparedness, Volume III  
Disaster Response and Assistance

Hawaii State Emergency Response Commission

Draft IV, June, 1989

TABLE OF CONTENTS

Table of Contents.....i  
Distribution List.....iii  
Record of Revisions.....v  
List of Figures and Tables.....vi  
List of Acronyms.....vii

Section Page

I. Introduction.....1  
    A. Background.....1  
    B. Statement of the Problem.....2  
    C. Purpose and Scope of the Plan.....5  
    D. Planning Assumptions.....7

II. Definition of Key Terms.....10

III. Hawaii's Oil and Hazardous Substance  
    Emergency Preparedness .....15  
    A. Coordinated Plans and Procedures.....15  
    B. Trained Personnel.....16  
    C. Equipment.....16  
    D. Information Systems.....17

IV. Elements of Hawaii's Emergency Response System.....19  
    A. Notification Policy.....19  
    B. Enforcement, Cost Recovery and Liability.....22  
    C. Incident Management.....23  
        1. Emergency Response.....23  
        2. Stabilization and Control.....25  
        3. Cleanup and Restoration.....26  
    D. Emergency Operation Centers.....29  
    E. Emergency Medical Services.....29  
    F. Technical Assistance - Government.....30  
    G. Technical Assistance - Industry.....30  
    H. Volunteer Services.....32  
    I. Public Information.....32

V. Responsibilities of Local, State, Federal Agencies, Industry  
    and Volunteer Organizations.....34  
    A. Overview.....34  
    B. Local Responders.....34  
    C. State Agencies.....37  
    D. Federal Agencies.....42  
    E. Industry.....46  
    F. Volunteer Organizations.....47

VI. Oil And Hazardous Substances Emergency Categories and Release Levels.....	48
A. Oil Spill Categories.....	48
B. Release Category Levels.....	49
VII. Plan Evaluation.....	51
A. Exercises.....	51
B. Incident Review.....	52
C. Training.....	54
D. Plan Review.....	55
E. Hazardous Substances Data Analysis.....	54
APPENDICES.....	56
Appendix I.....	56
Hawaii SARA Title III Section 304 Hazardous Substance Release Emergency Notification Guideline	
Appendix II.....	57
References	
Appendix III.....	58
Oil and Hazardous Substances: Sources of Technical Information	

DISTRIBUTION LIST

Jeremy Harris, Chairman  
Honolulu Local Emergency  
Planning Committee  
City and County of Honolulu  
530 South King Street #306  
Honolulu, Hawaii 96813

James Ahia, Co-Chairman  
Kauai Local Emergency  
Planning Committee  
Brewer Chemical  
P.O. Box 766  
Lihue, Hawaii 96766

Floyd Miyazono, Coordinator  
Maui Local Emergency  
Planning Committee  
County of Maui  
200 South High Street  
Wailuku, Hawaii 96793

Harry Kim, Coordinator  
Hawaii Local Emergency  
Planning Committee  
County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720

John C. Lewin, M.D., Chairman  
Hawaii State Emergency  
Response Commission  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96813

Bruce Anderson, Ph.D., Vice  
Chairman  
Hawaii State Emergency  
Response Commission  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801

Suzanne D. Peterson,  
Chairperson  
Board of Agriculture  
P.O. Box 22159  
Honolulu, Hawaii 96822-0159

Major General Alexis Lum  
Adjutant General  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495

Mario R. Ramil, Director  
Department of Labor and  
Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813

William W. Paty, Chairperson  
Board of Land and Natural Resources  
1151 Punchbowl Street, Room 130  
Honolulu, Hawaii 96813

Roger A. Ulveling, Director  
Department of Business and  
Economic Development  
P.O. Box 2359  
Honolulu, Hawaii 96804

Edward Y. Hirata, Director  
Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813

Jerrold M. Michael, Dean  
School of Public Health  
University of Hawaii  
1960 East-West Road  
Honolulu, Hawaii 96822

Jiggie Hommom, Manager  
Hawaii State Chapter  
American Red Cross  
P.O. Box 3948  
Honolulu, Hawaii 96812

Marvin Miura, Director  
Office of Environmental  
Quality Control  
550 Halekauwila Street, Room 301  
Honolulu, Hawaii 96813

Kathleen Shimmin, Co-Chairman  
Oceania Regional Response Team  
U.S. Environmental Protection  
Agency Region IX, (T-6)  
215 Fremont Street  
San Francisco, California 94105

Captain A. E. Tanos,  
Co-Chairman, Oceania Regional  
Response Team  
U.S. Coast Guard, 14th  
District  
300 Ala Moana Blvd.  
Honolulu, Hawaii 96850-4982

Leroy Hokana, Fire Chief  
Maui Fire Department  
21 Kinipopo Street  
Wailuku, Hawaii 96793

Frank Kahooohanohano, Fire Chief  
Honolulu Fire Department  
1455 South Beretania, Room 305  
Honolulu, Hawaii 96814

Tom Bello, Chief  
Hawaii Fire Department  
466 Kinooole Street  
Hilo, Hawaii 96720

Michael Mundon, Fire Chief  
4444 Rice Street, Room 230  
Lihue, Kauai 96766

# RECORD OF REVISIONS

CHANGE NUMBER	DATE OF CHANGE	DATE ENTERED	CHANGE MADE BY (SIGNATURE)



### List of Figures

- Figure I - Percentage of Oil and Hazardous Substances  
Emergencies by Categories, State of Hawaii 1988
- Figure II Percentage of Oil and Hazardous Emergencies  
By County for Hawaii 1988
- Figure III Chemical and Oil Spill Emergency Response  
Notification in Hawaii
- Figure IV Incident Management Generalized Diagram
- Figure V Matrix of Agency Responsibilities for Chemical and  
Hazardous Substances Emergency Response

### List of Tables

- Table I Summary of Oil and Hazardous Substances  
Emergencies in Hawaii Responded to During 1988

## ACRONYMS

DOH	Department of Health
SCD	State Civil Defense, Hawaii State Department of Defense
EPA	Environmental Protection Agency
EOC	Emergency Operations Center
EOP	Emergency Operation Plan
FEMA	Federal Emergency Management Agency
IC	Incident Commander
ICS	Incident Command System
DOT	Department of Transportation
OSC	On Scene Coordinator
PIO	Public Information Officer
RRT	Oceania Regional Response Team (Federal)
USCG	U.S. Coast Guard
HSERC	Hawaii State Emergency Response Commission
TSERC	Technical Subcommittee of the State Emergency Response Commiission
LEPC	Local Emergency Planning Committee
CAMEO	Computer Aided Management of Emergency Operations
USDOT	U.S. Department of Transportation
NCP	National Contingency Plan
CERCLA	Comprehensive Environmental Response Compensation and Liability Act as Amended
NRC	National Response Center
NDMS	National Disaster Medical System
NECC	National Emergency Coordination Center

**SECTION I**  
**INTRODUCTION**

**A. BACKGROUND**

Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) is entitled the Emergency Planning and Community Right-To-Know Act. This federal statute requires emergency response planning at the state and local levels. To comply with Title III the Governor was required to establish the Hawaii State Emergency Response Commission (HSERC). On April 23, 1987 Governor Waihee designated the Department of Health (DOH) as the lead agency to implement Title III.

In turn, the HSERC was required to delineate emergency planning districts and appoint local emergency response committees to facilitate in the preparation and implementation of local emergency response plans. Hawaii's four counties, Honolulu, Hawaii, Maui, and Kauai represent the emergency planning districts for the state.

The HSERC then established a technical subcommittee which was requested to draft a state plan to provide statewide guidance on oil and hazardous substances emergency response. The result is Hawaii's Oil and Hazardous Substances Emergency Response Plan.

B. STATEMENT OF THE PROBLEM

Hawaii's geographical isolation has made it imperative for the State to develop in-state capability to plan for/and respond to oil and hazardous substance, pollutant or contaminant emergencies. During the last several years this need has been met by establishing and maintaining a HAZMAT Team at the Honolulu Marine Safety Office through a joint agreement between U.S. Coast Guard (USCG) and the U.S. Environmental Protection Agency. EPA funding for the USCG Team will be terminated in July of 1990, therefore it is essential the state of Hawaii, in cooperation with the counties, develop in-state oil and hazardous substance emergency response capabilities.

During 1988 DOH responded to a total of forty-five oil and chemical emergencies in the islands which are listed in Table 1. Figure I illustrates the categories of oil and chemical spill emergencies in Hawaii in 1988. Nearly half of all the spills (44%) were oil related. The remaining spills were chemically hazardous in nature. Extremely Hazardous Substance (EHS), as defined under SARA Title III section 302, and Other Hazardous Substances, each made up twenty-four percent of the spills. The remaining eight percent were PCB related.

Table I

## SUMMARY OF OIL AND HAZARDOUS SUBSTANCES EMERGENCIES IN THE STATE OF HAWAII RESPONDED TO DURING 1988

<u>Date</u>	<u>County</u>	<u>Chemical</u>	<u>Quantity</u>
2/26/88	Oahu	Methylene Cholride	50 gallons
3/7/88	Oahu	Transformer oil w/PCBs	4000 gallons
3/22/88	Oahu	Black Oil	4000 gallons
3/23/88	Kauai	Oil/Tar Balls	
4/1/88	Kauai	Oil/Tar Balls	
4/2/88	Oahu	Oil/Tar Balls	
4/5/88	Maui	Oily/Water	
4/7/88	Oahu	Methene	
4/13/88	Oahu	Aviation Fuel	1000 gallons
4/18/88	Oahu	Transformer Oil w/PCBs	
4/18/88	Oahu	Oil Residues in Pipeline	
4/20/88	Maui	Gasoline	50 gallons
4/28/88	Maui	Unknown Chemical Explosion	
5/10/88	Oahu	Chlorine Residual	
6/21/88	Oahu	Oil/Tar Balls	
7/5/88	Kauai	Gasoline	
7/12/88	Oahu	Hydrogen Gas	
7/19/88	Oahu	Oil/Tar Balls	
7/22/88	Oahu	Oil	
8/4/88	Oahu	Amnonia	3000 gallons
8/20/88	Oahu	Gasoline	3000 gallons
8/25/88	Oahu	Sulfer (Molten)	
9/6/88	Oahu	Amonia	500 gallons
9/6/88	Oahu	Chloride	1 pound
9/11/88	Oahu	Hydrofluoric	250 gallons
9/13/88	Oahu	JP-4 Jet Fuel	
9/15/88	Oahu	Chlordane	
9/23/88	Oahu	Oil	
9/27/88	Oahu	Amonia	500 pounds
9/29/88	Oahu	Gas Cylinder	
9/30/88	Oahu	Sulfuric Acid	2500 pounds
10/18/88	Oahu	Red Paint	
10/25/88	Oahu	Amonia	300 pounds
11/4/88	Oahu	Hydrogen Sulfide	
11/10/88	Kauai	Cyanide Solution	4 pounds
11/16/88	Oahu	Old Fuel Tank	
11/22/88	Kauai	Gasoline Vapor	
11/25/88	Oahu	Gas Cylinder	
11/29/88	Oahu	#2 Disel Fuel	400 gallons
12/5/88	Oahu	Gasoline	
12/5/88	Oahu	Radioactive Container	
12/13/88	Oahu	Solvent	
12/24/88	Hawaii	#6 Fuel Oil Spill	3000 gallons

Figure I

PERCENTAGE OF OIL AND HAZARDOUS SUBSTANCE EMERGENCIES  
BY CATEGORIES, STATE OF HAWAII, 1988

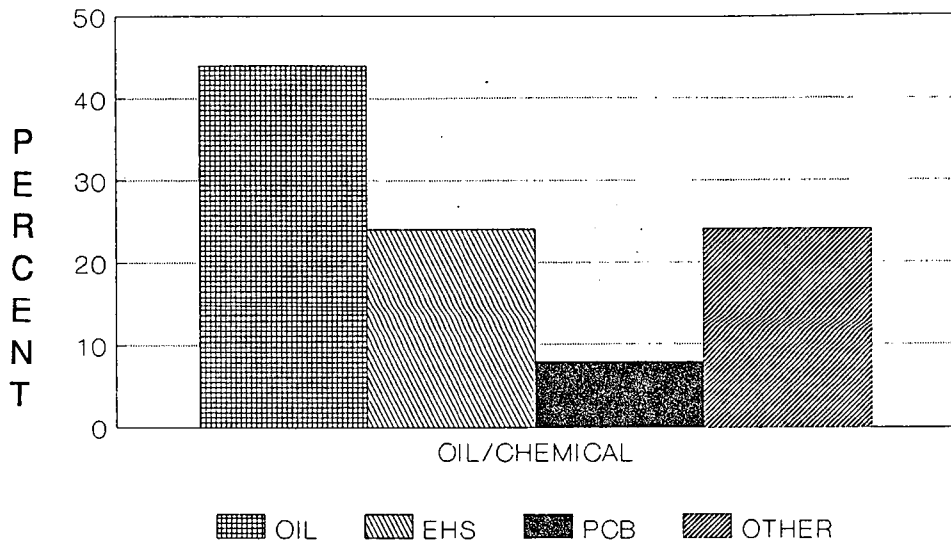


Figure II

PERCENTAGE OF OIL AND HAZARDOUS SUBSTANCE EMERGENCIES  
BY COUNTY, STATE OF HAWAII, 1988

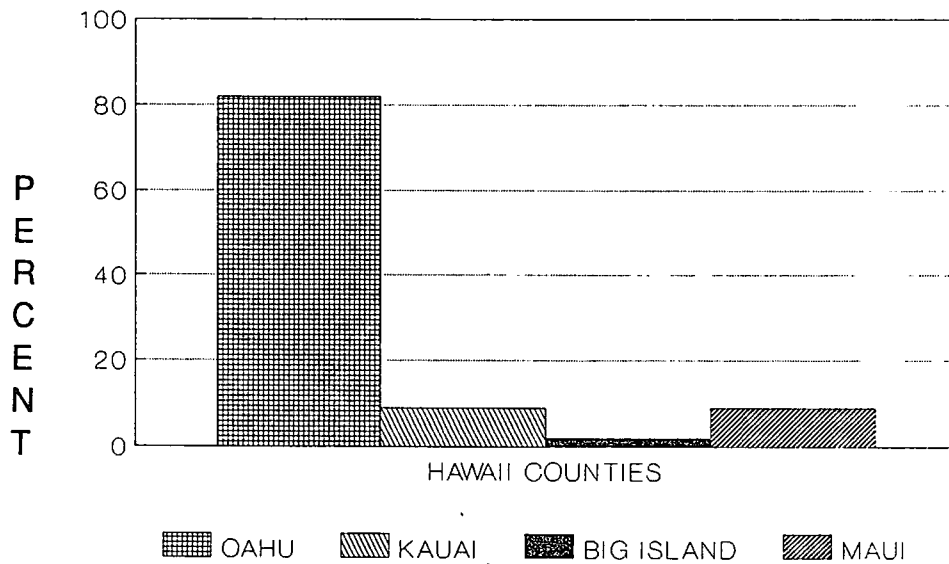


Figure II depicts the percentage releases by county. The vast majority, eighty-two percent, occurred on the island of Oahu. This is expected as Oahu has the greatest number of sites for potential hazards.

The Marine Safety Office of the USCG logs all the emergencies responded to by them in their database, Marine Safety Information Systems. A review of their database revealed that USCG responded to a total of 218 oil and chemical emergencies during 1988. A crude analysis of the spill sources show an estimated forty-five percent to be oil related. The other forty-five percent were of unknown sources. Five percent were hazardous wastes/chemicals and the other five percent appear to be related to drums, pipelines or dry docking.

#### C. PURPOSE AND SCOPE OF THE PLAN

The purpose of this plan is:

- 1). To establish a statewide guide for response to oil and hazardous substance emergencies.
- 2). To facilitate implementation of Title III requirements.
- 3). To compliment existing county local emergency response plans and federal emergency operations plans (EOPs), and;

4). To supplement the State of Hawaii's Plan for Emergency Preparedness, Volume III, Disaster Response and Assistance.

The Plan covers all reportable incidents involving the spill or release of oil or hazardous substances, to include transport incidents, fixed location mishaps, and abandoned materials incidents. It describes the unique roles and responsibilities of responders, identifies who will be in charge of an incident, and provides guidelines for coordinating local, state, federal, medical, private industry and volunteer emergency response resources.

State and county agencies and private industry emergency response resources should incorporate the special hazard specific requirements/procedures delineated in this plan into their EOPs. Local Emergency Planning Committees (LEPCs) are encouraged to use this plan as a model in developing their own detailed plans. County governments are expected to take the lead role during the initial response phases of an incident. State and/or federal agencies will provide resources and technical support to local governments during the emergency phases of an incident. State or Federal agencies will take the lead role for directing the cleanup and site restoration. Private industry or individuals are legally responsible for reporting their spills, performing cleanup, or hiring a cleanup contractor, and properly disposing of the spilled materials. Volunteer organizations such as the Hawaii



Chapters of the American Red Cross and American Lung Association are requested to provide support to the plan in accordance with their Charters.

#### D. PLANNING ASSUMPTIONS

The following assumptions provide a list of concepts to establish a general framework under which the plan is written.

1. The passage of SARA Title III requires that the state provide a leadership role in regards to hazardous substances and emergency response. The State will provide coordination and foster cooperation between state, county and federal agencies in response to oil and hazardous substances emergencies. The plan will establish how the coordination will take place by defining the roles and responsibilities of the parties and agencies involved.
2. There is currently a lack of state or county first responder capability for oil or hazardous substance emergency response. First response capability for oil or hazardous substances lies with the U.S. Coast Guard. However, they are planning to terminate its HAZMAT capability 1 July 1990. It is therefore essential that the state and counties develop adequate first response capability to replace the U.S. Coast Guard's responsibility. First response capability will center at

the county government level with fire, police, emergency medical and Civil Defense providing initial support at the scene for hazardous material incidents.

3. State responsibility is one of support to the local first responders. The state can provide support to county government through monitoring and backup assistance in health and environmental concerns, technical problems, resources, and serve as a liaison to the federal government in major hazardous substance incidents. In addition, the state will establish the planning and coordination network needed via the State Emergency Response Commission.
4. Support from federal agencies will be requested when it appears that county and state response capabilities may not be adequate to respond to the emergency.
5. The U.S. Coast Guard is the lead responding agency for oil spills that threaten or are in navigable waters. The state and county agencies provide support efforts in conjunction with the federal lead.
6. All persons on scene in a hazardous substances incident will use the incident command system utilized by State fire personnel.

7. The senior fire officer is the incident commander (IC) for all hazardous substance incidents in Hawaii unless otherwise determined. The state and federal on-scene coordinator and the Public Information Officer (PIO) will coordinate activities through the IC until such time as the emergency response phase has terminated and recovery begins.

**SECTION II**  
**DEFINITION OF KEY TERMS**

- A. Emergency Operations Center (EOC): The site from where local, state and federal agencies coordinate off-scene support to on-scene responders.
- B. Emergency services: Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to or recover from an emergency.
- C. Hazardous Substance : Any substance or mixture of substances, including but not limited to feedstock materials, products, or wastes, which, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may:
- 1). Cause or significantly contribute to an increase in serious irreversible or incapacitating reversible illness; or
  - 2). Pose a substantial present or potential hazard to human health, to property, or to the environment when improperly stored, transported, released, or otherwise managed. (HRS: Chapter 128D, Environmental Emergency Response).

- D. Hazardous Substance Specialists: Individuals specially trained and equipped to respond to a hazardous substance emergency. These include trained individuals from county, state or federal departments as well as those contracted by government to respond to a hazardous substance incident.
- E. Incident: Any event, that results in a spill or release of oil or hazardous substance that may pose a threat to public health or the environment.
- F. Incident Commander (IC): The One individual in charge at any given time of an incident. During the emergency phases the Incident Commander will normally be an officer of the local the fire department. During cleanup and restoration, the incident commander will normally be the lead state agency official (DOH). The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.
- G. Incident Command Post: The on-scene location where field commands are given. The Incident Commander and the On-Scene Coordinator direct the on-scene response from this location.
- H. Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating with a common command structure. In Hawaii, all emergency response operations relating to

oil and hazardous substances follow ICS procedures and practices as developed and taught by FEMA and used by the Hawaii Fire Departments throughout the State.

- I. Oil: Gasoline, crude oil, fuel oil, diesel oil, lubricating oil, sludge, oil refuse or any other petroleum-distillates.
- J. On Scene Coordinator (OSC): The individual on-scene responsible for coordinating the resources at each respective level of government. OSC's may include:
- County On-Scene Coordinator (COSC)
  - State On-Scene Coordinator (SOSC)
  - Federal On-Scene Coordinator (FOSC)
- K. Public Information Officer (PIO): A person designated by the incident commander who, in coordination with the lead state agency, provides information to the public and the media.
- L. Hazardous Substances Response Team: A team of emergency responders specially trained, equipped and organized to respond to hazardous substances incidents.

M. Responsible Party: The person or firm who by law is liable for the clean-up of any spill or release of hazard substances, contaminants or pollutants into the environment.

N. Unified Incident Command System: The method by which local, state and federal agencies and OSCs will work together with the Incident Commander to:

1. Determine the overall objectives for management of an incident.
2. Determine the roles and responsibilities for a given incident.
3. Select a strategy to achieve agreed upon objectives.
4. Deploy resources to achieve agreed upon objectives.

O. Hawaii State Emergency Response Commission (HSERC): The governor appointed commission established under SARA Title III which is responsible for establishing local emergency planning districts, supervising and coordinating the activities of local emergency planning committees and reviewing county hazardous substances emergency response plans.

- P. Local Emergency Planning Districts: The geographical areas established by the HSERC for which local emergency planning committees must develop a hazardous substances emergency response plan. In Hawaii, the county boundaries delineate the local emergency planning districts.
- Q. Local Emergency Planning Committee (LEPC): The committees established under SARA Title III and appointed by the HSERC to develop local hazardous substances emergency response plans. The county based committees have been established for each of the four major counties: Maui, Kauai, Hawaii and Honolulu.
- R. Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III: The federal law also referred to as the Emergency Planning and Community Right-to-Know Act of 1986, established to help communities meet their needs in regard to potential chemical emergencies.



### SECTION III

#### HAWAII'S OIL AND HAZARDOUS SUBSTANCES

##### EMERGENCY PREPAREDNESS PROGRAM

Hawaii's preparedness for oil and hazardous substance emergencies is contained in this supplemental plan and consists of four main elements; A) coordinated plans and procedures, B) trained personnel, C) equipment, and D) information systems.

#### A. COORDINATED PLANS AND PROCEDURES

The plan outlines the basic responsibilities of those who may be involved in an oil or hazardous substance emergency. Unique procedures necessary to implement the plan will be developed by each affected agency and incorporated into their existing EOPs. DOH and SCD will collaborate with other response agencies to see that procedures are consistent with each other and the plan.

The state and local plans will be examined at least once a year by each LEPC. Training exercises will be undertaken and monitored by DOH and SCD. Based on critiques of the drills and/or actual emergencies, local plans and Hawaii's preparedness plan will be reviewed and revised annually by the LEPCs and HSERC.

## B. TRAINED PERSONNEL

The state training program will include a basic hazardous substances awareness course recommended for all persons that are likely to be first responders in the course of their work, and a series of more advanced courses recommended for personnel requiring greater expertise and specialization. Supplemental training for persons that must respond to and report oil spills should also be developed to address state needs. Detailed discussion of training guidelines have been established in the document entitled State of Hawaii Chemical Emergency Response Training Guidelines.

## C. EQUIPMENT

Minimum equipment usage and maintenance standards shall be developed by the HSERC for different types of responders. An individual trained for a certain level of response capability will need a minimum level of equipment handling skills to safely perform the task for which they are trained. A more complete discussion of the equipment standards will be developed as additional resource material to this plan.

## D. INFORMATION SYSTEMS

### 1). State Information System

A computerized information system, utilizing CAMEO-Computer Aided Management of Emergency Operations, is being developed by state and county governments. Under SARA Title III, facilities that store hazardous or extremely hazardous substances above specific quantities must report certain information to HSERC, LEPCs, and the County Fire Departments. The information from these reports are entered into the CAMEO system to provide data on the location and type of hazards these substances pose at fixed sites around the state. Governmental Agencies operating or currently purchasing CAMEO capability in Hawaii include:

- 1) U.S. Coast Guard, Honolulu
- 2) Hawaii Department of Health
- 3) City and County of Honolulu Fire Department
- 4) County of Maui Civil Defense Agency
- 5) County of Kauai Civil Defense Agency
- 6) County of Hawaii Fire Department

This plan together with the Hawaii Hazardous Substances Information System, the training program, and the equipment standards is designed to ensure that emergency responders are adequately prepared for oil and hazardous substance incidents.

## 2. Other Information Systems

Other chemical or oil information can be obtained from state and federal agencies and industry. They include the Agency for Toxic Substances and Disease Registry (ATSDR) Hotline, Chemical Transportation Emergency Center (CHEMTREC), Oil and Hazardous Materials Technical Assistance Data System (OHMTADS), and Chemical Hazard Response Information System (CHRIS). See Appendix III for contact telephone numbers.

**SECTION IV**  
**ELEMENTS OF HAWAII'S OIL AND HAZARDOUS SUBSTANCES**  
**EMERGENCY RESPONSE SYSTEM**

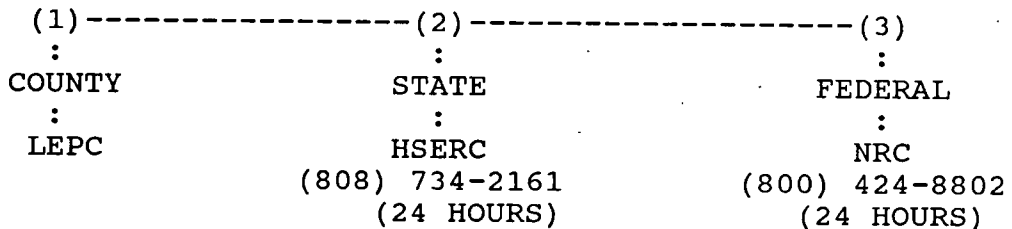
**A. NOTIFICATION**

**1. Notification Policy.**

Any oil or hazardous substances spill that may threaten public health or the environment must be reported to all three levels of government as soon as possible. See Appendix I for a specific guideline for reporting releases of hazardous substances that exceed reportable quantities. As shown in Figure III, a person reporting a spill must dial three numbers to ensure that all the proper authorities are notified. Federal law requires that the HSERC, the appropriate LEPCs and National Response Center are notified in the event of a chemical or oil release.

**FIGURE III**

**Chemical and Oil Emergency Response Notification in Hawaii**



Hawaii	935-0031; After hrs, wkends & holidays: 935-3311
Maui	244-7721; After hrs, wkends & holidays: 244-7811
Kauai	245-4001; After hrs, wkends & holidays: 742-1373
Honolulu	523-4121; After hrs, wkends & holidays: 911

2. Emergency Notification Information Requirements: The following information should be provided immediately by the person performing the emergency notification (to the extent known at the time of the notice and so long as no delay in responding to the emergency results):

- a. Identify chemical name(s) and/or substance(s) involved in the release.
- b. Indicate if substance is on list referred to in section 302(a) of SARA.
- c. Estimate of the quantity of the substance(s) released.
- d. Time and duration of release.
- e. Medium or media (air, water etc.) into which release occurred.
- f. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.

- g. Proper precautions to be taken as a result of the release, including evacuation (unless such information is readily available to the community emergency coordinator pursuant to the emergency plan).
  - h. The name and telephone number of the person(s) to be contacted for further information.
  - i. Address or description of location where release occurred.
3. Follow-up Emergency Information Notification: Follow-up emergency notice as specified under section 304(c) of SARA should be provided as soon as practical after the release occurs. This written notice should include the same information as listed above under 2a. through 2i. and should be revised and updated to include any additional information with respect to:
- a. Actions taken to respond to and contain the release.
  - b. Any known or anticipated acute or chronic health risks associated with the release, and
  - c. Where appropriate, advice regarding medical attention necessary for exposed individuals.

## B. ENFORCEMENT, COST RECOVERY AND LIABILITY

The On-Scene Coordinator (OSC) is responsible for proper documentation to support all actions taken when responding to incidents involving oil discharges or hazardous substance releases. Documentation should be sufficient to establish circumstances involved in an incident including source of discharge or release, identity of responsible parties, and actual or potential impact on the public health and welfare and the environment. Documentation should include collection and safeguarding accurate accounting information for costs incurred, record of legal notices of suspected responsible parties, sample collection and chain of custody procedures, photographs, and other investigative records. Because the OSC at the scene of a release may be from any one of several agencies, uniform procedures shall be provided wherever possible for collection of information and samples for cost recovery and criminal actions. Cost documentation in particular must be adequate to withstand scrutiny of the court during litigation.

In order for a violation to exist, documentation of a discharge or release quantity must be reported as described in the notification section. The Environmental Emergency Response law (HRS Chapter 128D), defines recovery of costs and liability (Sections 128D-5, 128D-6) associated with a discharge in the State of Hawaii. Any costs incurred by the state may be recovered from the responsible party. Any party



who is liable for a release, or a threat of a release, of hazardous substances and fails to provide removal or remedial action shall be liable to the department for punitive damages.

## C. INCIDENT MANAGEMENT

### 1. Hazardous Substances Emergency Response

A hazardous material incident may involve county, state, federal and private sector management. A centralized command structure will be established for any incident. This system will be based on the Incident Command System (ICS) currently used by all fire personnel in Hawaii.

There may be a scenario where more than one hazardous substances emergency happens at one time, a multiple events occurrence. In this case the OSC of both incidents should assess the initial threat of each event and assign available resources accordingly. If there are not adequate resources to be dispersed to both locations, a determination of priority based on the greatest potential threat should be made. If need be, the secondary emergency location can be evacuated until resources can be expended.

a. Incident Commander

The first emergency responder on the scene will assume to be the incident commander. The person will:

- (1) Assess the situation
- (2) Activate the local emergency response system
- (3) Initiate actions to protect the public

b. County Incident Command System

The lead county emergency response agency predesignated in county EOPs will:

- (1) Assume the incident command upon arriving on scene.
- (2) Designate a county on-scene coordinator (COSC) for local resources.
- (3) Establish an appropriate incident command post
- (4) Be in charge of and responsible for all emergency response operations.
- (5) The highest ranking fire official on scene will normally be designated the incident commander.

c. Unified Incident Command System

The IC system will be used if more than one level of government is involved. All designated on-scene coordinators (OSCs) will report to the incident command post to assist the incident commander.

d. Change-of-Command

Incident command will remain at the county level until emergency operations, which include stabilization and control activities, are completed unless:

- (1) The local resources are overtaxed and the incident commander requests one of the other on-scene coordinators to assume control.
- (2) The incident occurs in areas of federal jurisdiction, such as defense installations or United States waters, in which case, the appropriate federal agency will be the incident commander. (Section 105, CERCLA).

2. Stabilization and Control

Under most circumstances, the incident command will remain at the county level during the stabilization and control phase of a response. If requested, an OSC from a state or federal

agency could assume control. Several levels of government could become involved in this phase. The incident commander and OSCs are expected to work within a unified command structure.

### 3. Cleanup and Restoration

- a. State Incident Commander - Once the emergency is over, and stabilization and control measures are taken, local emergency responders will return to normal duties. At this time, the county incident commander will turn command over to the state on-scene coordinator (normally DOH) who will assume incident command authority and direct cleanup and restoration. County agencies may need or choose to remain involved.

Cleanup and restoration activities include:

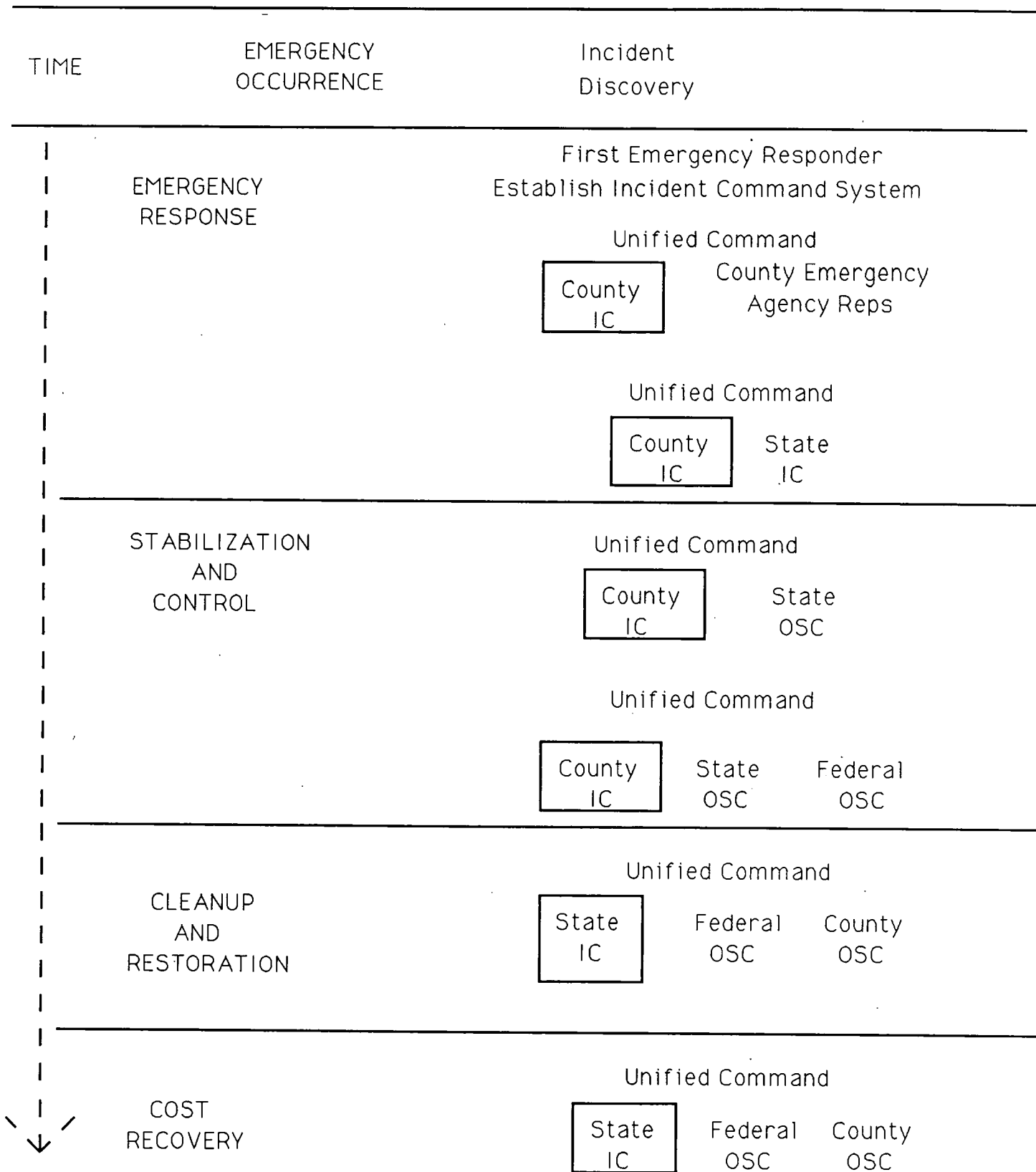
- (1) Compliance with cleanup standards
- (2) Restoration of environment and site
- (3) Investigation of cause
- (4) Assessment of health and environmental impact
- (5) Enforcement actions
- (6) Cost recovery

b. Federal Command - The federal on-scene coordinator (FOSC) will assume command if requested by the state or if the incident occurs in an area under federal jurisdiction.

c. Incident Management - The following diagram, Figure IV depicts the command structure described in the previous Section. The outlined box indicates the incident commander. The county on-scene coordinator (COSC) is the incident commander (IC) unless otherwise designated. For a minor incident this structure may not proceed beyond the second box. For a major incident the command structure builds during the emergency phase as various agencies and levels of government arrive on scene. Major incidents may require the federal government to assume incident command early in the response. Note that during cleanup and restoration phases, the incident command shifts to the state or federal government.

FIGURE IV

Incident Management Generalized Diagram



#### D. EMERGENCY OPERATIONS CENTERS (EOCs)

During major incidents, the heads of county and state agencies or their designated representatives will meet at Civil Defense EOCs to coordinate their off-scene support to on-scene operations. The federal government may activate the Regional Response Team (RRT) to coordinate federal off-scene support.

The following describes the county, state and federal On-Scene Coordinators in relation to the EOC:

1. The county EOC will be activated by the Civil Defense Administration, in coordination with the county OSC.
2. The State EOC will be activated by the Director of the State Civil Defense in coordination with the state OSC.
3. The Oceania Regional Response Team (RRT) will be activated by the chairpersons of the RRT when there is a major incident or upon request from the FOSC or a member of the RRT.

#### E. EMERGENCY MEDICAL ASSISTANCE

The Department of Health has Emergency Ambulance Units based Statewide to provide emergency medical services. These services can be accessed by dialing 911, and on the island of Hawaii by calling the County Fire Department. The ambulance

personnel have been trained in radiological and chemical emergency response, and ninety-five percent of the time can respond on the average of twenty minutes to any location in the State.

