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Alexander et al.

(10) **Patent No.: US 7,596,608 B2**
(45) **Date of Patent: Sep. 29, 2009**

(54) **NETWORKED EMERGENCY MANAGEMENT SYSTEM**

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(73) Assignee: **LiveProcess Corporation**, Verona, NJ (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **11/349,422**

(22) Filed: **Feb. 7, 2006**

(65) **Prior Publication Data**

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Related U.S. Application Data

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(51) **Int. Cl.**
G06F 15/16 (2006.01)

(52) **U.S. Cl.** **709/217**; 709/218; 709/219

(58) **Field of Classification Search** 709/217, 709/218, 219
See application file for complete search history.

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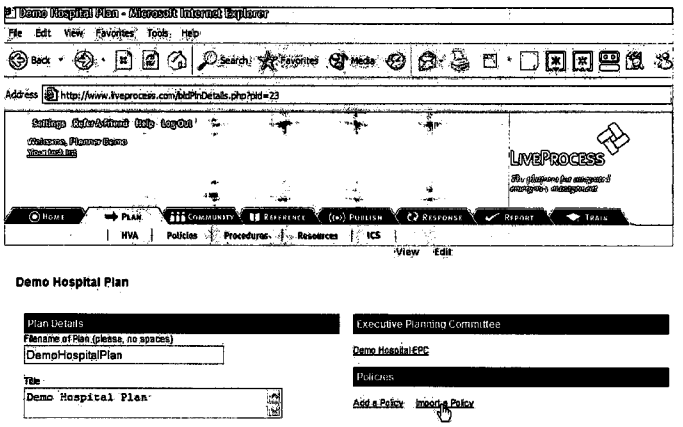
(57) **ABSTRACT**

A computer-implemented process allows emergency plans to be easily and rapidly created for a plurality of different facilities. An emergency plan is provided in electronic form for each facility. Each emergency plan has a standardized format with a plurality of component parts. Each emergency plan has at least some component parts that are accessible by other facilities. An electronic network is provided which allows at least some of the facilities to electronically obtain the accessible component parts of the emergency plans of at least some of the other facilities. A user interface allows the emergency plan of a facility to electronically import into its emergency plan selected content of one or more component parts of the emergency plan of another facility using the electronic network. The electronic importing is facilitated via the use of the standardized format for the emergency plans.

22 Claims, 76 Drawing Sheets



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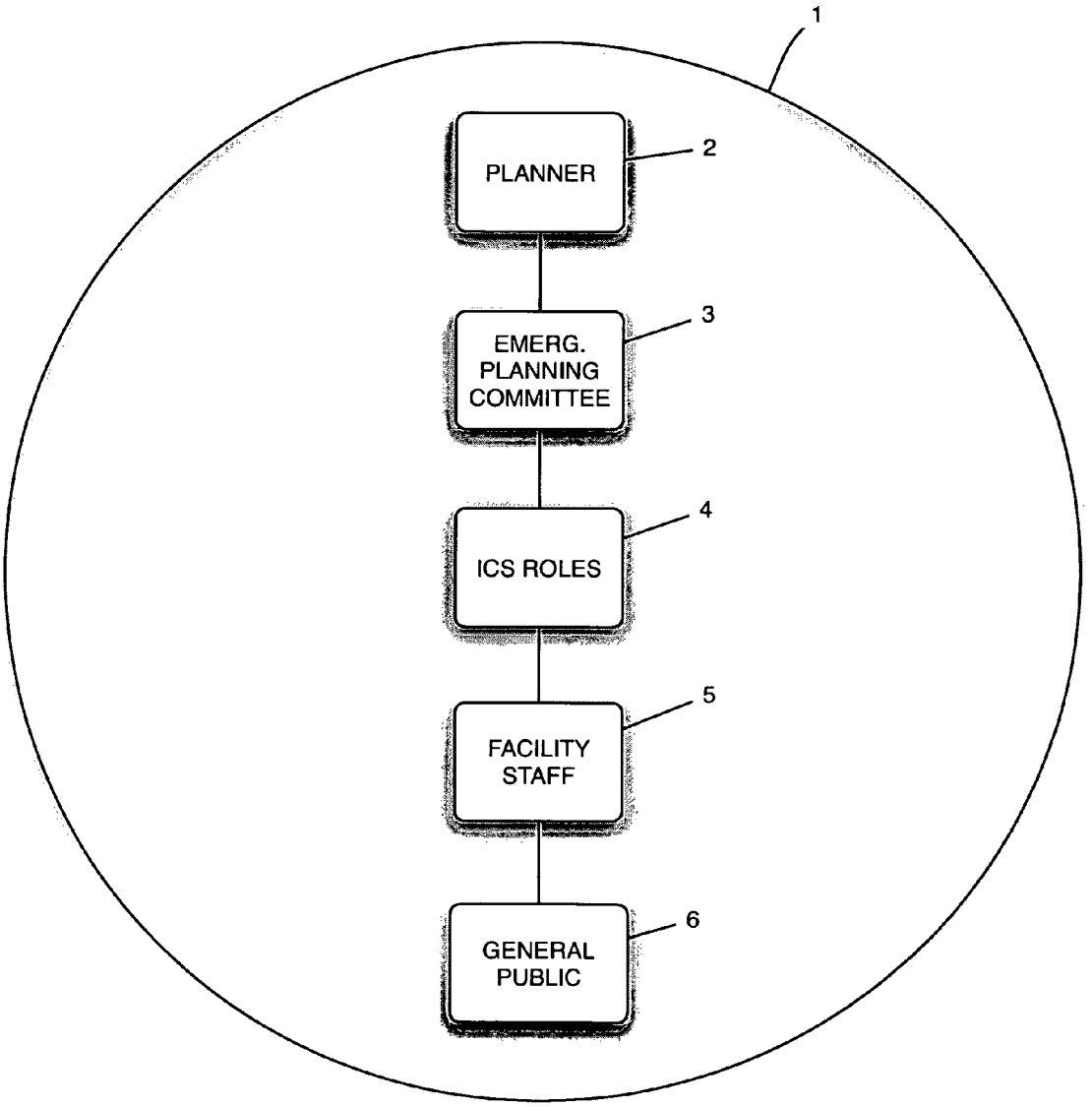
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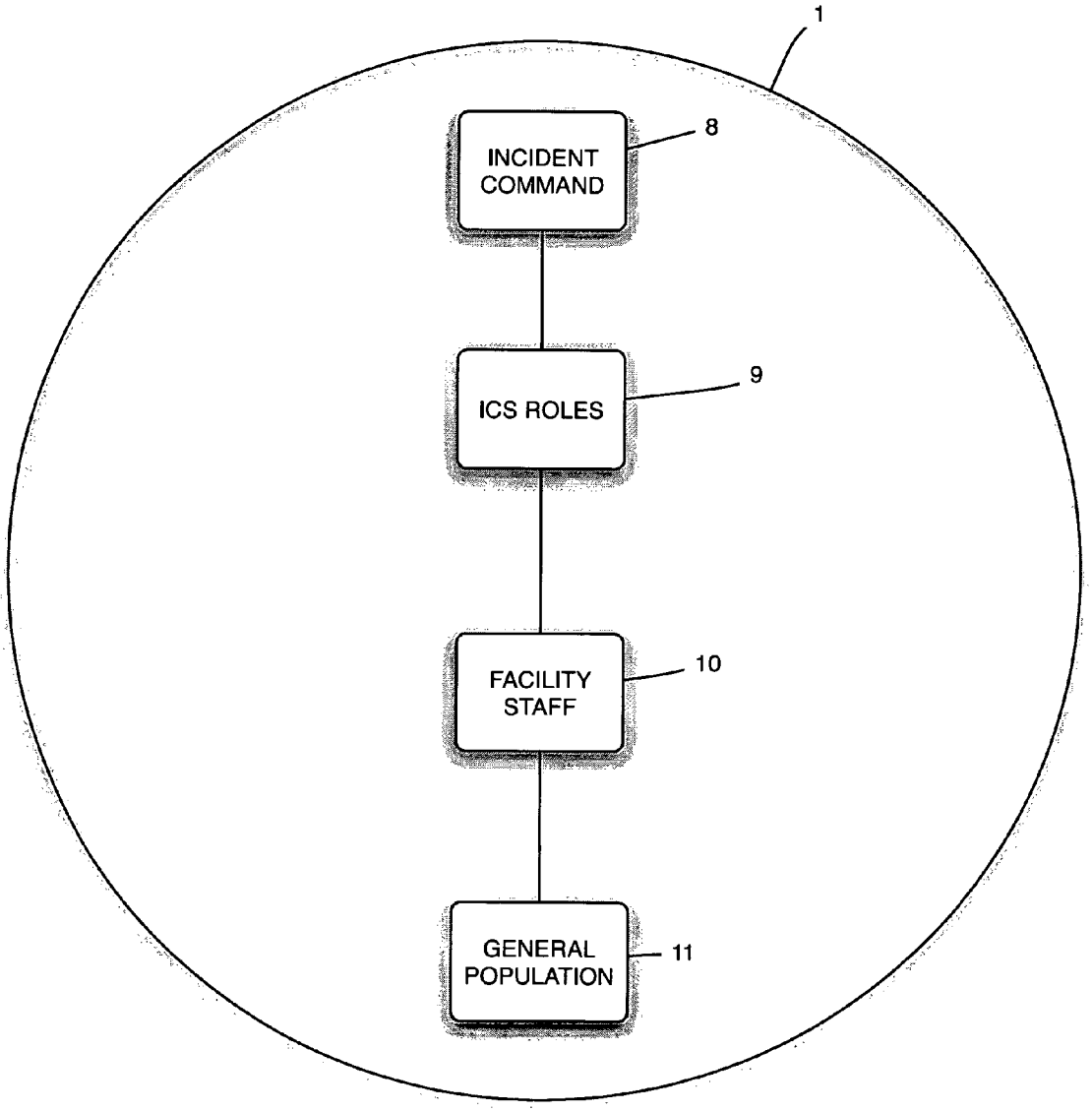
EMERG. PLANNING COMMITTEE
3
ICS ROLES
4
FACILITY STAFF
5
GENERAL PUBLIC
6

FIGURE 1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INCIDENT COMMAND
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ICS ROLES
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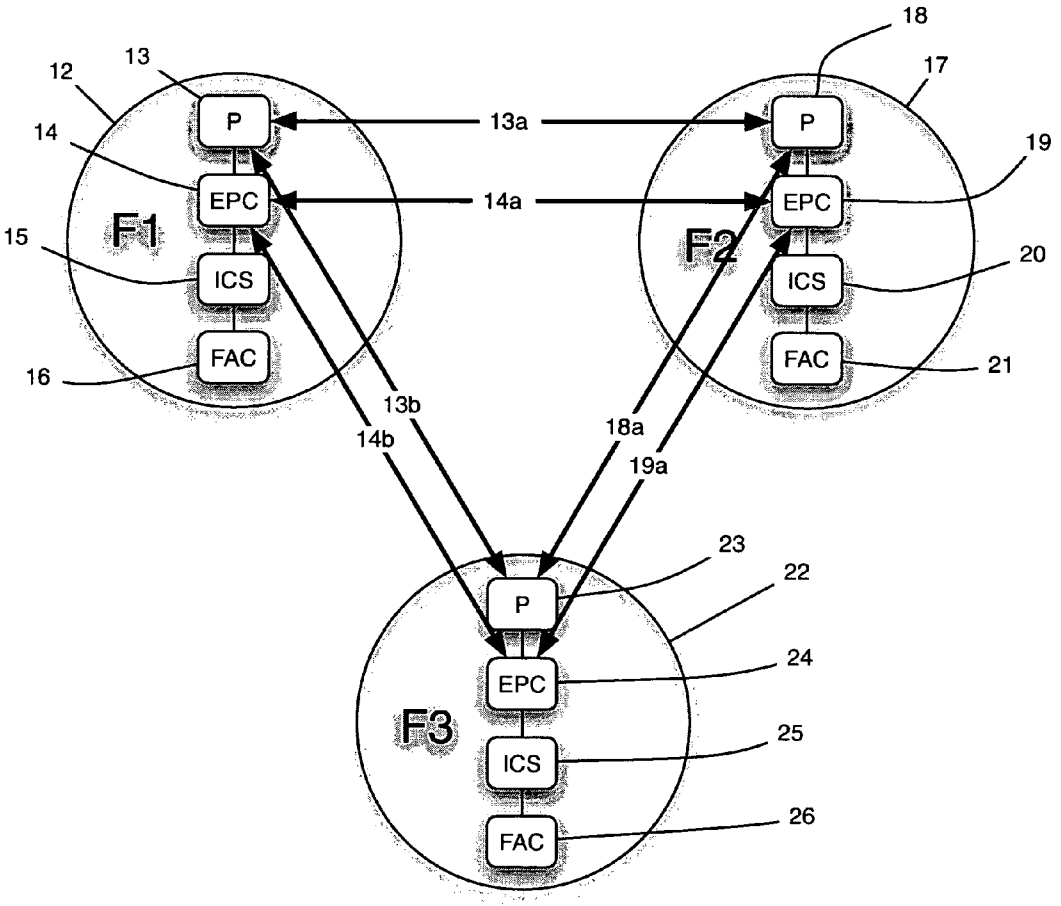
FACILITY STAFF
10
GENERAL POPULATION
11