If the State and County resources cannot handle the emergency, the National Disaster Medical System (NDMS) can be activated by authorized State officials and arrive on-the scene between six and eight hours. Requests for NDMS activation should be made to the National Emergency Coordination Center (NECC) operated by the Federal Emergency Management Agency,

Procedures for decontamination in the field are being drafted for emergency ambulance personnel. Each hospital facility is responsible for their decontamination procedures as put forth in their emergency operation plans (EOP). All hospitals have critical care capability, but some are better equipped in handling hazardous substances injuries. Thus, patients will either be stabilized and transferred to the appropriate facility, or given comprehensive treatment.

#### F. TECHNICAL ASSISTANCE - GOVERNMENT

##### 1. State

The Hawaii Poison Control Center provides 24 hr. immediate toxicological information and medical treatment advice to on-scene responders.



2. Federal

For public health information relating to the toxicity, chemistry and decontamination of hazardous materials the Agency for Toxic Substances and Disease Registry provides 24 hour service.

G. TECHNICAL ASSISTANCE - PRIVATE INDUSTRY

1. CHEMTREC is an off-scene 24 hr. information service operated by the Chemical Manufacturers Association. CHEMTREC can supply chemical and safety data as well as contacts to product manufacturers.
2. Clean Islands Council, a nonprofit cooperative organization of petroleum companies which contracts to control and cleanup oil spills in Hawaii waters.
3. The Shipping Industry is a source of information on transshipment of oil and hazardous substance throughout the state of Hawaii. The following companies are contacts: Matson Shipping Company, Sause Brothers Ocean Towing Company, Honolulu Shipyard, Young Brothers, TheoDavies Marine Agencies, Hawaiian Marine Lines.
4. Brewer Chemical Corporation, a seller of industrial chemicals, can provide technical support for chlorine emergencies.

## H. VOLUNTEER SERVICES

1. American Red Cross - can offer emergency relief in the form of food, shelter and clothing.
2. Salvation Army - can provide emergency food, shelter and clothing.
3. Radio Amateur Civil Emergency Service (RACES) - can provide radio communications through a network of amateur radio operators. Contact through local emergency coordinator.
4. American Lung Association, Hawaii Chapter - can provide health information on inhalation exposure to chemicals.
5. Other locally available volunteer services.

## I. COORDINATION OF PUBLIC INFORMATION

The news media can provide both important and detrimental information about the nature of an incident. Successful emergency operations require accurate and timely public information. A Public Information Officer (PIO) will be designated by the incident commander or OSC to issue

information about the incident. The PIO will issue information in coordination with the DOH information representatives. Public information will be coordinated between on-scene and off-scene operations within the EOC. DOH will provide the PIO with timely and accurate public health information.

## SECTION V

### RESPONSIBILITIES OF LOCAL, STATE AND FEDERAL AGENCIES, INDUSTRY AND VOLUNTEER ORGANIZATIONS

#### A. OVERVIEW OF THE RESPONSIBILITIES OF COUNTY, STATE AND FEDERAL AGENCIES, INDUSTRY AND VOLUNTEER ORGANIZATIONS.

Figure V is a matrix which shows the responsibilities of the various agencies and organizations at each level of government that might be involved in an oil or hazardous substance emergency response. Because county resources vary, exceptions may occur depending on the county in which an incident occurs. Agency participation depends on the type of incident, its severity, and the threat to health and welfare. County government should assume the lead unless circumstances dictate the passing of command to another level of government.

#### B. SPECIFIC RESPONSIBILITIES OF COUNTY AGENCIES

1. Provide personnel who have been trained in oil and hazardous substances emergency response.
2. Provide an incident commander and establish a command post. Establish a unified command with other government agencies depending on the incident.

Figure V

Matrix of Agency Responsibilities for Chemical and Hazardous Substances  
Emergency Response

STATE, COUNTY AND PRIVATE AGENCIES	First Responder	Emergency Notification	Emergency Mitigation	Technical Assistance	Clean-Up Activities	Damage Assessment	Enforcement
STATE							
Civil Defense		X					
DOH	X		X	X	X	X	
DOT				X			X
DLNR				X			X
DOA				X		X	X
DLNR				X			
DBED				X			
OSP				X	X	X	
COUNTIES				X	X	X	
Fire Department	X	X	X	X		X	
Police	X	X	X	X		X	X
Civil Defense	X	X				X	X
Public Works				X		X	
FEDERAL	X	X	X	X	X	X	X

3. Provide Incident Commander (IC).

4. Undertake emergency response actions including:

- Notifications to LEPC
- Initial hazard determination
- Initial measurements to detect concentrations of materials if possible
- Spill containment if possible
- Communications
- Contamination Control
- Life-saving/rescue
- Control of exposure for emergency workers and the public
- Emergency medical care
- Fire fighting
- Security (site perimeter, traffic and crowd control)
- On-scene liaison with other parties
- Providing public information
- Evacuation
- Shelter
- Initial decontamination if necessary

These activities are generally shared among county officials fire and law enforcement, emergency medical, and public works, along with support from the State Civil Defense Agency and Department of Health.

## C. SPECIFIC RESPONSIBILITIES OF STATE AGENCIES

### 1. State Civil Defense (SCD)

- a. Maintains 24-hour notification capability.
- b. Notifies DOH, other notifications made as needed or upon request.
- c. Activates, operates and maintains the State Civil Defense Emergency Operating Center.
- d. Provides and/or coordinates state-wide communications systems.

### 2. Department of Health (DOH)

- a. Receives notification via authorized sources.
- b. Provides State On Scene Coordinator (SOSC): neighbor islands SOSC will be the District Health Officer (DHO), or District Health Service Administrator (DHSA), or his designated representative.
- c. Provides technical assistance and advises on necessary protective actions.

- d. Provides assistance in hazard determination.
- e. Evaluates the environmental implications of a spill, and possible public health effects.
- f. Provides support to hospital emergency room for contamination control and toxicological information access.
- g. Coordinates state support to on-scene personnel in cooperation with the SCD.
- h. Liaison with federal agencies, and the private sector as needed.
- i. Collects and analyzes air, water, soil, vegetation or tissue samples (possibly through contract).
- j. Identifies clean-up requirements and works with governmental and private industry to insure that clean-up/restoration is done to specified standards.
- k. If necessary, coordinates with Governor to exercise Governor's authority to protect health and safety and the environment.
- l. Insures that materials are disposed of in an appropriate manner.



- m. Investigates cause and pursues enforcement actions.
- n. Collects and maintains data on statewide Oil and Hazmat Response incidents for evaluation and planning purposes.

3. Hawaii Department of Transportation (DOT)

- a. Notifies the HSERC and local emergency response personnel if DOT personnel are first on-scene.
- b. Closes a state highway harbor or airport and re-routes traffic as requested and necessary.
- c. Provides barricades and personnel to implement a closure and detour.
- d. Provides technical assistance in regarding oil and hazardous substances transportation spill incidents.
- e. In cooperation with DOH, coordinates the clean-up operations for spills that occur on state highways, in harbors, and property

4. Department of Land and Natural Resources (DLNR)

- a. Notifies the HSERC and local emergency response personnel if DLNR personnel are first on scene.
- b. Responds to an incident that could degrade state parks land or waters to the point that fish or wildlife or their habitat would be adversely affected.
- c. Evaluates and documents impact on fish and wildlife and determines natural resource damages for losses of fish, wildlife or habitat, to include preparation of Natural Resource Damage Assessments and recovery of damages.
- d. Provides advice and counsel as necessary and if possible.
- e. For an incident affecting a state park, Parks and Recreation personnel assists other agencies in crowd and/or traffic control and provides equipment and facilities, if possible.
- f. If requested by SOSC, DLNR will provide support (when possible) to emergency responders (radio systems,

dispatch and command center public information personnel, kitchens and other support services).

- g. In cooperation with DOH, coordinates the clean-up operations for spills that occur on DLNR lands and waters.

#### 5. Department of Agriculture

- a. Provides on-site technical support to agricultural chemical spills.
- b. Evaluates adverse impact of an accident on agricultural resources.
- c. Provides support for the sampling and analysis of pesticides and other agricultural chemicals (if possible).

#### 6. Department of Labor and Industrial Relations

- a. Provides support for air monitoring to emergency responders, and to ensure that occupational safety and health is not compromised.
- b. Provides technical support for chemical analysis of air contaminants.

7. Department of Business and Economic Development

- a. Provides support for information on economic impacts of an incident and remedial actions.

8. Office of State Planning

- a. Provides support for information and expertise on Coastal resources and access through the Coastal Zone Management Program.
- b. Provides statewide land use planning support in the event of a remedial response investigation.

D. SPECIFIC RESPONSIBILITIES OF FEDERAL AGENCIES

The following section briefly summarizes federal agency technical assistance outlined in the National Contingency Plan.

1. The U.S. Coast Guard (USCG) Provides:

- a. Expertise and management of Federal Programs in domestic/international fields or port safety and security, maritime law enforcement, ship navigation, safety or vessels and marine facilities.

- b. Predesignated federal on-scene coordinator (FOSC) for oil and hazardous substance emergencies in the coastal zone if a federal response is required and provides FOSC support for inland hazardous substance emergencies until relieved by EPA.
- c. Continuously manned facilities which can be used for command, control, and surveillance of oil discharges and hazardous substance releases occurring in the coastal zone.

2. Environmental Protection Agency (EPA) provides:

- a. Expertise on environmental effects of oil discharges or releases of hazardous substances, pollutants, or contaminants and environmental pollution control techniques.
- b. On-scene coordinator (FOSC) for the inland zone if a federal response is required after initial USCG FOSC role is completed for the inland zone. EPA requires 24 to 48 hours time to respond to a hazardous substance release in Hawaii due to travel time from Region IX San Francisco.
- c. Scientific support coordinator for responses in inland areas.

3. Department of Defense (USDOD) assumes incident command if an incident involves defense related materials. It acts as the lead response agency within the designated National Security Area.
4. Department of Transportation (USDOT) offers expertise in the requirements for packaging, handling and transporting regulated hazardous substances.
5. Department of Commerce (DOC), through National Oceanic and Atmospheric Administration (NOAA), provides:
  - a. Scientific expertise on living marine resources and their habitats.
  - b. Scientific Support coordinator (SSC) who will coordinate scientific support for responses and contingency planning in coastal and marine seas.

They can assess hazards that may be involved, predict movement and dispersion of oil and chemicals through trajectory modeling and provide information on sensitive coastal environments.

- c. Information on actual and predicted hydrologic, and oceanographic conditions for marine, coastal, and inland waters. They can provide charts and maps including tides and circulation information for coastal and territorial waters and for the Great Lakes.
  - d. Information on actual and predicted meteorological conditions through the National Weather Service.
6. U.S. Navy is knowledgeable in ship salvage, shipboard damage control and diving, It has an extensive array of specialized equipment and personnel that can be used for collection, containment and removal of pollution materials.
7. Department of Health and Human Services (DHHS) is responsible for providing assistance on all matters related to the assessment of health hazards and protection of both response workers' and the public's health. This includes the Agency for Toxic Substances and Disease Registry (ATSDR) which provides advice to health care providers in cases of public health emergencies and coordinates assistance from the Center for Disease Control (CDC), NIOSH and the FDA.
8. The Federal Emergency Management Agency (FEMA): Provides advice and assistance to the OSC on coordinating civil emergency planning and mitigation efforts with other

federal agencies, State and local governments, and the private sector. In the event of a major disaster declaration or emergency determination by the President, FEMA will coordinate all federal disaster or emergency actions with the FOSC.

9. Department of the Interior (DOI) has jurisdiction over the National Park System, National Wildlife Refuges and Fish Hatcheries, forest and grazing lands, and certain water projects in western states. In addition, bureaus and offices have relevant expertise as follows:

a. Fish and Wildlife Service: Fish and wildlife, including endangered and threatened species, migratory birds, certain marine mammals; habitats, resource contaminants; laboratory research facilities.

b. Geological Survey: Geology, hydrology (groundwater and surface), and natural hazards.

#### E. RESPONSIBILITIES OF PRIVATE INDUSTRY

1. Private industry is responsible for familiarizing themselves with Hawaii's emergency response plan and working with state and local government to see that their emergency operations plans are consistent with this plan and local plans.



2. Private industry is responsible for responding to emergencies as required by law unless otherwise directed by the government agency with jurisdiction to enforce the applicable law.
3. Private industry is responsible for cleanup and site restoration when required to do so by law or when industry in its discretion decides to do so.
4. When requested and if possible, private industry will provide expertise and resources to local and/or state government to help mitigate the effects of a hazardous substances incident.
5. Private clean-up contractors can provide resources, equipment and knowledge on the removal and disposal of contamination.

#### F. RESPONSIBILITIES OF VOLUNTEER ORGANIZATIONS

Volunteer organizations such as Red Cross, the Salvation Army and RACES can provide public assistance in the form of food clothing, shelter and communications during incidents where the public welfare is affected.

**SECTION VI**  
**OIL AND HAZARDOUS SUBSTANCES EMERGENCY CATEGORIES AND RELEASE**  
**LEVELS**

**A. OIL SPILL EMERGENCY CATEGORIES**

The National Contingency Plan (NCP) establishes the following categories of oil discharges based strictly on size. The size classes below are not meant to imply associated degrees of hazard to public health or welfare, nor are they a measure of environmental damage.

Minor Discharge means a discharge to the inland waters of less than 1000 gallons of oil, or a discharge to the coastal waters of less than 10,000 gallons of oil.

Medium discharge means a discharge of 1000 to 10,000 gallons of oil to the inland waters, or a discharge of 10,000 to 100,000 gallons of oil to the coastal waters.

Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters, or more than 100,000 gallons of oil to the coastal waters.

A high level of public interest in a spill, regardless of classification, will often necessitate special response efforts and may require the services of a Public Information Officer (PIO).

B. HAZARDOUS SUBSTANCES RELEASE CATEGORY LEVELS

1. Size classes of hazardous substance releases refers to the following size classifications which are provided as guidance to the OSC for meeting pollution reporting requirements in Subpart C of the NCP. The final determination of the appropriate classification of a release will be made by the OSC based on consideration of the particular release (e.g., size, location, impact, etc.).

a. Minor release means a release of a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health or welfare of the environment.

b. Medium release means all releases not meeting the criteria for classification as a minor or major release.

c. Major release means a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health or welfare or the environment of results in significant public concern.

**SECTION VII**  
**PLAN EVALUATION**

Plan evaluation is necessary to assess the effectiveness of proposed plan of action. The following methods may be utilized to evaluate this plan.

**A. EXERCISES**

The plan should be evaluated through exercises to see if the required activities are effective in practice and/or if there are more efficient ways of responding to a real emergency. Simulations can be full-scale, functional, or tabletop exercises.

A full-scale exercise is a mock emergency in which the response organizations that would be involved in an actual emergency perform the actions they would take in the emergency. These simulations may focus on limited objectives (e.g., the command structure). The responsible environmental, public safety, and health agencies simulate, as realistically as possible, notification, hazards identification and analysis, command structure, command post staging, communications, health care, containment, evacuation of affected areas, cleanup, and documentation.

Responders use the protective gear, radios, and response equipment and act as they would in a real incident. These multi-agency exercises provide a clearer understanding of the roles and resources of each responder.

A functional exercise involves testing or evaluating the capability of an individual or multiple functions, or activities within a function.

A low-cost, valuable version of an exercise is the staging of a tabletop exercise. In this exercise, each agency representative describes and acts out what they would do at each step of the response under the circumstances given.

Exercises are most beneficial when followed by a meeting of all participants to critique the performance of those involved and the strengths and weaknesses of the plan's operation. The use of an outside reviewer, free of local biases, is desirable. The emergency plan should be amended according to lessons learned. Provisions should be made to follow up exercises to see that identified deficiencies are corrected.

## B. INCIDENT REVIEW

When a hazardous substance incident does occur, a review or critique of the incident is a means of evaluating the plan's effectiveness. Recommendations for conducting an incident review are:

- \* Assign responsibility for incident review to the same organization responsible for the plan update.
- \* Conduct the review only after the emergency is under control and sufficient time has passed to allow emergency respondents to be objective about the incident.
- \* Use questionnaires, telephone interview, or personal interview to obtain comments and suggestions from emergency respondents. Follow-up non-respondents.
- \* Identify plan and response deficiencies: items that were over-looked, improperly identified, or were not effective.
- \* Convene the planning team to review comments and make appropriate plan changes.

\* Revise the plan as necessary. Communicate personal or departmental deficiencies informally to the appropriate person or department. Follow up to see that deficiencies are corrected.

### C. TRAINING

Training courses can help with planning and evaluation by sharpening response personnel skills, presenting up-to-date ideas/techniques, and promoting contact with other people involved in emergency response. Everyone who occupies a position that is identified in the plan must have appropriate training. This applies to persons at all levels who serve to coordinate or have responsibilities under the plan, both those directly and indirectly involved at the scene of an incident.

The training could be a short briefing on specific roles and responsibilities, or a seminar on the plan or on emergency planning and response in general. However the training is conducted, it should convey a full appreciation of the importance of each role and the effect that each person has on implementing an effective emergency response.



#### D. PLAN REVIEW

The plan will be reviewed annually by the Local Emergency Response Committees (LERC), and the Regional Response Team (RRT). Reviews will incorporate new ideas and techniques and provide opportunity for overall modifications and updating of the plan.

#### E. OIL AND HAZARDOUS SUBSTANCES DATA ANALYSIS

Another means to evaluate the plan is by summarizing the character, frequency and distribution of hazardous materials and its storage, transport and release. This will identify patterns and trends that can provide insight into how the plan and hence, the human response to emergencies, can be improved.

This method of assessment will become possible as the state accumulates accurate storage, release and clean-up data acquired through the reporting requirements of Title III, Sections 304, 311, and 312.

## APPENDIX I

# HAWAII SARA TITLE III SECTION 304 HAZARDOUS SUBSTANCE RELEASE EMERGENCY NOTIFICATION GUIDELINE

### Overview of Emergency Notification Requirements:

In Hawaii, facilities reporting releases of hazardous substances subject to notification requirements under Title III shall follow procedures outlined under Section 304 of the act.

As indicated under Section 304(b)(1), immediately after the release of a reportable quantity of a hazardous substance (as defined under section 304(a)), the Hawaii State Emergency Response Commission and any affected local emergency planning committee must be notified by the owner or operator of the facility. In the case of a release that occurs "with respect to transportation of a substance", dialing 911 or contacting the operator and reporting such a release will satisfy the initial emergency notification requirements of Section 304. In either case, the owner or operator of the facility must provide a written Follow-up Emergency Notice as specified under Section 304(c). If a release of a hazardous substance poses an imminent or immediate threat to public health or the environment dial "911" to prompt "first responder" fire, police and/or emergency medical service personnel response.

### Hawaii State Emergency Response Commission Notification:

To notify the Hawaii State Emergency Response Commission, dial 734-2161.

### Local Emergency Planning Committee Notification:

To notify the affected local emergency planning committee dial the appropriate telephone number(s) below:

Hawaii Local Emergency Planning Committee: 935-0031	After hours, weekends and holidays: 935-3311
Maui Local Emergency Planning Committee: 244-7721	After hours, weekends and holidays: 244-7811
Kauai Local Emergency Planning Committee: 245-4001	After hours, weekends and holidays: 742-1373
City and County of Honolulu Local Emergency Planning Committee: 523-4121	After hours, weekends and holidays: 911

### Emergency Notification Information Requirements:

The following information should be provided immediately by the person performing the emergency notification (to the extent known at the time of the notice and so long as no delay in responding to the emergency results):

- A. Chemical name(s) or substance(s) identity involved in release.
- B. Indication if substance is on list referred to in section 302(a).
- C. Estimate of the quantity of the substance(s) released.
- D. Time and duration of release.
- E. Medium or media (air, water etc.) into which the release occurred.
- F. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.
- G. Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordinator pursuant to the emergency plan).
- H. The name and telephone number of the person(s) to be contacted for further information.
- I. Address or description of location where release occurred.

### Follow-up Emergency Information Notification:

Follow-up emergency notice as specified under section 304(c) of the act should be provided to the same contacts as soon as practicable after the release occurs. This written notice should include the same information as listed above under A through I, and should be revised and updated to include any additional information with respect to:

- A. Actions taken to respond to and contain the release,
- B. Any known or anticipated acute or chronic health risks associated with the release, and
- C. Where appropriate, advice regarding medical attention necessary for exposed individuals.

Call the Hawaii State Emergency Response Commission at (808) 548-2076 if you have any questions or concerns regarding this guideline.

THIS GUIDELINE IS GENERAL IN NATURE AND IS PROVIDED TO ASSIST IN COMPLYING WITH TITLE III IN HAWAII. THIS GUIDELINE DOES NOT HAVE THE FORCE AND EFFECT OF LAW. TO ENSURE FULL COMPLIANCE UNDER THE LAW, PERSONS AFFECTED SHOULD REVIEW THE APPROPRIATE FEDERAL LAWS AND REGULATIONS INCLUDING TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AS WELL AS 40 CFR PARTS 300, 302 AND 355. FAILURE TO REPORT COVERED RELEASES UNDER SECTION 304 MAY PROMPT EPA ENFORCEMENT ACTION INCLUDING PENALTIES NOT TO EXCEED FINES OF \$25,000 PER DAY OR IMPRISONMENT. COPIES OF THE LAW AND REGULATIONS CAN BE OBTAINED BY DIALING: 548-2076.

## APPENDIX II

### REFERENCES

Criteria for Review of Hazardous Materials Emergency  
National Response Team, May, 1988.

Federal Superfund Amendments and Reauthorization Act of 1986,  
Title III, Emergency Planning and Community Right-To-Know.

Hawaii Environmental Emergency Response Act of 1988.

Hazardous Materials Emergency Planning Guide, National Response  
Team, 3/17/87.

Oceania Region Oil and Hazardous Substances Pollution Contingency  
Plan, Oceania Regional Response Team, 11/87.

## APPENDIX III

### OIL AND HAZARDOUS SUBSTANCES: SOURCES OF TECHNICAL INFORMATION

#### 24 Hour Hotlines

ATSDR (Agency for Toxic Substances  
and Disease Registry) 1-404-452-4100

CHEMTREC ( Chemical Transportation  
Emergency Center Information Center),  
1-800-424-9300, 1-202-483-7611

Hawaii Poison Center, 941-4411

NDMS (National Disaster Medical System)  
NECC (National Emergency Coordination  
Center), 1-202-898-6100

National Response Team  
1-800-424-8802

OHMTADS (Oil and Hazardous Materials  
Technical Assistance Data System)  
1-415-974-8131

Department of Transportation  
Notification Number for Assistance  
836-6411

#### Computerized Databases

CAMEO (Computer Assisted Management of  
Emergency Operations)

CHRIS (Chemical Hazard  
Response Information System),  
1-800-424-8802

#### Publications

Pocket Guide to Chemical Hazards, Department of Health and Human  
Services/DIOSH, 1985.

Guidebook for Initial Response to Hazardous Materials Incidents,  
U.S. Department of Transportation, 1987.

Rapid Guide to Hazardous Chemicals in the Workplace, N. Irving  
Sax and Richard Lewis, 1986.

Using Oil Spill Dispersants on the Sea, National Research  
Council, 1989.

Oil in the Sea, National Academy Press, 1985.

Technical Guidance for Hazards Analysis, U.S. Environmental Protection Agency and Department of Transportation, 1987.

Handbook of Toxic and Hazardous Chemicals and Carcinogens, Marshall Sittig, 1985.

Clinical Toxicology of Commercial Products, Gosselin, Smith, Hodge, 1984.

The Merck Index An Encyclopedia of Chemicals, Drugs, and Biologicals, Windholz, Budavari, Blumetti, Otterbein, 1983.

Toxic and Hazardous Industrial Chemicals Safety Manual, The International Technical Information Institute, 1986.

Farm Chemicals Handbook, Meister Publishing, 1989.

Handbook of Reactive Chemical Hazards, Bretherick, 1985.

Hawley's Condensed Chemical Dictionary, Sax and Lewis, 1987.

CHRIS Hazardous Chemical Data, U.S. Department of Transportation and U.S. Coast Guard, 1984.

STATE OF HAWAII  
CHEMICAL EMERGENCY RESPONSE TRAINING  
GUIDELINES

HAWAII STATE EMERGENCY RESPONSE COMMISSION

MAY 1989 (DRAFT II)

## INTRODUCTION

The purpose of this document is to provide guidance for Hawaii state and local governmental agencies on the level of training recommended for supervisors and staff who may come in contact with hazardous materials.

## BACKGROUND AND PURPOSE

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) 1986, the State of Hawaii is required to enhance its ability to respond to chemical emergencies. The Hawaii State Emergency Response Commission was formed to oversee this process. A technical subcommittee was formed to assist the commission and was tasked with ensuring that state and county officials and personnel are adequately trained for chemical emergency response. Due to the complexity of the training needs and requirements, the technical subcommittee developed guidelines to clearly describe what level of training should be provided to state and county employees. The guidelines are outlined in four different categories in this document. It must be emphasized that ultimately, each employer is responsible for their employees health and safety. This document is a tool to help state and county supervisors meet this responsibility.

The elements described for each category are the basic, fundamental topics which should be included for the specific worker category. Each course should be designed with these elements in mind but should also be tailored for that particular target audience. For example, if the target audience is concerned with chemical emergencies involving motor vehicles, then that particular training course should include specific case studies involving highway spills and address how their job function relates to such incidents.

It should also be noted that although these are guidelines, employees and their supervisors, who may be exposed to hazardous materials or wastes during their normal course of work, must be trained in accordance with State and Federal laws (Chapter 99 of State Administrative Rules and 29 CFR 1910.120 respectively). These requirements are described in the guidelines under Category II Hazardous Materials Personal Protection Training and Category III Hazardous Materials Training for Supervisors.

Training guidelines have been developed for the following four categories:

1. First Responder Training

This training category is targeted for people who may be the first to respond to a hazardous materials



incident.

2. Hazardous Material Personal Protection Training

This training category is targeted for any person who may come in contact with hazardous materials. Basic personal protection measures are covered in this training course.

3. Hazardous Material Training for Supervisors

This training category is specifically for supervisors of employees who may come in contact with hazardous materials.

4. Hazardous Materials Specialist Training

This training category is targeted for people who conduct the investigation and clean-up of the hazardous material incident. Their duties would include entering the contaminated zone, investigating the situation and implementing the appropriate clean-up measures.

**TRAINING CATEGORIES**

The following sections identify the minimal training

criteria recommended for each category. Additional training is recommended depending on the individual's need and interest.

**Category I      Hazardous Material First Responder Training**

**Hazardous Materials First Responder:**      A person(s) who in the course of their normal duties may be first on scene during a hazardous materials incident.

**Purpose:** Training in this category should provide the first responder with the ability to utilize basic reference tools available in order to recognize and identify hazardous materials. They should also be aware of the health risk associated with various chemicals and be able to notify the appropriate response agency. The training provided should cover the following areas:

**A.      Recognition of hazardous materials in an emergency:**

- 1)      the nine United National (UN)/Department of Transportation (DOT) hazardous materials classes, the major hazards of each class and provide examples
  
- 2)      the six groups of clues for detecting the presence of hazardous materials

- 3) typical locations in the community or facility where hazardous materials are manufactured, transported, sorted, used or disposed of
- 4) the placards, labels, markings and shipping papers used in the transportation of hazardous materials and know their advantages and limitations during the process of recognizing hazardous materials
- 5) the types of specialized marking systems found at fixed facilities such as NFPA 704M and pesticide labeling
- 6) three sources of specific information to help identify hazardous materials

B. Identification of hazardous materials and determination of appropriate response action including:

- 1) identification or classification the hazardous material involved in an emergency using markings, placards, labels, shipping papers or personal contacts
- 2) the use of the DOT Emergency Response Guidebook in assessing hazards, response actions and

determining isolation and evacuation distances

- 3) the problems in specifically identifying hazardous materials
  - 4) identification of the shipping papers found in various modes of transportation, the individuals responsible for the papers, and location where carried and found during an incident; and
  - 5) identification of basic hazardous materials containers and bulk and nonbulk packaging
- C. The role of the first responder at the scene of a hazardous materials incident
- D. Recognition of the need for additional resources and determination of appropriate notifications
- E. Scene management (incident Command System, isolate immediate site, deny entry, evacuate)
- 
- F. Health and Safety procedures including:
- 1) how hazardous materials incidents are different from other emergencies

- 2) six ways by which hazardous materials are harmful to people at incidents
- 3) the general routes of entry for human exposure to hazardous materials
- 4) the limitations of street clothes or work uniforms at the scene of hazardous materials incidents
- 5) the threats posed to the environment by hazardous materials releases
- 6) the precautions necessary when rendering emergency medical care to victims of hazardous materials incidents

**Category II Hazardous Materials Personal Protection Training**

This training is recommended for anyone who may come in contact with hazardous materials. This course should meet or exceed training requirements as defined under 29 CFR 1910.120.

---

**Purpose:** Training in this category should:

- . make an individual aware of the health risk associated with hazardous materials;

- provide workers with the knowledge and skill necessary to perform the work with minimal risk to their health and safety;
- make workers aware of the purpose and limitation of safety equipment; and
- ensure workers can safely avoid or escape from emergencies.

Training should cover the following topics:

- A. Understanding of chemistry and physical properties of hazardous materials
  - 1) chemical and physical properties, chemical reactions, chemical compatibilities
- B. Toxicology
  - 1) ~~dosage, routes of exposure, toxic effects,~~ Immediately Dangerous to Life of Health (IDLH) values, Permissible Exposure Limits (PELs), Recommended Exposure Limits (RELs), Threshold Limit Values (TLVs)

C. Industrial Hygiene

- 1) selection and monitoring of personal protective clothing and equipment
- 2) calculation of doses and exposure levels, evaluation of hazards, selection of worker health and safety protective measures

D. Rights and responsibilities of workers under OSHA

- 1) applicable provisions of Title 29 of the Code of Federal Regulations (the OSH Act)

E. Monitoring Equipment

- 1) functions, capabilities, selection, use, limitations, and maintenance

F. Hazard Evaluation

- 1) sampling techniques
- 2) evaluation of field and lab results

- 3) risk assessment
- G. Site safety plans
- 1) safe practices, safety briefings and meetings
  - 2) standard operating procedures, site safety map
- H. Standard operating procedures (SOPs)
- 1) hands-on practice
  - 2) development and compliance
- I. Engineering controls
- 1) the use of barriers, isolation, and distance to minimize hazards
- J. Personal protective clothing and equipment (PPE)
- 1) assignment, sizing, ~~fit-testing~~, maintenance of air purifying respirators, use, limitations, and hands-on training
  - 2) selection of PPE



3) ergonomics

K. Medical program

1) medical monitoring and requirements of such a program under 29 CFR 1910.120, first aid, stress recognition

2) advanced first aid, cardiopulmonary resuscitation emergency drills

3) design, planning and implementation

L. Decontamination

1) hands-on training using simulated field conditions

2) design and maintenance

M. Legal and regulatory aspects

1) applicable safety and health regulations (OSHA, EPA, etc.)

2) response to emergencies, follow-up investigation

and documentation

**Category III Hazardous Material Supervisor's Training**

This category is for persons that supervise personnel that may be exposed to hazardous materials during the course of their employment. The prerequisite for this course should be Hazardous Materials Personal Protection Training outlined in Category II.

**Purpose:** To provide guidance to supervisors of operations where workers may be exposed to hazardous material incidents. Training in this category should cover the following topics:

- A) Regulatory review of the following laws:  
Comprehensive Environmental Response, Compensation,  
And Liability Act (CERCLA) as amended by the Superfund  
Amendments Reauthorization Act (SARA), Resource  
Conservation and Recovery Act (RCRA), and Occupational  
Safety and Health Act.
- B) The role of Incident Commanders and On-Scene  
Coordinators
- C) Compliance with 29 CFR 1910.120 and other regulations
- D) Contingency planning and organization (including the

role of government agencies)

E) Industrial hygiene

- 1) selection and monitoring of personnel protective equipment
- 2) calculation of doses
- 3) hazard evaluation
- 4) selection of protective measures

F) Hazard Evaluation

- 1) techniques of sampling
- 2) evaluation of field and laboratory results
- 3) hazardous characterization and identification
- 4) risk assessment

G) Development and management of standard operating procedures

- 1) sampling plans
  - 2) health and safety plans
  - 3) medical monitoring plan
  - 4) heat stress monitoring
  - 5) work plan
  - 6) security plan (sit entry and control)
  - 7) logistics plan
  - 8) record keeping and logs
- H) Communication, public safety and community relations
- 1) press
  - 2) local community
  - 3) state and local officials
- 

**Category IV Hazardous Materials Specialist Training**

**Hazardous Materials Specialist:** A person(s) who in the course of their normal duties may enter into the hot or contaminated zone at a controlled or uncontrolled hazardous material site, emergency or incident. Training in this category should include all the training objectives as in the first responder category plus the following topic areas:

A. Development and implementation of a site safety plan including:

- 1) the components of a safety plan for a hazardous materials incident
- 2) identification criteria for determining the location of the control zones for a hazardous materials incident
- 3) identification criteria for modifying the evacuation areas set up by the first responder
- 4) the signs and symptoms of exposure to that hazardous material given a specific hazardous materials
- 5) the signs and symptoms of heat stress

6) implementation a safety plan given a simulated hazardous materials incident

B. Classification, identification and verification of known and unknown materials by using basic monitoring equipment including:

- 1) the twenty-five (25) DOT hazard categories, the basic hazard posed by each
- 2) the precautions to be observed and followed when dealing with the twenty-five hazard categories
- 3) the source of, definition of, and circumstances for the use of the terms "hazardous substances," "hazardous chemicals," "hazardous wastes"
- 4) the advantages and disadvantages of various resource references and monitoring and detection instruments
- 5) the decision-making process for identification of unknown chemical, biological or radiological hazards

C) The government and private sector agencies that offer aid during a hazardous materials incident, including their role and the type of aid or resources available

D) Simulated emergency response which reviews:

- 1) health and safety
- 2) site entry and reconnaissance
- 3) reference information
- 4) resources
- 5) decontamination procedures
- 6) operation

E) Selection and use of proper specialized personal protective equipment including:

- 1) interpretation of a chemical compatibility chart
- 2) the maintenance, testing and storage procedures for the personal protective clothing provided

- 3) the proper donning, doffing, and usage of specialized protective clothing
- F) Knowledge in hazard and risk assessment techniques including:
- 1) size and type of container and quantity involved, nature of the container stress, potential behavior of the container and its contents, level of resources available, exposure potential to people, property, environmental and systems, weather conditions and topography
  - 2) the various monitoring equipment used to monitor and detect the hazards of toxicity, flammability, reactivity, radioactivity, corrosivity, oxygen deficiency etc.
  - 3) the proper usage, interpretation and limitations of available monitoring equipment
- 
- 4) the maintenance and testing procedures for available monitoring equipment
- G) Advanced hazardous material control, containment,



and or confinement including:

- 1) the basic design and construction features of containers and bulk and nonbulk packaging used to store, process or transport hazardous materials including drums, cylinders, carboys?, boxes or bags, cans or bottles, tank trucks and trailers, fixed tanks, portable tanks and intermodal containers and piping
- 2) the methods and precautions for controlling, containing, and confining hazardous materials releases of the nine UN/DOT hazard classes
- 3) the options is implementing hazardous material control, containment and confinement procedures
- 4) the proper selection and use of available tools, equipment

H) Decontamination procedures including:\_\_\_\_\_

- 1) the advantages and limitations of dilution, absorption, chemical degradation, disposal, isolation

- 2) the considerations associated with the placement, locations and setup of the decontamination site
  - 3) the sources of technical information for performing decontamination operations
- I) Record keeping and termination procedures including:
- 1) the activities required in terminating the emergency phase of an incident
  - 2) the preparation of the locally required report with supporting documentation as necessary
- J) Basic chemical, biological and radiological terminology and behavior
- K) Medical and base-line monitoring of personnel
-

REFERENCES

1. Comprehensive and Environmental Response, Compensation and Liability Act as amended by Superfund Amendment Reauthorization Act, 42 U.S.C. Sections 9601-9675.
  2. Thomas H. Seymour, "Review of the Superfund Worker Training Standards" presented at the 1988 National Governor's Association Conference on Title III, Washington, D.C.
  3. 29 CFR 1910 Hazardous Operations and Emergency Response; Final Rule, Department of Labor, March 6, 1989.
-

# **"IT CAN'T HAPPEN HERE !"**

**(Revised Draft 7/11/89 )**

## **THE STATE OF HAWAII OIL AND HAZARDOUS SUBSTANCES EMERGENCY RESPONSE CONFERENCE FOR PUBLIC OFFICIALS**

SPONSORED BY: HAWAII STATE EMERGENCY RESPONSE COMMISSION (HSERC),  
OAHU, HAWAII, KAUAI, & MAUI LOCAL EMERGENCY RESPONSE COMMITTEES (LEPCs), &  
OCEANIA REGIONAL RESPONSE TEAM (RRT)

### **AGENDA**

- |  |                |
|--|----------------|
| Registration/Coffee Hour   | 10:00-11:00 AM |
| I. Opening Remarks   | 11:00-12:00 AM |
| "Welcoming Remarks- It Can't Happen Here"                                |                |
| John C. Lewin, M.D., Director, Hawaii Department of Health & HSERC Chair |                |
| " Plans to Withdraw the Hawaii Coast Guard Hazmat Team",                 |                |
| Captain Gordon Piche, On-Scene Coordinator, Hon. Marine Safety Office    |                |
| Luncheon/Presentations   | 12:00-2:30 PM  |
| II. "Oil Spill Emergencies-It Happened in Valdez                         | 1:00-1:45 PM   |
| Valdez Oil Spill Presentation  |                |
| Questions and Answers  |                |
| III. "Chemical Emergencies-It Happened in Simi Valley"                   | 1:45-2:30 PM   |
| Simi Valley Chlorine Gas Release Presentation                            |                |
| Questions and Answers  |                |
| IV. Response by Governor Waihee  | 2:30-2:45 PM   |
| Coffee Break   | 2:45-3:00 PM   |
| V. "Needs & Requirements for Emergency Preparedness                      | 3:00-4:00 PM   |
| in Hawaii" - Panel Presentations and Discussion                          |                |
| (Participants - State and County Officials, LEPC                         |                |
| Chair, Industry Representative, Concerned Citizen)                       |                |
| VI. Closing Remarks  | 4:00-4:30 PM   |
| "Hawaii Initiatives for Oil and Hazardous Substances Emergency           |                |
| Response Preparedness-It Can Happen Here"                                |                |
| Bruce Anderson, Ph.D, Deputy Director for Environmental Health,          |                |
| Hawaii Department of Health & Hawaii Rep. on Oceania RRT                 |                |

## EMERGENCY RESPONSE PERSONNEL TRAINING AND EXERCISE SCHEDULE

### Incident Response Training, Personal Protection Training

\* 40 hour session provided by the Coast Guard

Kauai - July 10-14  
Hilo - July 17-21 (?)  
Maui - August 7-11

### Chemistry of Hazardous Materials

\* FEMA sponsored

Hilo - June 19-30  
Instructors: John Bowen and Joseph Mehlretter

### Hazardous Materials Tactical Considerations

\* FEMA sponsored

Hilo - August 21 - September 1  
Instructors: John Bowen and Carter Davis

### Honolulu Full Field Exercise

\* EPA sponsored  
\* Field Leader: Ellery Savage

Planning meeting with all involved agencies - August 29th.  
Pre-exercise briefing - October 19th.  
Full field exercises - October 20th.