FIGURE 2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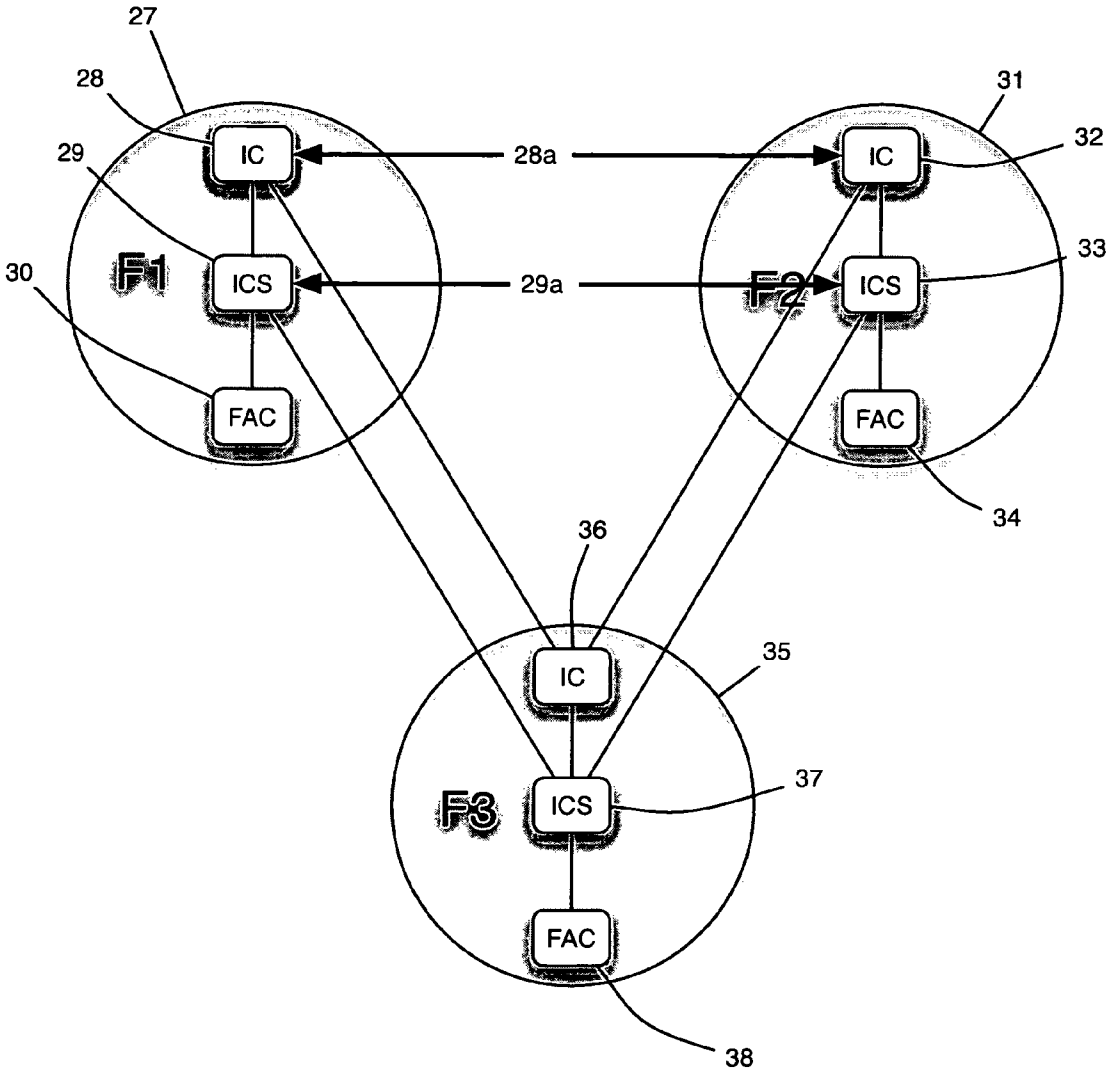
FAC
F1
13a
14a
13b
14b
18
17
19
20
21
P
EPC
ICS
FAC
F2
18a
19a
23
22
24
25
26
P
EPC
ICS
FAC
F3

FIGURE 3


27
28
31
IC
28a
IC
32
29
F1
ICS
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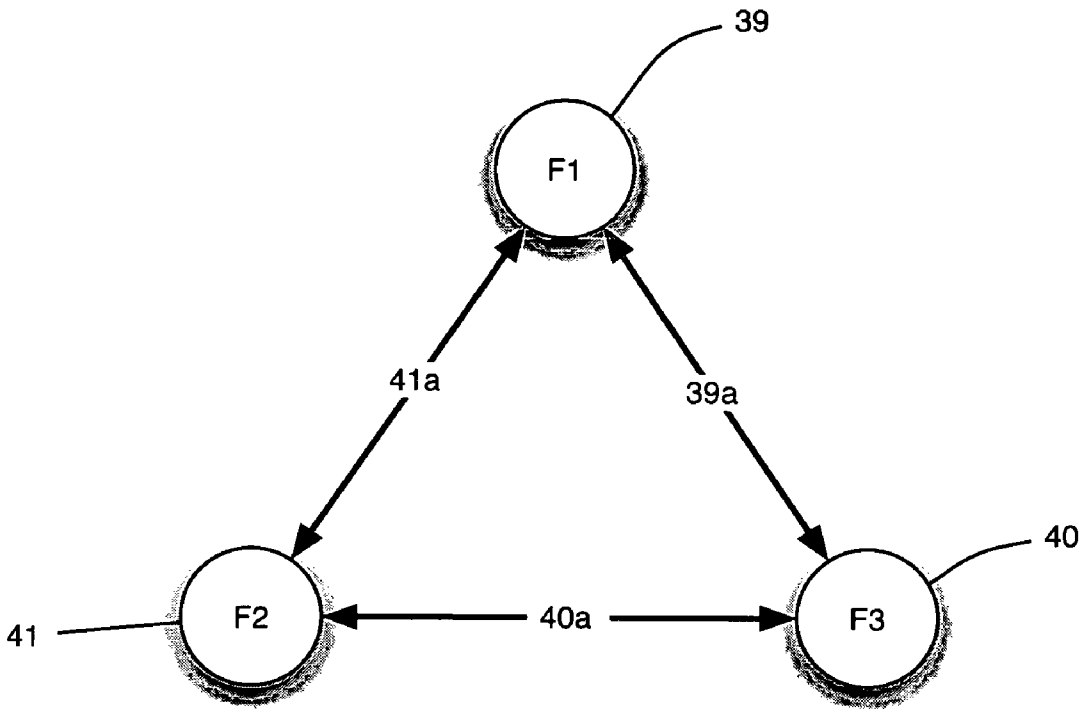
F2
ICS
33
30
FAC
FAC
34
36
IC
35
F3
ICS
37
FAC
38

FIGURE 4



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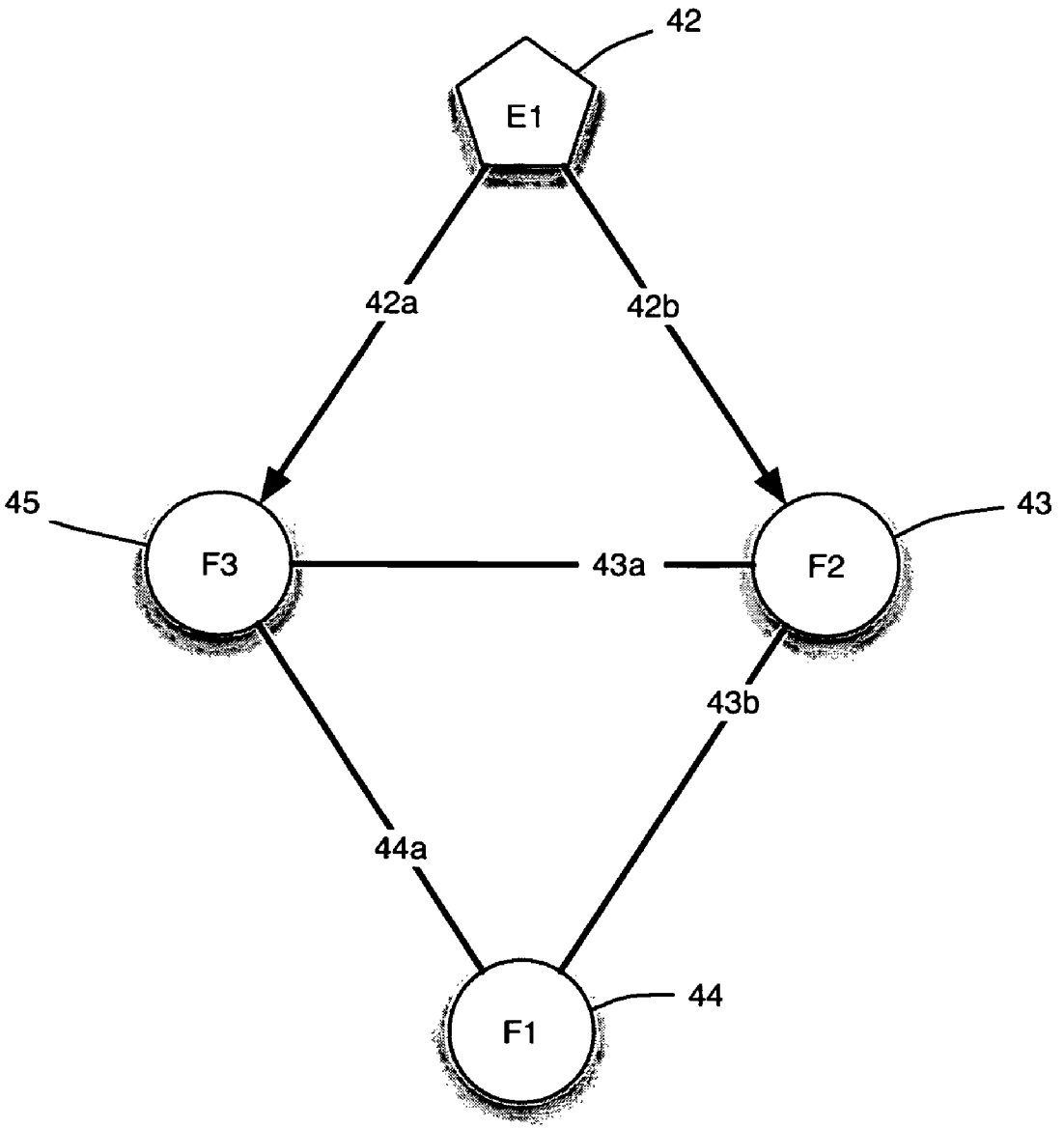

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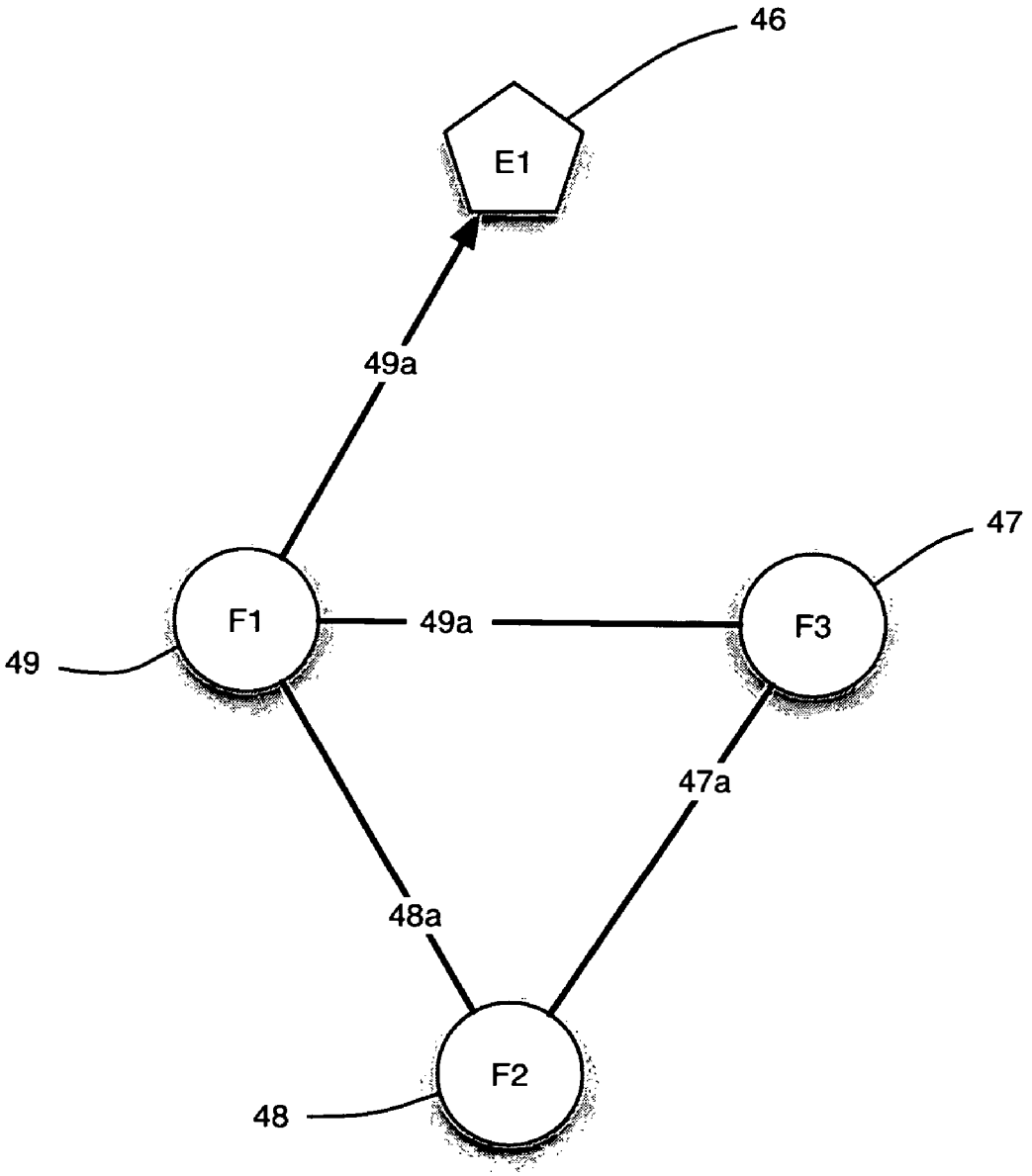
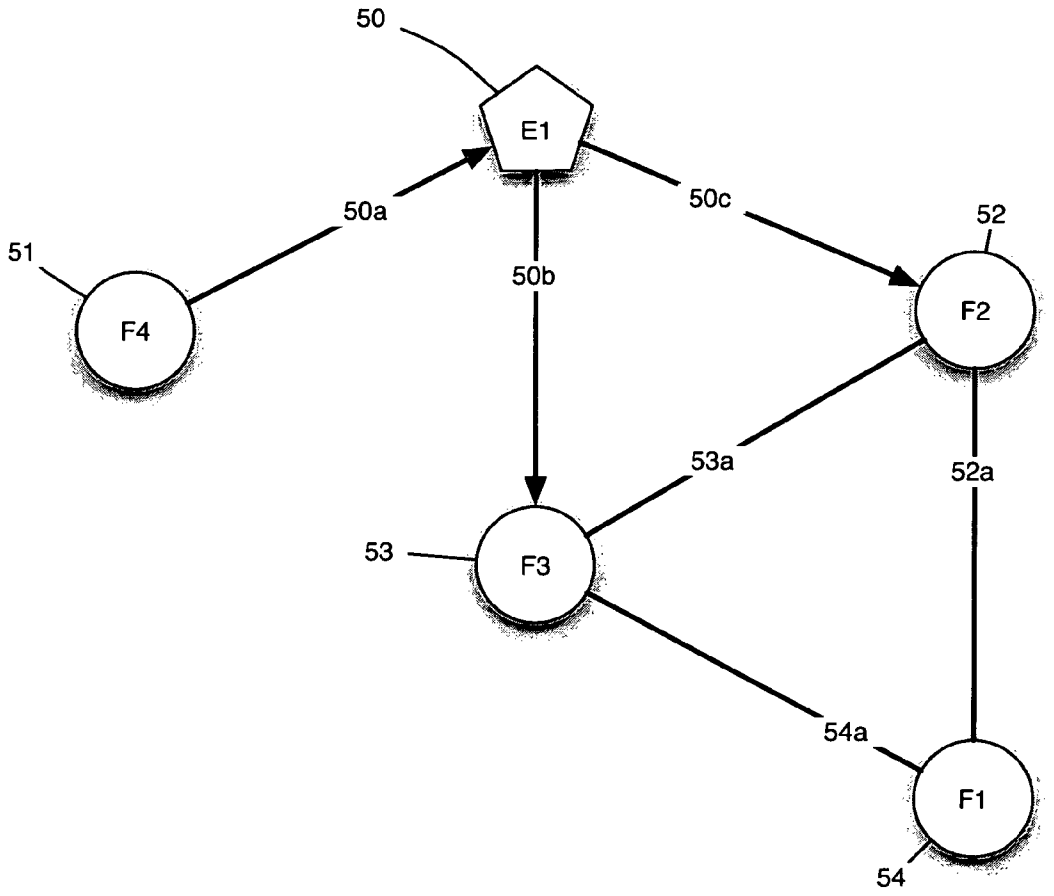