### Maui Tabletop Exercise

\* EPA sponsored  
\* Field Leader: TAT Contractor

Planning meeting with all involved agencies - August 30th.  
Pre-exercise briefing - October 23rd.  
Tabletop exercise - October 24th.



STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER  
HSERCM4-Mtg

MEETING SUMMARY

Hawaii State Emergency Response Commission Meeting #4  
Department of Health Board Room  
8 August 1988, 1:30 p.m.

Members Attending:

Ron Hirano, for Ed Hirata, DOT  
Michael Yoshinaga, for Bill Paty, DLNR  
Bruce Swartz, for Marvin Miura, OEQC  
Robert Sera, for Mario R. Ramil, DLIR  
Ms. Jiggie Hammon, American Red Cross  
Wayne Iwaoka, for Suzanne Peterson, DOA  
Robert Boesch, for Roger Ulveling, DBED  
Roy Price Sr., for Major General Alexis Lum, DOD  
Bruce S. Anderson, for John C. Lewin, DOH

Others Attending:

Thomas O. Batey and Norman C. Lamb, SCD  
George Kekuna and Joe Reed, OCD  
Selberio Menor, MCD  
LCDR Phil Dyer, U.S. Coast Guard  
Gilbert Kanazawa, U.S. Coast Guard 14th District  
D.A. Davidson, U.S. Coast Guard 14th District  
Jensen Uchida, DOH  
Mark Ingoglia, DOH  
J.K. Sims, M.D., DOH, EMSS  
Larry K. Hao, DOT  
Gerald Kimo, DOA  
Tom Brand, DOH, Haz. Waste  
Harold Matsuura, DOH-Hawaii  
Clyde Takekuma, DOH-Kauai  
Thomas Hughes, DLIR, DOSH, OH  
Carter W. Davis, HFD  
Herbert A.K. Campos, MFD  
Jim Mikulu, HECO  
Frank J. Pustka, P. S. Pacific  
Alex Ho, DPW, C&C of Honolulu  
Sandra Simms, C&C Corporation Counsel  
Courtney Harrington, C&C-OIC  
Mike Zustra, MSO Honolulu (CG)  
Robert R. Roberts, Hawn. Sugar Planters' Assoc.  
Rose Chu, Pacific Resources, Inc.  
John Ford, U.S. Fish & Wildlife Service

Raymond Yuen, BNA

1. The meeting was called to order by Dr. Bruce Anderson, representing Dr. John Lewin. Dr. Anderson offered introductory remarks and the summary of the previous meeting was reviewed by Commission members. Members offered nonsubstantive editorial comments and the meeting summary was accepted with minor editorial changes.

2. Appointment of SERC Vice-Chairman. Due to SERC Chairman Dr. John C. Lewin's busy schedule and the need to have clear authority from the Commission, it was recommended that a Vice-Chairman be appointed to serve as Chairman during Dr. Lewin's absence. By the members of the SERC, Bruce Anderson, Ph.D., was unanimously appointed as Vice-Chairman by the members of the SERC.

3. Status of Title III Program. The staff provided an overview of compliance, notification, and reporting in the State of Hawaii under Title III, Sections 302, 311, and 312. As of August 1, 1988, over 250 facilities had reported. The staff also briefed the Commission on Title III training in Hawaii and mentioned that the State received \$60,000 for 1988 Title III HAZMAT training from the Federal Emergency Management Agency (FEMA). Captain Carter Davis of the Fire Department provided an update on HAZMAT "first responder" training, and noted that FEMA will require 20% matching State funds during the next three fiscal years. The

staff briefed the Commission on the Department of Health's Title III program development and introduced Premlata Menon, Ph.D., a new staff member of the Hazard Evaluation and Emergency Response Program, which is responsible for implementing the Title III program within the Department of Health. The staff also provided updates on the progress of Local Emergency Planning Committees. It was noted that Kauai, Oahu, and Maui have been meeting regularly. Now that the Hawaii Committee's initial problems have been resolved with the able assistance of Dr. John Bowen, chairman of the planning subcommittee, they are making good progress in developing their Plan. The Commission also discussed the October 17 deadline for LEPC Plan submission with the County representatives attending the meeting, who agreed that the October 17 deadline for submission of Plans provided adequate time for the LEPCS to refine their Plans.

4. Establishment of State Emergency Response Fund. The staff described the passage of Act 148, SLH 1988, which grants the authority, one full-time position, and \$150,000 to the Department of Health for response and clean-up of environmental agents released in Hawaii. The State also successfully negotiated a Superfund Core Program grant agreement with EPA, which will provide \$250,000 for the development of the State Superfund Program.

5. Toxic Disposal Project. Tom Brand, Environmental Health Specialist for the Hazardous Waste Program, presented the



Department of Health's current plans to implement a state-wide collection and disposal project for hazardous materials from households and farms, using a \$250,000 grant from the 1988 State Legislature.

6. Development of State Oil and HAZMAT Plan. The staff presented the Department of Health's current first draft of the Hawaii State Oil and Hazardous Emergency Response Plan to Supplement the State of Hawaii Plan for Emergency Preparedness. A technical subcommittee will be established to refine this Plan before submitting it to the Commission for comment.

7. The meeting was adjourned at 3:00 p.m.

Respectfully submitted,

  
\_\_\_\_\_  
J. MARK INGOGLIA

**SERC MAILING LIST (7/15/89)**

Mr. James Ahia, LEPC Co-Chairman (Kauai)  
Brewer Chemicals  
P O Box 766  
Lihue, Hawaii 96766  
Phone: 245-4031

Dr. Bruce Anderson, Deputy Director  
State of Hawaii  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4139

Mr. Harold Barks, Administrator  
Occupational Safety & Health Div.  
Labor & Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4155

Mr. Thomas O. Batey  
State of Hawaii  
Civil Defense Division  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-2161

Mr. Bob Boesch, Chief  
Pesticides Branch DOA  
1428 South King Street  
Honolulu, Hawaii 96814  
Phone: 548-7120

Department of Health  
Hazardous Waste Program  
645 Halekauwila Street  
Honolulu, HI 96813

Ms. Laureen Brennan, President  
Hawaii Transportation Council  
1164 Bishop Street, Suite 1509  
Honolulu, Hawaii 96813  
Phone: 548-2638

Representative: Mr. William Lake  
Federal Highway Administration  
Honolulu, Hawaii 96813  
Phone: 541-2700

Mr. Herbert Campos Jr., Chief  
County of Maui Fire Department  
21 Kinipopo Street  
Wailuku, Hawaii 96793

Mr. James Canto  
Guam Environmental Protection Agency  
P.O. Box 2999  
Agana, Guam 96910

LTC Thomas P. Carras  
Commander in Chief Pacific (CINCPAC)  
Facilities Engineering Division  
CINCPAC Staff Box 20  
Camp H.M. Smith, Hawaii 96861

Clean Islands Council  
933 N. Nimitz Highway  
Honolulu, Hawaii 96817

Commanding Officer  
U.S. Coast Guard  
Marine Safety Office  
433 Ala Moana Boulevard, Rm 1  
Honolulu, Hawaii 96813-4909

Commanding Officer  
U.S. Coast Guard  
Marine Safety Office  
1026 Cabras Highway, Suite 102  
Piti, Guam 96910

Alma Ching Corn, M.D.  
Director Health Department  
City and County of Honolulu  
1455 South Beretania Street  
Honolulu, Hawaii 96814  
Phone: 943-3576

Rose Chu  
Pacific Resources Inc.  
733 Bishop Street, 28th Floor  
Honolulu, Hawaii 96813  
Phone: 547-3232

Dr. Nelson Clement  
Hawaii District Health Officer  
P O Box 916  
Hilo, Hawaii 96721-0916  
Phone: 961-7210

Mr. Charles P. Crisostomo  
Guam Environmental Protection Agency  
P O Box 2999  
Agana, Guam 96910

Mr. Dan Dagdagan  
Environmental Specialist  
Pacific Resources, Inc.  
P O Box 3379  
Honolulu, Hawaii 96742  
Phone: 547-3608

Ms. Nancy Darte  
RRT Coordinator  
FEMA Region IX, Bldg 105  
Presidio of San Francisco  
California 94129

Lt. Dave Davidson, Chief  
Marine Environmental Protection Branch  
Fourteenth Coast Guard District  
PJKK Federal Building, Rm 9149  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850-4982  
Phone: (808) 541-2114

Mr. Carter Davis, Fire Captain  
Hazardous Materials Instructor  
890 Valkenburgh Street  
Honolulu, Hawaii 96818  
Phone: 422-1001

Mr. Willie Espero, Executive Secretary  
Neighborhood Commission  
City and County of Honolulu  
530 South King Street, Room 400  
Honolulu, Hawaii 96813  
Phone: 527-5749

Mr. Pati Fai'ai  
American Samoa  
Environmental Protection Agency  
Office of the Governor  
Fagatogo, American Samoa 96799

Mr. John Ford  
U.S. Fish and Wildlife Service  
300 Ala Moana Boulevard, Rm 6037  
Honolulu, Hawaii 96850  
Phone: 541-2749

The Honorable Mary George  
Senator  
State Capitol, Room 221  
Honolulu, Hawaii 96813  
Phone: 548-4107

Mr. Sonny Gerardo, Administrator  
Kauai Civil Defense  
4396 Rice Street  
Lihue, Hawaii 96766  
Phone: 245-4001

Mr. Douglas G. Gibb, Chief  
Honolulu Police Department  
1455 South Beretania Street, 2nd Floor  
Honolulu, Hawaii 96814

Mr. Robert Godbey  
Asst. U.S. Attorney  
U.S. Courthouse, Rm C-242  
300 Ala Moana Blvd, Box 50183  
Honolulu, Hawaii 96850

Ms. Kathleen Martyn Goforth  
Emissions Inventory Coordinator  
US Environmental Protection Agency  
215 Fremont Street, Mail Code T-5-3  
San Francisco, California 94105  
Phone: (415) 974-7280

Ms. Dianthea Goo  
U.S. Department of Labor OSHA  
300 Ala Moana Blvd, Suite 5122  
P O Box 50072  
Honolulu, Hawaii 96850

Mr. Roy J. Gorup  
FEMA Region IX, Bldg 105  
Presidio of San Francisco  
California 94129

Mr. Jeremy Harris  
Managing Director  
City and County of Honolulu  
530 South King Street, 3rd Floor  
Honolulu, Hawaii 96813  
Phone: 527-5796

Mr. Courtney Harrington, Director  
Office of Information and Complaint  
City and County of Honolulu  
530 South King Street, 3rd Floor  
Honolulu, Hawaii 96813  
Phone: 523-4740

Harlan Hashimoto  
School Of Public Health  
Environmental Science and Engineering  
University of Hawaii  
1960 East-West Road  
Honolulu, Hawaii 96822  
Phone: 948-8894

Mr. Kazu Hayashida  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawaii 96843  
Phone: 527-6180

Mr. Thomas Hicks  
Public Health Advisor  
State of Hawaii  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801  
Phone: 548-5987

Mr. John E. Hirten, Director  
Department of Transportation Services  
City and County of Honolulu  
650 South King Street, 3rd Floor  
Honolulu, Hawaii 96813  
Phone: 523-4125

Mr. Ronald Hirano, Deputy Director  
Department of Business and Economic Development  
P.O. Box 2359  
Honolulu, Hawaii 96804  
Phone: 548-2055

Alex Ho  
c/o Department of Public Works  
City & County of Honolulu  
650 South King Street, 11th Floor  
Honolulu, Hawaii 96813  
Phone: 523-4159

Paul E. Hoffman, M.D.  
Maui District Health Office  
54 High Street  
Wailuku, Hawaii 96793  
Phone: 244-4282

MAJ Bruce K. Howard  
Commander in Chief Pacific (CINCPAC)  
Facilities Engineering Division  
CINCPAC Staff Box 20  
Camp H. M. Smith, Hawaii 96861

Thomas Hughes  
Department of Labor and Industrial Relations  
Division of Occupational Safety and Health (DOSH)  
830 Punchbowl Street, Room 423  
Honolulu, Hawaii 96813  
Phone: 548-5480

Mr. Clifford Ikeda, Kauai LEPC Co-Chairman  
Kauai Civil Defense  
4444 Rice Street, Room 230  
Lihue, Hawaii 96766  
Phone: 245-4001

Mr. Chris Jansen  
Environmental Specialist  
Pacific Resources, Inc.  
P O Box 3379  
Honolulu, Hawaii 96742

Mr. Frank Kahoohanohano  
Chief, Fire Department  
City & County of Honolulu  
1455 South Beretania Street  
Honolulu, Hawaii 96814  
Phone: 943-3301

LCDR Gilbert J. Kanazawa  
Commander, Fourteenth Coast Guard  
District (mrt)  
PJKK Federal Building  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850-4982

Richard Kawakami, Energy Conservation Specialist  
Department of Business and Education  
250 South King Street  
Honolulu, Hawaii 96813  
Phone: 548-4615

CDR Lawrence E. Keister  
U.S. DOC/NOAA  
Hazardous Materials Response Branch  
7600 Sand Point Way NE  
BIN C15700  
Seattle, Washington 98115

Mr. George L. Kekuna, Director  
Civil Defense Administration  
650 South King Street  
Honolulu, Hawaii 96813  
Phone: 523-4121

Mr. David Kennedy  
NOAA/Hazmat Response Group  
3211 Oak Lane  
Friday Harbor, Washington 98250

Mr. Harry Kim, Administrator  
Hawaii Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Po-Yung Lai, Ph.D., Head  
Plant Industry Division  
Department of Agriculture  
1428 South King Street  
Honolulu, Hawaii 96814  
Phone: 548-7173

Mr. Norm Lamb, Chief  
Intelligent Training Officer  
3949 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-2161

Mr. Libert Landgraf, Deputy Director  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-7518

Donna Maiava, Branch Chief  
Emergency Medical Services System Branch  
3627 Kilauea Avenue, Room 102  
Honolulu, Hawaii 96816  
Phone: 735-5267



Mr. Allan D. Marmelstein,  
Pacific Islands Administrator  
Fish & Wildlife Service  
300 Ala Moana Boulevard, Room 5302  
Honolulu, Hawaii 96813  
Phone: 541-1220

Mr. Thomas Marple  
U.S. Department of Labor - OSHA  
300 Ala Moana Blvd, Suite 5122  
P O Box 50072  
Honolulu, Hawaii 96850

Mr. Les Matsubara, Deputy Director  
Department of Business and Economic Development  
P.O. Box 2359  
Honolulu, Hawaii 96804  
Phone: 548-3034

Mr. Harold Matsuura  
Chief Sanitarian  
P O Box 916  
Hilo, Hawaii 96721-0916  
Phone: 961-7275, 7371

Mr. Russel Mechem, II  
Department of Public Health  
and Environmental Services  
Saipan, MP 96950

Mr. Sel Menor, Administrator  
Maui Civil Defense  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 244-7721

Dr. Ronald Mettler, M.D  
District Health Officer (Kauai)  
P.O. Box 671  
3040 Umi Street  
Lihue, Hawaii 96766  
Phone 245-4495

Jim Mikula, Environmental Scientist  
Hawaiian Electric Company  
P.O. Box 2750  
Honolulu, Hawaii 96840  
Phone: 548-6915

Mr. Floyd Miyazono, Co-Chairman  
Maui LEPC  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 244-7855  
Phone: 244-7721

Mr. Ralph Moore  
Hazardous Materials Specialist  
Hawaii Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-3188

The Honorable Arnold Morgado, Jr.  
Chairman, City Council  
530 South King Street, 2nd Floor  
Honolulu, Hawaii 96813  
Phone: 523-4829

Dr. Brunner Munger  
Manager, Environmental Department  
Hawaiian Electric Company  
P O Box 2750  
Honolulu, Hawaii 96840-0001  
Phone: 548-6880

Mr. David Nakagawa  
Maui Chief Sanitarium  
54 High Street  
Wailuku, Hawaii 96793  
Phone: 244-4255

Rusty Nall, General Manager  
Pacific Environmental Corporation  
Pier 14, 1st Floor  
Honolulu, Hawaii

Mr. John Naughton  
NOAA, National Marine Fisheries Service  
Western Pacific Program Office  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, Hawaii 96822-2396

Mr. Len Newell  
USDA Forest Service  
1151 Punchbowl St., Room 323  
Honolulu, Hawaii 96813

Mr. Masayoshi Ogata, Manager  
Occupational Health Inspection and  
Compliance Branch  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-5480

Mr. Francis Oishi  
Department of Land and Natural Resources  
Biologist Aquatic Resources Division  
1151 Punchbowl Street, Room 332  
Honolulu, Hawaii 96813  
Phone: 548-5225

Mr. Hugh Y. Ono Coordinator (LEPC, HI)  
Chief Engineer  
Department of Public Works  
25 Aupuni Street  
Hilo, Hawaii 96720  
Phone: 961-8321

Mr. William J. Patterson  
FEMA Region IX, Bldg 105  
Presidio of San Francisco  
California 94129

Mrs. Patricia Port  
U.S. Department of the Interior  
450 Golden Gate Avenue  
Box 36098  
San Francisco, California 94102

Roy Price, Deputy Assistant Director  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495  
Phone: 732-2161

Mr. Frank Putska, President  
P & S Pacific  
91-410 Komohana Street  
Ewa Beach, Hawaii 96707  
Phone: 682-5794

Mr. Joe Reed, Planner  
Oahu Civil Defense  
650 S. King Street, Basement  
Honolulu, Hawaii 96813  
Phone: 523-4121

Mr. Robert Rudolph  
Coastal Resources Management Program  
Office of the Governor  
Saipan, MP 96950

Mr. Melvin Seo  
Safety and Security Specialist  
Department of Education  
1037 South Beretania Street  
Honolulu, Hawaii 96814  
Phone: 548-2365

Robert Sera, Manager  
Department of Labor and Industrial Relations  
Safety Inspection and Compliance  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4781

Sandra Simms  
C & C Corporation Counsel  
530 South King Street  
Honolulu, Hawaii 96813  
Phone: 523-4116

J.K. Sims, M.D.  
Health Mobilization Physician  
Emergency Medical Services Branch  
3627 Kilauea Avenue, Room 102  
Honolulu, Hawaii 96816  
Phone: 735-5267

Ms. Kathleen Shimmin, Co-Chair, Oceania Regional Response Team  
US Environmental Protection Agency Region IX  
Office of Health and Emergency Planning (T-6)  
215 Fremont Street  
San Francisco, California 94105

Daniel Shon, Branch Manager  
Brewer Chemical Corporation  
P.O. Box 48  
Honolulu, Hawaii 96810  
Phone 533-4411

Dr. John W. Shupe  
U.S. Department of Energy  
Pacific Sight Office  
PJJK Federal Bldg, R, 4322, Box 50168  
Honolulu, Hawaii 96850

Mr. Francis Smith, Chief  
Hawaii County Fire Department  
466 Kainoole Street  
Hilo, Hawaii 96720  
Phone 935-2978

Mr. Clyde Takekuma, Chief Santarian  
Kauai Environmental Branch  
P O Box 671  
Lihue, Hawaii 96766  
Phone: 245-4323

CAPT Alexander (Sandy) E. Tanos  
Commander, Fourteenth Coast Guard District (m)  
PJKK Federal Building  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850-4982

Mr. Alfred J. Thiede  
director and Chief Engineer  
Department of Public Works  
City and County of Honolulu  
650 South King Street, 11th Floor  
Honolulu, Hawaii 96813  
Phone: 523-4341

Mr. John E. Vadnais  
U.S. Department of Health & Human Services  
Div. of Preventive Health Services  
50 United Nations Plaza, Rm 301  
San Francisco, California 94102

Mr. Damien Victorino, Chief  
County of Kauai Fire Department  
4396 Rice Street  
Lihue, Hawaii 96766  
Phone: 245-4721

Mr. Warren W. Warner  
U.S. Department of Energy  
ESQA Division  
1333 Broadway  
Oakland, California 94612

Mr. Craig Whitesell  
USDA Forest Service  
1151 Punchbowl St., Rm 323  
Honolulu, Hawaii 96813

Ms. Sheila Wiegman  
American Samoa  
Environmental Protection Agency  
Office of the Governor  
Fagatogo, American Samoa 96799

Ms. Stephanie Whalen, Chemist  
Hawaiian Sugar Planters Association  
P O Box 1057  
Aiea, Hawaii 96701  
Phone: 487-5561

Mr. Richard D. Wurdeman  
Corporation Counsel  
City and County of Honolulu  
530 South King Street, Basement  
Honolulu, Hawaii 96813  
Phone: 523-4122

Michael Yoshinaga, Asst. Project Coordinator  
Department of Human Services  
Development Section

Raymond Yuen  
910 Kapahulu Avenue  
Honolulu, Hawaii 96816  
Phone: 735-6592

Mike Zustra  
Commanding Officer U.S. Coast Guard  
Marine Safety Office  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
Phone: 541-2068

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE TSERC  
MAILING LIST

Latest Revision: June 23, 1989

Tom Bello, Chief  
Hawaii Fire Department  
466 Kinooole Street  
Hilo, Hawaii 96720  
Phone: 935-2978

John Bowen, Ph.D.  
University of Hawaii  
P.O. Box 1115  
Hilo, Hawaii 96721-1115  
Phone: 959-9460

Harold Barks, Administrator  
Occupational Safety & Health  
Department of Labor and Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4155

Tom Brown, Civil Defense Planner  
State Civil Defense  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-2161

Dan Chang, Envio. Hlth. Spec.  
GWP Program  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-6767

Carter Davis, Fire Captain  
Hazardous Materials Instructor  
890 Valkenburg Street  
Honolulu, Hawaii 96818  
Phone: 422-1001

Captain Melvin DeCosta  
Civil Defense Coordinator  
Honolulu Police Department  
1455 South Beretania  
Honolulu, Hawaii 96814  
Phone: 943-3364

Doug Erway, Exercise Asst. Off.  
State Civil Defense  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495  
Personal Business  
Phone: 734-2161

Sonny Gerardo, Administrator  
Kauai Civil Defense Agency  
4444 Rice Street, Room 230  
Lihue, Kauai 96766  
Phone: 245-4001

Neal Gyotoku  
Logistics and Supply Officer  
Hawaii County Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Harlan Hashimoto, Ph.D.  
University of Hawaii-School of Public Health  
1960 East-West Road  
Honolulu, Hawaii 96822  
Phone: 948-8037

Leroy Hokoana, Fire Chief  
Maui Fire Department  
21 Kinipopo Street  
Wailuku, Hawaii 96793  
Phone: 243-7561

Clifford Ikeda  
Co-Chairman, Kauai LEPC  
Kauai Civil Defense  
4444 Rice Street, Room 230  
Lihue, Hawaii 96766  
Phone: 245-4001

Thomas Kam  
Department of Land & Natural Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-7541

Arlene Kabei, Manager  
Department of Health-HWP  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
Phone: 548-2270



Edward J. Kalinowski, B.S.N., M.Ed.  
Emergency Medical Services Dept.  
Department Chair  
Kapiolani Community College  
4303 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-9288

Charmaine Kamaka  
Safety Coordinator  
County of Hawaii-Safety  
25 Aupuni Street  
Hilo, Hawaii 96720  
Phone: 961-8215

Lt. Cmdr. Kenneth Keane  
U.S. Coast Guard Marine Safety Office  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909  
Phone: 541-2068

Harry Kim, Administrator  
Hawaii Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Gerald Kinro, Pesticide Specialist  
Department of Agriculture  
1428 South King Street  
Honolulu, Hawaii 96814-2512  
Phone: 548-4721

Alejandro Lomosad  
Kauai Fire Department  
4223 Rice Street  
Lihue, Hawaii 96766  
Phone: 245-4721

Harold Matsuura  
Chief Sanitarian  
P.O. Box 916  
Hilo, Hawaii 96721-0916  
Phone: 961-7275, 7371

Sel Menor, Administrator  
Maui Civil Defense  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 243-7721

Ralph Moore  
Hazardous Materials Specialist  
State Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-3188

Donna Maiava, Chief  
Emergency Medical Services System Branch  
Department of Health  
3627 Kilauea Avenue, Room 102  
Honolulu, Hawaii -----  
Phone: 735-5267

David H. Nakagawa, Chief Sanitarian  
Department of Health-Maui  
54 High Street  
Wailuku, Hawaii 96793  
Phone: 244-4255

Captain Gordon Piche,  
Captain of the Port  
U.S. Coast Guard Marine Safety Division  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909  
Phone: 541-2608

Joe Reed  
Oahu Civil Defense  
650 South King Street, Basement  
Honolulu, Hawaii 96813  
Phone: 523-4121

Anthony Salis  
Department of Occupational Safety and Health  
830 Punchbowl Street, Room 423  
Honolulu, Hawaii 96813  
Phone: 548-4781

Ronald Takahashi  
Personnel Management Specialist  
Department of Civil Service  
County of Hawaii  
101 Aupuni Street, Suite 133  
Hilo, Hawaii 96720  
Phone: 961-8361

Paul Takamiya  
Oahu Civil Defense Agency  
650 South King Street  
Honolulu, Hawaii 96813  
Phone: 527-5489

Clyde Takekuma, Chief Sanitarian  
Kauai Environmental Branch  
P.O. Box 671  
Lihue, Hawaii 96766  
Phone: 245-4323

Tom Vendetta, Chief  
Industrial and Safety Workers' Compensation  
City and County of Honolulu  
550 South King Street  
Honolulu, Hawaii 96813  
Phone: 523-4880

STATE OF HAWAII  
CHEMICAL EMERGENCY RESPONSE TRAINING  
GUIDELINES

HAWAII STATE EMERGENCY RESPONSE COMMISSION

JUNE 1989 (DRAFT III)

TABLE OF CONTENTS

Introduction ..... 1

Training Categories

I. Hazardous Materials First Responder

    Awareness Training ..... 5

II. Hazardous Materials Incident Response

    Training ..... 8

III. Hazardous Materials Supervisor's Training ..... 13

IV. Hazardous Materials Specialist Training ..... 16

V. Hazardous Materials Response Exercise ..... 22

References ..... 23

## INTRODUCTION

The purpose of this document is to provide guidance for Hawaii state and local governmental agencies on the level of training recommended for supervisors and staff who may come in contact with hazardous materials.

## BACKGROUND AND PURPOSE

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) 1986, the State of Hawaii is required to enhance its ability to respond to chemical emergencies. The Hawaii State Emergency Response Commission was formed to oversee this process. A technical subcommittee was formed to assist the commission and was tasked with ensuring that state and county officials and personnel are adequately trained for chemical emergency response. Due to the complexity of the training needs and requirements, the technical subcommittee developed guidelines to clearly describe what level of training should be provided to state and county employees. The guidelines are outlined in five different categories in this document. It must be emphasized that ultimately, each employer is responsible for their employee's health and safety. This document is a tool to help state and county supervisors meet this responsibility.

The elements described for each category are the basic, fundamental topics which should be included for the specific worker category. Each course should be designed with these elements in mind but should also be tailored for that particular target audience. For example, if the target audience is concerned with chemical emergencies involving motor vehicles, then that particular training course should include specific case studies involving highway spills and address how their job function relates to such incidents.

It should also be noted that although these are guidelines, employees and their supervisors, who may be exposed to hazardous materials or wastes during their normal course of work, must be trained in accordance with State and Federal laws (Title 12, Chapter 99 of the Hawaii State Administrative Rules and 29 CFR 1910.120 respectively). These requirements are described in the guidelines under Category I First Responder Awareness Training, II Hazardous Materials Incident Response Training and Category III Hazardous Materials Training for Supervisors.

Training guidelines have been developed for the following five categories:

1. First Responder Awareness Training

This training category is targeted for people who may

be the first to respond to a hazardous materials incident and would respond in a defensive fashion without actually trying to stop the release.

2. Hazardous Materials Incident Response Training

This training category is targeted for any person who may be exposed to hazardous materials releases or emergencies during the course of their employment. Basic personal protection measures are covered in this training course along with recognition, identification, toxicology, risk assessment monitoring and basic chemical emergency response planning and tactical considerations.

3. Hazardous Materials Training for Supervisors

This training category is specifically for supervisors of employees who may come in contact with hazardous materials. Category 2 is a prerequisite for this course.

4. Hazardous Materials Specialist Training

This training category is targeted for people who respond to chemical emergencies, and conduct the



investigation and clean-up of a hazardous materials release. Their duties would include entering the contaminated zone, investigating the situation and implementing the appropriate clean-up measures. Advanced chemistry and tactical training are covered in this course in addition to topics identified in Categories 1 and 2.

5. Hazardous Materials Response Exercise

This training category is targeted for state and local personnel who may respond to a chemical emergency incident. They should have taken training in one of four previously mentioned categories. The purpose of the exercise is to promote hazardous materials response preparedness; test or evaluate emergency hazardous materials operations, policies, plans and procedures as well as train personnel in hazardous materials management duties and to demonstrate capability.

TRAINING CATEGORIES

The following sections identify the minimal training criteria recommended for each category. Additional training is recommended depending on the individual's need and interest.

**Category I      Hazardous Material First Responder Training**

**Hazardous Materials First Responder:**      A person(s) who in the course of their normal duties may be first on scene during a hazardous materials incident and would respond in a defensive fashion without actually trying to stop the release.

**Purpose:** Training in this category should provide the first responder with the ability to utilize basic reference tools available in order to recognize and identify hazardous materials. They should also be aware of the health risk associated with various chemicals and be able to notify the appropriate response agency. This training provided in this category should meet or exceed training requirements under 29 CFR 1910.120 (q)(6)(ii). The training provided should cover the following areas:

A.      Recognition of hazardous materials in an emergency:

- 1)      the nine United National (UN)/Department of Transportation (DOT) hazardous materials classes, the major hazards of each class and provide examples
  
- 2)      the six groups of clues for detecting the presence of hazardous materials

- 3) typical locations in the community or facility where hazardous materials are manufactured, transported, stored, used or disposed of
- 4) the placards, labels, markings and shipping papers used in the transportation of hazardous materials and know their advantages and limitations during the process of recognizing hazardous materials
- 5) the types of specialized marking systems found at fixed facilities such as NFPA 704M and pesticide labeling
- 6) three sources of specific information to help identify hazardous materials

B. Identification of hazardous materials and determination of appropriate response action including:

- 1) identification or classification the hazardous material involved in an emergency using markings, placards, labels, shipping papers or personal contacts
- 2) the use of the DOT Emergency Response Guidebook in

assessing hazards, response actions and  
determining isolation and evacuation distances

- 3) the problems in specifically identifying hazardous materials
  - 4) identification of the shipping papers found in various modes of transportation, the individuals responsible for the papers, and location where carried and found during an incident; and
  - 5) identification of basic hazardous materials containers and bulk and nonbulk packaging
- C. The role of the first responder at the scene of a hazardous materials incident
- D. Recognition of the need for additional resources and determination of appropriate notifications
- E. Scene management (incident Command System, isolate immediate site, deny entry, evacuate)
- F. Health and Safety procedures including:
- 1) how hazardous materials incidents are different

from other emergencies

- 2) six ways by which hazardous materials are harmful to people at incidents
- 3) the general routes of entry for human exposure to hazardous materials
- 4) the limitations of street clothes or work uniforms at the scene of hazardous materials incidents
- 5) the threats posed to the environment by hazardous materials releases
- 6) the precautions necessary when rendering emergency medical care to victims of hazardous materials incidents

**Category II Hazardous Materials Incident Response Training**

This training is recommended for anyone who may come in contact with or exposed to hazardous materials release or emergency during the course of their employment. This course should meet or exceed training requirements as defined under 29 CFR 1910.120 (q)(6)(iii), and (iv).

**Purpose:** Training in this category should:

- . make an individual aware of the health risk associated with hazardous materials;
  
- . provide workers with the knowledge and skill necessary to perform chemical emergency response or remedial response work with minimal risk to their health and safety;
  
- . make workers aware of the purpose and limitation of safety equipment; and
  
- . ensure workers can safely respond to, avoid or escape from emergencies according to appropriate plans and procedures.

Training should cover the following topics:

- A. Understanding of chemistry and physical properties of hazardous materials
  - 1) chemical and physical properties, chemical reactions, chemical compatibilities
  
- B. Toxicology

- 1) dosage, routes of exposure, toxic effects, Immediately Dangerous to Life of Health (IDLH) values, Permissible Exposure Limits (PELs), Recommended Exposure Limits (RELs), Threshold Limit Values (TLVs)

C. Industrial Hygiene

- 1) selection and monitoring of personal protective clothing and equipment
- 2) calculation of doses and exposure levels, evaluation of hazards, selection of worker health and safety protective measures

D. Rights and responsibilities of workers under OSHA

- 1) applicable provisions of Title 29 of the Code of Federal Regulations (the Occupational Safety & Health Act)

E. Monitoring Equipment

- 1) functions, capabilities, selection, use, limitations, and maintenance

F. Hazard Evaluation

- 1) sampling techniques
- 2) evaluation of field and lab results
- 3) risk assessment

G. Site safety plans

- 1) safe practices, safety briefings and meetings
- 2) standard operating procedures, site safety map

H. Plans and Standard operating procedures (SOPs)

- 1) SOP development, compliance and hands-on practice
- 2) Knowledge of the Regional Response Team, State Emergency Response and local emergency response plans

I. Engineering controls

- 1) the use of barriers, isolation, and distance to



minimize hazards

J. Personal protective clothing and equipment (PPE)

- 1) assignment, sizing, fit-testing, maintenance of air purifying respirators, use, limitations, and hands-on training
- 2) selection of PPE
- 3) ergonomics

K. Medical program

- 1) medical monitoring and requirements of such a program under 29 CFR 1910.120, first aid, stress recognition
- 2) advanced first aid, cardiopulmonary resuscitation emergency drills
- 3) design, planning and implementation

L. Decontamination

- 1) hands-on training using simulated field conditions

2) design and maintenance

M. Legal and regulatory aspects

1) applicable safety and health regulations (OSHA, EPA, etc.)

2) response to emergencies, follow-up investigation and documentation

**Category III Hazardous Materials Supervisor's Training**

This category is for persons that supervise personnel that may be exposed to hazardous materials during the course of their employment. The prerequisite for this course should be Hazardous Materials Personal Protection Training outlined in Category II.

**Purpose:** To provide guidance to supervisors of operations where workers may be exposed to hazardous material incidents. Training in this category should cover the following topics:

A) Regulatory review of the following laws:

Comprehensive Environmental Response, Compensation, And Liability Act (CERCLA) as amended by the Superfund Amendments Reauthorization Act (SARA), Resource

Conservation and Recovery Act (RCRA), and Occupational Safety and Health Act.