FIGURE 7



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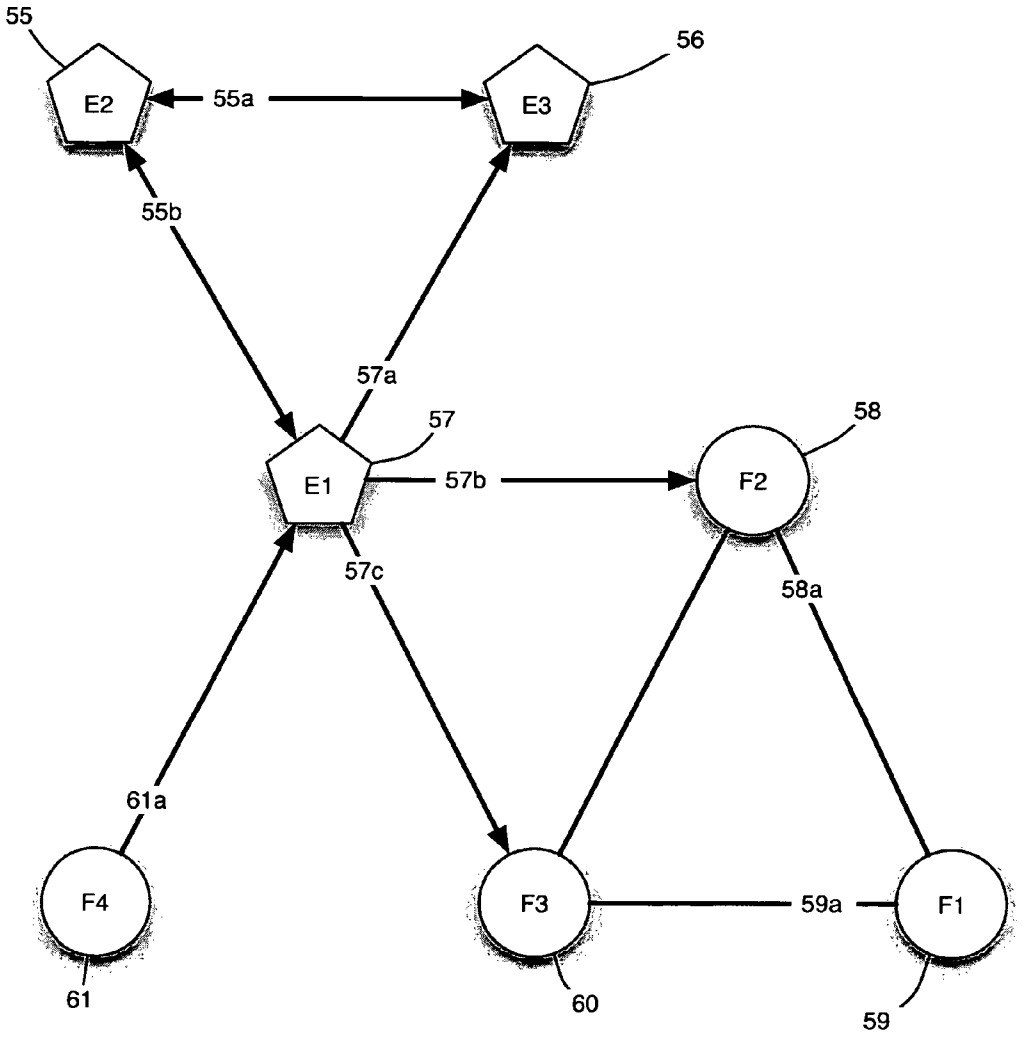
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E2
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E3
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55b
57a
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E1
57b
F2
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57c
58a
61a
F4
F3
59a
F1
61
60
59

FIGURE 9

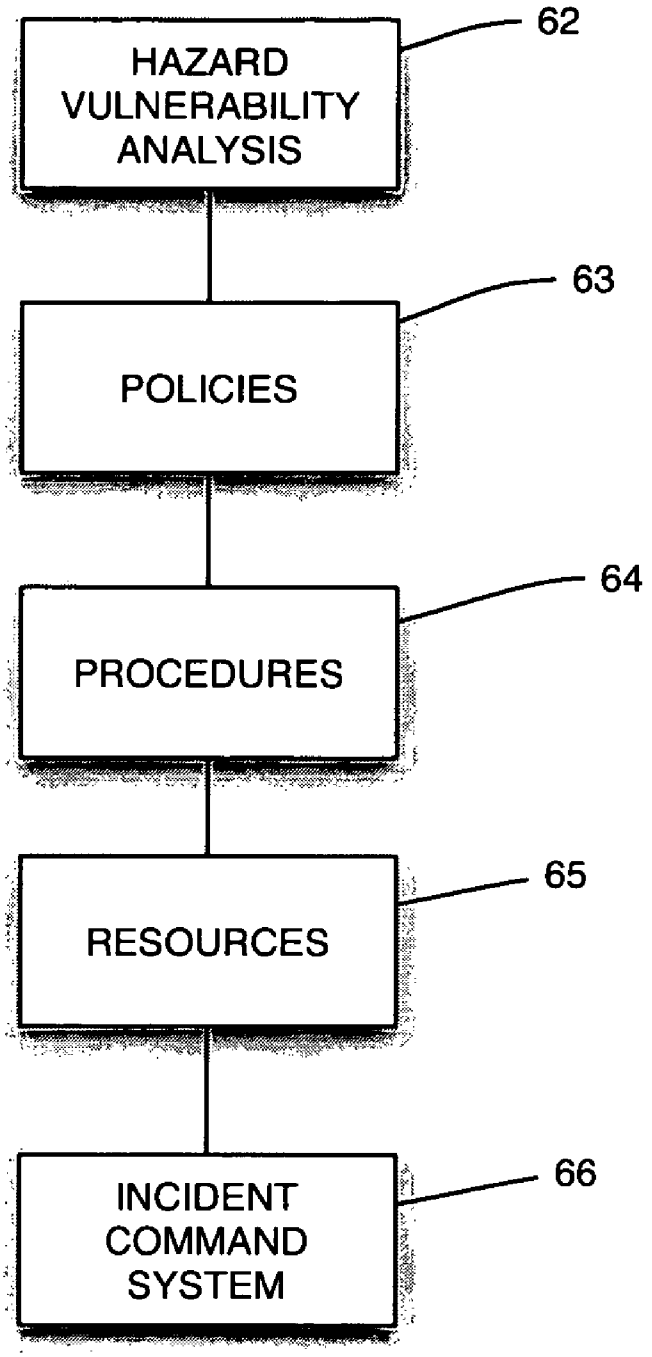
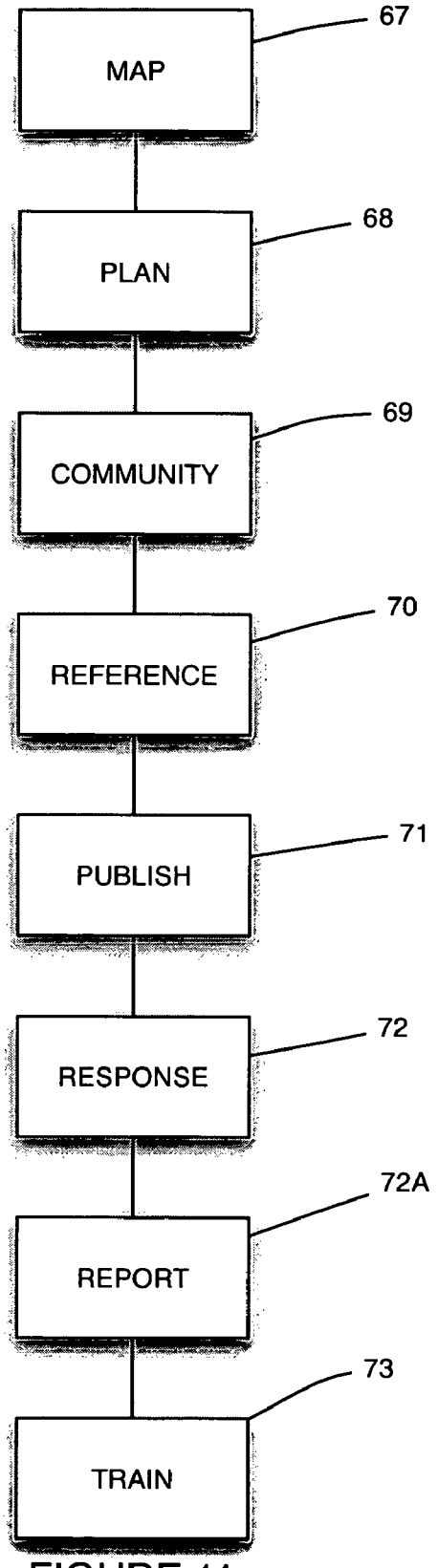

HAZARD VULNERABILITY ANALYSIS
62
POLICIES
63
PROCEDURES
64
RESOURCES
65
INCIDENT COMMAND SYSTEM
66

FIGURE 10


MAP
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PLAN
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COMMUNITY
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REFERENCE
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PUBLISH
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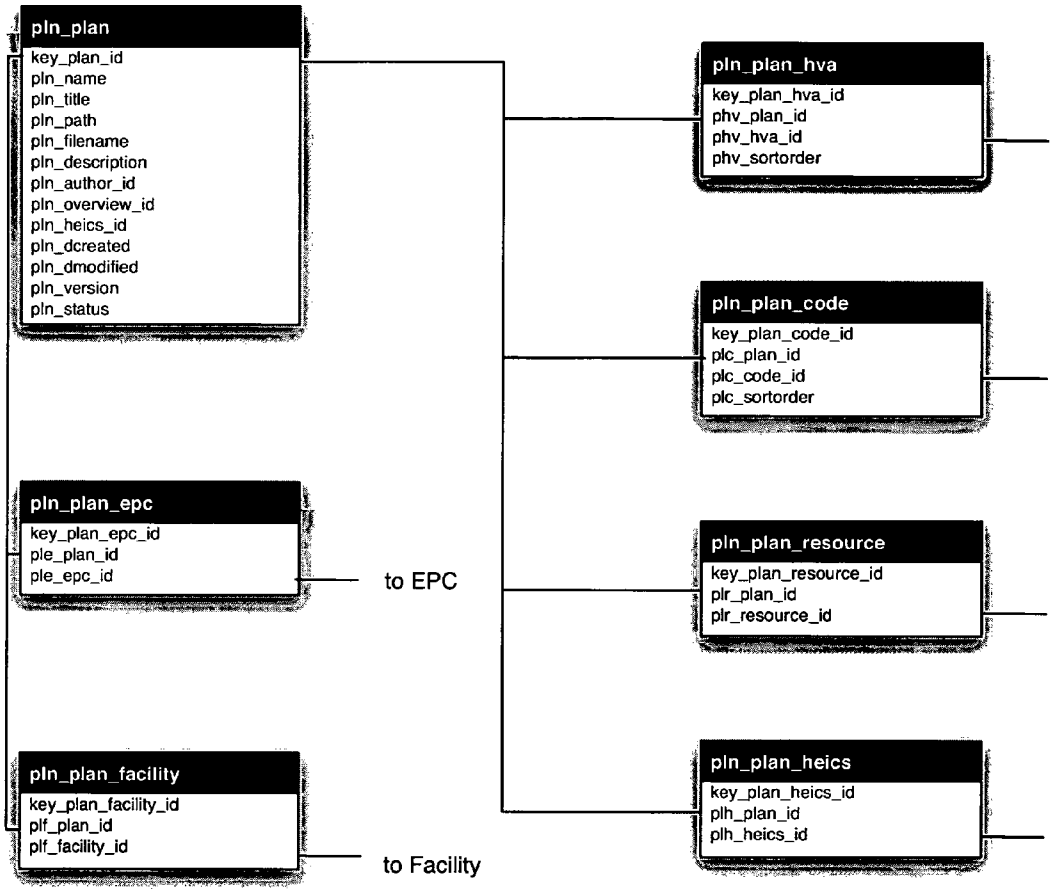
RESPONSE
72
REPORT
72A
TRAIN
73

FIGURE 11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pln_dcreated
pln_dmodified
pln_version
pln_status
pln_plan_hva
key_plan_hva_id
phv_plan_id
phv_hva_id
phv_sortorder
pln_plan_code
key_plan_code_id
plc_plan_id
plc_code_id
plc_sortorder
pln_plan_epc
key_plan_epc_id
ple_plan_id
ple_epc_id
to EPC
pln_plan_resource
key_plan_resource_id
plr_plan_id
plr_resource_id
pln_plan_facility
key_plan_facility_id
plf_plan_id
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to Facility
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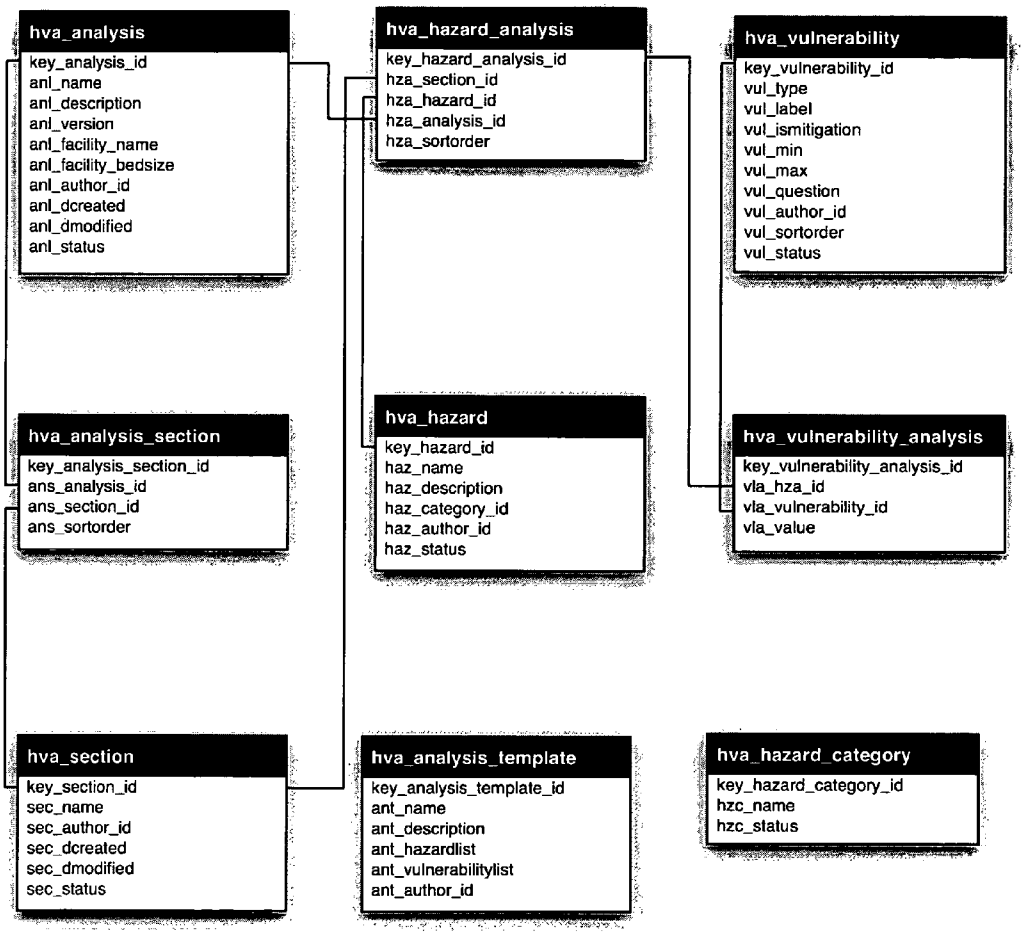
plh_heics_id

FIGURE 12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anl_dcreated
anl_dmodified
anl_status
hva_hazard_analysis
key_hazard_analysis_id
hza_section_id
hza_hazard_id
hza_analysis_id
hza_sortorder
hva_vulnerability
key_vulnerability_id
vul_type
vul_label
vul_ismitigation
vul_min
vul_max
vul_question
vul_author_id
vul_sortorder
vul_status
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key_analysis_section_id
ans_analysis_id
ans_section_id
ans_sortorder
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haz_description
haz_category_id
haz_author_id
haz_status
hva_vulnerability_analysis
key_vulnerability_analysis_id
vla_hza_id
vla_vulnerability_id
vla_value
hva_section
key_section_id
sec_name
sec_author_id
sec_dcreated
sec_dmodified
sec_status
hva_analysis_template
key_analysis_template_id
ant_name
ant_description
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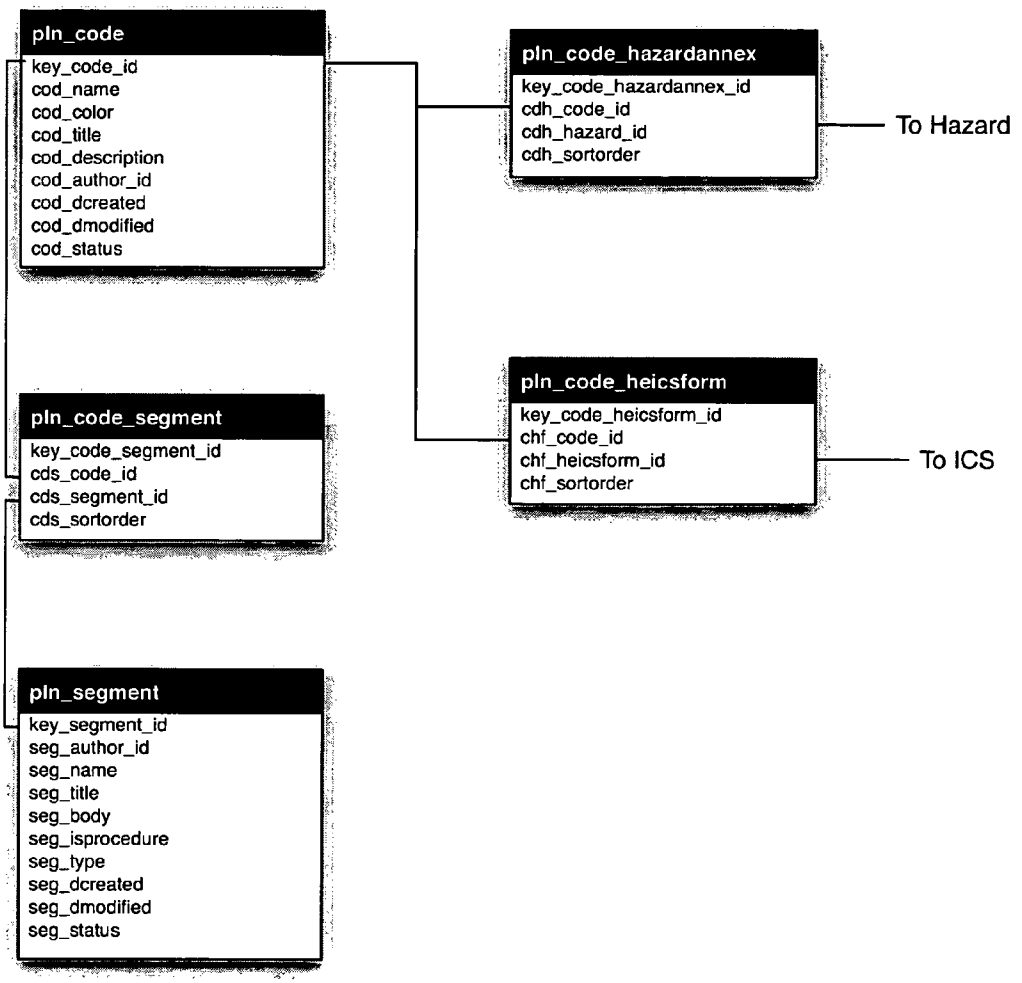
FIGURE 13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cdh_code_id
cdh_hazard_id
cdh_sortorder
To Hazard
pln_code_heicsform
key_code_heicsform_id
chf_code_id
chf_heicsform_id
chf_sortorder
To ICS
pln_code_segment
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cds_code_id
cds_segment_id
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FIGURE 14

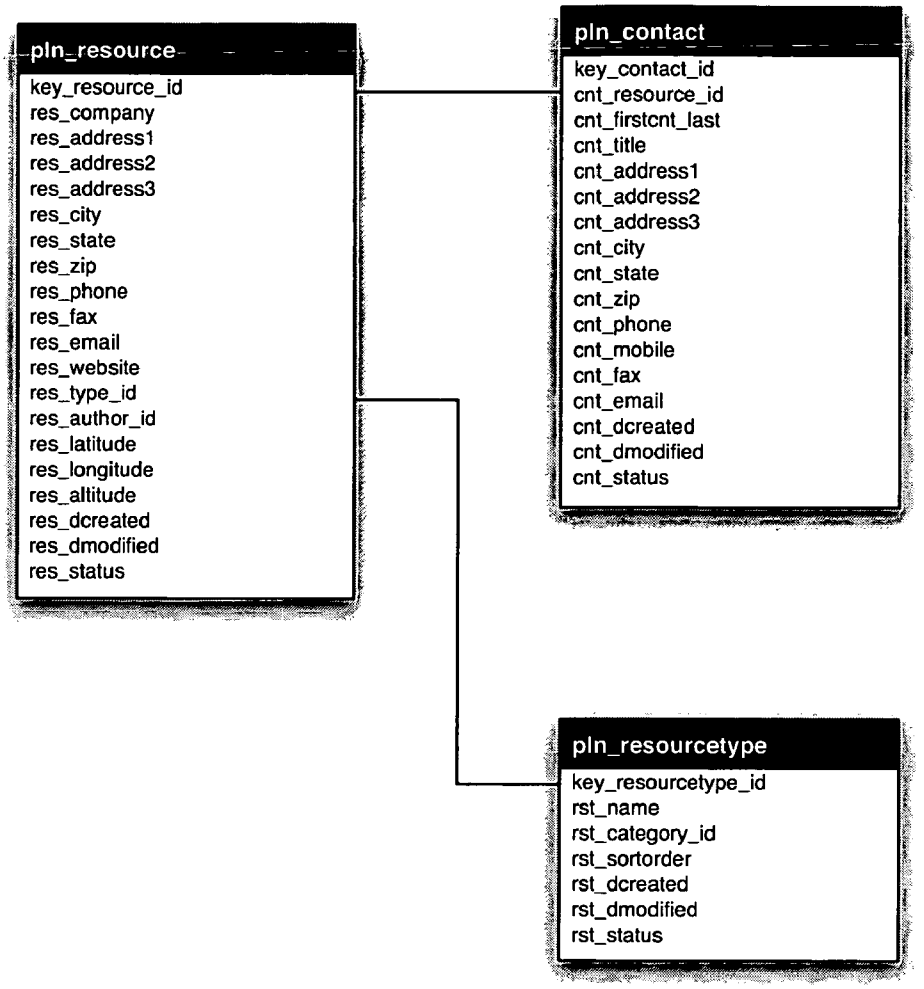
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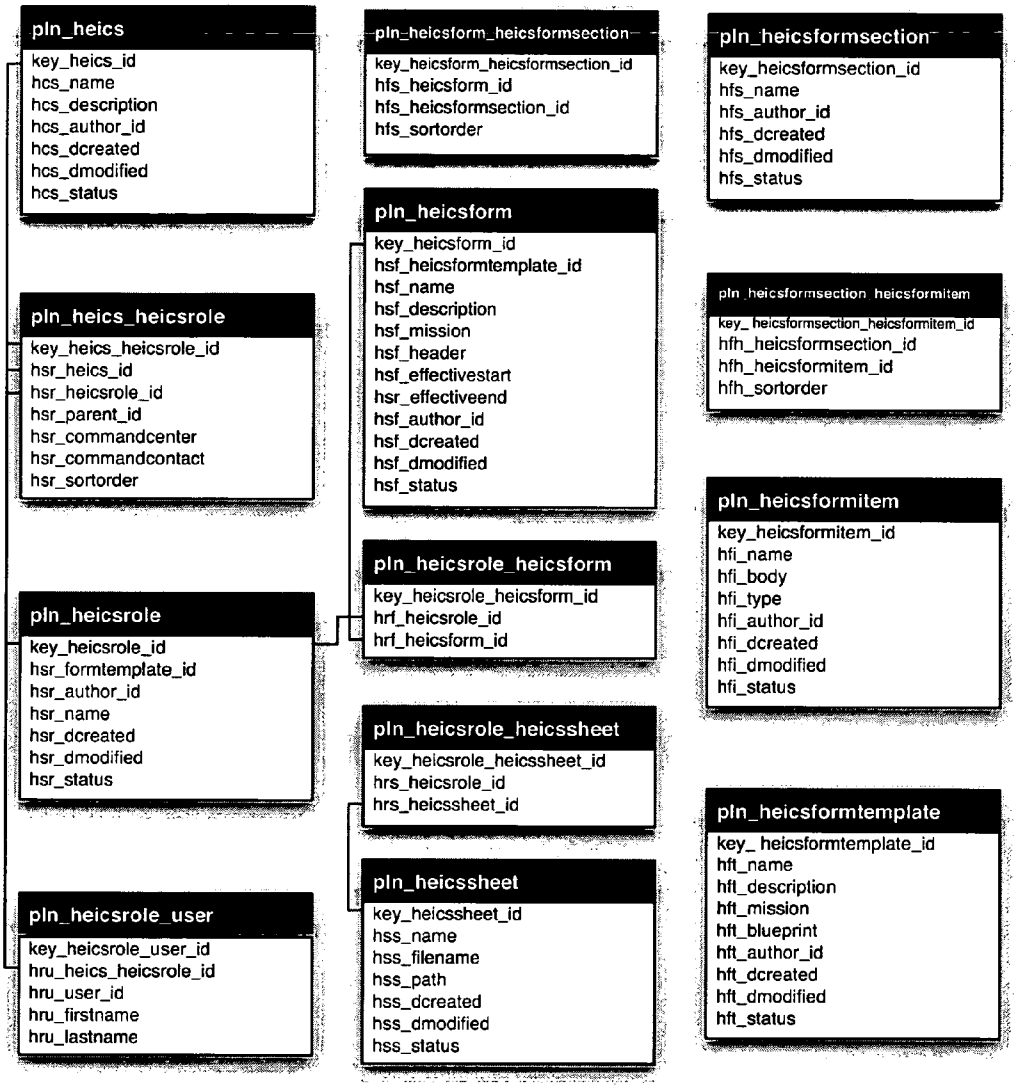
FIGURE 15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hft_author_id
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hft_status
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hru_heics_heicsrole_id
hru_user_id
hru_firstname
hru_lastname
pln_heicssheet
key_heicssheet_id
hss_name
hss_filename
hss_path
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hss_dmodified
hss_status