- B) The Incident Command System and the role of Incident Commander and On-Scene Coordinator
- C) Compliance with 29 CFR 1910.120 and other regulations
- D) Contingency planning and organization (including the role of government agencies)
- E) Industrial hygiene
  - 1) selection and monitoring of personnel protective equipment
  - 2) calculation of doses
  - 3) hazard evaluation
  - 4) selection of protective measures
- F) Hazard Evaluation
  - 1) techniques of sampling

- 2) evaluation of field and laboratory results
  - 3) hazardous characterization and identification
  - 4) risk assessment
- G) Development and management of standard operating procedures
- 1) sampling plans
  - 2) health and safety plans
  - 3) medical monitoring plan
  - 4) heat stress monitoring
  - 5) work plan
  - 6) security plan (site entry and control)
  - 7) logistics plan
  - 8) record keeping and logs
- H) Communication, public safety and community relations

- 1) press
- 2) local community
- 3) state and local officials

**Category IV Hazardous Materials Specialist Training**

**Hazardous Materials Specialist:** A person(s) who in the course of their normal duties may enter into the hot or contaminated zone at a controlled or uncontrolled hazardous material site, emergency or incident. Training in this category should include all the training objectives as in the first responder category plus the following topic areas:

- A. Development and implementation of a site safety plan including:
  - 1) the components of a safety plan for a hazardous materials incident
  - 2) identification criteria for determining the location of the control zones for a hazardous materials incident

- 3) identification criteria for modifying the evacuation areas set up by the first responder
- 4) the signs and symptoms of exposure to that hazardous material given a specific hazardous materials
- 5) the signs and symptoms of heat stress
- 6) implementation a safety plan given a simulated hazardous materials incident

B. Classification, identification and verification of known and unknown materials by using basic monitoring equipment including:

- 1) the twenty-five (25) DOT hazard categories, the basic hazard posed by each
- 2) the precautions to be observed and followed when dealing with the twenty-five hazard categories
- 3) the source of, definition of, and circumstances for the use of the terms "hazardous substances," "hazardous chemicals," "hazardous wastes"

- 4) the advantages and disadvantages of various resource references and monitoring and detection instruments
  - 5) the decision-making process for identification of unknown chemical, biological or radiological hazards
- C) The government and private sector agencies that offer aid during a hazardous materials incident, including their role and the type of aid or resources available
- D) Simulated emergency response which reviews:
- 1) health and safety
  - 2) site entry and reconnaissance
  - 3) reference information
  - 4) resources
  - 5) decontamination procedures
  - 6) operation

E) Selection and use of proper specialized personal protective equipment including:

- 1) interpretation of a chemical compatibility chart
- 2) the maintenance, testing and storage procedures for the personal protective clothing provided
- 3) the proper donning, doffing, and usage of specialized protective clothing

F) Knowledge in hazard and risk assessment techniques including:

- 1) size and type of container and quantity involved, nature of the container stress, potential behavior of the container and its contents, level of resources available, exposure potential to people, property, environmental and systems, weather conditions and topography
- 2) the various monitoring equipment used to monitor and detect the hazards of toxicity, flammability, reactivity, radioactivity,



corrosivity, oxygen deficiency etc.

- 3) the proper usage, interpretation and limitations of available monitoring equipment
  - 4) the maintenance and testing procedures for available monitoring equipment
- G) Advanced hazardous material control, containment, and or confinement including:
- 1) the basic design and construction features of containers and bulk and nonbulk packaging used to store, process or transport hazardous materials including drums, cylinders, carboys, boxes or bags, cans or bottles, tank trucks and trailers, fixed tanks, portable tanks and intermodal containers and piping
  - 2) the methods and precautions for controlling, containing, and confining hazardous materials releases of the nine UN/DOT hazard classes
  - 3) the options is implementing hazardous material control, containment and confinement procedures

- 4) the proper selection and use of available tools, equipment
- H) Decontamination procedures including:
- 1) the advantages and limitations of dilution, absorption, chemical degradation, disposal, isolation
  - 2) the considerations associated with the placement, locations and setup of the decontamination site
  - 3) the sources of technical information for performing decontamination operations
- I) Record keeping and termination procedures including:
- 1) the activities required in terminating the emergency phase of an incident
  - 2) the preparation of the locally required report with supporting documentation as necessary
- J) Basic chemical, biological and radiological terminology and behavior

K) Medical and base-line monitoring of personnel

**Category V Hazardous Materials Response Exercise**

This training is recommended for anyone who may respond to a chemical emergency response incident. The participants of this exercise should have taken training in one of the four categories previously mentioned.

**Purpose:** To reveal planning weaknesses, resource gaps, improve coordination, clarify roles and responsibilities, improve individual performance and gain public recognition of hazardous materials response program. These exercises will be coordinated by Hawaii Department of Health and State Civil Defense and they should integrate this exercise requirement into the overall exercise needs of the State. Exercises should be in the following levels:

1. Table-top exercise
2. Functional exercise (EOC exercise)
3. Full-scale exercise (Field exercise)

Exercises consist of the performance of duties, tasks and operations very similar to the way they would be performed in a real emergency or chemical emergency incident.

## REFERENCES

1. Comprehensive and Environmental Response, Compensation and Liability Act as amended by Superfund Amendment Reauthorization Act, 42 U.S.C. Sections 9601-9675.
2. Thomas H. Seymour, "Review of the Superfund Worker Training Standards" presented at the 1988 National Governor's Association Conference on Title III, Washington, D.C.
3. 29 CFR 1910 Hazardous Waste Operations and Emergency Response; Final Rule, Department of Labor, March 6, 1989.
4. Hawaii's Administrative Rules, Title 12, Chapter 99, Hazardous Waste Operations and Emergency Response, Hawaii Department of Labor and Industrial Relations.
5. National Institute for Occupational Safety and Health, "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities", October 1985.

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER

May 12, 1989

MEMORANDUM

To: Members of the Hawaii State Emergency Response  
Commission Technical Subcommittee (TSERC)

From: Coordinator, Hazard Evaluation and Emergency  
Response Program

Subject: Revised Agenda for Technical Subcommittee Meeting #6  
Monday, 22 May 1989, 9:00 AM, Department of Health

This is to remind and update the TSERC members of ongoing subcommittee activities. Due to the lack of comments on the HAZMAT training guidelines, we extended the comment period on the guidelines to May 15. This decision was based on the fact that the training conducted by the Coast Guard would help members comment on the guidelines.

During the next six months, staff at the Department of Health will be working on developing draft rules and regulations for the implementation of the State's Environmental Emergency Response Law. The Department would like to incorporate the needs of all effected agencies during the development of these rules. In order to accomplish this goal as efficiently as possible, the Department intends to rely on comments and ideas provided by the working members of the Technical Subcommittee to the Emergency Response Commission (TSERC). Once the final draft rules are completed, they will be sent to the Commission for review and approval.

Department staff will discuss this strategy for rule development more fully at the TSERC meeting scheduled for May 22, 1989. In anticipation of this meeting, a revised agenda is attached. It is hoped that all member agencies will be able to attend this meeting, and any future meetings to ensure that your agency is fully represented and aware of the Department's activities during the forthcoming rulemaking process.

TSERC Members  
May 12, 1989  
Page 2

If you have any questions or would like to discuss our strategy for developing these rules, please give me or Andria Benner a call at 548-2076. Thank you for your continued participation and help with this effort.

  
Mark Ingoglia

Enclosure 1. Revised Agenda, TSERC Meeting, May 22, 1989

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #6  
DEPARTMENT OF HEALTH, LIBRARY, FIRST FLOOR  
MONDAY, 22 MAY 1989, 9:00 AM

AGENDA

- I. Review Meeting Summary from 23 February 1989
- II. HAZMAT Exercise Update
- III. State HAZMAT Plan Distribution, Draft III
- IV. Statewide HAZMAT Training Assessment Update
  - Status of Training Guidelines
  - Needs Assessment
  - Alternatives for Meeting Needs
  - Workshop Update
- V. Title III Data Management
- VI. Establishment of Rulemaking Workgroup for Environmental Emergency Response Law
- VII. Next Meeting, Date and Time
- VIII. Adjournment

Note: County representatives involved in Title III Data Management will have an informal meeting immediately following the TSERC meeting at the same location.

SCHEDULE FOR TRAINING GUIDELINE, SURVEY, STATE PLAN AND HAZMAT CONFERENCE

\* STATE RESPONSE PLAN

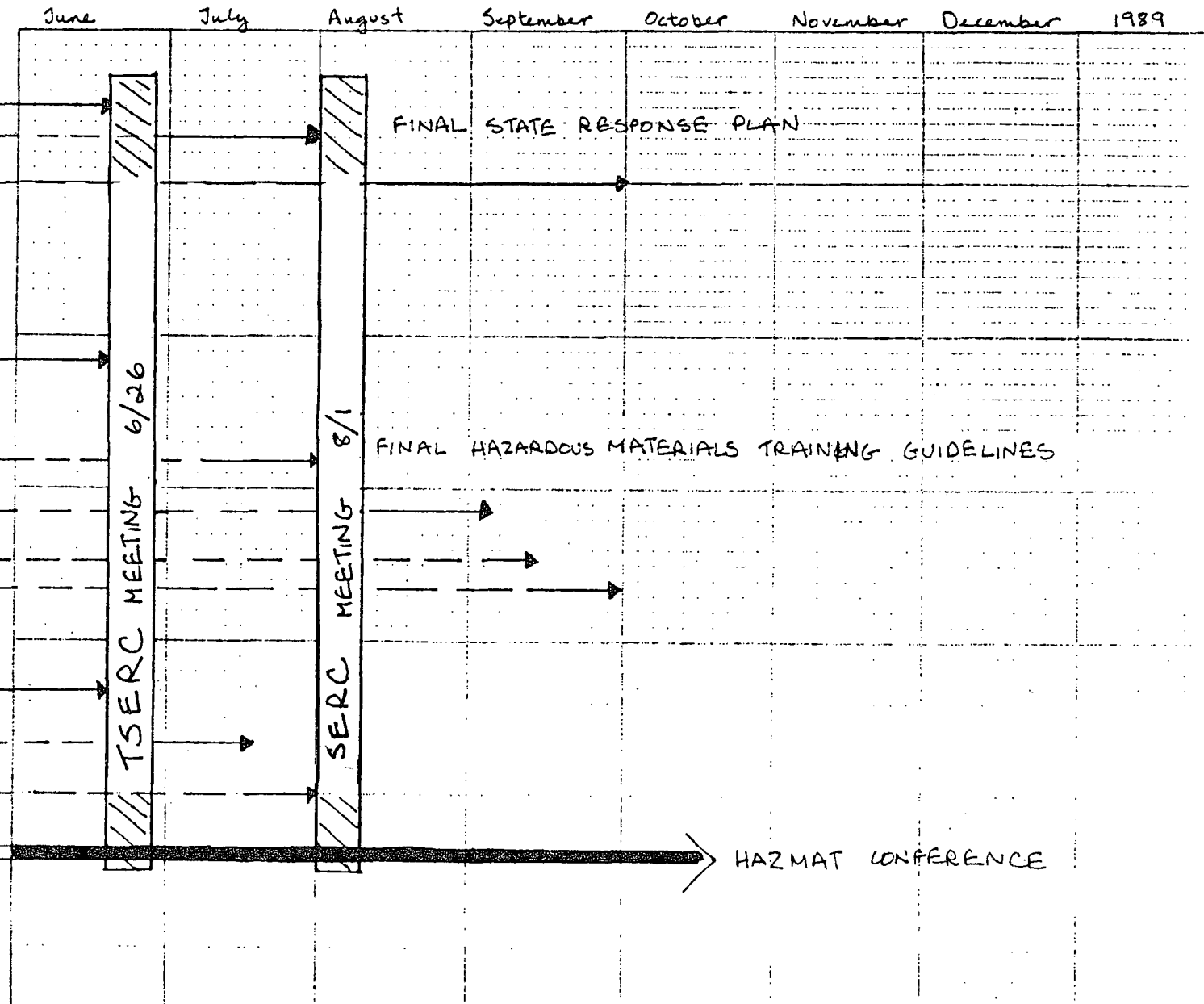
- Revise State Response Plan (6/23)
- Present to TSERC for final approval (6/26)
- Submit to SERC for approval (8/1)
- Once approved, distribute statewide (10/89)

\* HAZARDOUS MATERIALS TRAINING GUIDELINES/SURVEY

- Revise Draft II (6/23)
- Present to TSERC for final approval (6/26)
- Submit to Federal Agencies (USCG, FEMA and EPA) for review (6/22)  
Comments requested by 7/19
- Submit to SERC for approval (8/1)
- Once approved, initiate training survey statewide (8/89)
- Design statewide training program based on survey response (9/89)
- Include in supplemental budget request

\* HAZMAT CONFERENCE " It Can't Happen Here"

- Present proposal to TSERC (6/26)
- Develop small working group and finalize proposal (7/19)
- Present Hazmat Conference proposal to SERC (8/1)
- Conference tentatively scheduled for 10/89





Andria

MEETING SUMMARY

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #5

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #6  
DEPARTMENT OF HEALTH, LIBRARY, FIRST FLOOR  
MONDAY, 22 MAY 1989, 9:00 A.M.

Members Attendees:

- Tom Bello, Hawaii Fire Department
- Tom Brown, State Civil Defense
- Daniel Chang, DOH
- Doug Erway, State Civil Defense
- Harlan Hashimoto, Ph.D., University of Hawaii-Manoa
- Leroy Hokoana, Maui Fire Department
- Clifford Ikeda, Kauai Civil Defense
- Gerald Kinro, DOA
- Alejandro Lomosad, Kauai Fire Department
- Harold Matsuura, Hawaii DOH
- Selbero Menor, Maui Civil Defense
- David Nakagawa, DOH-Maui
- Joe Reed, Oahu Civil Defense
- Thom Diggs, Oahu Civil Defense
- Tom Vendetta, C & C of Honolulu
- Clyde Takekuma, Kauai District Health Office
- Neil Gytoku, Hawaii Civil Defense
- Charmaine Kamaka, Hawaii County Safety
- Harold Banks, DOSH
- Thomas Kam, DLNR
- Mark Ingoglia
- Jeff Klein
- Andria B. Jenner
- Nancy Woo
- Nancy Gilder

I. HAZMAT EXERCISES

HAZMAT exercises will be held on Oahu August 20th, and Maui August 23rd. Discussion followed on what kind of exercise Maui should hold, table-top, partial, or full field. A comment was made that one objective of an exercise is to identify shortfalls in equipment, training, personnel and other emergency response capabilities. It was agreed that table-top would be sufficient for Maui.

A statewide tsunami exercise will be held on May 31st.

EPA is planning a HAZMAT exercise for August 29-30.

## II. TRAINING GUIDELINES

The draft Training Guidelines was distributed for review and comment. Comments should be returned to HEER by June 5th. One comment mentioned that the plan was too specific.

## III. TITLE III DATA MANAGEMENT

Samir Araman is no longer with DOH. Andria Benner and Jeff Klein will be working with Title III.

## IV. ESTABLISHMENT OF RULEMAKING

The rulemaking process will be discussed with the Attorney General's office and be discussed at the next meeting.

## V. KAUAI LANDFILL INCIDENT

The Kauai Landfill accident of May 2nd was reported to the group. The landfill operator broke the drum open went home for lunch and became nauseous. The area was cordoned off and people kept away. Samples were taken by untrained people without the proper equipment. Finally, Unitec was called in to help.

### Lessons Learned from this Incident:

1). Untrained personnel should not collect samples. Please contact DOH for assistance if staff are not field trained.

2). A consistent line of communication is critical during an emergency response action. The initial responder should maintain the lead role until the response is completed or the lead is delegated to another another agency or party.

### Other Factors:

- \* Liquids not allowed in landfill
- \* County responsible for problem (Owner/Operator)
- \* Costs may be \$50-\$100,000 for cleanup; but County was not there to monitor the contractor it hired
- \* Need to train landfill operators to identify hazardous materials

→  
→

VI. TRAINING: PERSONNAL PROTECTION AND SAFETY

The next Personnal Protection and Safety training will be on Kauai, hopefully in June. Maui is aiming for July, and the Big Island in August. These dates need to be confirmed with the Coast Guard.

VII. WRAP-UP

Surveys will be sent within two weeks concerning training needs assessment. Please complete and return three weeks after you receive it.

A statewide HAZMAT conference was discussed as a way to bring more public, private and government attention to the problem.

Next meeting, Monday, June 19th 9:00 AM, DOH Library

Meeting was adjourned at 11:00am.

TSERC  
TITLE III DATA MANAGEMENT SUBCOMMITTEE  
MINUTES  
MAY 22, 1989

I. Each island presented the status of its data management activities.

Oahu Civil Defense

1). Uses a facility profile form

- information on all materials; if new materials added to a facility in-between reporting periods, facility has 60 days to ~~report~~ report.

2). File for each facility

- collect data for future input into CAMEO

3). Compliance

- make an appointment with the facility operators for a walking tour to familiarize yourself with the people and the facility.

- don't coordinate with the Fire Department, you have different interests and reasons for the visitation.

- follow state's notification guidelines

- map out "Danger Zone" (to plot potential plume) for all facilities, half mile radius and one mile downwind. Data for CAMEO.

Kauai Civil Defense

1). One problem is that there is no responsible agency or person for HAZMAT program.

2). Recommended that meetings be held to get people to fill out questionnaires.

3). Everything was removed from their budget except training. Hoping to get a MacIntosh computer next year.

Hawaii Civil Defense

1). They have facility profile for between 26-30 companies.

2). Working on Site Visitation plans, questioning whether to do it alone or coordinate with the Fire Department.

3). Facilities are developing their Emergency Plans and are asking their assistance.

4). Concerned about the fact that the police do not have first response training.

## II. Suggestions for Notification Title III

- \* Newspaper ad and or article
- \* Handout with Brewer Chemical mailing list
- \* Hold a conference - discussion of a grassroots workshop to educate the public, companies and government officials of SARA requirements and the state's Emergency Response Plan for hazardous materials.

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE TSERC  
MAILING LIST

Latest Revision: June 23, 1989

Tom Bello, Chief  
Hawaii Fire Department  
466 Kinoole Street  
Hilo, Hawaii 96720  
Phone: 935-2978

John Bowen, Ph.D.  
University of Hawaii  
P.O. Box 1115  
Hilo, Hawaii 96721-1115  
Phone: 959-9460

Harold Barks, Administrator  
Occupational Safety & Health  
Department of Labor and Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4155

Tom Brown, Civil Defense Planner  
State Civil Defense  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-2161

Dan Chang, Envio. Hlth. Spec.  
GWP Program  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-6767

Carter Davis, Fire Captain  
Hazardous Materials Instructor  
890 Valkenburg Street  
Honolulu, Hawaii 96818  
Phone: 422-1001

Captain Melvin DeCosta  
Civil Defense Coordinator  
Honolulu Police Department  
1455 South Beretania  
Honolulu, Hawaii 96814  
Phone: 943-3364

Doug Erway, Exercise Asst. Off.  
State Civil Defense  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495  
Personal Business  
Phone: 734-2161

Sonny Gerardo, Administrator  
Kauai Civil Defense Agency  
4444 Rice Street, Room 230  
Lihue, Kauai 96766  
Phone: 245-4001

Neal Gyotoku  
Logistics and Supply Officer  
Hawaii County Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Harlan Hashimoto, Ph.D.  
University of Hawaii-School of Public Health  
1960 East-West Road  
Honolulu, Hawaii 96822  
Phone: 948-8037

Leroy Hokoana, Fire Chief  
Maui Fire Department  
21 Kinipopo Street  
Wailuku, Hawaii 96793  
Phone: 243-7561

Clifford Ikeda  
Co-Chairman, Kauai LEPC  
Kauai Civil Defense  
4444 Rice Street, Room 230  
Lihue, Hawaii 96766  
Phone: 245-4001

Thomas Kam  
Department of Land & Natural Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-7541

Arlene Kabei, Manager  
Department of Health-HWP  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
Phone: 548-2270

Edward J. Kalinowski, B.S.N., M.Ed.  
Emergency Medical Services Dept.  
Department Chair  
Kapiolani Community College  
4303 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-9288

Charmaine Kamaka  
Safety Coordinator  
County of Hawaii-Safety  
25 Aupuni Street  
Hilo, Hawaii 96720  
Phone: 961-8215

Lt. Cmdr. Kenneth Keane  
U.S. Coast Guard Marine Safety Office  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909  
Phone: 541-2068

Harry Kim, Administrator  
Hawaii Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Gerald Kinro, Pesticide Specialist  
Department of Agriculture  
1428 South King Street  
Honolulu, Hawaii 96814-2512  
Phone: 548-4721

Alejandro Lomosad  
Kauai Fire Department  
4223 Rice Street  
Lihue, Hawaii 96766  
Phone: 245-4721

Harold Matsuura  
Chief Sanitarian  
P.O. Box 916  
Hilo, Hawaii 96721-0916  
Phone: 961-7275, 7371

Sel Menor, Administrator  
Maui Civil Defense  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 243-7721



Ralph Moore  
Hazardous Materials Specialist  
State Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-3188

Donna Maiava, Chief  
Emergency Medical Services System Branch  
Department of Health  
3627 Kilauea Avenue, Room 102  
Honolulu, Hawaii -----  
Phone: 735-5267

David H. Nakagawa, Chief Sanitarian  
Department of Health-Maui  
54 High Street  
Wailuku, Hawaii 96793  
Phone: 244-4255

Captain Gordon Piche,  
Captain of the Port  
U.S. Coast Guard Marine Safety Division  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909  
Phone: 541-2608

Joe Reed  
Oahu Civil Defense  
650 South King Street, Basement  
Honolulu, Hawaii 96813  
Phone: 523-4121

Anthony Salis  
Department of Occupational Safety and Health  
830 Punchbowl Street, Room 423  
Honolulu, Hawaii 96813  
Phone: 548-4781

Ronald Takahashi  
Personnel Management Specialist  
Department of Civil Service  
County of Hawaii  
101 Aupuni Street, Suite 133  
Hilo, Hawaii 96720  
Phone: 961-8361

Paul Takamiya  
Oahu Civil Defense Agency  
650 South King Street  
Honolulu, Hawaii 96813  
Phone: 527-5489

Clyde Takekuma, Chief Sanitarian  
Kauai Environmental Branch  
P.O. Box 671  
Lihue, Hawaii 96766  
Phone: 245-4323

Tom Vendetta, Chief  
Industrial and Safety Workers' Compensation  
City and County of Honolulu  
550 South King Street  
Honolulu, Hawaii 96813  
Phone: 523-4880

SUGGESTED CHANGES TO HAWAII'S OIL AND HAZARDOUS MATERIALS EMERGENCY  
RESPONSE PLAN DRAFT III BY TSERC MEMBERS

Bracketed materials are deleted, underlined items are additions.

DOSH:

Page 6: 6a., [standards in work places are not violated], is not compromised.

Page 36: 6b, [OSHA], air.

Page 41: 12, and the precautions necessary to reduce risk to worker safety and health, instead of health and safety.

DOA:

1). Suggested an appendix section listing sources of technical information.

2). Suggested a standard form be used by those receiving an emergency report.

KAUAI CIVIL DEFENSE:

Page 15: B. TRAINED PERSONNEL

The state training program will include a basic HAZMAT awareness course recommended for all first responders...

Page 17: 1. Notification Policy [.]

Any oil or HAZMAT spill that may threaten public health or the environment [be] must be reported...

Page 19: (2) Designate a county on-scene coordinator (COSC) for local resources [who shall also be the IC].

d. Change-of-Command

Incident [commander] command will remain at the county level...

Page 22: 3. Cleanup and Restoration

a. State Incident Commander - Once the emergency is over and stabilization and control measures are taken, local emergency responders will return to normal duties. At [a mutually agreed upon] this time, the county incident commander will turn command over to the state on-scene coordinator (normally DOH) who will assume incident commander authority and direct cleanup and restoration.

County agencies may [need or] choose to remain involved. This change was not accepted.

Page 28: H. Coordination of Public Information

The news media can provide both important and detrimental information about the nature of an incident. Successful emergency operations require accurate and timely public information. Public information will be coordinated between on-scene and off-scene operations. [A] An on-scene Public Information Office (PIO) will be designated by the incident commander [or OSC] to issue information about the incident. This change was not accepted.

The PIO will issue information[,] in coordination with the DOH information representatives. DOH will [ensure that] provide the PIO [has] with timely and accurate public health information.

Page 32: 2. Department of Health (DOH)

a. Receives notification via SCD.

b. Provides State On-Scene Coordinator (SOSC):  
neighbor islands SOSC will be the District Health Officer (DHO) or District Health Service Administrator (DHSA) or his designated representative.

CHANGES MADE BY HEER:

Added to the Definition of Key Terms section the definition of "hazardous substance" issued in the Hawaii State Environmental Emergency Response law, Chapter 128D.

Replaced all references made to hazardous materials, HAZMAT etc. to hazardous substance[s].

Page 39: Remove 5. USDA responsibilities

Page 40: Remove 7. Army Corps of Engineers responsibilities

Page 41: Remove 12. USDOL

Section IV - Elements of Hawaii's Oil and HAZMAT Emergency Response System: Removed Figure IV.

Section VI - Oil and Hazardous Materials Emergency Categories and Response Levels: Removed Figures VII, VIII, IX, Table 2, and all their references.

**HAWAII'S  
OIL AND HAZARDOUS SUBSTANCES EMERGENCY  
RESPONSE PLAN**

Supplement to State of Hawaii Plan  
for Emergency Preparedness, Volume III  
Disaster Response and Assistance

Hawaii State Emergency Response Commission

Draft IV, June 26, 1989

TABLE OF CONTENTS

Table of Contents.....i  
Distribution List.....iii  
Records of Amendments and Changes.....iv  
List of Figures and Tables.....v  
List of Acronyms.....vi

Section

Page

I. Introduction.....1  
    A. Background.....1  
    B. Statement of the Problem.....2  
    C. Purpose and Scope of the Plan.....6  
    D. Planning Assumptions.....7

II. Definition of Key Terms.....10

III. Hawaii's Oil and Hazardous Substance  
    Emergency Preparedness.....15  
        A. Coordinated Plans and Procedures.....15  
        B. Trained Personnel.....16  
        C. Equipment.....16  
        D. Information Systems.....17

IV. Elements of Hawaii's Emergency Response System.....19  
    A. Notification Policy.....19  
    B. Enforcement, Cost Recovery and Liability.....22  
    C. Incident Management.....23  
        1. Emergency Response.....23  
        2. Stabilization and Control.....25  
        3. Cleanup and Restoration.....25  
    D. Emergency Operation Centers.....28  
    E. Technical Assistance - Government.....28  
    F. Technical Assistance - Industry.....29  
    G. Volunteer Services.....30  
    H. Public Information.....30

V. Responsibilities of Local, State, Federal Agencies, Industry  
    and Volunteer Organizations.....32  
    A. Overview.....32  
    B. Local Responders.....32  
    C. State Agencies.....35  
    D. Federal Agencies.....40  
    E. Industry.....44  
    F. Volunteer Organizations.....45

VI. Oil And Hazardous Substances Emergency Categories and  
    Response Levels.....46  
    A. Oil Spill Categories and Response Levels.....46  
    B. Release Category Levels.....47

VII. Plan Evaluation.....	48
A. Exercises.....	50
B. Incident Review.....	50
C. Training.....	51
D. Plan Review.....	52
E. Hazardous Substances Data Analysis.....	52
 APPENDICES.....	 53
Appendix I.....	53
Hawaii SARA Title III Section 304 Hazardous Substance Release Emergency Notification Guideline	
Appendix II.....	53
References	
Appendix III.....	55
Oil and Hazardous Substances: Sources of Technical Information	
Appendix IV.....	56
Standardized Emergency Response Report Form	

DISTRIBUTION LIST



Records of Amendments and Changes

## List of Figures

- Figure I            Categories of Oil and Hazardous Substances  
Emergencies for Hawaii 1988
- Figure II           Frequency of Oil and Hazardous Emergencies  
By County for Hawaii 1988
- Figure III          Chemical and Oil Spill Emergency Response  
Notification in Hawaii
- Figure IV           Incident Management Generalized Diagram
- Figure V            Matrix of Agency Responsibilities for Chemical and  
Hazardous Substances Emergency Response

## List of Tables

- Table 1             Summary of Emergencies Responded to During 1988

## ACRONYMS

DOH	Department of Health
SCD	State Civil Defense, Hawaii State Department of Defense
EPA	Environmental Protection Agency
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
IC	Incident Commander
ICS	Incident Command System
DOT	Department of Transportation
OSC	On Scene Coordinator
PIO	Public Information Officer
RRT	Oceania Regional Response Team (Federal)
USCG	U.S. Coast Guard
LEPC	Local Emergency Planning Committee
CAMEO	Computer Aided Management of Emergency Operations
USDOT	U.S. Department of Transportation
NCP	National Contingency Plan
CERCLA	Comprehensive Environmental Response Compensation and Liability Act as Amended
NRC	National Response Team

**SECTION I**  
**INTRODUCTION**

**A. BACKGROUND**

Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) is entitled the Emergency Planning and Community Right-To-Know Act. This federal statute requires emergency response planning at the state and local levels. To comply with Title III the Governor was required to establish the Hawaii State Emergency Response Commission (HSERC). On April 23, 1987 Governor Waihee designated the Department of Health (DOH) as the lead agency to implement Title III.

In turn, the HSERC was required to delineate emergency planning districts and appoint local emergency response committees to facilitate in the preparation and implementation of local emergency response plans. Hawaii's four counties, Honolulu, Hawaii, Maui, and Kauai represent the emergency planning districts for the state.

The HSERC then established a technical subcommittee which was requested to draft a state plan to provide statewide guidance on oil and hazardous substances emergency response. The result is Hawaii's Oil and Hazardous Substances Emergency Response Plan.

B. STATEMENT OF THE PROBLEM

Hawaii's geographical isolation has made it imperative for the State to develop in-state capability to plan for/and respond to oil and hazardous substance, pollutant or contaminant emergencies. During the last several years this need has been met by establishing and maintaining a HAZMAT Team at the Honolulu Marine Safety Office through a joint agreement between U.S. Coast Guard (USCG) and the U.S. Environmental Protection Agency. EPA funding for the USCG Team will be terminated in July of 1990, therefore it is essential the state of Hawaii, in cooperation with the counties, develop in-state oil and hazardous substance emergency response capabilities.

During 1988 DOH responded to a total of forty-five oil and chemical emergencies in the islands which are listed in Table 1. Figure I illustrates the categories of oil and chemical spill emergencies from in Table I. Nearly half of all the spills (44%) were oil related. The remaining spills were chemically hazardous in nature. Extremely Hazardous Substance (EHS), as defined under SARA Title III section 302, and Other Hazardous Substances, each made up twenty-five percent of the spills. The remaining six percent were PCB related.

Figure II depicts the frequency of releases by county. The vast majority, eighty-two percent, occurred on the island of Oahu. This is expected as Oahu has the greatest number of sites for potential hazards.

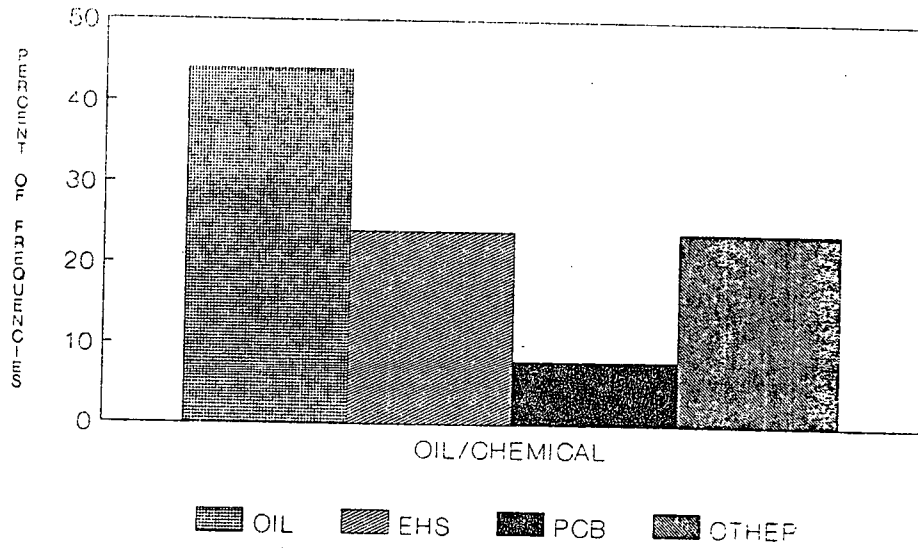
The Marine Safety Office of the USCG logs all the emergencies responded to by them in their database, Marine Safety Information Systems. A review of their database revealed that USCG responded to a total of 218 oil and chemical emergencies during 1988. A crude analysis of the spill sources show an estimated forty-five percent to be oil and another forty-five percent of unknown source. Five percent were hazardous wastes/chemicals and the other five percent appear to be related to drums, pipelines or dry docking.

Table I

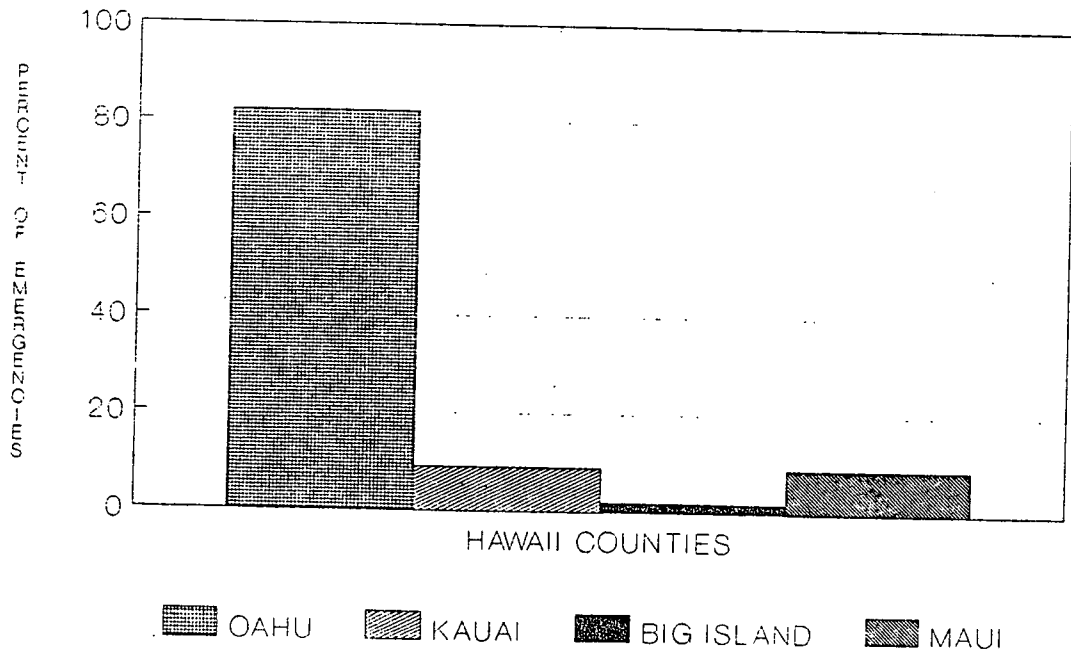
SUMMARY OF OIL AND HAZARDOUS MATERIALS EMERGENCIES IN THE  
STATE OF HAWAII RESPONDED TO DURING 1988

<u>Date</u>	<u>County</u>	<u>Chemical</u>	<u>Quantity</u>
02/26/88	Oahu	Methylene Chloride	50 gallons
03/07/88	Oahu	Transformer oil w/PCBs	
03/22/88	Oahu	Black Oil	4000 gallons
03/23/88	Kauai	Oil/Tar balls	
04/01/88	Kauai	Oil/Tar balls	
04/02/88	Oahu	Oil/Tar balls	
04/05/88	Maui	Oily Water	
04/07/88	Oahu	Methane	
04/13/88	Oahu	Aviation fue	11000 gallons
04/18/88	Oahu	Transformer oil w/PCBs	
04/18/88	Oahu	Oil Residues in pipeline	
04/20/88	Maui	Gasoline	50 gallons
04/28/88	Maui	Unknown chemical explosion	
05/10/88	Oahu	Chlorine residual	
06/21/88	Oahu	Oil/Tar balls	
07/05/88	Kauai	Gasoline	
07/12/88	Oahu	Hydrogen gas	
07/19/88	Oahu	Oil/Tar balls	
07/22/88	Oahu	Oil	
08/04/88	Oahu	Ammonia	3000 pounds
08/20/88	Oahu	Gasoline	3000 gallons
08/25/88	Oahu	Sulfur (molten)	
09/06/88	Oahu	Ammonia	500 pounds
09/06/88	Oahu	Chlorine	1 pound
09/11/88	Oahu	Hydrofluoric	250 gallons
09/13/88	Oahu	JP-4 Jet fuel	
09/15/88	Oahu	Chlordane	
09/23/88	Oahu	Oil	
09/27/88	Oahu	Ammonia	500 pounds
09/29/88	Oahu	Gas cylinder	
09/30/88	Oahu	Sulfuric Acid	2500 lbs
10/18/88	Oahu	Red Paint	
10/25/88	Oahu	Ammonia	300 lbs
11/04/88	Oahu	Hydrogen sulfide	
11/10/88	Kauai	Cyanide solution	4 pounds
11/16/88	Oahu	Old fuel tank	
11/22/88	Kauai	Gasoline vapor	
11/25/88	Oahu	Gas cylinder	
11/29/88	Oahu	#2 diesel fuel	400 gallons
12/05/88	Oahu	Gasoline	
12/05/88	Oahu	Radioactive container	
12/13/88	Oahu	Solvent	
12/24/88	Hawaii	#6 fuel oil spill	3000 gallons

**Figure I**  
**CATEGORIES OF OIL AND HAZARDOUS SUBSTANCE EMERGENCIES**  
**STATE OF HAWAII, 1988**



**Figure II**  
**FREQUENCY OF OIL AND HAZARDOUS SUBSTANCE EMERGENCIES**  
**BY COUNTY, STATE OF HAWAII, 1988**





### C. PURPOSE AND SCOPE OF THE PLAN

The Hawaii State Emergency Response Commission (HSERC), established under SARA Title III, has developed a statewide plan for responding to oil and hazardous substance emergencies to facilitate implementation of Title III and to compliment federal, state and county emergency operations plans (EOPs).

Hawaii's Oil and Hazardous Substances Emergency Response Plan covers all reportable incidents involving the spill or release of oil or hazardous substances, to include transport incidents, fixed location mishaps, and abandoned materials incidents. The plan has been developed in cooperation with appropriate federal, state and county agencies along with the private sector. It supplements the State of Hawaii's Plan for Emergency Preparedness, Volume III, Disaster Response and Assistance. It describes the typical roles and responsibilities of responders, identifies who will be in charge of an incident, and provides guidelines for coordinating local, state, federal, private industry and volunteer emergency response resources.

State and county agencies and private industry emergency response resources should incorporate the special hazard specific requirements/procedures delineated in this plan into their EOPs. Local Emergency Planning Committees

(LEPCs) are encouraged to use this plan as a model in developing their own detailed plans. County governments are expected to take the lead role during the initial emergency phases of an incident. State and/or federal agencies will provide technical support to local governments during the emergency phases of an incident. State or Federal agencies will take the lead role for directing the cleanup and site restoration. Private industry or individuals are legally responsible for reporting their spills, performing cleanup, or hiring a cleanup contractor, and properly disposing of the spilled materials. Volunteer organizations such as the Hawaii Chapters of the American Red Cross and American Lung Association are requested to provide support to the plan in accordance with their Charters.

#### D. PLANNING ASSUMPTIONS

The following assumptions provide a list of concepts to establish a general framework under which the plan is written.

1. The plan addresses statewide needs for greater coordination and cooperation between state, county and federal agencies in response to oil and hazardous substances emergencies. The passage of SARA Title III requires that the state provide a leadership role in regards to hazardous substances and emergency response. Therefore the plan will

establish a state framework under which county local emergency response plans can be developed, revised and coordinated.

2. There is currently a lack of state or county first responder capability for hazardous substance emergency response. First response capability for hazardous substances lies with the U.S. Coast Guard which is planning to terminate its HAZMAT capability 1 July 1990. It is essential that the state and county develop adequate first response capability to replace the U.S. Coast Guard's responsibility. First response capability will center at the county government level with fire, police, emergency medical and Civil Defense response capability providing initial support at the scene for hazardous material incidents.
3. State response responsibility is one of support to the first responders. The state can provide support to county government through monitoring and backup assistance in health and environmental concerns, technical problems, and serve as a liaison to the federal government in major hazardous substance incidents. In addition, the state will establish the planning and coordination network needed via the State Emergency Response Commission.

4. In regards to hazardous substance incidents, support from federal agencies will be requested when it appears that county and state response capabilities may not be adequate to respond to the emergency.
5. The U.S. Coast Guard is the lead responding agency for oil spills that threaten or are in navigable waters. The state and county agencies provide support efforts in conjunction with the federal lead.
6. All persons on scene in a hazardous substances incident will use the incident command system utilized by Hawaii fire personnel.
7. The commanding fire officer is the incident commander (IC) for all hazardous substance incidents in Hawaii unless otherwise determined. The state and federal on-scene coordinator and the Public Information Officer (PIO) will take direction and work through IC.

## SECTION II

### DEFINITION OF KEY TERMS

- A. Emergency Operations Center (EOC): The site from where local, state and federal agencies coordinate off-scene support to on-scene responders.
- B. Emergency services: Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to or recover from an emergency.
- C. Hazardous Substance : Any substance or mixture of substances, including but not limited to feedstock materials, products, or wastes, which, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may:
- 1). Cause or significantly contribute to an increase in serious irreversible or incapacitating reversible illness; or
  - 2). Pose a substantial present or potential hazard to human health, to property, or to the environment when improperly stored, transported, released, or otherwise managed. (HRS: Chapter 128D, Environmental Emergency Response).

- D. Hazardous Substance Specialists: Individuals specially trained and equipped to respond to a hazardous substance emergency. These include trained individuals from county, state or federal departments as well as those contracted by government to respond to a hazardous substance incident.
- E. Incident: Any event, that results in a spill or release of oil or hazardous substance that may pose a threat to public health or the environment.
- F. Incident Commander (IC): The One individual in charge at any given time of an incident. During the emergency phases the Incident Commander will normally be an official of the local lead responding agency which is most commonly the fire department. During cleanup and restoration, the incident commander will normally be the lead state agency official (DOH). The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.
- G. Incident Command Post: The on-scene location where field commands are given. The Incident Commander and the On-Scene Coordinator direct the on-scene response from this location.
- H. Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating with a common command structure.

In Hawaii, all emergency response operations relating to oil and hazardous substances follow ICS procedures and practices as developed and taught by FEMA and used by the Hawaii Fire Departments throughout the State.

- I. Oil: Gasoline, crude oil, fuel oil, diesel oil, lubricating oil, sludge, oil refuse or any other petroleum-distillates.
  
- J. On Scene Coordinator (OSC): The individual on-scene responsible for coordinating the resources at each respective level of government. OSC's may include:
  - County On-Scene Coordinator (COSC)
  - State On-Scene Coordinator (SOSC)
  - Federal On-Scene Coordinator (FOSC)
  
- K. Public Information Officer (PIO): A person designated by the incident commander who, in coordination with the lead state agency, provides information to the public and the media.
  
- L. Hazardous Substances Response Team: A team of emergency responders specially trained, equipped and organized to respond to hazardous substances incidents.

- M. Responsible Party: The person or firm who by law is liable for the clean-up of any spill or release of hazard substances, contaminants or pollutants into the environment.
- N. Unified Incident Command System: The method by which local, state and federal agencies and OSCs will work together with the Incident Commander to:
1. Determine the overall objectives for management of an incident.
  2. Determine the roles and responsibilities for a given incident.
  3. Select a strategy to achieve agreed upon objectives.
  4. Deploy resources to achieve agreed upon objectives.
- O. Hawaii State Emergency Response Commission (HSERC): The governor appointed commission established under SARA Title III which is responsible for establishing local emergency planning districts, supervising and coordinating the activities of local emergency planning committees and reviewing county hazardous substances emergency response plans.
- P. Local Emergency Planning Districts: The geographical areas established by the HSERC for which local emergency planning committees must develop a hazardous substances emergency



response plan. In Hawaii, the county boundaries delineate the local emergency planning districts.

Q. Local Emergency Planning Committee (LEPC): The committees established under SARA Title III are appointed by the HSERC to develop local hazardous substances emergency response plans. The county based committees have been established for each of the 4 major counties: Maui, Kauai, Hawaii and Honolulu.

R. Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III: The federal law also referred to as the Emergency Planning and Community Right-to-Know Act of 1986, established to help communities meet their needs in regard to potential chemical emergencies.

### SECTION III

#### HAWAII'S OIL AND HAZARDOUS SUBSTANCES

##### EMERGENCY PREPAREDNESS PROGRAM

Hawaii's preparedness for oil and hazardous substance emergencies is contained in its Oil and Hazardous Substances Emergency Response Plan. The plan involves four main elements; A) coordinated plans and procedures, B), trained personnel, C) equipment, and D) information systems.

#### A. COORDINATED PLANS AND PROCEDURES

The plan outlines the basic responsibilities of those who may be involved in an oil or hazardous substance emergency. Procedures to implement the plan will be developed by each affected agency and incorporated into their EOPs. DOH and SCD will collaborate with other response agencies to see that procedures are consistent with each other and the plan.

The state and local plans will be examined at least once a year by each LEPC. Training exercises will be undertaken and monitored by DOH. Based on critiques of the drills and/or actual emergencies, local plans and Hawaii's preparedness plan will be reviewed and revised annually by the LEPCs and HSERC.

## B. TRAINED PERSONNEL

The state training program will include a basic hazardous substances awareness course recommended for all persons that are likely to be first responders in the course of their work, and a series of more advanced courses recommended for personnel requiring greater expertise and specialization. Supplemental training for persons that must respond to and report oil spills should also be developed to address state needs. Detailed discussion of training guidelines have been established in the document entitled State of Hawaii Chemical Emergency Response Training Guidelines.

## C. EQUIPMENT

Minimum equipment usage and maintenance standards shall be developed by the HSERC for different types of responders. An individual trained for a certain level of response capability will need a minimum level of equipment handling skills to safely perform the task for which they are trained. A more complete discussion of the equipment standards will be developed as additional resource material to this plan.

## D. INFORMATION SYSTEMS

### 1). State Information System

A computerized information system,utilizing CAMEO-Computer Aided Management of Emergency Operations, is being developed by state and county governments. Under SARA Title III, facilities that store hazardous or extremely hazardous substances above a specific quantities must report certain information to HSERC and county Fire Departments and Civil Defense Agencies. The information from these reports are entered into the CAMEO system to provide data on the location and type of hazards these substances pose at fixed sites around the state. Governmental Agencies operating or currently purchasing CAMEO capability in Hawaii include:

- 1) U.S. Coast Guard, Honolulu
- 2) Hawaii Department of Health
- 3) City and County of Honolulu Fire Department
- 4) County of Maui Civil Defense Agency
- 5) County of Kauai Civil Defense Agency
- 6) County of Hawaii Fire Department

This plan together with the Hawaii Hazardous Substances Information System, the training program, and the equipment standards is designed to ensure that emergency responders are adequately prepared for oil and hazardous substance incidents.

## 2. Other Information Systems

Other chemical or oil information can be obtained from state and federal agencies and industry. They include the Agency for Toxic Substances and Disease Registry (ATSDR) Hotline, Chemical Transportation Emergency Center (CHEMTREC), Oil and Hazardous Materials Technical Assistance Data System (OHMTADS), and Chemical Hazard Response Information System (CHRIS).

SECTION IV

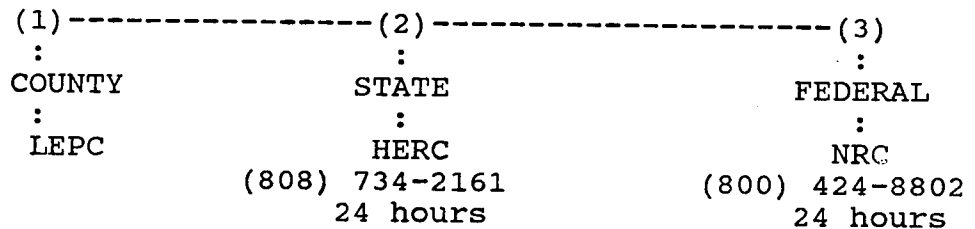
ELEMENTS OF HAWAII'S OIL AND HAZMAT EMERGENCY RESPONSE SYSTEM

A. NOTIFICATION

1. Notification Policy.

Any oil or HAZMAT spill that may threaten public health or the environment must be reported to all 3 levels of government as soon as possible. See Appendix I for a specific guideline for reporting releases of HAZMATs that exceed reportable quantities. As shown in Figure III, a person reporting a spill must dial three numbers to ensure that all the proper authorities are notified. Federal law requires that the HSERC, the appropriate LEPCs and National Response Center are notified in the event of a chemical or oil release.

FIGURE III  
Chemical and Oil Emergency Response Notification in Hawaii



Hawaii (808) 935-0031; After hrs, wkends & holidays: (808) 935-3311  
Maui (808) 244-7721; After hrs, wkends & holidays: (808) 244-7811  
Kauai (808) 245-4001; After hrs, wkends & holidays: (808) 742-1373  
Honolulu (808) 523-4121; After hrs, wkends & holidays: 911

2. Emergency Notification Information Requirements: The following information should be provided immediately by the person performing the emergency notification (to the extent known at the time of the notice and so long as no delay in responding to the emergency results):

- a. Identify chemical name(s) and/or substance(s) involved in the release.
- b. Indicate if substance is on list referred to in section 302(a) of SARA.
- c. Estimate of the quantity of the substance(s) released.
- d. Time and duration of release.
- e. Medium or media (air, water etc.) into which release occurred.
- f. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.

- g. Proper precautions to be taken as a result of the release, including evacuation (unless such information is readily available to the community emergency coordinator pursuant to the emergency plan).
  - h. The name and telephone number of the person(s) to be contacted for further information.
  - i. Address or description of location where release occurred.
3. Follow-up Emergency Information Notification: Follow-up emergency notice as specified under section 304(c) of SARA should be provided as soon as practical after the release occurs. This written notice should include the same information as listed above under 2a. through 2i. and should be revised and updated to include any additional information with respect to:
- a. Actions taken to respond to and contain the release
  - b. Any known or anticipated acute or chronic health risks associated with the release, and
  - c. Where appropriate, advice regarding medical attention necessary for exposed individuals.



## B. ENFORCEMENT, COST RECOVERY AND LIABILITY

The On-Scene Coordinator (OSC) is responsible for proper documentation to support all actions taken when responding to incidents involving oil discharges or hazardous substance releases. Documentation should be sufficient to establish circumstances involved in an incident including source of discharge or release, identity of responsible parties, and actual or potential impact on the public health and welfare and the environment. Documentation should include collection and safeguarding accurate accounting information for costs incurred, record of legal notices of suspected responsible parties, sample collection and chain of custody procedures, photographs, and other investigative records. Because the OSC at the scene of a release may be from any one of several agencies, uniform procedures shall be provided wherever possible for collection of information and samples for cost recovery and criminal actions. Cost documentation in particular must be adequate to withstand scrutiny of the court during litigation.

In order for a violation to exist, documentation of a discharge or release quantity must be reported as described in the notification section. The Environmental Emergency Response law (HRS Chapter 128D), defines recovery of costs and liability (Sections 128D-5, 128D-6) associated with a discharge in the State of Hawaii. Any costs incurred by the state may be recovered from the responsible party. Any party

who is liable for a release, or a threat of a release, of hazardous substances and fails to provide removal or remedial action shall be liable to the department for punitive damages.

## C. INCIDENT MANAGEMENT

### 1. Hazardous Substances Emergency Response

A hazardous material incident may involve county, state, federal and private sector management. No single agency will normally have the necessary resources to carry out all response activities. In addition, there may be overlapping authorities and responsibilities. Rapid and effective coordination is essential during an emergency. A centralized command structure will be established for any incident. This system will be based on the Incident Command System (ICS) originally standardized and taught by FEMA and currently used by all fire personnel in Hawaii.

#### a. Incident Commander

The first emergency responder on the scene will assume to be the incident commander. The person will:

- (1) Assess the situation
- (2) Activate the local emergency response system
- (3) Initiate actions to protect the public.

b. County Incident Command System

The lead county emergency response agency predesignated in county EOPs will:

- (1) Assume the incident command upon arriving on scene.
- (2) Designate a county on-scene coordinator (COSC) for local resources.
- (3) Establish an appropriate incident command post
- (4) Be in charge of and responsible for all emergency response operations.
- (5) The highest ranking fire official on scene will normally be designated the incident commander.

c. Unified Incident Command System

The IC system will be used if more than one level of government is involved. All designated on-scene coordinators (OSCs) will report to the incident command post to assist the incident commander.

d. Change-of-Command

Incident command will remain at the county level until emergency operations, which include stabilization and control activities, are completed unless:

- (1) The local resources are overtaxed and the incident commander requests one of the other on-scene coordinators to assume control.
- (2) The incident occurs in areas of federal jurisdiction, such as defense installations or United States waters, in which case, the appropriate federal agency will be the incident commander. (Section 105, CERCLA).

## 2. Stabilization and Control

Under most circumstances, the incident commander will remain at the county level during the stabilization and control phase of a response. If requested, an OSC from a state or federal agency could assume control. Several levels of government could become involved in this phase. The incident commander and OSCs are expected to work within a unified command structure.

## 3. Cleanup and Restoration

- a. State Incident Commander - Once the emergency is over, and stabilization and control measures are taken, local emergency responders will return to normal duties. At this time, the county incident commander will turn command over to the state on-scene coordinator (normally DOH) who will

assume incident commander authority and direct cleanup and restoration. County agencies may need or choose to remain involved.

Cleanup and restoration activities include:

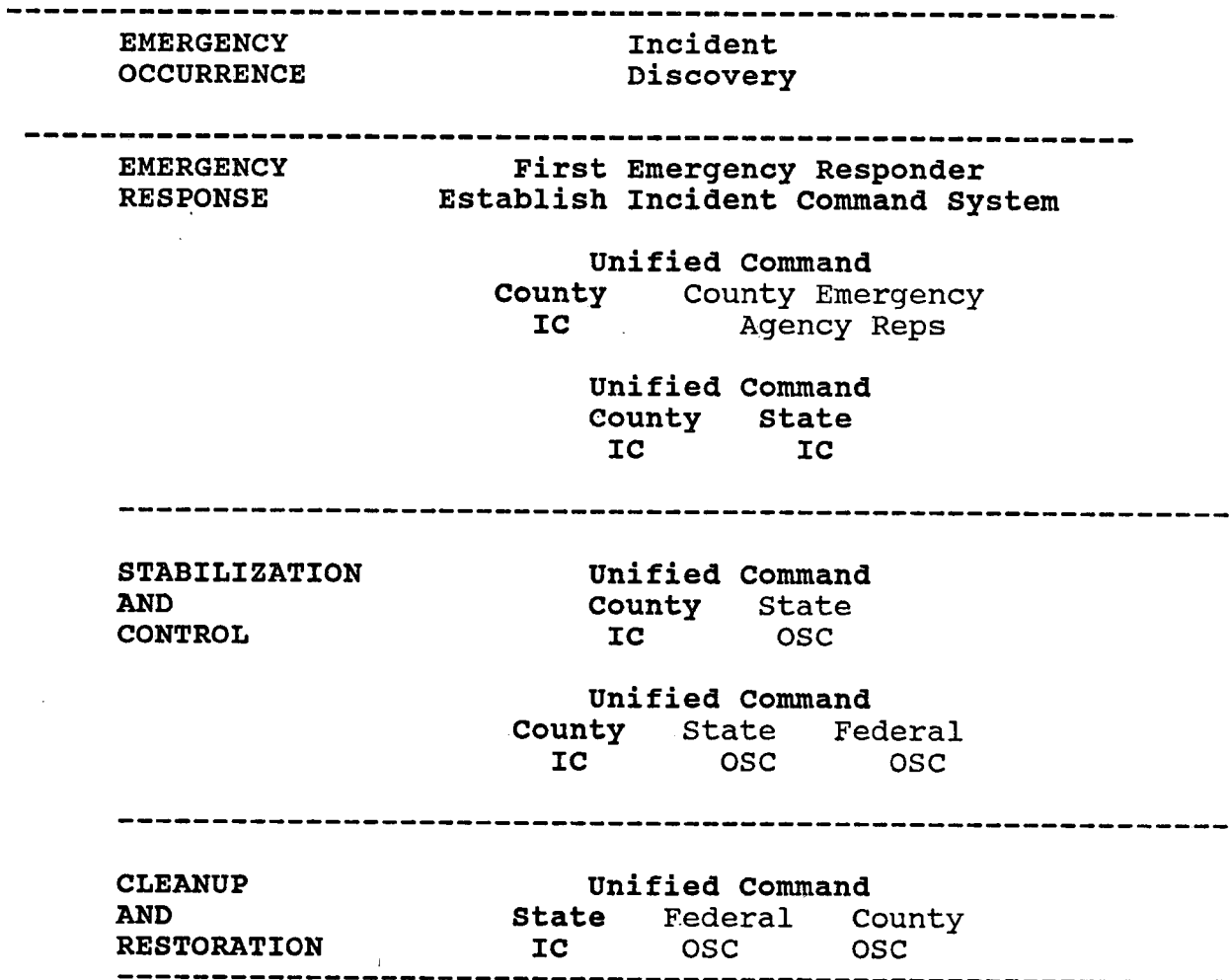
- (1) Compliance with cleanup standards
- (2) Restoration of environment and site
- (3) Investigation of cause
- (4) Assessment of health and environmental impact
- (5) Enforcement actions
- (6) Cost recovery

- b. Federal Command - The federal on-scene coordinator (FOSC) will assume command if requested by the state or if the incident occurs in an area under federal jurisdiction.
- c. Incident Management - The following diagram, Figure V depicts the command structure described in the previous Section. The outlined box indicates the incident commander. The county on-scene coordinator (COSC) is the incident commander (IC) unless otherwise designated. For a minor incident this structure may not proceed beyond the second box. For a major incident the command structure builds during the emergency phase as various agencies and levels of government arrive on scene. Major incidents may require the federal government to assume incident command

require the federal government to assume incident command early in the response. Note that during cleanup and restoration phases, the incident command shifts to the state or federal government.

**FIGURE IV**

**Incident Management Generalized Diagram**



#### D. EMERGENCY OPERATIONS CENTERS (EOCs)

During major incidents, the heads of county and state agencies or their designated representatives will meet at Civil Defense EOCs to coordinate their off-scene support to on-scene operations. The federal government may activate the Regional Response Team (RRT) to coordinate federal off-scene support.

The following describes the county, state and federal On-Scene Coordinators in relation to the EOC:

1. The county EOC will be activated by the Civil Defense Administration, in coordination with the county OSC.
2. The State EOC will be activated by the Director of the State Civil Defense in coordination with the state OSC.
3. The Oceania Regional Response Team (RRT) will be activated by the chairpersons of the RRT when there is a major incident or upon request from the FOSC or a member of the RRT.

#### E. TECHNICAL ASSISTANCE - GOVERNMENT

##### 1. State

The Hawaii Poison Control Center at (808) 941-4411 provides 24 hr. immediate toxicological information and medical treatment advice to on-scene responders.

2. Federal

For public health information relating to hazardous materials the Agency for Toxic Substances and Disease Registry provides 24 hour service at 1 (404) 452-4100.

F. TECHNICAL ASSISTANCE - PRIVATE INDUSTRY

1. CHEMTREC is an off-scene 24 hr. information service operated by the Chemical Manufacturers Association. CHEMTREC (1-800-424-9300) can supply chemical and safety data as well as contacts to product manufacturers.
2. Clean Islands Council, a nonprofit cooperative organization of petroleum companies which contracts to control and cleanup oil spills in Hawaii waters (808) 528-4449.
3. The Shipping Industry is a source of information on transshipment of oil and hazardous substance throughout the state of Hawaii. The following companies are contacts:  
Matson Shipping Company 848-1255, Sause Brothers  
Ocean Towing Company 521-5082, Honolulu Shipyard 848-6211,  
Young Brothers 543-9432, TheoDavies Marine Agencies 531-8531, Hawaiian Marine Lines 524-6644.
4. Brewer Chemical Corporation, a seller of industrial chemicals, can provide technical support for chlorine emergencies, 533-4411.



## 2. VOLUNTEER SERVICES

1. American Red Cross - can offer emergency relief in the form of food, shelter and clothing.
2. Salvation Army - can provide emergency food, shelter and clothing.
3. Radio Amateur Civil Emergency Service (RACES) - can provide radio communications through a network of amateur radio operators. Contact through local emergency coordinator.
4. American Lung Association, Hawaii Chapter - can provide health information on inhalation exposure to chemicals.
5. Other locally available volunteer services.

## H. COORDINATION OF PUBLIC INFORMATION

The news media can provide both important and detrimental information about the nature of an incident. Successful emergency operations require accurate and timely public information. Public information will be coordinated between on-scene and off-scene operations. A Public Information

Officer (PIO) will be designated by the incident commander or OSC to issue information about the incident. The PIO will issue information in coordination with the DOH information representatives. DOH will provide the PIO with timely and accurate public health information.

**SECTION V**  
**RESPONSIBILITIES OF LOCAL, STATE AND FEDERAL AGENCIES,**  
**INDUSTRY AND VOLUNTEER ORGANIZATIONS**

**A. OVERVIEW OF THE RESPONSIBILITIES OF COUNTY, STATE AND FEDERAL AGENCIES, INDUSTRY AND VOLUNTEER ORGANIZATIONS.**

Figure V is a matrix which shows the responsibilities of the various agencies and organizations at each level of government that might be involved in an oil or hazardous substance emergency response. Because county resources vary, exceptions may occur depending on the county in which an incident occurs. Agency participation depends on the type of incident, its severity, and the threat to health and welfare. County government should assume the lead unless circumstances dictate the passing of command to another level of government.

**B. SPECIFIC RESPONSIBILITIES OF COUNTY AGENCIES**

1. Provide personnel who have been trained in oil and hazardous substances emergency response.
2. Provide an incident commander and establish a command post. Establish a unified command with other government agencies depending on the incident.

Figure V

GENERALIZED INCIDENT COMMAND SYSTEM ORGANIZATION

		EMERGENCY	RESPONSE		RESPONSIBILITIES		
STATE, COUNTY AND PRIVATE AGENCIES	First Responder	Emergency Notification	Emergency Mitigation	Technical Assistance	Clean-Up Activities	Damage Assessment	Enforcement
Civil Defense		X				X	
DOH	X		X	X	X	X	X
DOT				X			X
DLNR				X		X	X
DOA				X			
DLNR				X			
DBED				X			
OSP				X	X	X	
COUNTIES				X	X	X	
Fire Department	X	X	X	X		X	X
Police	X	X	X	X		X	X
Civil Defense	X	X				X	
Public Works				X		X	
FEDERAL	X	X	X	X	X	X	X

3. Provide Incident Commander (IC).

4. Undertake emergency response actions including:

- Notifications to LEPC
- Initial hazard determination
- Initial measurements to detect concentrations of materials if possible
- Spill containment if possible
- Communications
- Contamination Control
- Life-saving/rescue
- Control of exposure for emergency workers and the public
- Emergency medical care
- Fire fighting
- Security (site perimeter, traffic and crowd control)
- On-scene liaison with other parties
- Providing public information
- Evacuation
- Shelter
- Initial decontamination if necessary

These activities are generally shared among county officials fire and law enforcement, emergency medical, and public works, along with support from the State Civil Defense Agency and Department of Health.

C. SPECIFIC RESPONSIBILITIES OF STATE AGENCIES

1. State Civil Defense (SCD)

- a. Maintains 24-hour notification capability.
- b. Notifies DOH, other notifications made as needed or upon request.
- c. Activates, operates and maintains the State Civil Defense Emergency Operating Center.
- d. Provides and/or coordinates state-wide communications systems.

2. Department of Health (DOH)

- a. Receives notification via SCD.
- b. Provides State On Scene Coordinator (SOSC): neighbor islands SOSC will be the District Health Officer (DHO), or District Health Service Administrator (DHSA), or his designated representative.
- c. Provides technical assistance and advises on necessary protective actions.
- d. Provides assistance in hazard determination.

- e. Evaluates the environmental implications of a spill, and possible public health effects.
- f. Provides support to hospital emergency room for contamination control and toxicological information access.
- g. Coordinates state support to on-scene personnel in cooperation with the SCD.
- h. Liaison with federal agencies, and the private sector as needed.
- i. Collects and analyzes air, water, soil, vegetation or tissue samples (possibly through contract).
- j. Provides technical support (possibly through contract) for measurements of concentrations of materials.
- k. Identifies clean-up requirements.
- l. Works with private industry to insure that clean-up/restoration is done to specified standards.

- m. If necessary, coordinates with Governor to exercise Governor's authority to protect health and safety and the environment.
  - n. Insures that materials are disposed of in an appropriate manner.
  - o. Investigates cause and pursues enforcement actions.
  - p. Assesses public health environmental impacts.
  - q. Collects and maintains data on statewide Oil and Hazmat Response incidents for evaluation and planning purposes.
3. Hawaii Department of Transportation (DOT)
- a. Notifies the HSERC and local emergency response personnel if DOT personnel are first on-scene.
  - b. Closes a state highway harbor or airport and re-routes traffic as requested and necessary.
  - c. Provides barricades and personnel to implement a closure and detour.



- d. Provides technical assistance in regards to transportation and oil and hazardous substance spill incidents.
- e. In cooperation with DOH, coordinates the clean-up operations for spills that occur on state highways, in harbors, and property

4. Department of Land and Natural Resources (DLNR)

- a. Notifies the HSERC and local emergency response personnel if DLNR personnel are first on scene.
- b. Responds to an incident that could degrade state parks land or waters to the point that fish or wildlife or their habitat would be adversely affected.
- c. Evaluates and documents impact on fish and wildlife and scales payment of damages for losses of fish, wildlife or habitat.
- d. Provides advice and counsel as necessary and if possible.
- e. For an incident affecting a state park, Parks and Recreation personnel assist other agencies in crowd and/or traffic control and provide equipment and facilities, if possible.

- f. If requested by SOSC, DLNR will provide support (when possible) to emergency responders (radio systems, dispatch and command center trailers, public information personnel, kitchens and other support services).

5. Department of Agriculture

- a. Provides on-site technical support to agricultural chemical spills.
- b. Evaluates adverse impact of an accident on agricultural resources.
- c. Provides support for the sampling and analysis of pesticides and other agricultural chemicals (if possible).

6. Department of Labor and Industrial Relations

- a. Provides support for air monitoring to emergency responders, and to ensure that occupational safety and health is not compromised.
- b. Provides technical support for chemical analysis of air contaminants.

7. Department of Business and Economic Development

- a. Provides support for information on economic impacts of an incident and remedial actions.

8. Office of State Planning

- a. Provides support for information and expertise on Coastal resources and access through the Coastal Zone Management Program.
- b. Provides statewide land use planning support in the event of a remedial response investigation.

D. SPECIFIC RESPONSIBILITIES OF FEDERAL AGENCIES

The following section briefly summarizes federal agency technical assistance outlined in the National Contingency Plan.

1. The U.S. Coast Guard (USCG) Provides:

- a. Expertise and management of Federal Programs in domestic/international fields or port safety and security, maritime law enforcement, ship navigation, safety or vessels and marine facilities.

- b. Predesignated federal on-scene coordinator (FOSC) for oil and hazardous substance emergencies in the coastal zone if a federal response is required and provides FOSC support for inland hazardous substance emergencies until relieved by EPA.
  
- c. Continuously manned facilities which can be used for command, control, and surveillance of oil discharges and hazardous substance releases occurring in the coastal zone.

2. Environmental Protection Agency (EPA) provides:

- a. Expertise on environmental effects of oil discharges or releases of hazardous substances, pollutants, or contaminants and environmental pollution control techniques.
  
- b. On-scene coordinator (FOSC) for the inland zone if a federal response is required after initial USCG FOSC role is completed for the inland zone. EPA requires 24 to 48 hours time to respond to a hazardous substance release in Hawaii due to travel time from Region IX San Francisco.

- c. Scientific support coordinator for responses in inland areas.
- 
- 3. Department of Defense (USDOD) assumes incident command if an incident involves defense related materials. It acts as the lead response agency within the designated National Security Area.
  - 4. Department of Transportation (USDOT) offers expertise in the requirements for packaging, handling and transporting regulated hazardous substances.
  - 5. Department of Commerce (DOC), through National Oceanic and Atmospheric Administration (NOAA), provides:
    - a. Scientific expertise on living marine resources and their habitats.
    - b. Scientific Support coordinator (SSC) who will coordinate scientific support for responses and contingency planning in coastal and marine seas.

They can assess hazards that may be involved, predict movement and dispersion of oil and chemicals through trajectory modeling and provide information on sensitive coastal environments.

- c. Information on actual and predicted hydrologic, and oceanographic conditions for marine, coastal, and inland waters. They can provide charts and maps including tides and circulation information for coastal and territorial waters and for the Great Lakes.
  - d. Information on actual and predicted meteorological conditions through the National Weather Service.
6. U.S. Navy is knowledgeable in ship salvage, shipboard damage control and diving, It has an extensive array of specialized equipment and personnel that can be used for collection, containment and removal of pollution materials.
7. Department of Health and Human Services (OHHS) is responsible for providing assistance on all matters related to the assessment of health hazards and protection of both response workers' and the public's health. This includes the Agency for Toxic Substances and Disease Registry (ATSDR) which provides advice to health care providers in cases of public health emergencies and coordinates assistance from the Center for Disease Control (CDC), NIOSH and the FDA.
8. The Federal Emergency Management Agency (FEMA): Provides advice and assistance to the OSC on coordinating civil emergency planning and mitigation efforts with other

federal agencies, State and local governments, and the private sector. In the event of a major disaster declaration or emergency determination by the President, FEMA will coordinate all federal disaster or emergency actions with the FOSC.

9. Department of the Interior (DOI) has jurisdiction over the National Park System, National Wildlife Refuges and Fish Hatcheries, forest and grazing lands, and certain water projects in western states. In addition, bureaus and offices have relevant expertise as follows:

a. Fish and Wildlife Service: Fish and wildlife, including endangered and threatened species, migratory birds, certain marine mammals; habitats, resource contaminants; laboratory research facilities.

b. Geological Survey: Geology, hydrology (groundwater and surface), and natural hazards.

#### E. RESPONSIBILITIES OF PRIVATE INDUSTRY

1. Private industry is responsible for familiarizing themselves with Hawaii's emergency response plan and

working with state and local government to see that their emergency operations plans are consistent with this plan and local plans.

2. Private industry is responsible for responding to emergencies as required by law unless otherwise directed by the government agency with jurisdiction to enforce the applicable law.
3. Private industry is responsible for cleanup and site restoration when required to do so by law or when industry in its discretion decides to do so.
4. When requested and if possible, private industry will provide expertise and resources to local and/or state government to help mitigate the effects of a hazardous substances incident.
5. Private clean-up contractors can provide resources, equipment and knowledge on the removal and disposal of contamination.

#### F. RESPONSIBILITIES OF VOLUNTEER ORGANIZATIONS

Volunteer organizations such as Red Cross, the Salvation Army and RACES can provide public assistance in the form of food, clothing, shelter and communications during incidents where the public welfare is affected.



SECTION VI  
OIL AND HAZARDOUS SUBSTANCES EMERGENCY CATEGORIES AND RESPONSE  
LEVELS

A. OIL SPILL EMERGENCY CATEGORIES AND RESPONSE LEVELS

The National Contingency Plan (NCP) establishes the following categories of oil discharges based strictly on size. The size classes below are not meant to imply associated degrees of hazard to public health or welfare, nor are they a measure of environmental damage.

Minor Discharge means a discharge to the inland waters of less than 1000 gallons of oil, or a discharge to the coastal waters of less than 10,000 gallons of oil.

Medium discharge means a discharge of 1000 to 10,000 gallons of oil to the inland waters, or a discharge of 10,000 to 100,000 gallons of oil to the coastal waters.

Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters, or more than 100,000 gallons of oil to the coastal waters.

A high level of public interest in a spill, regardless of classification, will often necessitate special response efforts and may require the services of a Public Information Officer (PIO).

B. HAZARDOUS SUBSTANCES RELEASE CATEGORY LEVELS

1. Size classes of hazardous substance releases refers to the following size classifications which are provided as guidance to the OSC for meeting pollution reporting requirements in Subpart C of the NCP. The final determination of the appropriate classification of a release will be made by the OSC based on consideration of the particular release (e.g., size, location, impact, etc.).

- a. Minor release means a release of a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health or welfare of the environment.
- b. Medium release means all releases not meeting the criteria for classification as a minor or major release.
- c. Major release means a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health or welfare or the environment of results in significant public concern.

**SECTION VII**  
**PLAN EVALUATION**

Plan evaluation is a necessary element of any planning process. In order to assess the effectiveness of a proposed plan of action, it must be evaluated. Evaluations examine the assumptions upon which a plan, program or policy is based. That is, it evaluates whether the plan, program or policy achieves its intended goal. The question becomes; did the plan address its intended purpose as stated in Chapter I, which is to develop a coordinated statewide approach to respond effectively to hazardous substance emergencies. Evaluation methods vary to satisfy different needs of programs, policies or plans. The following methods may be utilized to evaluate this plan.

**A. EXERCISES**

The plan should be evaluated through exercises to see if its required activities are effective in practice and/or if there are more efficient ways of responding to a real emergency. Simulations can be full-scale, functional, or tabletop exercises.

A full-scale exercise is a mock emergency in which the response organizations that would be involved in an actual emergency perform the actions they would take in the emergency. These simulations may focus on limited

objectives (e.g., the command structure). The responsible environmental, public safety, and health agencies simulate, as realistically as possible, notification, hazards identification and analysis, command structure, command post staging, communications, health care, containment, evacuation of affected areas, cleanup, and documentation. Responders use the protective gear, radios, and response equipment and act as they would in a real incident. These multi-agency exercises provide a clearer understanding of the roles and resources of each responder.

A functional exercise involves testing or evaluating the capability of individual or multiple functions, or activities within a function.

A low-cost, valuable version of an exercise is the staging of a tabletop exercise. In this exercise, each agency representative describes and acts out what they would do at each step of the response under the circumstances given.

Exercises are most beneficial when followed by a meeting of all participants to critique the performance of those involved and the strengths and weaknesses of the plan's operation. The use of an outside reviewer, free of local biases, is desirable. The emergency plan should be amended according to lessons learned. Provisions should be made to follow up exercises to see that identified deficiencies are corrected.

## B. INCIDENT REVIEW

When a hazardous substance incident does occur, a review or critique of the incident is a means of evaluating the plan's effectiveness. Recommendations for conducting an incident review are:

- \* Assign responsibility for incident review to the same organization responsible for the plan update.
- \* Conduct the review only after the emergency is under control and sufficient time has passed to allow emergency respondents to be objective about the incident.
- \* Use questionnaires, telephone interview, or personal interview to obtain comments and suggestions from emergency respondents. Follow-up non-respondents.
- \* Identify plan and response deficiencies: items that were over-looked, improperly identified, or were not effective.
- \* Convene the planning team to review comments and make appropriate plan changes.