FIGURE 16

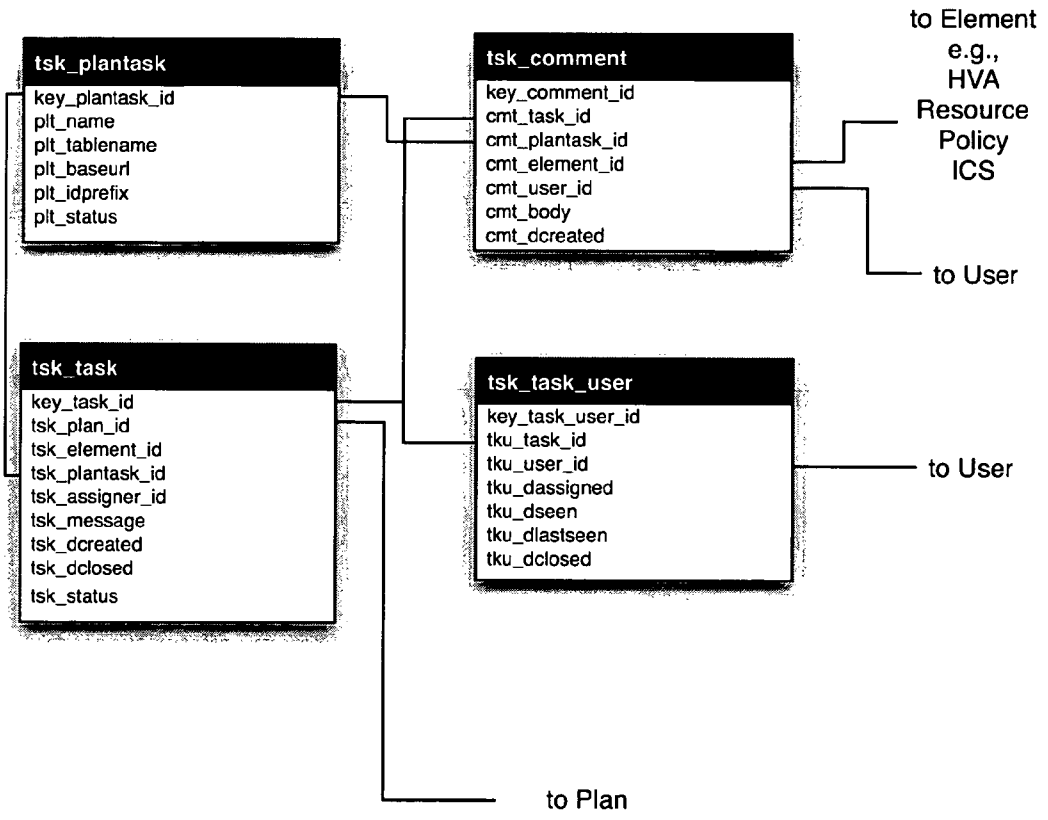

tsk_plantask
key_plantask_id
plt_name
plt_tablename
plt_baseurl
plt_idprefix
plt_status
tsk_comment
key_comment_id
cmt_task_id
cmt_plantask_id
cmt_element_id
cmt_user_id
cmt_body
cmt_dcreated
to Element
e.g.,
HVA
Resource
Policy
ICS
to User
tsk_task
key_task_id
tsk_plan_id
tsk_element_id
tsk_plantask_id
tsk_assigner_id
tsk_message
tsk_dcreated
tsk_dclosed
tsk_status
tsk_task_user
key_task_user_id
tku_task_id
tku_user_id
tku_dassigned
tku_dseen
tku_dlastseen
tku_dclosed
to User
to Plan

FIGURE 17

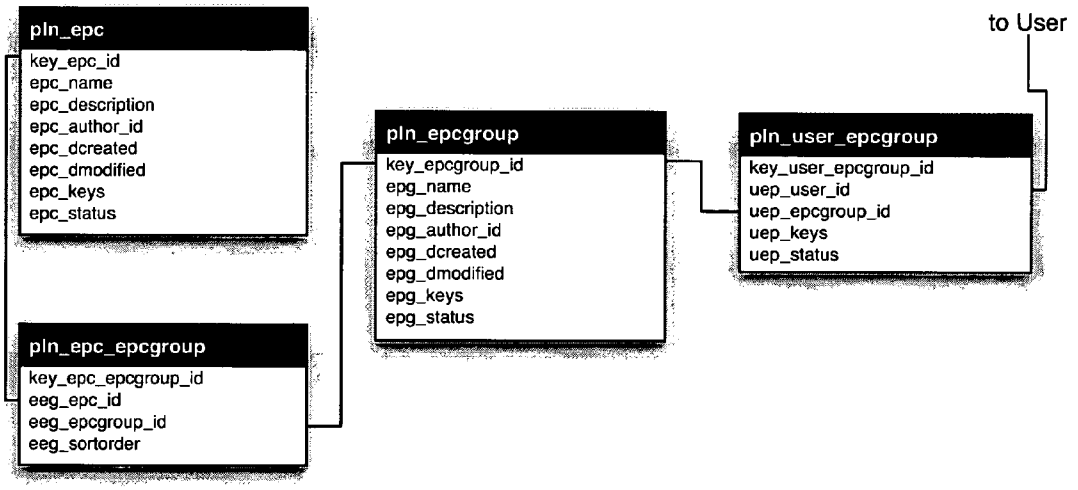

pln_epc
key_epc_id
epc_name
epc_description
epc_author_id
epc_dcreated
epc_dmodified
epc_keys
epc_status
pln_epcgroup
key_epcgroup_id
epg_name
epg_description
epg_author_id
epg_dcreated
epg_dmodified
epg_keys
epg_status
pln_user_epcgroup
key_user_epcgroup_id
uep_user_id
uep_epcgroup_id
uep_keys
uep_status
to User
pln_epc_epcgroup
key_epc_epcgroup_id
eeg_epc_id
eeg_epcgroup_id
eeg_sortorder

FIGURE 18

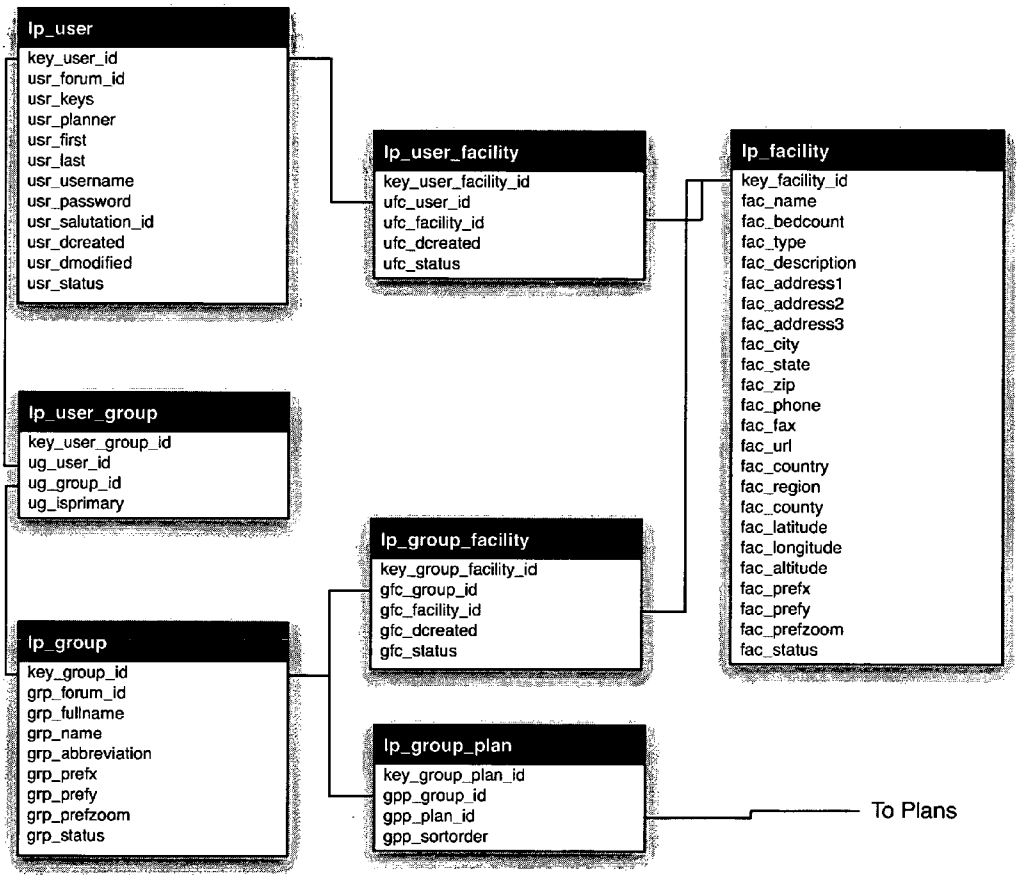

lp_user
key_user_id
usr_forum_id
usr_keys
usr_planner
usr_first
usr_last
usr_username
usr_password
usr_salutation_id
usr_dcreated
usr_dmodified
usr_status
lp_user_facility
key_user_facility_id
ufc_user_id
ufc_facility_id
ufc_dcreated
ufc_status
lp_facility
key_facility_id
fac_name
fac_bedcount
fac_type
fac_description
fac_address1
fac_address2
fac_address3
fac_city
fac_state
fac_zip
fac_phone
fac_fax
fac_url
fac_country
fac_region
fac_county
fac_latitude
fac_longitude
fac_altitude
fac_prefx
fac_prefy
fac_prefzoom
fac_status
lp_user_group
key_user_group_id
ug_user_id
ug_group_id
ug_isprimary
lp_group_facility
key_group_facility_id
gfc_group_id
gfc_facility_id
gfc_dcreated
gfc_status
lp_group
key_group_id
grp_forum_id
grp_fullname
grp_name
grp_abbreviation
grp_prefx
grp_prefy
grp_prefzoom
grp_status
lp_group_plan
key_group_plan_id
gpp_group_id
gpp_plan_id
gpp_sortorder
To Plans

FIGURE 19

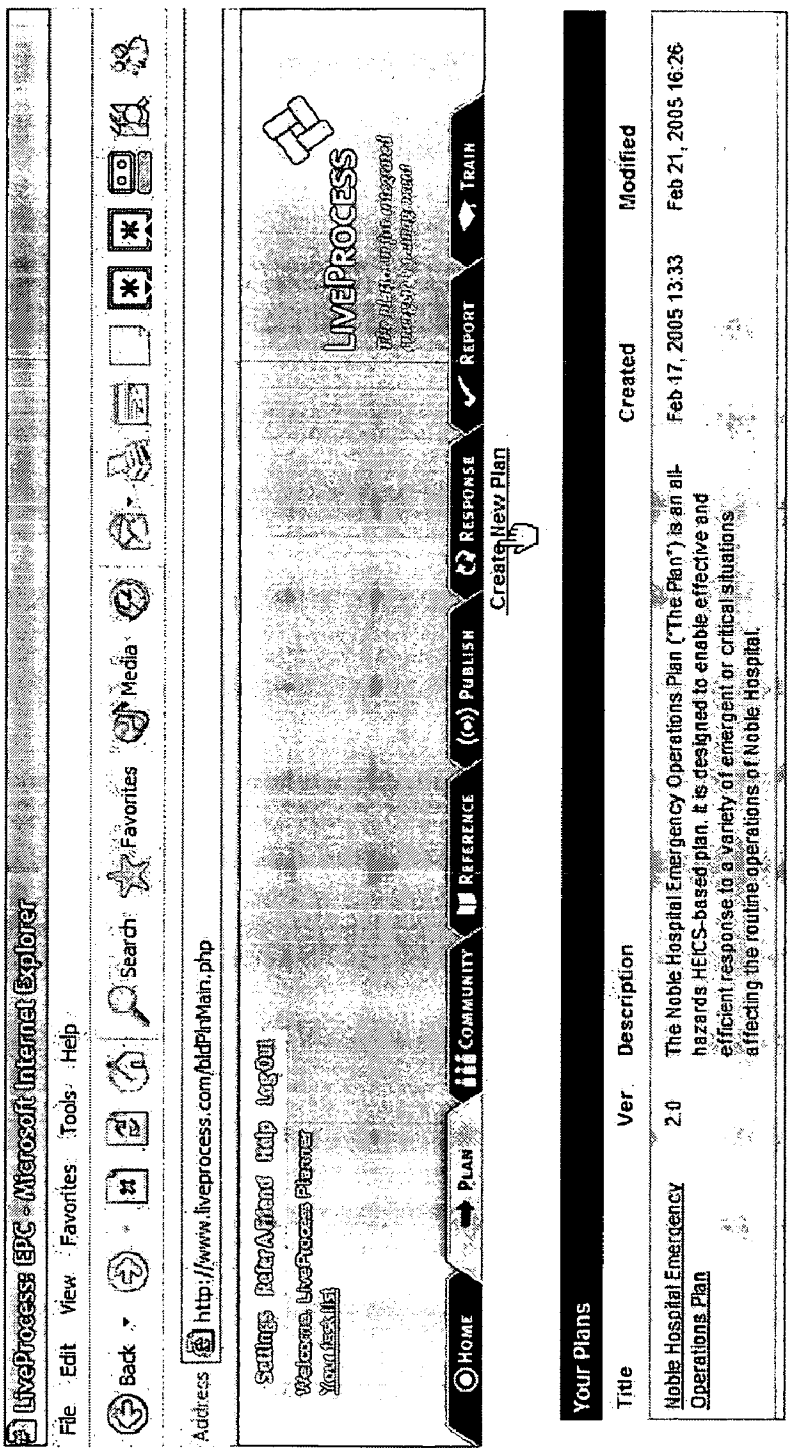

LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Media
Address http://www.liveprocess.com/bldPlnMain.php
Settings Refer A Friend Help LogOut
Welcome, LiveProcess Planner
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
Create New Plan
Your Plans
Title
Ver
Description
Created
Modified
Noble Hospital Emergency Operations Plan
2.0
The Noble Hospital Emergency Operations Plan ("The Plan") is an all-hazards HEICS-based plan. It is designed to enable effective and efficient response to a variety of emergent or critical situations affecting the routine operations of Noble Hospital.
Feb 17, 2005 13:33
Feb 21, 2005 16:26