\* Revise the plan as necessary. Communicate personal or departmental deficiencies informally to the appropriate person or department. Follow up to see that deficiencies are corrected.

### C. TRAINING

Training courses can help with planning and evaluation by sharpening response personnel skills, presenting up-to-date ideas/techniques, and promoting contact with other people involved in emergency response. Everyone who occupies a position that is identified in the plan must have appropriate training. This applies to persons at all levels who serve to coordinate or have responsibilities under the plan, both those directly and indirectly involved at the scene of an incident.

The training could be a short briefing on specific roles and responsibilities, or a seminar on the plan or on emergency planning and response in general. However the training is conducted, it should convey a full appreciation of the importance of each role and the effect that each person has on implementing an effective emergency response.

#### D. PLAN REVIEW

The plan will be reviewed annually by the Local Emergency Response Committees (LERC), and the Regional Response Team (RRT). Reviews will incorporate new ideas and techniques and provide opportunity for overall modifications and updating of the plan.

#### E. HAZARD MATERIALS DATA ANALYSIS

Another means to evaluate the plan is by summarizing the character, frequency and distribution of hazardous materials and its storage, transport and release. This will identify patterns and trends that could provide insight into how the plan and hence, the human response to emergencies, can be improved.

This method of assessment will become possible as the state accumulates accurate storage, release and clean-up data acquired through the reporting requirements of Title III, Sections 304, 311, and 312.

# HAWAII SARA TITLE III SECTION 304 HAZARDOUS SUBSTANCE RELEASE EMERGENCY NOTIFICATION GUIDELINE

## Overview of Emergency Notification Requirements:

In Hawaii, facilities reporting releases of hazardous substances subject to notification requirements under Title III shall follow procedures outlined under Section 304 of the act.

As indicated under Section 304(b)(1), immediately after the release of a reportable quantity of a hazardous substance (as defined under section 304(a)), the Hawaii State Emergency Response Commission and any affected local emergency planning committee must be notified by the owner or operator of the facility. In the case of a release that occurs "with respect to transportation of a substance", dialing 911 or contacting the operator and reporting such a release will satisfy the initial emergency notification requirements of Section 304. In either case, the owner or operator of the facility must provide a written Follow-up Emergency Notice as specified under Section 304(c). If a release of a hazardous substance poses an imminent or immediate threat to public health or the environment dial "911" to prompt "first responder" fire, police and/or emergency medical service personnel response.

## Hawaii State Emergency Response Commission Notification:

To notify the Hawaii State Emergency Response Commission, dial 734-2161.

## Local Emergency Planning Committee Notification:

To notify the affected local emergency planning committee dial the appropriate telephone number(s) below:

Hawaii Local Emergency Planning Committee: 935-0031

After hours, weekends and holidays: 935-3311

Maui Local Emergency Planning Committee: 244-7721

After hours, weekends and holidays: 244-7811

Kauai Local Emergency Planning Committee: 245-4001

After hours, weekends and holidays: 742-1373

City and County of Honolulu Local Emergency Planning Committee: 523-4121

After hours, weekends and holidays: 911

## Emergency Notification Information Requirements:

The following information should be provided immediately by the person performing the emergency notification (to the extent known at the time of the notice and so long as no delay in responding to the emergency results):

- A. Chemical name(s) or substance(s) identity involved in release.
- B. Indication if substance is on list referred to in section 302(a).
- C. Estimate of the quantity of the substance(s) released.
- D. Time and duration of release.
- E. Medium or media (air, water etc.) into which the release occurred.
- F. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.
- G. Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordinator pursuant to the emergency plan).
- H. The name and telephone number of the person(s) to be contacted for further information.
- I. Address or description of location where release occurred.

## Follow-up Emergency Information Notification:

Follow-up emergency notice as specified under section 304(c) of the act should be provided to the same contacts as soon as practicable after the release occurs. This written notice should include the same information as listed above under A through I, and should be revised and updated to include any additional information with respect to:

- A. Actions taken to respond to and contain the release,
- B. Any known or anticipated acute or chronic health risks associated with the release, and
- C. Where appropriate, advice regarding medical attention necessary for exposed individuals.

Call the Hawaii State Emergency Response Commission at (808) 548-2076 if you have any questions or concerns regarding this guideline.

THIS GUIDELINE IS GENERAL IN NATURE AND IS PROVIDED TO ASSIST IN COMPLYING WITH TITLE III IN HAWAII. THIS GUIDELINE DOES NOT HAVE THE FORCE AND EFFECT OF LAW. TO ENSURE FULL COMPLIANCE UNDER THE LAW, PERSONS AFFECTED SHOULD REVIEW THE APPROPRIATE FEDERAL LAWS AND REGULATIONS INCLUDING TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AS WELL AS 40 CFR PARTS 300, 302 AND 355. FAILURE TO REPORT COVERED RELEASES UNDER SECTION 304 MAY PROMPT EPA ENFORCEMENT ACTION INCLUDING PENALTIES NOT TO EXCEED FINES OF \$25,000 PER DAY OR IMPRISONMENT. COPIES OF THE LAW AND REGULATIONS CAN BE OBTAINED BY DIALING: 548-2076.



## APPENDIX II

### REFERENCES

Federal Superfund Amendments and Reauthorization Act of 1986,  
Title III, Emergency Planning and Community Right-To-Know.

Hawaii Environmental Emergency Response Act of 1988.

Hazardous Materials Emergency Planning Guide, National Response  
Team, 3/17/87.

Oceania Region Oil and Hazardous Substances Pollution Contingency  
Plan, Oceania Regional Response Team, 11/87.

**APPENDIX III**

**OIL AND HAZARDOUS SUBSTANCES:  
SOURCES OF TECHNICAL INFORMATION**

APPENDIX IV

STANDARDIZED EMERGENCY RESPONSE REPORT FORM

# Environmental Protection Agency



## Exercise Design Workshop



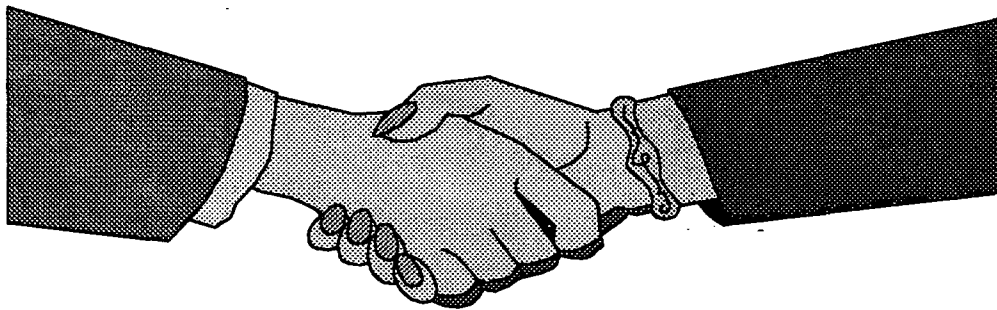
Presented by  
***California  
Specialized  
Training Institute***

vfrankel@ene.com

ronalves@sprynet.com


# INTRODUCTORY EXERCISE DESIGN WORKSHOP

## INTRODUCTION



Lesson #1

Environmental Protection  
Agency  
**EXERCISE DESIGN  
WORKSHOP**



CSTI IEDW 1

---

---

---

---


---

---

---

---

**O E S**  
CALIFORNIA



*Governor's Office of  
Emergency Services*

**CALIFORNIA  
Readiness Program**

*(previously the COMPREHENSIVE EXERCISE PROGRAM)*

CSTI IEDW 2

---

---

---

---


---

---

---

---

**Ron Alves, Facilitator**



**Captain  
Emergency Mgmt. Spec**

- Conducted exercises in 56 of 58 Calif. Counties
- Staff to OES in 3 Major Disasters
- Plans Section CDF ICT 4
- One of the Principal Developers of EEDC

CSTI IEDW 3

---

---

---

---


---

---

---

---

## EXERCISE DESIGN TRAINING



**Purpose**  
Train and Maintain Jurisdictional Exercise Design Teams

**Exercise Design Team Concept**  
All Jurisdictions  
Inherent Training Benefits

CSTI IEDW 4

---

---

---

---

---

---

---

---

## EXERCISE DESIGN TRAINING

1. **Introductory Workshop**..... G 620
2. **Enhanced Enhanced Course**..... G 120
3. **Advanced Exercise Design Course**..... G 630
4. **Exercise Evaluation Course**..... G 130

CSTI IEDW 5

---

---

---

---


---

---


---

---

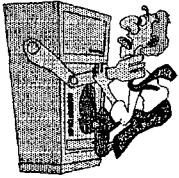
## Facilities and Administrative Arrangements



Telephones  
Smoking areas  
Breaks & food



Pagers  
Cell phones  
Absences



Non-attribution policy  
Emergency Exits

CSTI IEDW 6

---

---

---

---

---

---

---

---

**Course Expectations**

- Participate
- Apply lessons learned
- Keep an open mind
- Be flexible
- Have fun

CSTI IEDW 7

---

---

---

---

---

---

---

---

**Course Objectives**

- Be familiar with elements of a local Exercise Program
- Identify key elements in construction of an exercise
- Assess ability of a jurisdiction or business to conduct a given exercise

CSTI IEDW 8

---

---

---

---

---

---

---

---

**Course Objectives (cont)**

- Be familiar with the Exercise Plan format.
- Prepare a statement of purpose, goal, objectives and create a narrative for a Tabletop Exercise.
- Prepare and deliver a Tabletop Exercise for a host jurisdiction or business.

CSTI IEDW 9

---

---

---

---

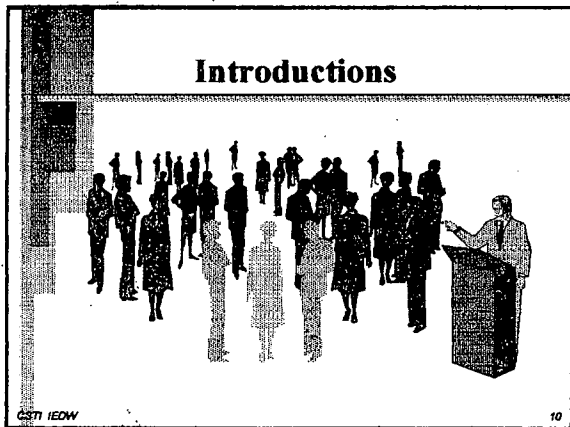
---

---

---

---





---

---

---

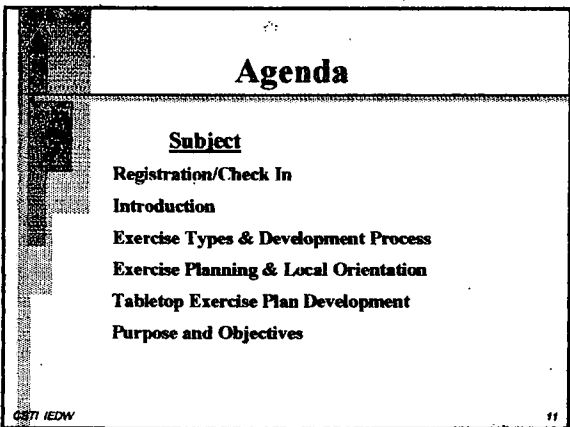
---

---

---

---

---



---

---

---

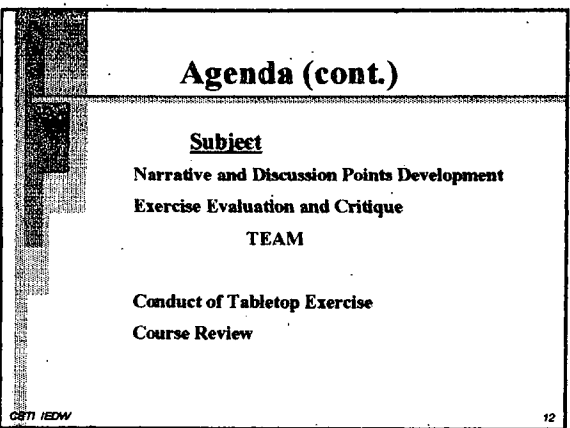
---

---

---

---

---



---

---

---

---

---

---

---

---

INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

Exercise Types  
&  
Development Process



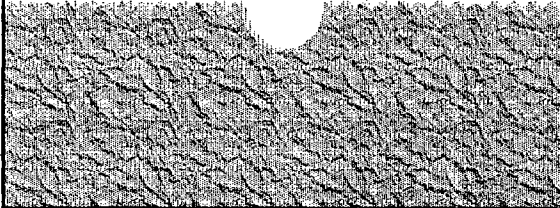
Tabletop



Full Scale

Lesson #2

## Exercise Types and Development Process



---

---

---

---

---

---


---

---

### Lesson Objectives

Students will be able to:

- Identify the five elements of an exercise sequence
- Identify the positions of the Exercise Design Team
- Be familiar with the Exercise Plan format and the modified Exercise Plan format used for Drills and Tabletop Exercises.



---

---

---

---

---

---


---

---

## Exercise

An activity designed to:

- Promote emergency preparedness
- Evaluate emergency:
  - operations, systems
  - policies, plans or procedures
  - facilities



*Exercise - another form of training*

*Do not evaluate individuals*

---

---

---

---

---

---

---

---

### Exercise Definition (cont)

- Train personnel in emergency management duties
- Demonstrate operational capability

---

---

---

---

---

---

---

---

### Why Exercise?

The **GOAL** of emergency management exercising is to improve operational readiness.

---

---

---

---

---

---

---

---

### Group Exercise

1. What steps has your jurisdiction/ firm taken to develop an emergency plan?
2. What steps have been taken towards development of an exercise program?

DEVELOP RESOURCE LIST,  
PRIORITY OF SUPPLIES IN EMERGENCY

ICS-INCIDENT COMMAND SYSTEM

---

---

---

---


---

---

**Group Exercise (Cont)**

3. How would you structure/staff an Exercise Design Team from your jurisdiction?

4. What process would you use to develop a Tabletop Exercise?



---

---

---

---

---


---

---

---

**Local Exercise Program**

- Based on Federal, State, headquarters, parent organization program.
- Formalized written training & exercise program plan.
- From objectives, establish realistic schedule of training and exercises.
- Ensure objectives and time for exercise schedule is reasonable - both for you and the jurisdiction.
- Establish effective data reporting system.



---

---

---

---

---

---

---

---


**Five Elements Of An Exercise Sequence**

Orientation Seminar

Drills

Exercises:

- Tabletop**
- Functional**
- Full Scale**



---

---

---

---

---

---

---

---

### Orientation Seminar

- Introduces participants to plans and procedures.
- Can involve any & all levels of personnel.
- Can be used to review past cases for lessons learned.



---

---

---

---

---

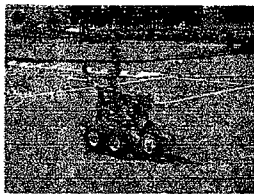
---

---

---

### Drill

- Tests single emergency response function.
- Usually involves actual field response.
- Focus on a single limited portion of the overall response system.



USUALLY ONE AGENCY TRAINING  
ITS SPECIFIC ROLE

---

---

---

---

---

---

---

---

### Tabletop Exercise

- Discussion Exercise.
- Based on an emergency situation.
- Coordinated problem solving and response.
- Ongoing discussion of appropriateness of actions taken and decisions made.



BASED ON A SPECIFIC OBJECTIVE

---

---

---

---

---

---

---

---

### Tabletop

- Advantages
  - Modest time, cost, and resources commitment
  - Effective method for reviewing plans, policies and procedures
  - Training for key personnel
  - Builds coordination and consensus
- Disadvantages
  - Lacks realism
  - Does not provide a true test of total emergency system operation

---

---

---

---

---

---

---

---

### Functional Exercise

**Purpose:**

- Coordinate emergency management team.
- Evaluation of EOC and elements of EOP.

**Characteristics:**

- Performance Exercise.
- Communication with Simulators.
- Any Function or all Functions.
- Time Pressured, Realistic.

---

---

---

---

---

---

---

---

### Functional

- Advantages
  - Moderate time cost, an resources
  - More realism than a tabletop
  - Tests integrated response of entire emergency management system
  - Tests command and control
- Disadvantages
  - Heavily dependant on a written scenario
  - Realism and effectiveness can suffer if not well planned

---

---

---

---

---

---

---

---

### Full Scale Exercise

**Purpose:**

- Evaluation of the local system in the field.
- Ultimate goal of the Exercise Sequence.

**Characteristics:**

- Field event with EOC/ICP activation.
- Significant functions, policy decisions.
- Tests deployment and management of resources.



---

---

---

---

---

---

---

---

### Full Scale Exercise

• **Advantages**

- Good realism
- Good test of integrated communications
- Provides a means to evaluate resources and first response capability
- Opportunity to increase public awareness of the program

• **Disadvantages**

- Major time, cost, and resource commitment
- Scenario development is critical



---

---

---

---

---

---

---

---

### Exercise Development Process

● **Five Steps**

- » Establish Base/Conduct Needs Assessment
- » Develop Exercise & Write EXPLAN
- » Conduct Exercise
- » Evaluate Exercise
- » Follow-up Exercise



---

---

---

---

---

---

---

---



### Tabletop Exercise Plan Format

- Abbreviated Exercise Plan:
  - Background/Goal
  - Purpose & Objectives
  - Narrative / Discussion Points
  - Instructions to Participants
- Control Staff Instructions
  - Discussion Points/Problems
  - Follow-up Questions

---

---

---

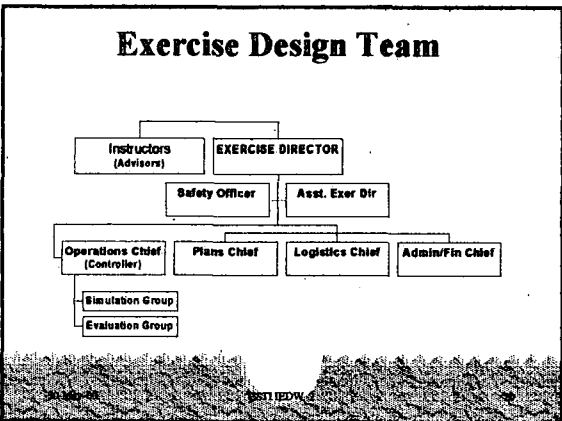
---

---

---

---

---



UNIFIED COMMAND - JOINT DECISIONS

---

---

---

---

---

---

---

---

### Exercise Assignments

**Exercise Director = Sets the mission.**

**Operations Chief = Carries out the mission.**

**Plans Chief = Documents, plans the mission.**

**Logistics Chief = Supports the mission.**

**Finance Chief = Pay for the mission.**

**MISSION = CONDUCT an EXERCISE**

---

---

---

---

---

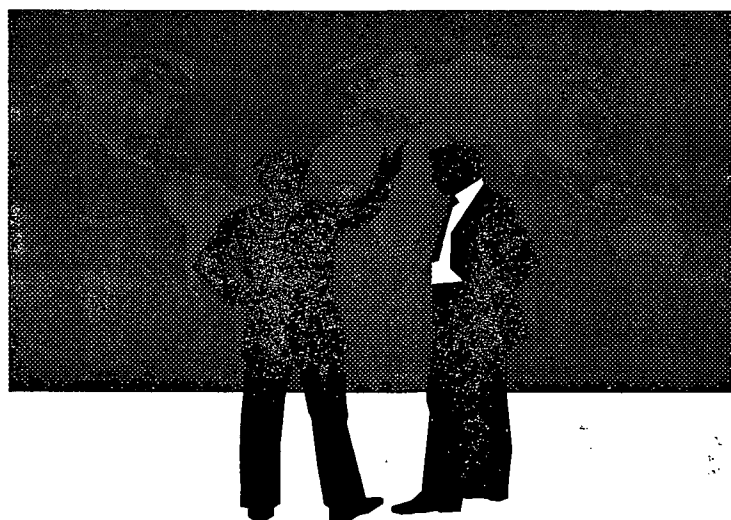
---

---

---

INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

# Exercise Planning and Orientation



Lesson #3

# **EXERCISE PLANNING AND EPA ORIENTATION**



593000

CSTI IEDW 3

1

---

---

---

---

---

---

---

---

## **Objectives**

- To understand and identify the chronology of an exercise
- To become familiar with factors in establishing a base for an exercise
- To become familiar with the host jurisdiction's environment.

593000

CSTI IEDW 3

2

---

---

---

---

---

---

---

---

## **Exercise Steps**

- Conduct a Needs Assessment
- Develop the Exercise
- Conduct the Exercise
- Evaluate the Exercise
- Follow-up the Exercise

593000

CSTI IEDW 3

3

---

---

---

---

---

---

---

---

## ***Factors to Establish a Base Conduct Needs Assessment***

- *Review current EOP*
- *Review potential emergencies*
- *Define exercise scope, goal, purpose, type, costs, liability*
- *Training level*

5/30/00

CSTI IEDW 3

4

---

---

---

---

---

---

---

---

## ***Develop the Exercise***

- *Form the Exercise Design Team*
- *Provide Team Training*
- *Purpose and Goals*
- *Define Objectives*
- *Develop Exercise Plan*
- *Prepare Facilities & Staff*

5/30/00

CSTI IEDW 3

5

---

---

---

---

---

---

---

---

## ***Conduct the Exercise***

- *Assign Staff Roles:*
  - » *Exercise Director*
  - » *Facilitator*
  - » *Recorder*
  - » *Evaluators (if used)*
- *Conduct exercise according to the Exercise Plan. (ExPlan)*

5/30/00

CSTI IEDW 3

6

---

---

---

---

---

---

---

---

### *Evaluate the Exercise*

- **Objective based, actions to be observed / identified.**
- **"Hot Wash" critique by participants**
- **Evaluation & recommendations contained in after-action report.**

53000

CSTI IEDW 3

7

Not More Than Two Weeks Later

### *Follow-up Exercise*

- **Review exercise evaluation.**
- **Identify future exercise needs.**
- **Refinement of exercise & training program timelines.**
- **Exercises increase in difficulty & scope.**
- **Improvements/corrections to system are monitored.**

53000

CSTI IEDW 3

8

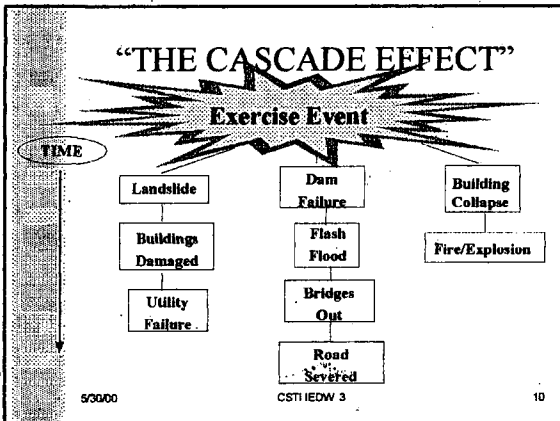
### *Exercise Planning*

- \* **Planned, organized, emergency response provides direction and control, which will save lives and property.**
- \* **State & Federal statutes mandate emergency planning.**
- \* **Emergency Plans, systems and facilities must be periodically tested .....to do....**
- \* **Must evaluate/exercise emergency plans, systems and facilities.**

53000

CSTI IEDW 3

9




---

---

---

---

---

---

---

---

### *The Tabletop Exercise Plan*

- *Abbreviated Exercise Plan:*  
*Background/Goal*  
*Purpose & Objectives*  
*Narrative*  
*Instructions to Participants*  
*Discussion Points / Problems*
- *Control Staff Instructions*  
*Discussion Points/Problems*  
*(Follow-up questions)*  
*Evaluation Tool*

5/30/00 CSTI IEDW 3 11

---

---

---

---

---

---

---

---

### *EPA Orientation*

- *To describe the local emergency management environment*
- *To familiarize the "Exercise Design Team" with the factors to prepare the ExPlan.*

***This is the Needs Assessment***

5/30/00 CSTI IEDW 3 12

---

---

---

---

---

---

---

---

## EPA Emergency Operations Plan

### ■ Plan:

- Last revised?
- What format?
- Numbers available?
- How developed?
- Distribution?
- Does the plan have checklists for each position/function in EOC?

5/30/00

CSTI IEDW 3

13

ADD: PLAN REVIEWED ALONG CRITERIA  
FOR HAZMAT EMERGENCY PLAN (NRT-1a)?

---

---

---

---

---

---

---

## Potential Local Emergencies

- **Capability and Hazard Identification Plan (CHIP) completed?**
- **What are the major hazards covered?**
- **Which hazard was selected to support the exercise?**

5/30/00

CSTI IEDW 3

14

FEMA ACRONYMS:

---

CHER-CAP REVIEW (COMPREHENSIVE HAZMAT  
EMERGENCY RESPONSE - CAPABILITY ASSESSMENT  
PROGRAM)

---

• MAJOR HAZARDS COVERED?

---

• WHICH HAZARD WAS SELECTED  
TO SUPPORT THE EXERCISE  
(SEE HANDOUT)

---

---

---

---

---

---

---

## Emergency Management Facilities

### ■ Status of EOC:

- Is there a formal EOC? Is a Command Post used?
- What are its capabilities/limitations?
- What is the status of the EOC maps, charts and administrative supplies?
- Department/Agencies participation?

5/30/00

CSTI IEDW 3

15

**Emergency Management System**

- **Incident Command System**
  - What is currently in use in your EOC?
- **Agencies Roles and Responsibilities**
- **Mutual Aid (interface / unified cmd)**

5/30/00 CSTI IEDW 3 16

---

---

---

---

---

---

---

---

**Local State of Readiness**

- **Evaluation of State of Readiness**
  - Does the jurisdiction have a resource list?
  - Review of recent exercises/training
    - Training during previous 12 months
    - Exercises conducted
    - Problems encountered
    - Were problems corrected?
  - How accomplished are the participants?
  - Formal and Informal Mutual Aid Agreements
  - Alert, Recall Notification Procedures
  - Proclamation of Local Emergency

5/30/00 CSTI IEDW 3 17

---

---

---

---

---

---

---

---

**Establish the Base**

Answer these questions

- Which Emergency Management Functions within your organization need review?
- Which agencies will be participants?
- What event will involve all participants and the functions identified?

5/30/00 CSTI IEDW 3 18

*ANSWER THESE QUESTIONS WHEN WORKING ON EXERCISE*

---

---

---

---

---

---

---

---



## Preparing a Schedule of Tasks

### Handout Material

This slide is here so the Instructor  
doesn't forget this material

5/30/00

CSTI IEDW 3

19

---

---

---

---

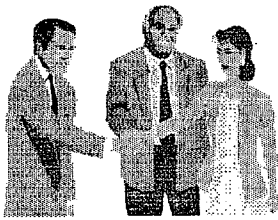
---

---

---

---

***LET'S BEGIN DEVELOPING  
YOUR EXERCISE EVENT!!***



5/30/00

CSTI IEDW 3

20

---

---

---

---

---

---

---

---

## **✎ PREPARING A SCHEDULE OF TASKS**

There are several tasks that will be completed before, during and after the exercise. It is best to list all the exercise requirements, including who is responsible for each activity or product with a specific due date. Having a written checklist of this information for you to use when assignments are first being made will ensure a well-constructed exercise. Once the assignments have been made the schedule can be distributed to all team members. Your **Schedule of Tasks** should include the following:

- Exercise Announcement
- Exercise Background
- Exercise Purpose Statement
- Exercise Objectives
- Exercise Assumptions
- Ground Rules
- Exercise Agenda
- Exercise Narrative
- Exercise Discussion Points, Problems and/or Messages
- Critique Sheet/Evaluation Form
- Maps/Charts/Displays/Room Configuration
- Refreshments
- After Action Report
- Implementing Recommendations

## ✈ TABLETOP EXERCISE SUMMARY & TASK SCHEDULE

WHEN	WHAT	WHO
10 Weeks Before	Conduct Needs Assessment	Team Leader
8 Weeks Before	Present Exercise Recommendation to Superiors	Team Leader
7 Weeks Before	Prepare and Distribute Exercise Announcement	Team Leader
6 Weeks Before	<b>Conduct Initial Planning Meeting to:</b> <ul style="list-style-type: none"> <li>• Review the Announcement with Design Team</li> <li>• Review Definition of Tabletop Exercise</li> <li>• Determine the Exercise Purpose &amp; Objectives</li> <li>• Select the type of Emergency for Narrative</li> <li>• Determine location and date for exercise</li> <li>• Select Exercise Facilitator</li> <li>• Determine method for Facilitator to deliver Discussion Points (verbal or scripted messages)</li> <li>• Identify Exercise Recorder/Scribe</li> </ul>	Team Leader Team Leader Team Leader Team Team Team Team Team Team Team
4 Weeks Before	<b>Make arrangements to use the facility/room selected for the exercise.</b>  <b>Determine and obtain all supplies, materials &amp; audio Visual equipment that will be used at the exercise.</b>  <b>Make extra copies of EOP and distribute if needed.</b>  <b>Determine if any refreshments will be provided.</b>	Admin. Support  Admin. Support  Admin. Support  Team Leader
4 Weeks Before	<b>Conduct Exercise Design Meeting to:</b> <ul style="list-style-type: none"> <li>• Write Background Statement</li> <li>• Write the Exercise Narrative</li> <li>• Determine Exercise Assumptions</li> <li>• Finalize the Purpose Statement</li> <li>• Finalize the Objectives</li> <li>• Develop Discussion Points, Problems</li> <li>• Prepare Critique Sheet</li> </ul>	Team Team Team Team Team Team Team

**TABLETOP EXERCISE  
SUMMARY & TASK  
SCHEDULE – (Continued)**

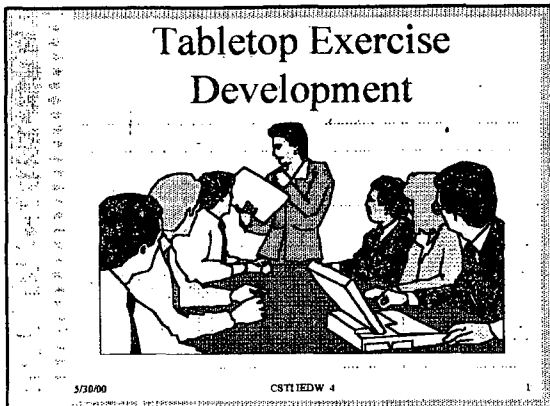
<b>WHEN</b>	<b>WHAT</b>	<b>WHO</b>
<b>2 Weeks Before</b>	<p><b>Prepare Final Exercise Plan (ExPlan) (which includes:)</b></p> <ul style="list-style-type: none"> <li>• Background Statement</li> <li>• Exercise Purpose and Objectives</li> <li>• Exercise Narrative and Assumptions</li> <li>• Exercise Ground Rules</li> <li>• Exercise Agenda</li> <li>• Exercise Discussion Points and Problems</li> <li>• Exercise Critique Sheet</li> </ul>	Admin. Support
	<b>Finalize the ExPlan and make appropriate copies</b>	Admin. Support
<b>2 Weeks Before</b>	<b>Make arrangements for any refreshments</b>	Admin. Support
<b>1 Week Before</b>	<p><b>Reconfirm room use, configuration and use of any props, supplies, etc.</b></p> <p><b>Confirm Participants Attendance Practice Facilitator Duties</b></p>	<p>Team Leader &amp; Admin. Support</p> <p>Admin. Support Facilitator</p>
<b>Day Before</b>	<b>Set up Exercise Facility</b>	Admin. Support
	<b>Confirm Refreshment Delivery and set up</b>	Admin. Support
<b>1 Week After</b>	<b>Prepare Draft After Action Report</b>	Team Leader
<b>2 Weeks After</b>	<b>Review Draft After Action Report with Team</b>	Team
<b>3 Weeks After</b>	<b>Submit Recommendations</b>	Team Leader

INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

# Tabletop Exercise Development



Lesson #4



---

---

---

---

---

---

---

---

### Lesson Objectives

- **Students will be able to:**
  - Understand exercise planning factors for the Tabletop Exercise.
  - Understand the characteristics of a Tabletop Exercise.
  - Identify the components of a Tabletop Exercise.
  - Understand exercise development for this class.

5/30/00 CSTI IEDW 4 2

---

---

---

---

---

---

---

---

### TASKS - THIS EXERCISE

These are KEY

- Assign the TEAM
- Further develop the Scenario
- Develop additional Objectives
- Create a Participants List
- Develop the Evaluation Criteria

We will refer to this list often.

5/30/00 CSTI IEDW 4 3



*narrative, all problem, discussion points, etc*

---

---

---

---

---

---

---

---

*What is a Tabletop Exercise?*

- Discussion exercise.
- Solves problems with plans, procedures, policies, etc.
- Coordinated problem solving and response.
- Ongoing discussion of appropriateness of actions taken and decisions made.

5/30/00 CSTI IEDW 4 4

---

---

---

---

---

---

---

---

*What is a Tabletop Exercise ?*  
*(Cont)*

- Permits breaks between problems
- Most flexible exercise type:
  - Policy groups
  - EOC sections
  - Departmental exercises

5/30/00 CSTI IEDW 4 5

---

---

---

---

---

---

---

---

*What is a Tabletop Exercise ?*  
*(Cont)*

- Low stress exercise often in combination with Orientation.
- Clarify Roles and Responsibilities.
- Low Cost:
  - Money, time & materials

SHOW THE VIDEO

5/30/00 CSTI IEDW 4 6

---

---

---

---

---

---

---

---

***Reasons for Tabletops***

- Practice group problem solving
- Executive familiarity
- Specific case study
- Specific risk study
- Examine Staffing contingencies
- Observe information sharing
- Assess interagency coordination

5/30/00 CSTI IEDW 4 7

---

---

---

---

---

---

---

---

***Requirements for Conducting a Tabletop***

- Exercise experience - Orientation
- Preparation staff - minimal with little experience
- Prep time - one to three months
- Skills - Group process for materials development
- Materials - Exercise Plan (ExPlan)

5/30/00 CSTI IEDW 4 8

---

---

---

---

---

---

---

---

***Scope of Characteristics of a Tabletop***

- Hazards - of any type can be used
- Agencies - low to medium activity and involvement
- Types of activities - Problem solving, brain storming, resource allocation, task coordination
- Personnel involved - policy, coordination, operations

5/30/00 CSTI IEDW 4 9

---

---

---

---

---

---

---

---



**Tabletop Guidelines**

- Everyone should participate
- Share ideas freely with the group
- Piggyback ideas of others
- Focus on constructive solutions
- Focus on improvements to Plans, Systems, SOP's and Facilities...NOT individual performance

5/30/00 CSTI IEDW 4 10

---

---

---

---

---

---

---

---

**Facilitators Role and Responsibility**

- Focus - On Track - Objectives
- Pace - even discussion
- Maintains within Function (Policy vs OPS)
- Resolves problems

5/30/00 CSTI IEDW 4 11

---

---

---

---

---

---

---

---

**Facilitator Skills**

- Expertise and knowledge in the subject area being trained
- Expertise in task and document analysis process
- Expertise in training program development design process
- Skill in questioning techniques

5/30/00 CSTI IEDW 4 12

---

---

---

---

---

---

---

---

**Facilitator Skills (cont)**

- Ability to act as the process expert who leads and controls the process... but allows the team members to act as content experts who make content judgements and decisions
- Skill in small group dynamics
- Skill in obtaining small group consensus

5/3000 CSTI IEDW 4 13

---

---

---

---

---

---

---

---

**Interpersonal Skills of Facilitator**

- Ability to establish and maintain enthusiasm
- Patience
- High degree of sensitivity to both verbal and nonverbal communications
- Excellent memory
- Ability to show empathy
- Sense of humor
- Ability to make decisions
- Excellent listening skills
- Ability to motivate, encourage, and focus the team

5/3000 CSTI IEDW 4 14

---

---

---

---

---

---

---

---

**Recorder's Role and Responsibilities**

- Captures all comments
- Clarifies points of discussion
- Acts as timekeeper
- Maintains "Action List" or Parking Lot

5/3000 CSTI IEDW 4 15

---

---

---

---

---


---

---

---

*Group Activity*

- Planning Considerations/Schedule
- Staff Required and Training
- Display and Materials
- Physical Facility



5/30/00 CSTI/EDW 4 16

---

---

---

---

---

---

---

---

*The Tabletop Exercise Plan*

- Abbreviated Exercise Plan:
  - Background/Goal
  - Purpose & Objectives
  - Narrative / Discussion Points
  - Instructions to Participants
- Control Staff Instructions
  - Discussion Points/Problems
  - Follow-up Questions

5/30/00 CSTI/EDW 4 17

---

---

---

---

---

---

---

---

*Exercise Design Phase*

Exercise Design Team Organization

- Exercise Director: Oversees development
- Plans: Prepares EXPLAN
- Operations: EXPLAN input (problems/messages)
- Logistics: Obtain, set up facility, provide materials and supplies

5/30/00 CSTI/EDW 4 18

---

---

---

---

---

---

---

---

**Exercise Conduct Phase**

- **Facilitator:** Can be Exercise Director or appointed team member
- **Recorder:** Should be the Plans Chief or other team planner

5/30/00 CSTI IEDW 4 19

---

---

---

---

---

---

---

---

**Room Set-up**



5/30/00 CSTI IEDW 4 20

---

---

---

---

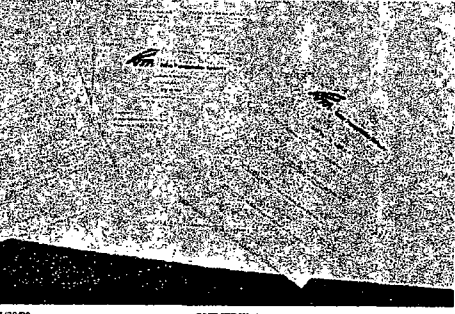
---

---

---

---

**Materials**



5/30/00 CSTI IEDW 4 21

EXERCISE PLAN

CRITIQUE SHEET

---

---

---

---

---

---

---

---

**NAME OF YOUR ORGANIZATION**

**TABLETOP  
EXERCISE PLAN  
(YOUR CHOSEN SCENARIO TYPE)**

**Date  
Time (start and end)**

**Provided by  
Your name  
Your Agency**

**TABLETOP  
EXERCISE**

# **NAME OF YOUR ORGANIZATION**

## **TABLETOP EXERCISE**

**Date**

### **BACKGROUND:**

### **PURPOSE:**

### **OBJECTIVES:**

- 1.
- 2.
- 3.
- 4.