FIGURE 20


LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/bldPlnMain.php
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Create New Plan
Your Plans
Title Ver Description Created Modified
Sutter General Hospital Emergency Plan
1.0
This Emergency Management Program has been developed by Sutter Medical Center, Sacramento administrative staff to provide loss control and safety guidelines to protect people from injury or illness; to reduce the risk of loss to real property and business assets and to meet regulatory requirements of federal, state and local governmental agencies.
Jan 28, 2005 13:07
Feb 09, 2005 13:14
Group Plans
Title Ver Description Created Modified
NOBLE EMERGENCY OPERATIONS PLAN
1
Dec 31, 1969 19:00
Feb 09, 2005 12:20
Sutter Roseville Emergency Management Plan
Feb 02, 2005 00:29
Feb 02, 2005 00:31

FIGURE 21

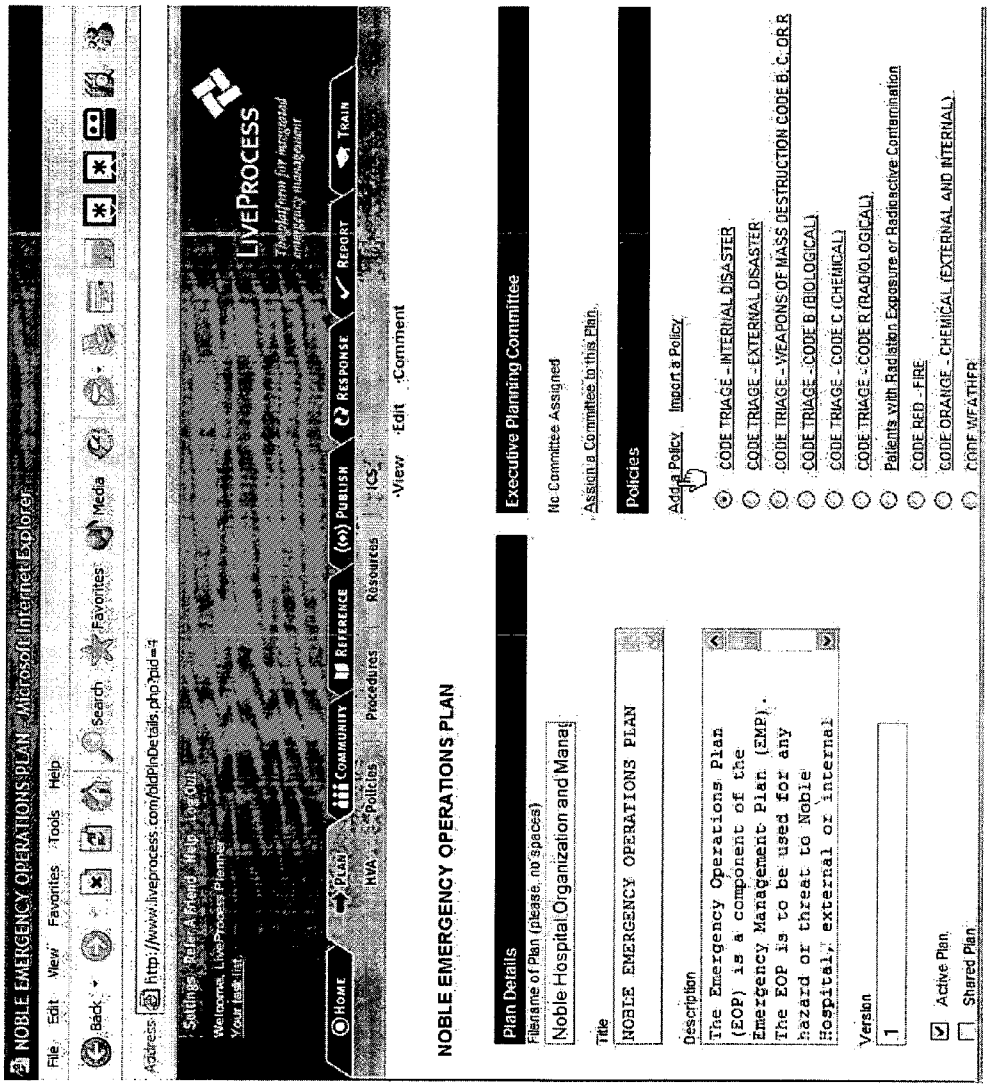

NOBLE EMERGENCY OPERATIONS PLAN - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/oldPlnDetails.php?pid=4
LIVEPROCESS
The platform for horizontal emergency management
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Policies HVA Procedures Resources ICS
View Edit Comment
NOBLE EMERGENCY OPERATIONS PLAN
Plan Details
Filename of Plan (please, no spaces)
Noble Hospital Organization and Manag
Title
NOBLE EMERGENCY OPERATIONS PLAN
Description
The Emergency Operations Plan (EOP) is a component of the Emergency Management Plan (EMP). The EOP is to be used for any hazard or threat to Noble Hospital, external or internal
Version
1
Active Plan
Shared Plan
Executive Planning Committee
No Committee Assigned
Assign a Committee to this Plan.
Policies
Add a Policy Import a Policy
CODE TRIAGE - INTERNAL DISASTER
CODE TRIAGE - EXTERNAL DISASTER
CODE TRIAGE - WEAPONS OF MASS DESTRUCTION CODE B, C, OR R
CODE TRIAGE - CODE B (BIOLOGICAL)
CODE TRIAGE - CODE C (CHEMICAL)
CODE TRIAGE - CODE R (RADIOLOGICAL)
Patients with Radiation Exposure or Radioactive Contamination
CODE RED - FIRE
CODE ORANGE - CHEMICAL (EXTERNAL AND INTERNAL)
CODE WEATHER

FIGURE 22

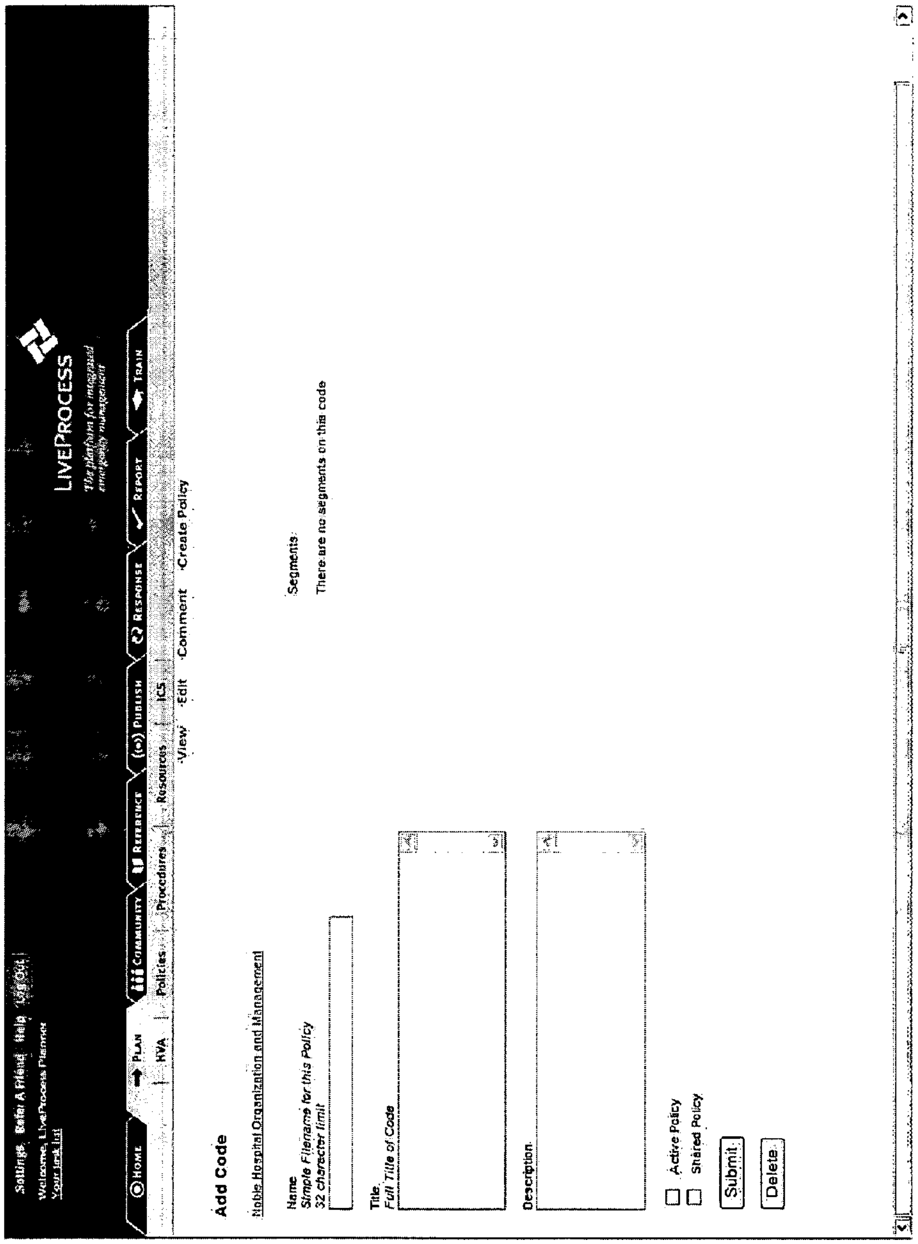

Settings Refer A Friend Help Log Out
Welcome, LiveProcess Planner
Your task list
LIVEPROCESS
The platform for integrated emergency management
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
View
Edit
Comment
Create Policy
Add Code
Noble Hospital Organization and Management
Name
Simple Filename for this Policy
32 character limit
Segments:
There are no segments on this code
Title:
Full Title of Code
Description:
Active Policy
Shared Policy
Submit
Delete

FIGURE 23

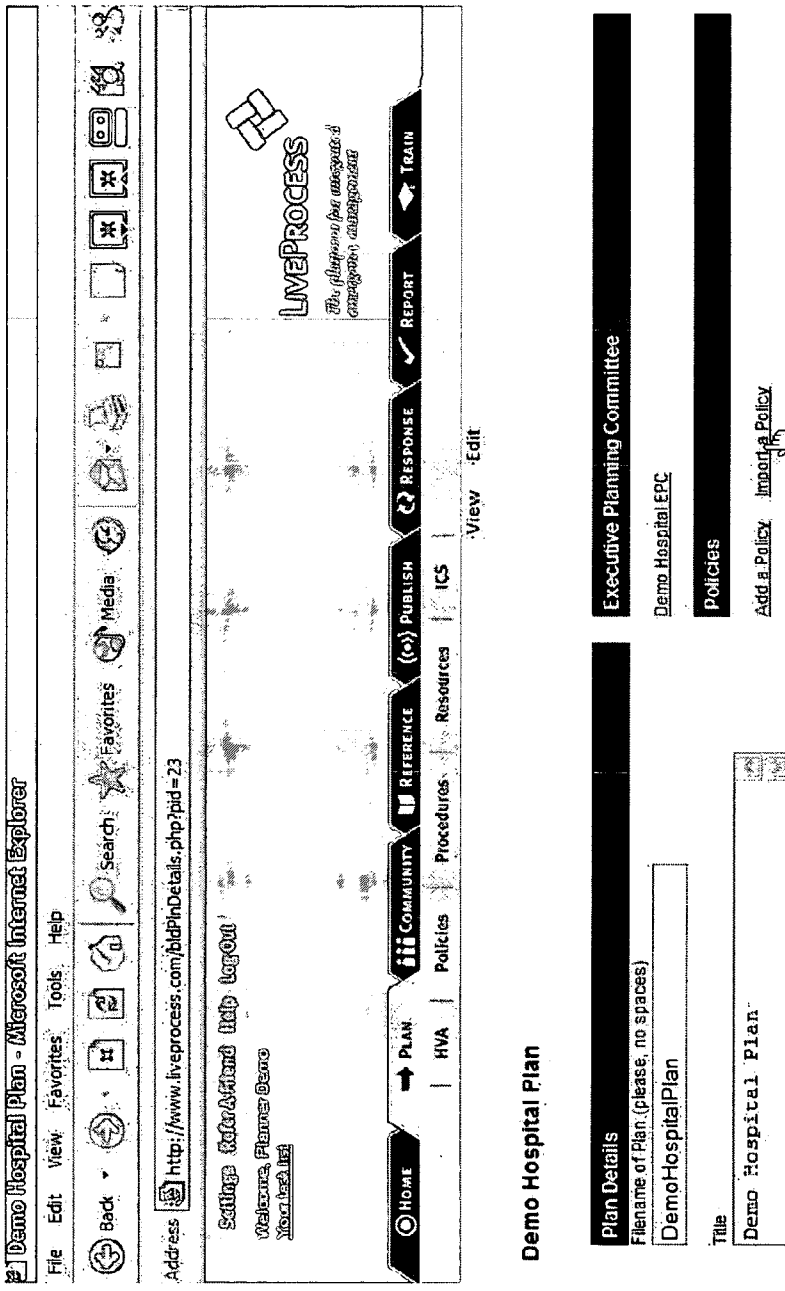
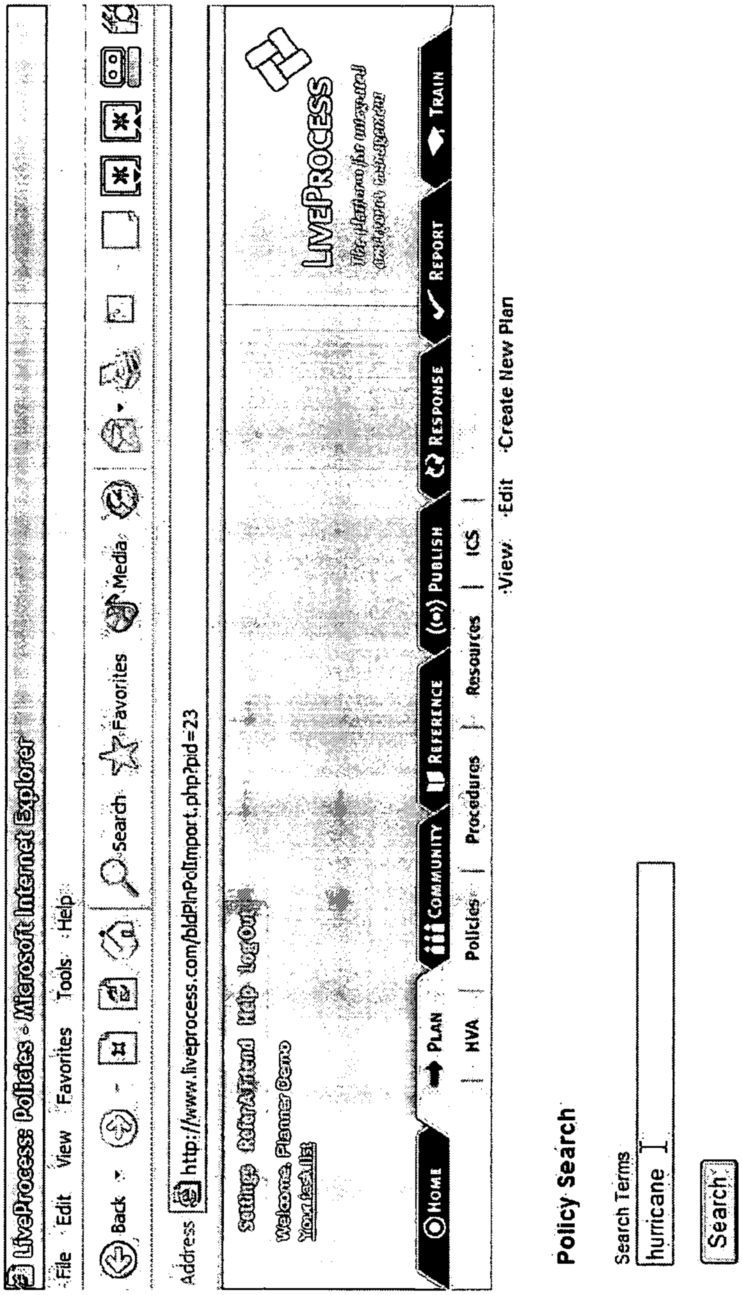

Demo Hospital Plan - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/bldPlnDetails.php?pid=23
Settings AdminAssist Help LogOut
Welcome, Planner Demo
Your last list
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
HVA Policies Procedures Resources ICS
View Edit
Demo Hospital Plan
Plan Details
Filename of Plan (please, no spaces)
DemoHospitalPlan
Title
Demo Hospital Plan
Executive Planning Committee
Demo Hospital EPC
Policies
Add a Policy
Import a Policy

FIGURE 24


LiveProcess: Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Media
Address
http://www.liveprocess.com/bldPlnPolImport.php?pid=23
Settings Refer A Friend Help Log Out
Welcome, Planner Demo
Your task list
LIVEPROCESS
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COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
View
Edit
Create New Plan
Policy Search
Search Terms
hurricane
Search

FIGURE 25

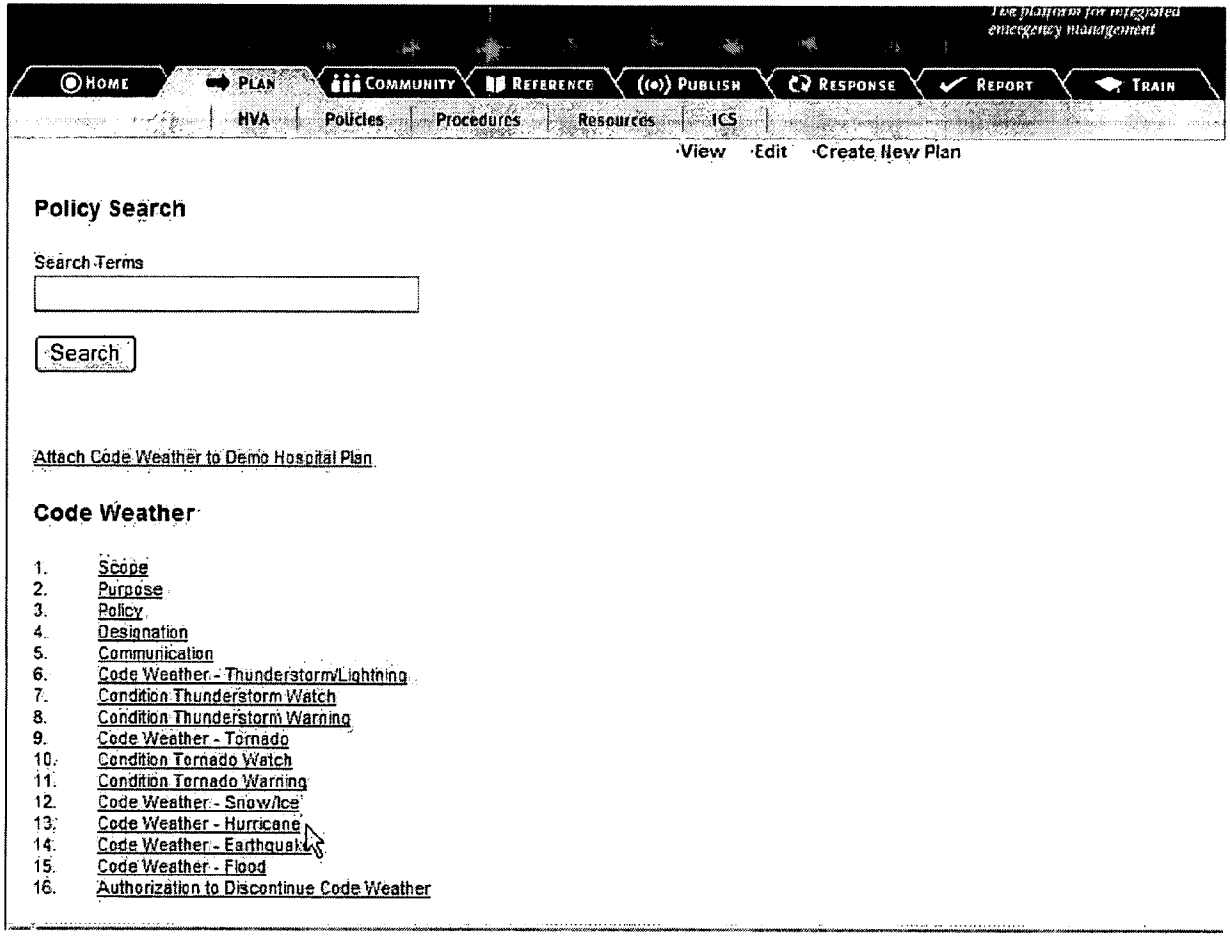
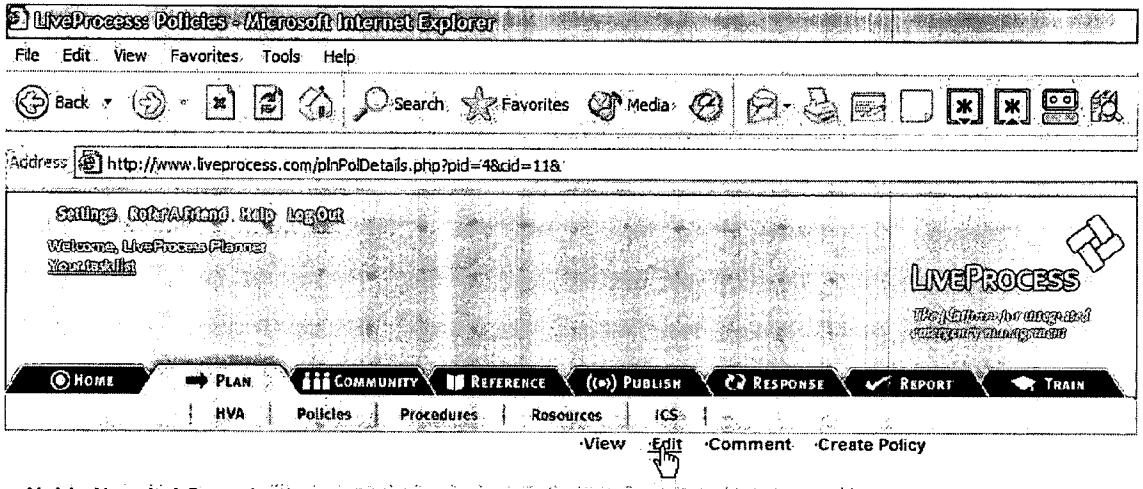

The platform for integrated emergency management
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
View
Edit
Create New Plan
Policy Search
Search Terms
Search
Attach Code Weather to Demo Hospital Plan
Code Weather
1. Scope
2. Purpose
3. Policy
4. Designation
5. Communication
6. Code Weather - Thunderstorm/Lightning
7. Condition Thunderstorm Watch
8. Condition Thunderstorm Warning
9. Code Weather - Tornado
10. Condition Tornado Watch
11. Condition Tornado Warning
12. Code Weather - Snow/Ice
13. Code Weather - Hurricane
14. Code Weather - Earthquake
15. Code Weather - Flood
16. Authorization to Discontinue Code Weather

FIGURE 26



Noble Hospital Organization and Management: Code Triage - Code C (Chemical)

1. Scope
2. Purpose
3. Policy
4. Procedure
5. External Procedure
6. Internal Procedure
7. Preparation Of Decon Area
8. Donning Protective Clothing
9. Doffing Protective Clothing
10. Code Yellow Team Leader
11. Security Officer: Responsibilities
12. Environmental Services: Responsibilities
13. Respiratory Therapy: Responsibilities

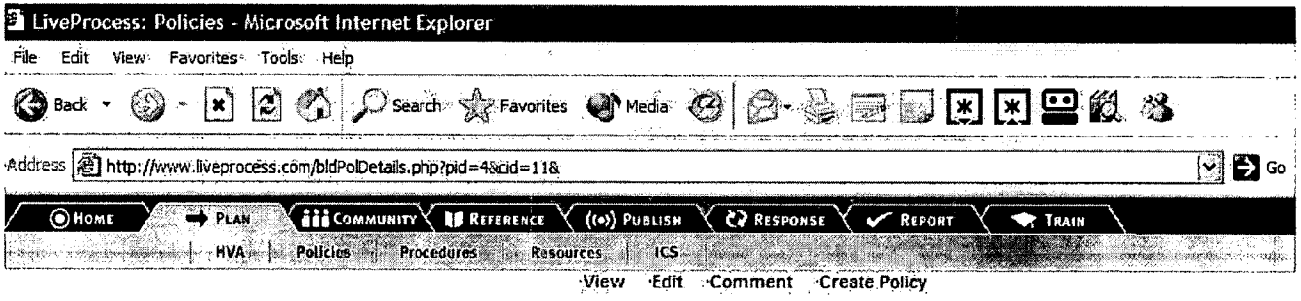
Scope

All Hospital Departments.

Purpose

Chemical decontamination has 2 primary goals: first, decontamination helps prevent further harm to the patient from the chemical exposure and secondly, c providers and maintains the viability of the Emergency Department (ED) as a treatment center. Methods of patient decontamination include chemical dilution during decontamination may result in illness in healthcare providers and contamination of the ED. Severe ED contamination may necessitate departmental c mass casualty incident.