### **ASSUMPTIONS**

- All information in the narrative is to be considered valid.
- Normal staffing, equipment and inventory exists.
- The EOC facility is on normal power.
- All primary Emergency Management Staff are available and on site.
- There is no mutual aid available at the beginning of the exercise.
- Normal traffic conditions existed prior to emergency.
- Local first responders will not be available immediately.

## Instructions to Participants

- **This is not a TEST. This is an evaluation of the Emergency Plan, systems and facilities used to mitigate emergencies.**
- **The facilitator is neutral and will guide the exercise to attain the stated goals.**
- **This is a friendly, no fault / no blame discussion**
- **Don't be afraid to ask questions or offer comments**
- **Don't all talk at once**
- **Honor time constraints**
- **Stay on the topic matter only**
- **Do not leave unless it is an emergency**

### AGENDA

Introductions  
Exercise Briefing (ExPlan)  
Reading of Scenario  
Exercise  
Critique/Briefing  
Adjournment

exact time  
exact time  
exact time  
exact time  
exact time  
exact time

**Remember, we are all on the same team  
Striving to attain the best result  
of our  
Planning Efforts**

**NAME OF YOUR ORGANIZATION**

**TYPE OF EMERGENCY**

**NARRATIVE**



# DISCUSSION POINTS

1.

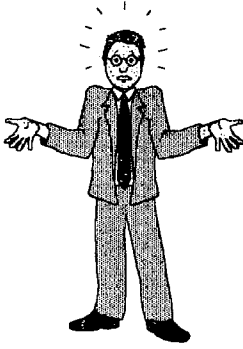
2.

3.

4.

5.

6.



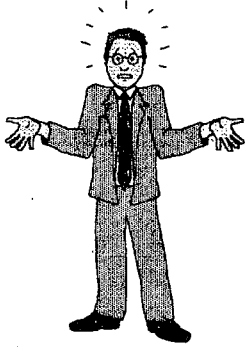
## HOW WOULD THESE PROBLEMS BE SOLVED

---

**Problem No. 1**

**Problem No. 2**

**Problem No. 3**



## HOW WOULD THESE PROBLEMS BE SOLVED

---

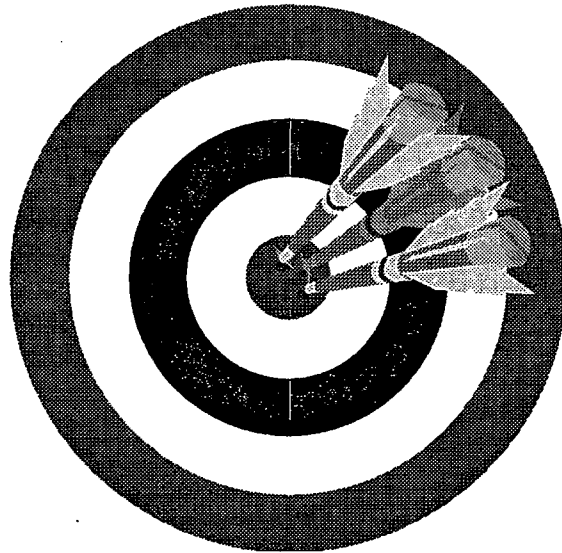
**Problem No. 4**

**Problem No. 5**

**Problem No. 6**

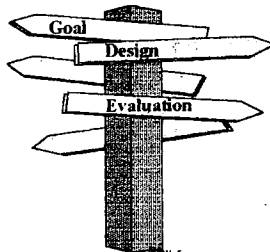
INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

Developing  
Purpose & Objectives



Lesson #5

## Developing Purpose/Objectives



4/28/00 CSTI IEDW 5 1

---

---

---

---

---

---

---

---

## Lesson Objectives

- ★ To develop a statement of purpose.
- ★ To identify the scope of the exercise.
- ★ To develop objectives for a Tabletop Exercise.

4/28/00 CSTI IEDW 5 2

---

---

---

---

---

---

---

---

## Writing Exercise Purpose & Objectives

- ★ Commences after evaluation of:
  - Plans and Standard Operating Procedures (SOP)
  - Previous Training
  - State of Experience of Staff
  - Readiness of EOC
  - Desires of Decision Maker

4/28/00 CSTI IEDW 5 3

---

---

---

---

---

---

---

---

**Statement of Purpose**

---

- ★ **Defines the intent of exercise.**
- ★ **Clearly and briefly states what you plan to accomplish.**
- ★ **Differs from exercise objectives.**

4/28/00 CSTI IEDW 5 4

---

---

---

---

---

---

---

---

**Six Components Of The Exercise Scope**

---

- ★ **Types of Emergency Management Activities or Procedures You Want to Exercise.**
- ★ **Agencies Involved.**
- ★ **Kinds of Personnel Involved.**
- ★ **Degree of Complexity**
- ★ **Hazard.**
- ★ **Geographical Area.**

4/28/00 CSTI IEDW 5 5

---

---

---

---

---

---

---

---

**Objectives**

---

- ★ **Why objectives are needed?**
  - **Development**
  - **Conducting exercise**
  - **Evaluation**
  - **Follow-up**

4/28/00 CSTI IEDW 5 6

---

---

---

---

---

---

---

---

**Objectives (Cont)**

---

★ **Development:**

- Establishes the direction of the exercise.
- Controls expected actions of exercise participants.

4/20/00 CSTI IEDW 5 7

---

---

---

---

---

---

---

---

**Objectives (Cont)**

---

★ **Conducting Exercise:**

- Narrows the scope of the exercise plan.
- Keeps the play on track.
- Must be clearly understood by:
  - ◆ Participants
  - ◆ Facilitator (Design Team)

4/20/00 CSTI IEDW 5 8

---

---

---

---

---

---

---

---

**Objectives (Cont)**

---

★ **Evaluation**

- Objectives control exercise discussion points and problems
- Discussion points and problems control participant actions.
- Anticipated participant actions form the basis of evaluation.

4/20/00 CSTI IEDW 5 9

---

---

---

---

---

---


---

---

### Objectives(Cont)

★ **Follow Up:**

- **Helps identify needs:**
- **Helps identify improvements, if not met.**
- **Re-plan/Retrain/Re-exercise/Re-examine:**



4/28/00 CSTI/EDW 5 10

---

---

---

---

---

---

---

---

### Writing Objectives

★ **Criteria for good objectives: (SMART)**

- **Simple (concise)**
- **Measurable**
- **Achievable (can this be done during the exercise?)**
- **Realistic (and challenging)**
- **Task Oriented (oriented to functions)**

4/28/00 CSTI/EDW 5 11

---

---

---

---

---

---

---

---

### Assumptions

★ **These design criteria that further define the scope of the exercise, by placing assumed operations and functional limits on the exercise or participants.**

4/28/00 CSTI/EDW 5 12

---

---

---

---

---

---

---

---



**Assumptions  
(Cont)**

★ **Examples:**

- The city will be isolated for 48 hours.
- The actual weather will be the exercise weather.
- Mutual aid is not available.
- Communication systems are operating normally.

4/29/00 CSTI IEDW 5 13

---

---

---

---

---

---

---

---

**Class Assignment:  
Small Group Activity**

★ **Break into groups.**

★ **Write Exercise purpose.**

★ **Write three exercise objectives.**

★ **Present purpose and objectives to class.**

**HANDOUT MATERIAL**

4/29/00 CSTI IEDW 5 14

---

---

---

---

---

---

---

---

## **PREPARE THE PURPOSE STATEMENT**

---

Developing the statement of purpose will clarify for all persons involved in the exercise, **WHY** the exercise is being conducted. The purpose statement is a broad statement about the exercise's overall goal and is easily constructed once you have completed the Needs Assessment.

### **SAMPLES of PURPOSE STATEMENT**

The purpose of the proposed Tabletop Exercise is to review, practice and evaluate EPA's current Emergency Operations Plan and response capabilities with an emphasis on enhancing coordination and cooperation with other Agencies in response to a major hazardous materials incident.

The purpose of this exercise is to create a realistic environment throughout the Marin County Operational Area that will facilitate training for staff and enhance the coordination and cooperation within the County.

To orient personnel to and evaluate the Emergency Action Plan for the Department of the Interior, Dam Facility at San Justo. To provide a platform for identifying future training needs.

## **SELECT AND PREPARE THE OBJECTIVES**

### **1. What Are Objectives?**

Objectives must support the purpose statement and cause the exercise participants to demonstrate their ability to perform the actions that would be required as a result of the emergency.

The objectives actually become evident at the time you are completing the Needs Assessment Questionnaire. Think about the type of emergency you have selected. The functions you selected from the Needs Assessment Questionnaire will drive the objectives you develop. For example, if your emergency is a hazardous materials incident, alerting and notification protocols will need to be implemented. One of the resulting objectives would be to verify that the EOC is able to make the proper warnings and notifications.

### **2. How Many Objectives Do I Need?**

There can be as few as three or four objectives. Especially when conducting a Tabletop Exercise numerous objectives are not needed. Remember the Tabletop Exercise is intended to be more simplistic than other more advanced types of exercises.

### **3. What Are Characteristics of Effective Objectives?**

**Simple.** A good objective is simply and clearly phrased. It is brief and easy to understand.

**Measurable.** The objective sets the level of performance, so that results are observable. This means the participants can easily understand and agree on whether they succeeded in meeting the objective.

**Achievable.** Do not set objectives that would be almost impossible to achieve.

**Realistic.** The objective must be pertinent and relative to the purpose statement. Do not set objectives that are outside the reasonable scope of the type of exercise or the goal of the exercise.

**Task Oriented.** Each objective should focus on an individual emergency function. The objective must be specific.

## **SELECT AND PREPARE THE OBJECTIVES - Continued**

### **4. Verbs To Use When Writing Objectives**

One way to avoid vagueness in phrasing objectives is to use concrete words, paying particular attention to the verb that describes participant performance. Here are some helpful suggestions:

Assess  
Clarify  
Determine  
Evaluate  
Examine  
Identify  
Inspect  
Notify  
Show

### **5. Effective Objectives**

- Review EOC activation criteria and set up procedures.
- Initiate and complete a call back of EOC personnel as prescribed in the Emergency Plan.
- Identify and discuss the procedures to follow when activating an alternate communication system that is used as back up of failure of primary communication system.
- Define and describe the initial Action Plan that would be developed.
- Practice and evaluate the documentation forms and process to be utilized in the EOC when documenting the agency's situation status.
- Review Agency's information and data gathering process including damages, resources and operational capabilities.
- Explain Agency's mutual aid request process.
- Define Agency's shelter in place procedures.
- Practice coordination of the EOC Operations Section Officer with field personnel using Emergency Plan protocols and checklists.

### **6. Poor Objectives**

- To get all the emergency services to sit down in the same room together and talk.
- To get the agencies to improve their disaster operations.
- To identify the primary reason for slow response of mutual aid resources.
- To improve the number of accurate messages transmitted by dispatch to the EOC.
- Interaction with other agencies will be demonstrated.
- Proper procedures to declare a disaster or ask for outside aid will be taken.

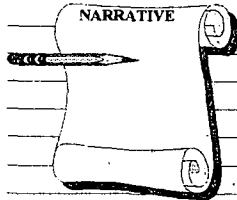
INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

Narrative and  
Discussion Points



Lesson #6

## Narrative and Discussion Points Preparation



5/30/00 1

CSTI IEDW 6

---

---

---

---

---

---

---

---

## Lesson Objectives

Students will be able to:

- ◆ Understand the elements of a narrative and discussion points
- ◆ Develop an exercise narrative using a narrative checklist.

---

---

---

---

---

---

---

---

## The Exercise Narrative

- Describes the environment at the time the exercise begins.
- Provides necessary background information.
- Prepares participants for the exercise.

5/30/00 3

CSTI IEDW 6

---

---

---

---

---

---

---

---

	<b>Narrative Checklist</b>	
	<input type="checkbox"/>	Emergency/Disaster Event.
	<input type="checkbox"/>	Discovery, Report: How do you find out?
	<input type="checkbox"/>	Advance notice?
	<input type="checkbox"/>	Time, Location, Extent or Level of Damage.
5/30/00	4	CSTI IEDW 6

---

---

---

---

---

---

---

---

	<b>Narrative Checklist (Cont)</b>	
	<input type="checkbox"/>	Sequence of events or movement.
	<input type="checkbox"/>	Who has responded, Anticipation of future needs
	<input type="checkbox"/>	Initial damage report
	<input type="checkbox"/>	Weather conditions.
<input type="checkbox"/>	Other information or factors.	
5/30/00	5	CSTI IEDW 6

---

---

---

---

---

---

---

---

	<b>Discussion Points and Problems</b>	
	<input type="checkbox"/>	Discussion Points stimulate the participants to freely discuss operational procedures.
	<input type="checkbox"/>	Problems are directed to specific functions to further explore areas of concern or those requiring definition
5/30/00	6	CSTI IEDW 6

---

---

---

---

---

---

---

---





## **PREPARE DISCUSSION POINTS**

---

### **1. What Are Discussion Points?**

The facilitator uses Discussion Points to initiate conversation amongst the participants. The Discussion Points are formulated generally to demonstrate how your emergency organization is structured to respond to the type of emergency being exercised. Most of the exercise participants will be able to easily provide the information that the facilitator is asking for. Only two or three Discussion Points need to be developed for each objective.

Developing discussion points is a simple process. Refer to the narrative and the objectives you have already developed. From these make a list of general statements or questions that would stimulate conversation about the functions that have been selected for the focus of the exercise.

### **EXAMPLE**

#### **EARTHQUAKE SCENARIO:**

##### **Objectives:**

1. Review EOC activation criteria and procedures.
2. Practice agency's information and data gathering process.

##### **Supporting Discussion Points:**

- a. Describe your agency's notification and activation process under the scenario circumstances.
- b. Who is authorized to activate the EOC?
- c. Who is responsible for maintaining the EOC's state of readiness.
- d. Which Section in the EOC gathers information about the incident?
- e. How is the information displayed?
- f. How is the information shared internally and externally?

## PREPARE DISCUSSION POINTS

---

### 1. What Are Discussion Points?

The facilitator uses Discussion Points to initiate conversation amongst the participants. The Discussion Points are formulated generally to demonstrate how your emergency organization is structured to respond to the type of emergency being exercised. Most of the exercise participants will be able to easily provide the information that the facilitator is asking for. Only two or three Discussion Points need to be developed for each objective.

Developing discussion points is a simple process. Refer to the narrative and the objectives you have already developed. From these make a list of general statements or questions that would stimulate conversation about the functions that have been selected for the focus of the exercise.

#### EXAMPLE

##### EARTHQUAKE SCENARIO:

##### Objectives:

1. Review EOC activation criteria and procedures.
2. Practice agency's information and data gathering process.

##### Supporting Discussion Points:

- a. Describe your agency's notification and activation process under the scenario circumstances.
- b. Who is authorized to activate the EOC?
- c. Who is responsible for maintaining the EOC's state of readiness.
- d. Which Section in the EOC gathers information about the incident?
- e. How is the information displayed?
- f. How is the information shared internally and externally?

## PREPARE PROBLEMS

---

### 1. What Are Problems?

The facilitator introduces major problems immediately following the conclusion of Discussion Points. Problems are introduced to continue to explore and practice your agency's procedures in greater detail. The essential difference between a discussion point and a problem; is the problem describes a specific major event that has occurred as a direct result of the emergency. It requires a detailed answer from the participant responsible for that emergency function.

### 2. How Many Problems Do I Need?

Once again only a few problems need to be developed to conduct the tabletop exercise. The problems should be based on the expected actions that would occur as a result of the type of emergency. And like the Discussion Points, the problems must be closely related to the exercise objectives.

#### EXAMPLE

##### EARTHQUAKE SCENARIO:

##### Problems:

1. Approximately 25% of your fleet is unaccounted for. Some may be damaged and out-of-service, while others have just not been able to communicate with Central dispatch. What can be done to determine their status?
2. Your Maintenance crew has completed its initial damage inspection and reports the fuel dispensing equipment is leaking. What actions should be taken?
3. The EOC Manager conducts a briefing approximately four hours after the earthquake to update the initial Action Plan. An EOC staff person mentions during the meeting that he just heard on the radio that a chemical fire and cloud is forming adjacent to your property that may be toxic. What actions should be taken?
4. Your PIO is getting numerous requests from the media for a status report on your situation. What procedures do you use for informational releases?

INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

Exercise Evaluation  
& Critique



Lesson #7

*Exercise Evaluation  
and Critique*

- Purpose of Evaluation,
- Development of Evaluation Forms



4/30/00

IEDW 7

1

---

---

---

---

---

---

---

---

**Exercise Evaluation**

Objectives:

- To define exercise evaluation, utilizing a systematic approach.
- To develop a Participant Critique Sheet for a Tabletop Exercise.

4/30/00

IEDW 7

2

---

---

---

---

---

---

---

---

*Exercise Evaluation and Critique*

Topics:

- +Reasons for exercise evaluation.
- +What to evaluate.
- +Mechanics of evaluation/when to evaluate.

4/30/00

IEDW-7

3

---

---

---

---

---

---

---

---

### *Why Do We Exercise ?*

†A realistic exercise program provides the best opportunity for a jurisdiction to evaluate its emergency plan and its overall preparedness for emergency operations.



4/30/00

IEDW 7

4

---

---

---

---

---

---

---

---

### *Course Definition: Exercise Evaluation*

†Act of reviewing or observing and recording exercise activity or conduct, applying the behavior or activity against exercise objectives; noting strengths, weaknesses, deficiencies or other observations.

4/30/00

IEDW 7

5

---

---

---

---

---

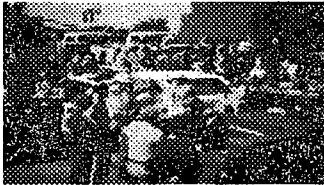
---

---

---

### *Short Course Definition: Exercise Evaluation*

†An assessment of the attainment of the exercise objectives.



4/30/00

IEDW 7

6

---

---

---

---

---

---

---

---

## *Characteristics Of Systematic Exercise Evaluation*

- Formulation of an Evaluation Plan (EXPLAN Annex).
- Based on the definition and tracking the attainment of objectives.
- Produces written evaluations covering each of the stated objectives.
- Gathers insight from the Participants

4/20/00

IEDW 7

7

---

---

---

---

---

---

---

---

## *Reasons To Evaluate Exercise Performance*

- +To identify needed improvements in the EOP & SOPs.
- +To identify needed improvements in the emergency management system.
- +To observe whether the exercise has achieved its objectives.
- +To identify future training requirements.

4/23/00

IEDW 7

8

---

---

---

---

---

---

---

---

## *What To Evaluate*

- +Objectives of the exercise
- +Expected Player actions



4/10/00

IEDW 7

9

---

---

---

---

---

---

---

---

## Participant Exercise Critique Sheet

+ Obtain detailed insight from participants on:

- Adequacy of plan.
- Level of training required.
- Exercise format, additional exercises.
- Can be narrative, questionnaire, numerical evaluation or combination.



4/30/00

IEDW 7

10

---

---

---

---

---

---

---

---

## Ongoing Observations

The following observations can be made at any exercise:

- Command
- Control
- Coordination
- Communications

4/30/00

IEDW 7

11

→ SOMEONE HAS TO BE IN CHARGE

LIGHTS IF GETTING DARK, FOOD, ETC.

---

---

---

---

---

---

---

---

## Communication Evaluation

- **Methodology** - Methods used to communicate
- **Technology** - What are you using?  
Year 2000 technology or .....
- **Psychology** - Why didn't I know that??  
If using ICS, this question is answered
- **Policies and Procedures** - Do you have a Communications Plan?

4/30/00

IEDW 7

12

---

---

---

---

---

---

---

---



***Data Needed For After-Action Report***

- + Items tracked by Recorder
- + Items noted on Action List
- + Player's debriefing comments.
- + Player's written critique.
- + Comments from Facilitator / Recorder
- + Any subsequent clarification or discussion with Participants.

4/30/00

IEDW 7

13

---

---

---

---

---

---

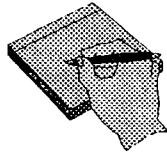
---

---

***Exercise Evaluator Tasks***

- + Prepare exercise participant critique sheets.

EXAMPLES in  
HANDOUT MATERIAL



4/30/00

IEDW 7

14

---

---

---

---

---

---

---

---



## **AFTER THE EXERCISE**

---

### **1. Preparing The After Action Report?**

Documentation of the effectiveness of the exercise takes the form of an After Action Report, which should be prepared within one to three weeks of the exercise, while memories are still fresh. The purpose of this report is to serve as a basis for planning future exercises, upgrading the Emergency Operations Plan and taking corrective action.

The nature of this report varies widely. Conducting the tabletop exercise usually warrants only a brief summary of the comments and recommendations made by the participants during the debriefing. A simple introductory overview of the purpose of the exercise and who participated can be written in the report followed by a listing of the recommendations that emerged during the exercise critique.

**It is helpful to list the recommendations by categories:**

- Plans and procedures needed to be written or revised
- Equipment and supplies to be purchased
- Improvements to operational systems
- Additional training required
- Documents to be copied and distributed
- Forms or Maps to be developed and/or mounted

**NOTE: Who should be responsible for completing each recommendation needs to be included in the report.**

### **2. Implementing Change**

Making recommendations for the future is one of the main reasons for doing the exercise. As mentioned earlier, the purpose of evaluation is to improve the plan and performance. This can be done best if objectives relate clearly to emergency functions with the focus on performance rather than on people. Specifically any changes considered should be centered on these issues:

- Are the procedures sound?
- Are resources sufficient to support the procedures?
- Are the personnel adequately trained to follow the procedures and use resources?

## **AFTER THE EXERCISE - Continued**

---

### **3. Follow Up STEPS**

Just as an exercise without recommendations makes the exercise incomplete, recommendations without FOLLOW-UP will keep the agency from getting the full benefit of the exercise.

Follow-up is one of the most neglected areas of exercise development. Suggestions include:

- Use the exercise to establish goals for the Multi-Year Development Plan.
- Clearly assign tasks, a schedule and responsibility for each recommended improvement.
- Monitor the progress of implementing recommended improvements.
- Build testing of improvements into the next exercise.

#### **Draft a Follow-Up Memorandum**

Prepare a memorandum to all exercise participants for the chief executive's signature. This is the best way to start implementing improvements in the emergency management system, and to take advantage of the chief executive's interest in the exercise program. The memorandum should thank them for their participation and make specific assignments for follow-up actions.

#### **EXAMPLE**

##### **Outline for Exercise Follow-up Actions:**

**TO:** All exercise participants

**From:** Chief Executive

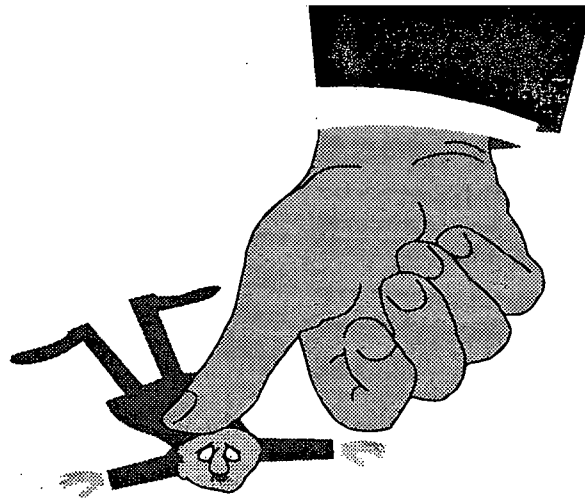
##### **CONTENTS:**

**Thanks for participation  
General success of exercise  
Follow-up assignments  
Actions/Recommendations  
Who assigned to  
Date by which to complete  
Report progress to whom, when**

**The Emergency Program Manager will monitor follow-up and brief the chief executive.**


INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

Conduct and Critique  
Tabletop Exercise



Lesson #8

**Conduct & Critique a  
Tabletop Exercise**



4/30/00 CSTI IEDW 8 1

---

---

---

---

---

---

---

---

**Lesson Objectives**

■ The student will :

- +Use Exercise Plan as developed by the Student Exercise Design Team.
- +Conduct a Tabletop Exercise.
- +Be familiar with a de-briefing "hotwash" critique process.

4/30/00 CSTI IEDW 8 2

---

---

---

---

---

---

---

---

**Conduct a Exercise  
Critique**

- Evaluate exercise based on achievement of Objectives.
- Provide feedback to the local jurisdiction.
- Review lessons learned as applicable.

4/30/00 CSTI IEDW 8 3

---

---

---

---

---

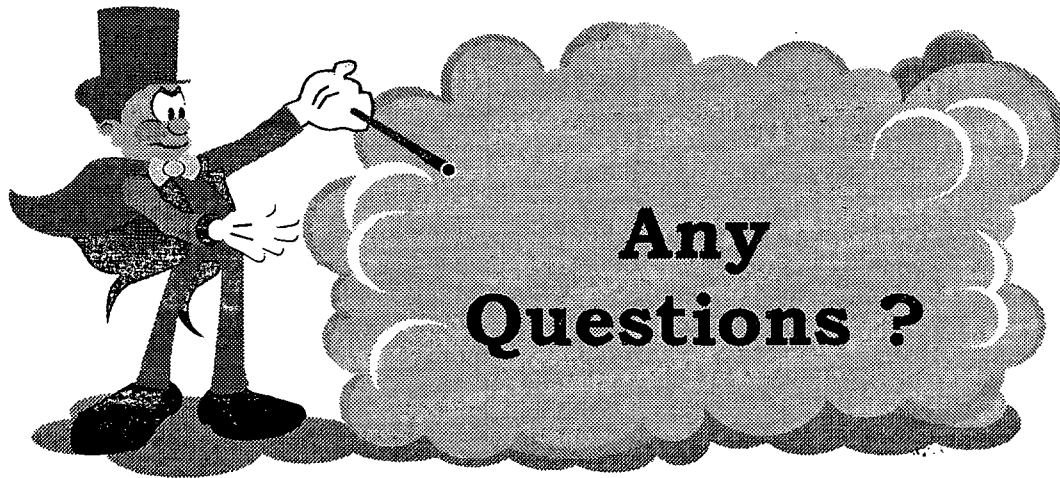
---

---

---

INTRODUCTORY  
EXERCISE DESIGN  
WORKSHOP

# Course Review



Lesson #9

*Course Review*

- ◆ Review course objectives for achievement.
- ◆ Entertain Design Team questions.
- ◆ Critique Design Team performance.
- ◆ Instructor comments.
- ◆ Present course certificates.

CSTI

---

---

---

---

---

---

---



HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #7  
STATE CAPITAL, CONFERENCE ROOM 212  
MONDAY, JUNE 26, 1989, 9:00 A.M.

**AGENDA**

- I. Review Meeting Summary from 22 May, 1989
- II. Chemical and Oil Activities Overview
  - \* Hawaii's Oil and Hazardous Materials Emergency Response Plan (Draft IV)
  - \* Chemical Emergency Response Training Guidelines
  - \* Hazardous Materials Training and Exercise Update
  - \* State HAZMAT Conference
  - \* Overview
- III. "Sheltering In Place" - An Alternative To Evacuation
- IV. Next Meeting, Date and Time
- V. Other Business
- VI. Adjournment

## MEETING SUMMARY

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #7  
STATE CAPITAL, CONFERENCE ROOM 212  
MONDAY, JUNE 26, 1989, 9:00 A.M.

### Member Attendees:

Tom Brown, State Civil Defense  
Doug Erway, State Civil Defense  
Joe Reed, Oahu Civil Defense Agency  
Thom Diggs, Oahu Civil Defense Agency  
Paul Takamiya, Oahu Civil Defense Agency  
Gerald Kinro, DOA  
Charmaine Kamaka, Hawaii County Safety  
David H. Nakagawa, DOH-Maui  
Thomas Kam, DLNR  
Leroy Hokoana, Maui Fire Department  
LCDR Kenneth Keane, USCG  
Selbero Menor, Maui Civil Defense  
Tom Bello, Hawaii Fire Department  
Tom Vendetta, C&C Civil Service  
Clyde Takekuma, Kauai District Health Office  
Clifford Ikeda, Kauai Civil Defense  
Hal Barks, DLIR/DOSH  
Harold Matsuura, Hawaii-DOH  
Wendell Hatada, Hawaii Civil Defense Agency  
Mark Ingoglia, DOH  
Andria Benner, DOH/EPA  
Nancy Woo-Larkin DOH/EPA  
Jeff Klein, DOH  
Nancy Gilder, DOH

### I. OPENING REMARKS

The Meeting Summary of the May 22nd meeting was reviewed by Mark Ingoglia. He noted that the training dates in the Summary were incorrect and that the Training Schedule enclosed with the Meeting Summary is the most up-to-date.

Update on Kekaha landfill - It was noted that three barrels of unidentified wastes were still on site, labeled, and cordoned, awaiting final results of analysis. (Final Update: test results

indicate contents of barrels are not hazardous waste.)

## II. REVIEW OF SCHEDULE - NANCY WOO

Nancy went over a schedule hand-out. The main upcoming events are the Emergency Response Plan, the Training Guidelines, and the HAZMAT Conference. All are going to be presented to HSERC for approval at their meeting August 1, 1989.

A new Section V Hazardous Materials Response Exercise was added to the Training Guidelines. If there are no additional comments, the Guidelines will be presented to HSERC at the August meeting.

## III. CHANGES AND AMENDMENTS TO THE EMERGENCY RESPONSE PLAN - NANCY GILDER.

There was a hand-out listing the suggested comments from TSERC members as well as changes made by HEER. Discussion followed during the reading of the comments. The following suggestions were made:

- \* A section should be added that describes "multiple events", (e.g., more than one emergency at a time), and how resources will be allocated.

- \* It was suggested that there be an on-scene PIO (Public Information Officer). Discussion revealed that procedures be established in accordance with standard Civil Defense procedures where the PIO generally speaks from the appropriate EOC (Emergency Operation Center).

- \* The media cannot be denied from being on-the-scene. However they should be referred to the EOC and look to them for details.

- \* USCG trains their people to answer only facts relating to their particular job and not to speculate.

- \* There was discussion about the SOSOC (State On-Scene Coordinator) being designated by position, or by name. The function should be clearly stated. For when the plan is adopted it will be law and the parties will be liable for their roles.

- It was noted that the District Health Administrator (DHA) is a separate position from the District Health Services Administrator (DHSA) who has an M.D.

- \* The use of volunteers should not be encouraged during clean-up unless the contractor assumes liability; and then only used during oil not chemical spill clean-up.

#### IV. HAZMAT CONFERENCE

The suggested audience for the conference was: policy-makers, mayors, key councilmembers, affected State/County Department heads, key legislators, LEPCs, private industry. It will be well publicized and open to the public.

A suggestion was made that a "pre-meeting" for agency representatives who are emergency responders be held, to package their reactions to potential questions from the media about the federal, state and county's response capabilities.

Other suggested activities that would bring attention to the fall 1989 conference.

- Invite the mayors to attend the debriefing of the Honolulu Full-Field Exercise.
- Encourage the Governor to sign a Proclamation designating a HAZMAT Awareness/Emergency Preparedness Week.

Some thought a day long conference would be too long to get busy and important officials to attend. TSERC was asked for comments on the format of the schedule and it was agreed that the HSERC will decide.

#### IV. SHELTERING IN PLACE

There was an article enclosed with the agenda packet about "Sheltering in Place". It was noted that Oahu Civil Defense references it in their LEPC Plan and a question was raised regarding who makes the determination whether to use it. Oahu Civil Defense said the CEC (Community Emergency Coordinator) is responsible.

A separate comment was made that sheltering in place is useful only in situations where there is not enough time for an evacuation.

#### VI. CLOSING REMARKS

The next HSERC meeting is scheduled for August 1st. Please attend, it will be at the DOH Board Room.

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE TSERC  
MAILING LIST

Latest Revision: June 23, 1989

Tom Bello, Chief  
Hawaii Fire Department  
466 Kinoole Street  
Hilo, Hawaii 96720  
Phone: 935-2978

John Bowen, Ph.D.  
University of Hawaii  
P.O. Box 1115  
Hilo, Hawaii 96721-1115  
Phone: 959-9460

Harold Barks, Administrator  
Occupational Safety & Health  
Department of Labor and Industrial Relations  
830 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-4155

Tom Brown, Civil Defense Planner  
State Civil Defense  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-2161

Dan Chang, Envio. Hlth. Spec.  
GWP Program  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-6767

Carter Davis, Fire Captain  
Hazardous Materials Instructor  
890 Valkenburg Street  
Honolulu, Hawaii 96818  
Phone: 422-1001

Captain Melvin DeCosta  
Civil Defense Coordinator  
Honolulu Police Department  
1455 South Beretania  
Honolulu, Hawaii 96814  
Phone: 943-3364

Doug Erway, Exercise Asst. Off.  
State Civil Defense  
Department of Defense  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495  
Personal Business  
Phone: 734-2161

Sonny Gerardo, Administrator  
Kauai Civil Defense Agency  
4444 Rice Street, Room 230  
Lihue, Kauai 96766  
Phone: 245-4001

Neal Gyotoku  
Logistics and Supply Officer  
Hawaii County Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Harlan Hashimoto, Ph.D.  
University of Hawaii-School of Public Health  
1960 East-West Road  
Honolulu, Hawaii 96822  
Phone: 948-8037

Leroy Hokoana, Fire Chief  
Maui Fire Department  
21 Kinipopo Street  
Wailuku, Hawaii 96793  
Phone: 243-7561

Clifford Ikeda  
Co-Chairman, Kauai LEPC  
Kauai Civil Defense  
4444 Rice Street, Room 230  
Lihue, Hawaii 96766  
Phone: 245-4001

Thomas Kam  
Department of Land & Natural Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-7541

Arlene Kabei, Manager  
Department of Health-HWP  
591 Ala Moana Boulevard  
Honolulu, Hawaii 96813  
Phone: 548-2270

Edward J. Kalinowski, B.S.N., M.Ed.  
Emergency Medical Services Dept.  
Department Chair  
Kapiolani Community College  
4303 Diamond Head Road  
Honolulu, Hawaii 96816  
Phone: 734-9288

Charmaine Kamaka  
Safety Coordinator  
County of Hawaii-Safety  
25 Aupuni Street  
Hilo, Hawaii 96720  
Phone: 961-8215

Lt. Cmdr. Kenneth Keane  
U.S. Coast Guard Marine Safety Office  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909  
Phone: 541-2068

Harry Kim, Administrator  
Hawaii Civil Defense Agency  
34-A Rainbow Drive  
Hilo, Hawaii 96720  
Phone: 935-0031

Gerald Kinro, Pesticide Specialist  
Department of Agriculture  
1428 South King Street  
Honolulu, Hawaii 96814-2512  
Phone: 548-4721

Alejandro Lomosad  
Kauai Fire Department  
4223 Rice Street  
Lihue, Hawaii 96766  
Phone: 245-4721

Harold Matsuura  
Chief Sanitarian  
P.O. Box 916  
Hilo, Hawaii 96721-0916  
Phone: 961-7275, 7371

Sel Menor, Administrator  
Maui Civil Defense  
200 South High Street  
Wailuku, Hawaii 96793  
Phone: 243-7721

Ralph Moore  
Hazardous Materials Specialist  
State Department of Transportation  
869 Punchbowl Street  
Honolulu, Hawaii 96813  
Phone: 548-3188

Donna Maiava, Chief  
Emergency Medical Services System Branch  
Department of Health  
3627 Kilauea Avenue, Room 102  
Honolulu, Hawaii -----  
Phone: 735-5267

David H. Nakagawa, Chief Sanitarian  
Department of Health-Maui  
54 High Street  
Wailuku, Hawaii 96793  
Phone: 244-4255

Captain Gordon Piche,  
Captain of the Port  
U.S. Coast Guard Marine Safety Division  
433 Ala Moana Boulevard  
Honolulu, Hawaii 96813-4909  
Phone: 541-2608

Joe Reed  
Oahu Civil Defense  
650 South King Street, Basement  
Honolulu, Hawaii 96813  
Phone: 523-4121

Anthony Salis  
Department of Occupational Safety and Health  
830 Punchbowl Street, Room 423  
Honolulu, Hawaii 96813  
Phone: 548-4781

Ronald Takahashi  
Personnel Management Specialist  
Department of Civil Service  
County of Hawaii  
101 Aupuni Street, Suite 133  
Hilo, Hawaii 96720  
Phone: 961-8361



Paul Takamiya  
Oahu Civil Defense Agency  
650 South King Street  
Honolulu, Hawaii 96813  
Phone: 527-5489

Clyde Takekuma, Chief Sanitarian  
Kauai Environmental Branch  
P.O. Box 671  
Lihue, Hawaii 96766  
Phone: 245-4323

Tom Vendetta, Chief  
Industrial and Safety Workers' Compensation  
City and County of Honolulu  
550 South King Street  
Honolulu, Hawaii 96813  
Phone: 523-4880

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD/HEER

June 15, 1989

MEMORANDUM

TO: TSERC

FROM: Mark Ingoglia, Coordinator, HEER

SUBJECT: Announcement of Upcoming TSERC Meeting

Enclosed you will find the Agenda for the June 26th TSERC meeting. Please note that we have changed the meeting date and location. It will take place at the State Capital, Conference Room #212.

Enclosed also are the following: minutes from the last meeting, a new emergency response training schedule, and an article on "Sheltering in Place". Please review this article so that we can discuss it at the next meeting.

Thanks for all your support; hope to see you there

  
\_\_\_\_\_  
Mark Ingoglia

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #7  
HAWAII STATE CAPITAL, ROOM #212  
MONDAY, 26 JUNE 1989, 9:00 A.M.

AGENDA

- I. Review Meeting Summary from 22 May, 1989
- II. Chemical and Oil Activities Overview
  - \* Hawaii's Oil and Hazardous Materials Emergency Response Plan (Draft IV)
  - \* Chemical Emergency Response Training Guidelines
  - \* Hazardous Materials Training and Exercise Update
  - \* State HAZMAT Conference
  - \* Overview
- III. "Sheltering In Place" - An Alternative To Evacuation
- IV. Next Meeting, Date and Time
- V. Other Business
- VI. Adjournment

## MEETING SUMMARY

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
TECHNICAL SUBCOMMITTEE MEETING #6  
DEPARTMENT OF HEALTH, LIBRARY, FIRST FLOOR  
MONDAY, 22 MAY 1989, 9:00 A.M.

### Members Attendees:

Tom Bello, Hawaii Fire Department  
Tom Brown, State Civil Defense  
Daniel Chang, DOH  
Doug Erway, State Civil Defense  
Harlan Hashimoto, Ph.D., University of Hawaii-Manoa  
Leroy Hokoana, Maui Fire Department  
Clifford Ikeda, Kauai Civil Defense  
Gerald Kinro, DOA  
Alejandro Lomosad, Kauai Fire Department  
Harold Matsuura, Hawaii DOH  
Selbero Menor, Maui Civil Defense  
David Nakagawa, DOH-Maui  
Joe Reed, Oahu Civil Defense  
Thom Diggs, Oahu Civil Defense  
Tom Vendetta, C & C of Honolulu  
Clyde Takekuma, Kauai District Health Office  
Neil Gyotoku, Hawaii Civil Defense  
Charmaine Kamaka, Hawaii County Safety  
Harold Banks, DOSH  
Thomas Kam, DLNR  
Mark Ingoglia, DOH  
Jeff Klein, DOH  
Andria Benner, DOH/EPA  
Nancy Woo-Larkin, DOH/EPA  
Nancy Gilder, DOH

### I. HAZMAT EXERCISES

HAZMAT exercises will be held on Oahu August 20th, and Maui August 23rd. Discussion followed on what kind of exercise Maui should hold, table-top, functional, or full field. A comment was made that one objective of an exercise is to identify shortfalls in equipment, training, personnel and other emergency response capabilities. It was agreed that table-top would be sufficient for Maui, due to the level of their training.

A statewide tsunami exercise will be held on May 31st.

EPA is planning a HAZMAT exercise for August 29-30. There will be a letter distributed at the next meeting with the details.

## II. TRAINING GUIDELINES

The draft Training Guidelines were distributed for review and comment. Comments should be returned to HEER by June 5th. One comment mentioned that the plan was too specific. It was noted that although specific, the guidelines include the minimum level of detail and that instructors can emphasize various aspects or conditions depending on the background of the trainees and the type of function they perform.

## III. TITLE III DATA MANAGEMENT

The group was informed that Samir Araman is no longer with DOH. Andria Benner and Jeff Klein will be working with Title III.

## IV. ESTABLISHMENT OF RULEMAKING

The rulemaking process will be discussed with the Attorney General's office and the drafting of rules will be discussed at the next meeting.

## V. HAZARDOUS SUBSTANCE RELEASE AND RESPONSE KEKAHA LANDFILL

The Kauai landfill incident of May 2nd was discussed with the group. The landfill operator drove a bulldozer over a drum. The drum broke open and the operator was sprayed with the unknown substance. He went home for lunch and became nauseous. The area was cordoned off and people kept away. Samples were taken by untrained people without the proper equipment. Finally, Unitec was called in to help.

### Lessons Learned from this Incident:

- 1). Untrained personnel should not collect samples or enter a cordoned off area. If criticized for not taking samples, HEER will accept the responsibility. Please contact DOH for assistance if staff are not field trained.
- 2). A consistent line of communication is critical during an emergency response action. The initial responder should maintain the lead role until the response is completed or the lead is delegated to another another agency or party. The highest ranking Fire official on the scene is the Incident Commander (IC).

Other Factors:

- \* Unknown liquids cannot be accepted into the landfill
- \* County responsible for problem (Owner/Operator)
- \* Costs may be \$50-\$100,000 for cleanup; but County was not there to monitor the contractor it hired
- \* Need to train landfill operators to identify hazardous materials

VI. TRAINING: PERSONNAL PROTECTION AND SAFETY

The next Personnal Protection and Safety training will be on Kauai, hopefully in June. Maui is aiming for July, and the Big Island in August. These dates need to be confirmed with the Coast Guard.

VII. FUTURE DEADLINES

Please complete your review and comment of the draft guidelines by June 16th.

A statewide HAZMAT conference was discussed as a way to bring more public, private and government attention to the problem. It was suggested that the conference cover Community Right-To-Know and reporting requirements.

Next meeting, Monday, June 19th 9:00 AM, DOH Library

Meeting was adjourned at 11:00am.

TSERC  
TITLE III DATA MANAGEMENT SUBCOMMITTEE  
MINUTES  
MAY 22, 1989

I. Each island presented the status of its data management activities.

Oahu Civil Defense

1). Uses a facility profile form

- information on all materials; if new materials added to a facility in-between reporting periods, facility has 60 days to report.

2). File for each facility

-collect data for future input into CAMEO

3). Compliance

- they got more willing compliance with a personal visit. Make an appointment with the facility operators for a walking tour to familiarize yourself with the people and the facility and explain that you are not inspectors. The facilities are not aware of the annual submission requirement of Tier II.

- don't coordinate with the Fire Department, you have different interests and reasons for the visitation.

- follow state's notification guidelines

- map out "Danger Zone" (to plot potential plume) for all facilities, half mile radius and one mile downwind. Using for emergency response areas until CAMEO.

Kauai Civil Defense

1). One problem is that there is no responsible agency or person for HAZMAT program. Recommended that Mayor Yukimura assign such agency.

2). Recommended that meetings be held to get people to fill out questionnaires.

3). Everything was removed from their budget except training. Hoping to get a MacIntosh computer next year.

## Hawaii Civil Defense

- 1). They have facility profile for between 26-30 companies.
- 2). Working on Site Visitation plans, questioning whether to do it alone or coordinate with the Fire Department.
- 3). Facilities are developing their Emergency Plans and are asking their assistance.
- 4). Concerned about the fact that the police do not have first response training.

Mark said if outer islands have difficulty in getting funding for HAZMAT equipment to let us know and he or Bruce can go testify.

## II. Suggestions for Notification Title III

- \* Newspaper ad and or article in Trade Journal
- \* Handout with Brewer Chemical mailing list
- \* Hold a conference - discussion of a grassroots workshop to educate the public, companies and government officials of SARA requirements and the state's Emergency Response Plan for hazardous materials.
- \* EPA will hold a Federal Facilities conference and it was discussed whether our conference should be held in conjunction with it. It was suggested that the feds would not be useful to state/county officials to meet our needs, mainly because federal conferences operate at a higher technical/bureaucratic level than the states.



STATE OF HAWAII  
DEPARTMENT OF HEALTH

EMERGENCY RESPONSE PERSONNEL TRAINING AND EXERCISE SCHEDULE

Incident Response Training, Personal Protection Training

\* 40 hour session provided by the Coast Guard

Kauai - July 10-14  
Hilo - July 17-21 (?)  
Maui - August 7-11

Chemistry of Hazardous Materials

\* FEMA sponsored

Hilo - June 19-30  
Instructors: John Bowen and Joseph Mehlretter

Hazardous Materials Tactical Considerations

\* FEMA sponsored

Hilo - August 21 - September 1  
Instructors: John Bowen and Carter Davis

Honolulu Full Field Exercise

\* EPA sponsored  
\* Field Leader: Ellery Savage

Planning meeting with all involved agencies - August 29th.  
Pre-exercise briefing - October 19th.  
Full field exercises - October 20th.

Maui Tabletop Exercise

\* EPA sponsored  
\* Field Leader: TAT Contractor

Planning meeting with all involved agencies - August 30th.  
Pre-exercise briefing - October 23rd.  
Tabletop exercise - October 24th.

6/13/89

HAWAII STATE EMERGENCY RESPONSE COMMISSION  
 TECHNICAL SUBCOMMITTEE MEETING #7  
 HAWAII STATE CAPITAL, ROOM #212  
 MONDAY, 26 JUNE 1989, 9:00 A.M.

SIGN-IN SHEET

NAME	ADDRESS	PHONE NUMBER
TOM BROWN	SCD	734-2161
DOUG ERWAY	SCD	11
JOE REED	OCDA	523-4121
Thom Diggis	OCDA	523-4121
Paul Takamiya	OCDA	527-5489
GERALD KIRO	DOA	548-7124
Nancy Woo-Larkin	DOH	548-2076
ANDRIA BENNER	DOH	548-2076
JEFF Klein	DOH-HEBR	" "
CHARMAINE KANAKA	15 AUPUNI ST. Hilo	961-8215
DAVID H. NAKAGAWA	DOH-Maui	244-4255
Thomas Kam	DLNR	548-7642
Leroy Holoana	Fire-Maui	243-7561
LCDR KENNETH KEANE	U.S COAST GUARD	541-2068
Selberio Menon	Maui Civil Defense	243-7721
Tom Bello	FIRE - Hawaii	935-2978
Tom Vendetta	Civil Service - C/C	523-4880
Clyde Takekuma	Kauai - DHO	245-4323
CLIFFORD IKEDA	Kauai ED	245-4001



HAWAII STATE EMERGENCY RESPONSE COMMISSION  
 TECHNICAL SUBCOMMITTEE MEETING #6  
 DEPARTMENT OF HEALTH, LIBRARY, FIRST FLOOR  
 MONDAY, 22 MAY 1989, 9:00 A.M.

SIGN-IN SHEET

NAME	ADDRESS	PHONE NUMBER
REED, JOE.	OAHU Civil Defense	523-4121
Thom Diggs	OAHU Civil Defense	523-4121
Harold Matsucera	P.O. Box 4054 Hilo HI 96720	961-7275
Tom Vendetta	550 S. King St.	523-4880
Clyde Takekuma	Kauai District Health Office	245-4323
David H Nakagawa	Maui " " "	244-4255
LeRoy Hokoana	Maui Fire	243-7560
ALEJANDRO LOMOSAS	Kaun FMS Dept.	245-4721
Thomas Bello	Hawaii Fire Dept	935-2978
Hil Gyoroc	Hawaii Civil Defense	935-0031
CHARMAINE KAMAKA	HAWAII COUNTY - SAFETY	961-8215
Harold W. Banks	DOSH	548-4155
Thomas Kam	DLNR, 1151 Punchbowl St.	548-7642
SEL MENOR	MAUI Civil Defense Agency	243-7721
Tom BROWN	STATE CIVIL DEF.	734-2161
GERALD KINRO	STATE DOA	548-7124
CLIFFORD IKEDA	Kauai CD Agency	245-3601
DOUG ERWAY	STATE CIVIL DEFENSE	734-2161
HARLAN HASHIMOTO	SCH OF PUBLIC HLTH	948-8894
DAN CHANG	DOH	548-6767

**SIGN-IN SHEET**

NAME ADDRESS PHONE NUMBER

Jeff Klein DOH-HEER 548-2076

ANDRIA BENNER DOH-HEER 548-2076

MARK INGOGLIA DOH-HEER 548-2076

Nancy Woot DOH-HEER " "

Nancy Selder DOH-HEER " "

**SIGN-IN SHEET**

Source:

Chemical Manufacturers Association, CMA  
Community Awareness and Emergency Response, CAER May, 1989 Newsletter

Reprinted from the Winter 1989 issue of Resources, the quarterly publication of Resources for the Future, a Washington, D.C. research institution.

## Responding to chemical accidents by sheltering in place

Alyce M. Ujihara

*A chemical accident that produces a toxic cloud can pose a life-threatening community emergency. Evacuation is one emergency response option, but having the public seek refuge indoors may sometimes be a better way to minimize the risk.*

**S**carcely a month passes that one does not hear or read about an accident involving the release of a toxic chemical. These accidents can create a toxic vapor cloud that can put a community in the midst of a life-threatening emergency. The tragedy that occurred in Bhopal, India, and other lesser events have spurred efforts within both industry and government to prevent such accidents from occurring. Yet, be-

cause we will never be able to prevent them all, efforts are also being made to improve our capabilities to respond to these emergencies when they do occur.

When an accident poses a threat to the general public, local authorities normally initiate emergency response measures in an attempt to minimize the harm. In general, the options they have are few: they can keep members of the public sheltered in homes or other buildings or they can evacuate the public from the affected area. In the United States, those with responsibility for protecting the public during an emergency have traditionally relied upon the use of evacuation during life-threatening emergencies. This strategy is not surprising given the types of incidents they typically have been called on to respond to. Indeed, evacuation

probably is the best response for fires and many natural hazards such as floods and earthquakes. But there is increasing evidence that in certain circumstances sheltering members of the public in place may be the better option during a toxic chemical emergency.

### Why shelter in place?

Sheltering in place means seeking refuge indoors when a toxic chemical forms a vapor cloud that threatens to engulf an area. The public, once inside, conducts several self-protective measures including closing all windows, doors, and vents, shutting off ventilation systems, and tuning to the emergency broadcast system (EBS) on television or radio for further instructions. But the emergency response does not end here. When outdoor concentrations have fallen to safe levels, the public must evacuate and ventilate the building to diminish peoples' exposure. This final step is necessary because some toxic vapors may have infiltrated the structure; once inside, these vapors will

WINTER 1989 11



take much longer to dissipate than those in the outdoor air. By remaining indoors too long the occupants could receive an unnecessarily high dose.

Sheltering in place provides protection during a toxic chemical emergency because closed structures supply a reservoir of clean air and serve to shield the occupants from direct exposure to the contaminated air outside. Because of infiltration effects, sheltering in place would probably not eliminate the threat entirely, but at least it would reduce the concentrations to which building occupants would be exposed were they to go outside.

There are other advantages to sheltering in place. Because it takes time for authorities to respond to an emergency, sheltering in place can be an effective interim measure while emergency personnel assess the situation, determine the best response actions, and, if necessary, mobilize the resources needed for an evacuation. Furthermore, if the public is indoors and tuned to the EBS, emergency

personnel will be able to communicate with them directly. If an evacuation is necessary, they will be able to provide precise, up-to-the-minute instructions via the airwaves, which will greatly facilitate the evacuation.

Sheltering in place is by no means an all-purpose solution. A significant number of chemical emergencies involve a flammable or explosive substance, and the threat that the vapor cloud will ignite or explode may be the most immediate concern. With this type of situation, evacuation may be the only suitable option.

The degree to which sheltering in place provides protection from an airborne toxic chemical depends on a number of factors. The most important is the infiltration rate of the building. The infiltration rate refers to the volume and speed at which outdoor air is exchanged with the indoor air through cracks, vents, and other openings in a building. It is typically measured by the number of air changes per hour (ACH).

In the United States, the range of infiltration rates is large—from 0.2 ACH for highly energy-efficient buildings to 10.0 ACH for drafty buildings with windows and doors open. While infiltration rates can vary enormously from building to building, some generalizations can be made. Buildings in colder climates tend to have lower infiltration rates than those in warmer climates, and older buildings tend to be leakier than newer ones. Meteorological conditions such as wind speed and direction and the differences between indoor and outdoor air temperature will also affect the infiltration rate. Interior rooms may afford better protection than rooms with exterior walls, doors, or windows, and upper floors of a multistory building may provide greater protection than ground floors. The type of chemical is also a factor.

Closing windows and doors and turning off ventilation systems helps to reduce infiltration. Covering cracks around windows and doors with tape or wet rags will also slow infiltration. The degree to which these measures are effective, however, depends on the infiltration rate of the house; greater gains can probably be had

in drafty structures with high infiltration rates than in well-weatherproofed ones.

The protectiveness of sheltering in place also depends on the duration and nature of the release. Releases can be long-term and continuous (a slow leak) or short-term and instantaneous (a "puff"). According to one expert, beginning with a typical infiltration rate of 1.0 ACH and a chemical release of 10 minutes' duration, those who shelter themselves in place will receive only about one-tenth of the dose of those who are outdoors and exposed directly to the chemical. Given a puff-type of release of only about one minute's duration, the indoor dose will be approximately one one-hundredth of the outdoor dose.

Automobiles, with windows shut and ventilations systems off, provide some degree of protection from airborne toxic chemicals. However, in general infiltration rates in stationary autos are high, and the rate increases with the vehicle's speed.

### Community preparedness

In a few places around the United States, sheltering in place has already been integrated into the community's emergency response plans. For example, in the area surrounding the Bridesburg chemical complex in Philadelphia, an information sheet prepared by Rohm & Haas and Allied Chemical instructs local residents to seek shelter indoors when they hear a long rotating tone from sirens installed in the area, and then to take self-protective measures. In the Kanawha Valley in West Virginia, which is home to a number of chemical manufacturing facilities, the community interest pages of the local phone book contain the statement that "sheltering in place is a proven, effective emergency protective action which is used when there is insufficient time to evacuate in the event of an airborne hazardous material release."

These examples of emergency planning, however, are exceptions rather than the rule. In both the Bridesburg area and the Kanawha Valley, public concern prompted the industry and local government to develop plans much more sophis-

## Chemical emergencies and Title III

Congress enacted the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act (SARA), because it recognized that few communities were adequately prepared for chemical emergencies. Title III establishes state emergency planning commissions (SERCs) and local emergency planning committees (LEPCs) across the country. The federal government, led by the Environmental Protection Agency, oversees Title III activities, though the focus of Title III is at the local level. One of the most important responsibilities of the LEPCs is the development of comprehensive emergency response plans. These plans, which are reviewed by the SERCs, assist the local community in planning for and responding to chemical releases.

ticated than the level of planning found in most areas in the United States. For the rest of the country, the impetus to begin preparing for chemical emergencies has come with the passage of the Emergency Planning and Community Right-to-Know Act in 1986 (see box).

### Shelter in place or evacuate?

A community's emergency response plan and the information furnished to the local authorities during an emergency will provide the basis for determining the best response actions. As Title III of the 1986 act requires, emergency response decisions and actions are directed by local authorities. Most likely, the fire and police chiefs will be closely involved in response decisions, though the final decision to shelter in place or evacuate usually rests with an elected official—the mayor, the city manager, or a county executive.

In deciding whether to shelter in place or evacuate, emergency personnel face a difficult task. Important factors they must consider in making this decision include, first, whether there is time to complete an evacuation before the toxic chemical vapors reach populated areas. This determination will require estimates of how long it will take the vapors to arrive and how long it will take to evacuate a threatened area. Second, emergency personnel must determine whether the homes or buildings where the public is sheltered will be protective enough when the toxic vapors reach them. In many cases, emergency personnel are notified when the release has already occurred and there is no time even to begin an evacuation. Under these circumstances, sheltering in place is the only option.

Yet in a situation when there is no time to evacuate and where sheltering in place may not be protective enough, emergency personnel may have to direct the public through the EBS to conduct additional protective actions such as breathing through a cloth; or, under extreme circumstances, they may have to undertake rescue actions and provide sheltered occupants with protective breathing apparatus. In situations where the release has not yet occurred or is small, but where

it has the potential to escalate into a large release, emergency personnel will usually opt for evacuation as a precautionary measure, *if time permits*.

During an actual emergency the best response may not be obvious. No doubt some uncertainties arise in a given situation because the information the emergency personnel receive may be incomplete or even incorrect. Furthermore, there may only be a few minutes to assess the situation and implement a response.

In preparing for a decision to shelter in place or evacuate, there are several steps a community can take. Evacuation times depend on many factors, such as the size and the population density of the area to be evacuated, the time of day, the weather conditions, and the road network—much of which can be assessed before an accident occurs. Planners may also be able to reduce the time needed to implement an evacuation through a good education program and practice drills. Emergency personnel are well aware that a total evacuation can easily take several hours. In comparison, the time it takes to shelter in place will generally be considerably less and, if the public has been educated to recognize warning signals, sheltering in place can begin within minutes.

### Growing support

The United States Environmental Protection Agency (EPA), the Federal Emergency Management Agency (FEMA), and other federal agencies are responsible for providing guidance and training to the local emergency planning committees (LEPCs) to assist in developing emergency response plans. Unfortunately, the existing guidelines do not emphasize sheltering in place and as a result it has received little or no attention by LEPCs.

This situation is changing, however. A recent conference sponsored by EPA and FEMA and organized by RFF's Center for Risk Management brought together representatives from all levels of government (including emergency planners and response personnel), industry representatives, and a variety of technical experts on evacuation and sheltering in place. This diverse group reached the consensus that

sheltering in place is a viable option for responding to chemical emergencies and should be considered as an alternative to evacuation during chemical emergencies.

The conference also pointed out some of the issues that need to be resolved if sheltering in place is to become a more

---

**I**n many emergencies, there may be no time to begin an evacuation.

---

widely accepted practice. For example, few guidelines exist to help emergency personnel make the important decision between sheltering in place and evacuation. In addition, there is a human factor in implementing emergency response actions: experts are concerned that because of the urge to flee from danger it might be difficult to convince some of the public to accept sheltering in place.

As one result of the conference, the federal government is considering an expansion of its guidance and training of local authorities to give sheltering in place a more prominent role. The intention is that the sheltering option will become more widely integrated into local emergency response actions.

In spite of the availability of protective response measures, the focus should remain—as always—on preventing accidents involving toxic chemicals from occurring in the first place. Even with the best preventative measures these accidents will continue to occur, but in giving greater attention to mitigating actions, options like sheltering in place may help reduce the harm from such potentially catastrophic events. ■

---

*Material for this article was drawn from an RFF research project on sheltering in place during chemical emergencies, carried out for EPA's Emergency Preparedness Staff. The project was conducted by Theodore S. Glickman and Alyce M. Ujihara of RFF's Center for Risk Management.*



SUGGESTED CHANGES TO HAWAII'S OIL AND HAZARDOUS MATERIALS EMERGENCY  
RESPONSE PLAN DRAFT III BY TSERC MEMBERS

Bracketed materials are deleted, underlined items are additions.

DOSH:

Page 6: 6a., [standards in work places are not violated], is not compromised.

Page 36: 6b, [OSHA], air.

Page 41: 12, and the precautions necessary to reduce risk to worker safety and health, instead of health and safety.

DOA:

1). Suggested an appendix section listing sources of technical information.

2). Suggested a standard form be used by those receiving an emergency report.

KAUAI CIVIL DEFENSE:

Page 15: B. TRAINED PERSONNEL

The state training program will include a basic HAZMAT awareness course recommended for all first responders...

Page 17: 1. Notification Policy [.]

Any oil or HAZMAT spill that may threaten public health or the environment [be] must be reported...

Page 19: (2) Designate a county on-scene coordinator (COSC) for local resources [who shall also be the IC].

d. Change-of-Command

Incident [commander] command will remain at the county level...

Page 22: 3. Cleanup and Restoration

a. State Incident Commander - Once the emergency is over and stabilization and control measures are taken, local emergency responders will return to normal duties. At [a mutually agreed upon] this time, the county incident commander will turn command over to the state on-scene coordinator (normally DOH) who will assume incident commander authority and direct cleanup and restoration.

County agencies may [need or] choose to remain involved. This change was not accepted.

Page 28: H. Coordination of Public Information

The news media can provide both important and detrimental information about the nature of an incident. Successful emergency operations require accurate and timely public information. Public information will be coordinated between on-scene and off-scene operations. [A] An on-scene Public Information Office (PIO) will be designated by the incident commander [or OSC] to issue information about the incident. This change was not accepted.

The PIO will issue information[, ] in coordination with the DOH information representatives. DOH will [ensure that] provide the PIO [has] with timely and accurate public health information.

Page 32: 2. Department of Health (DOH)

a. Receives notification via SCD.

b. Provides State On-Scene Coordinator (SOSC):  
neighbor islands SOSC will be the District Health Officer (DHO) or District Health Service Administrator (DHSA) or his designated representative.

CHANGES MADE BY HEER:

Added to the Definition of Key Terms section the definition of "hazardous substance" issued in the Hawaii State Environmental Emergency Response law, Chapter 128D.

Replaced all references made to hazardous materials, HAZMAT etc. to hazardous substance[s].

Page 39: Remove 5. USDA responsibilities

Page 40: Remove 7. Army Corps of Engineers responsibilities

Page 41: Remove 12. USDOL

Section IV - Elements of Hawaii's Oil and HAZMAT Emergency Response System: Removed Figure IV.

Section VI - Oil and Hazardous Materials Emergency Categories and Response Levels: Removed Figures VII, VIII, IX, Table 2, and all their references.

# The COMMUNITY PLUME

A Publication for the Members of America's Local Emergency Planning Committees

Vol. 1, No. 3 • April 1989

## State Funding for Emergency Planning. . . States Start Taking SARA Seriously

When Congress passed The Emergency Planning and Community Right to Know Act (SARA Title III) in 1986, the state of Kansas responded fast. Within a year it passed its own legislation, establishing a chemical safety program that follows the outline of the federal program - with one crucial exception. While Congress only provided a total of \$5 million through the Federal Emergency Management Agency for emergency management training in all states, the Kansas program set up a funding system to fully support its new initiative. Facilities pay annual filing fees each time they submit a report under Sections 311, 312 and 313 of the federal law.

According to Governor Mike Hayden, the legislature wished to see "as many state programs as possible recover all or part of their operating costs from the facilities or communities which they serve." By 1991, facility filing fees and funds from general revenue will each provide 50% of the total support, under the assumption that both the facilities and the general public benefit under this program.

Ohio has also set up a system based on filing fees. The money is placed in a special fund in the state treasury. If more than \$5 million is collected, the excess up to the amount of \$3 million will be held in a reserve fund. Excesses beyond the amount of the reserve fund will be refunded on a pro-rated basis to those industries which originally paid the fees.

Money from the special fund will go to the State Emergency Reponse Commission (SERC), to be distributed as follows: 15% to the SERC, 65-75% to the state's LEPCs, and 5-15% to fire departments. 50% of the reserve fund is held to bolster the special fund to the \$5 million level in case collected fees don't reach that amount in a given year. The other 50% may be provided through grants to the SERC, LEPCs or firefighters for emergency planning, training, data management or equipment for first response.

### Many States Slow to Fund Title III

Most states have been much slower than Kansas and Ohio to accept the financial challenge of SARA Title III. *The Community Plume's* recent survey of 15 states reveals that almost half allot no funds for the SERC and only two budget any amount at all for the Local Emergency Planning Committees (LEPCs). Most provide some sort of in-kind support to the SERC.

Of the many states that passed Right to Know legislation before SARA Title III, only California and New Jersey have full-scale comprehensive programs - and in both cases, the states have been very slow in putting the laws into effect. New Jersey has merged the state and federal programs, and provided a total of \$1.2 million in funding. However, although the state has a record number of LEPCs (567 municipalities and 21 counties, totaling 588), no money goes directly to them. State agencies are providing technical and public outreach assistance. California has no state system

(continued on page 3)

## 12,000 Evacuated: Toxic Gas Lessons Learned The Hard Way

California's second major chlorine gas accident within a four-month period has illustrated the need for vital, genuinely local Local Emergency Planning Committees, as Congress intended under SARA Title III (The Emergency Planning and Community Right to Know Act of 1986). The accident shows, through hard experience, the value of candid community hazard analysis, which is needed to motivate adequate hazardous materials training for fire fighters. It also shows the importance of strong accident prevention measures, and of local zoning laws in siting chemical facilities.

### A Dense Yellow-Green Gas Hovered Over The City

In only a pretense of compliance with SARA Title III, California's Office of Emergency Services has established a total of only six Local Emergency Planning Committees (LEPCs) for the

entire state. The LEPC for the Los Angeles area embraces five counties and 200 cities, including Simi Valley. As the 100,000 citizens of Simi Valley discovered, that wasn't "local" enough.

On January 5, 1989 an estimated 12,000 people were evacuated from their homes and businesses [in Simi Valley]... and traffic was snarled for hours when a square-mile sized cloud of potentially lethal chlorine gas leaked from a tank at a textile manufacturing plant and hovered over the city" (Los Angeles Times, Jan. 6, 1989). Used in water treatment plants, swimming facilities and elsewhere, chlorine is one of the most widely distributed chemicals in the country. It is

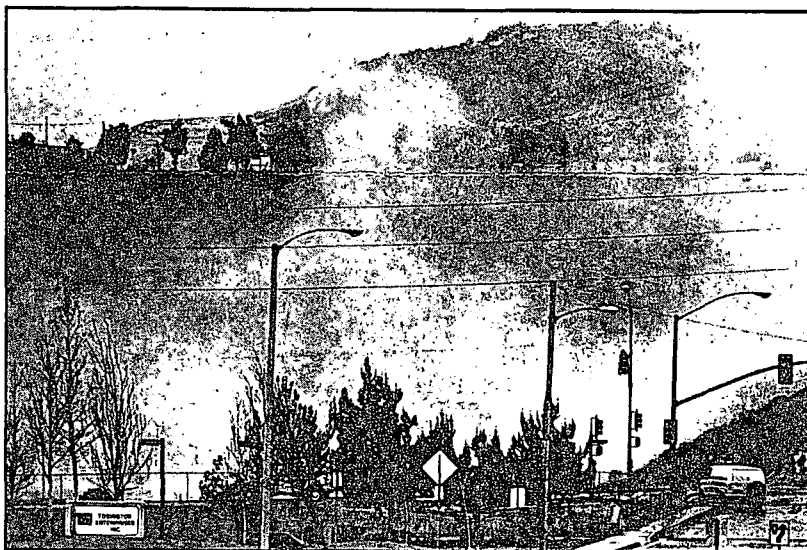
a dense, yellow-green gas that intensely irritates eyes, skin and lungs. It was used as poison gas during World War I.

### All Day Long. . .

The Simi Valley accident started about 7:45 a.m. with a leak from a 30-ton cylinder at Travelin' West Textiles plant. According to its later report to the Los Angeles LEPC, the Ventura County Fire Department's five-person hazmat team responded to a minor leak, requested a small precautionary evacuation, and put on its protective suits at 8:30 a.m. Efforts to close the valve, which was frozen, caused it to break and release "a strong, green stream" of chlorine which engulfed the the hazmat team and sent billows of toxic gas hundreds of feet into the air. Protective suits, which cost \$1500 each, froze and ripped apart, exposing two men to the chlorine. The new release necessitated a major evacuation.

The chlorine cloud hung over the surrounding area all day. Five preschools, four elementary schools and two junior highs were evacuated. Twenty people, including five fire fighters and a sheriff's deputy, were treated at the hospital. The Los Angeles hazmat team arrive at 1:30 p.m., but didn't begin work until 5:30. By 6:00 they had installed a Chlorine Kit cap and stopped the leak. The cloud cleared, and by 7 p.m. the evacuation was over.

(continued on page 3)



This cloud of yellow-green chlorine gas hung over one square mile of the city of Simi Valley, California for an entire day last January. 12,000 were evacuated, including 11 schools. Twenty were hospitalized.

Los Angeles Daily News photo.

## Local Action Needed in Calif.

(continued from page 1)

### Poor Design, Poor Information, Poor Equipment

Contributing to the accident was the lack of accurate information from the company manager. A hazmat team member reported that the manager said the tank held only 25 pounds of chlorine at most; in retrospect, hazmat team members estimated at least 300 pounds. The Fire Department's evaluation included several "state of the art" accident prevention suggestions based on lessons learned in the course of the accident:

- There should be at least two doors to a tank building. In this incident the chlorine sprayed directly at the only door.
- There should be a built-in umbilical air supply for fire fighters near the tank.
- Lighting should be good, so that fire fighters don't need to hold flashlights in their hands as they work.
- Catwalks should be installed on tanks to allow access to the valves. During this accident the hazmat team had to use a rickety ladder.
- There should be a roof for containment, and a scrubber tank to handle at least the first hour of a serious gas release.
- Hazmat teams should have more than one Chlorine Kit. The only one was left behind near the tank when the chlorine poured out during this event.

### Citizens Propose New Regulations

Paul LaBonte, of a local homeowners group called Help End Local Pollution, described the incident as "a comedy of errors all day long. . .", saying that one cause of the problem was government complacency. "The facility had a 5-year record of violations of codes, and the city had moved in court to shut it down. We knew they had chlorine gas and were going to dismantle the plant. Yet there was no competent authority which required a dismantlement procedure, no one onsite to oversee. . . ."

"A terrible design for the tank building had been approved by the Fire Department. After the accident, City Council members decided to take up our proposed ordinance on handling and storage of hazardous materials," says LaBonte. Modelled after the Santa Clara Valley, Calif. Fire Chiefs' recent toxic gas ordinance, this law would allow the city to oversee design of new chemical facilities and evaluate risk management.

"The city now intends to organize its own LEPC," said LaBonte. "If they do not, we will organize our own citizens committee and start acting as a *de facto* LEPC."

### Mayor: "I Want LEPC Power Back in My City"

Simi Valley's Mayor *pro tem* Anne Rock has many unanswered questions about the accident. She wonders about the hazmat team with its \$500,000 truck, about the difficulties in capping the leak, about the lack of information on the contents of the leaking tank. "Why on earth were there such delays in emergency response?" she asks. "This was a half-hour job that became a nightmare."

As for prevention, Mayor Rock says, "We are now looking at zoning and permit procedures. We will put the requirements from the state's 'schools and toxics' law [California Assembly Bill 3205, enacted in 1988] into our own local zoning to prevent schools from being sited too close to chemical sites. We do not have to rely on anyone else for that. It's the best hammer we have."

Mayor Rock also wants to use SARA Title III to protect her community. "I hope to be able to bring the Los Angeles LEPC's authority and powers back down to my city and to every city in Ventura County. That's what we need to do." ■



Two fire fighters were exposed to liquid chlorine in Simi Valley, Calif. when a frozen valve broke. Engulfed in a stream of toxic gas, their \$1,500 protective suits froze and ripped. Los Angeles Times

## Moving Ahead on Funding. . .

(continued from page 1)

for collecting fees; many localities support their programs by their own efforts.

### Some Localities Take the Lead

In the absence of state funding, some localities elsewhere in the country have taken matters into their own hands. Charles Griffith, of the Washtenaw County, Mich. LEPC, says his county currently has more authority and resources to enforce Title III than the state. County Right to Know regulations allow the health department "to inspect facilities to verify reporting compliance, to assess penalties in cases where facilities withhold chemical information, and, perhaps most importantly, to assess inspection fees in order to fund [the] local program." Fees are based on the quantity of chemicals stored. The program is self-funding.

Griffith and others are concerned that, although SARA Title III is non-pre-emptive, when state laws are passed they may pre-empt (replace) local provisions. "Federal law establishes a minimum baseline standard," he says. "While local laws should not be in conflict with the federal or state legislation, blanket [state] pre-emption of local laws only serves to block potential solutions to local problems. . . . Congress specifically allowed for local laws and programs that go further than the federal Act when passing SARA Title III."

States like Kansas and Ohio that have moved ahead on funding have set the national and local pace for SARA Title III. New York, Michigan, Pennsylvania, Minnesota and others are currently working on bills to strengthen SARA Title III. To them and to others trying to find money for emergency planning and chemical safety, Karl Birns of the Right to Know Program, Kansas Department of Health and Environment, recommends the following:

- Funding systems should be fair and equitable.
- There should be a rational relationship between fee levels and "real world" circumstances, such as degree of hazard, amounts of hazardous chemicals, and the actual cost of processing the program information. ■

### The COMMUNITY PLUME

A Publication for the Members of America's Local Emergency Planning Committees

The Community Plume provides hands-on information for the nearly 50,000 members of America's 4,100 Local Emergency Planning Committees - and for fire fighters and other citizens using the federal Superfund Title III legislation to protect our communities from toxic chemicals. Names and addresses of persons interested in receiving this newsletter should be sent to the editor at the address below.

\* Fred Millar, Ph.D. *FJM*  
Director, Toxic Chemicals  
Safety and Health Project

Anne F. Morris  
Editor

Jonathan Rees, Intern

A Publication of The Environmental Policy Institute/Friends of the Earth Foundation/  
218 D Street, S.E. • Washington, D.C. 20003 • 202/544-2600