FIGURE 27



Code Triage - Code C (Chemical)

Noble Hospital Organization and Management

Name
Simple Filename for this Policy
32 character limit
Code Triage - Code C (Chemical)

Title
Full Title of Code
CODE TRIAGE - CODE C (CHEMICAL)

Description
Code Yellow-Hazardous Materials Accident

☑ Active Policy
☑ Shared Policy

Submit

Segments

- Scope
- Purpose
- Policy
- Procedure
- External Procedure
- Internal Procedure
- Preparation Of Decon Area
- Donning Protective Clothing
- Doffing Protective Clothing
- Code Yellow Team Leader
- Security Officer: Responsibilities
- Environmental Services: Responsibilities
- Respiratory Therapy: Responsibilities

Adjust Segment Order:

Add Segment

FIGURE 28

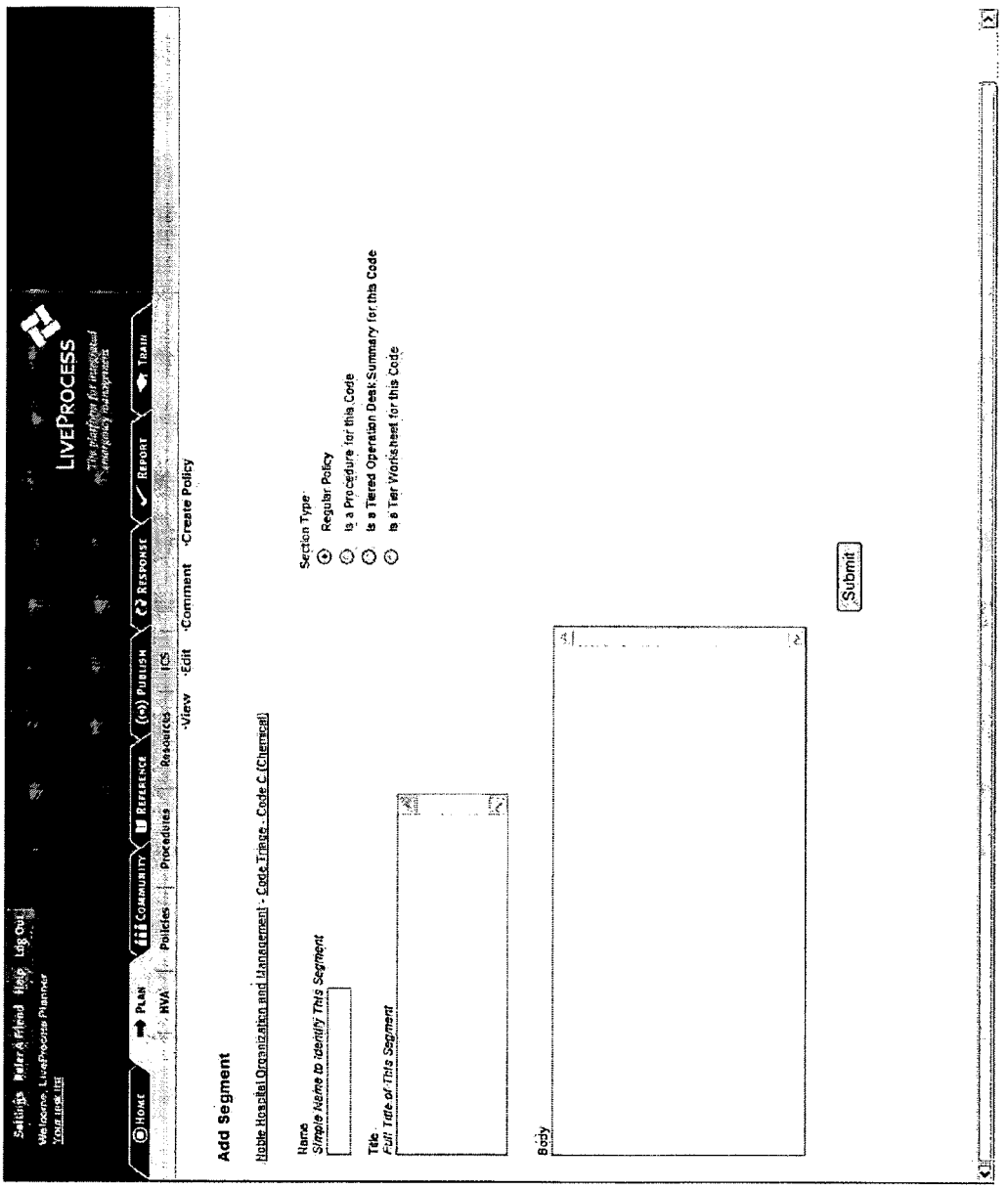

Settings Refer a Friend Help Log Out
Welcome, LiveProcess Planner
Your last login
LiveProcess
The platform for integrated emergency management
Home
Plan
Community
Reference
Publish
Response
Report
Train
Policies
Procedures
Resources
HVA
ICS
-View -Edit -Comment -Create Policy
Add Segment
Noble Hospital Organization and Management - Code Triage - Code C (Chemical)
Name
Simple Name to identify This Segment
Title
Full Title of This Segment
Body
Section Type:
Regular Policy
Is a Procedure for this Code
Is a Tiered Operation Desk Summary for this Code
Is a Tier Worksheet for this Code
Submit

FIGURE 29

LiveProcess Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/plnPolDetails.php?pid=238cid=102a
Settings Role Admin Help Logout
Welcome, Planner Demo
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
HVA Policies Procedures Resources ICS
View Edit Comment Create Policy
DemoHospitalPlan: Code Triage - Code C (Chemical)
1. Scope
2. Purpose
3. Policy
4. Procedure
5. External Procedure
6. Internal Procedure
7. Preparation Of Decon Area
8. Donning Protective Clothing
9. Doffing Protective Clothing
10. Code Yellow Team Leader
11. Security Officer: Responsibilities
12. Environmental Services: Responsibilities
13. Respiratory Therapy: Responsibilities
Scope
All Hospital Departments.
Purpose
Chemical decontamination has 2 primary goals: first, decontamination helps prevent further harm to the patient from the chemical exposure and secondly, d
providers and maintains the viability of the Emergency Department (ED) as a treatment center. Methods of patient decontamination include chemical dilution
during decontamination may result in illness in healthcare providers and contamination of the ED. Severe ED contamination may necessitate departmental cl
mass casualty incident.

FIGURE 30

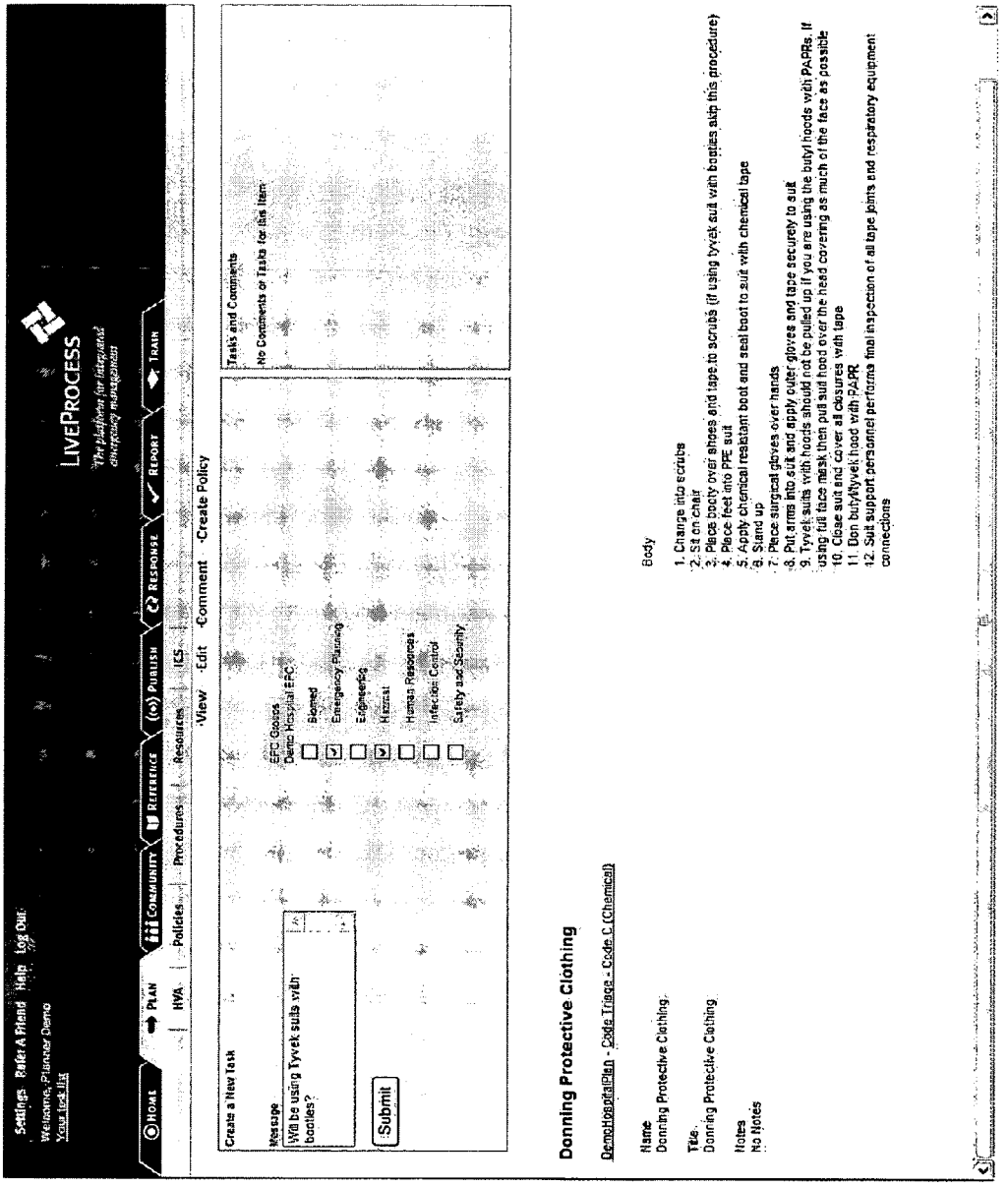

Settings Refer A Friend Help Log Out
Welcome, Planner Demo
Your task list
LiveProcess
The platform for integrated emergency management
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
IES
View
Edit
Comment
Create Policy
Create a New Task
Message
Will be using Tyvek suits with booties?
Submit
EPC Groups
Demo Hospital EPC
Biomed
Emergency Planning
Engineering
Hazmat
Human Resources
Infection Control
Safety and Security
Tasks and Comments
No Comments or Tasks for this Item
Donning Protective Clothing
DemoHospitalPlan - Code Triage - Code C (Chemical)
Name
Donning Protective Clothing
Title
Donning Protective Clothing
Notes
No Notes
Body
1. Change into scrubs
2. Sit on chair
3. Place booty over shoes and tape to scrubs (if using Tyvek suit with booties skip this procedure)
4. Place feet into PPE suit
5. Apply chemical resistant boot and seal boot to suit with chemical tape
6. Stand up
7. Place surgical gloves over hands
8. Put arms into suit and apply outer gloves and tape securely to suit
9. Tyvek suits with hoods should not be pulled up if you are using the butyl hoods with PAPRs. If using full face mask then pull suit hood over the head covering as much of the face as possible
10. Close suit and cover all closures with tape
11. Don butyl/tyvek hood with PAPR
12. Suit support personnel performs final inspection of all tape joints and respiratory equipment connections

FIGURE 31

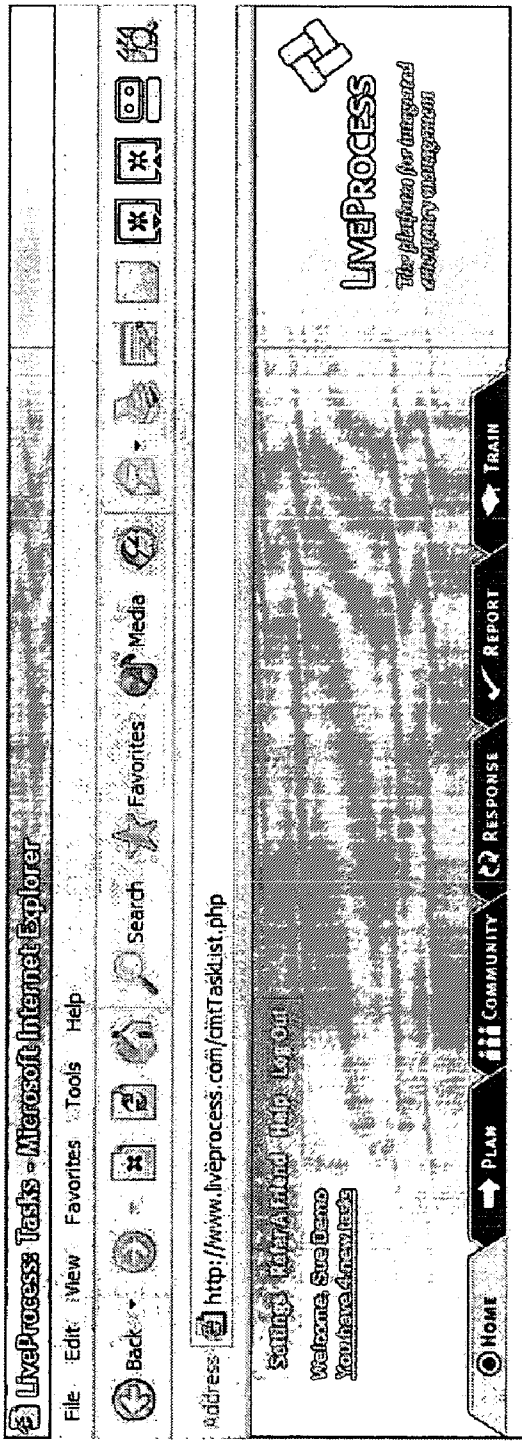

LiveProcess Tasks - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/cmtTaskList.php
Welcome, Sue Demo
LIVEPROCESS
HOME
PLAN
COMMUNITY
RESPONSE
REPORT
TRAIN
Open Tasks for Sue Demo
1. Comment on: Policy -- Please review segment 5 of this policy.
2. App. Comment on: Policy -- Please review this policy.
3. App. Comment on: Policy -- Please review Fire policy.
4. Comment on: Segment -- Will we be using Tyvek suits with bootie
Closed Tasks for Sue Demo

FIGURE 32

LiveProcess: Pollutes - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://www.liveprocess.com/cmtPolSegDetails.php?pid=238sid=787&tid=348
LIVEPROCESS
HOME
PLAN
COMMUNITY
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
This Task
Approve this segment
Message
Submit
Will we be using Tyvek suits with booties?
Planner Demo
2/25/05 00:06
We will be using the NBC Tyvek F Suit kit. This kit includes the Tyvek F suit + 1 pair of nitrile gloves + 1 pair of boaties + 1 roll of duct tape. Tyvek F provides an exceptionally high level of protectio against all known biological and chemical hazards.
Sue Demo
2/25/05 00:14
Tasks and Comments
Task
Will we be using Tyvek suits with booties?
Planner Demo
2/25/05 00:06
We will be using the NBC Tyvek F Suit kit. This kit includes the Tyvek F suit + 1 pair of nitrile gloves + 1 pair of boaties + 1 roll of duct tape. Tyvek F provides an exceptionally high level of protectio against all known biological and chemical hazards.
Sue Demo
2/25/05 00:14
Donning Protective Clothing
DemoHospitalPlan -
Name
Donning Protective Clothing
Title
Donning Protective Clothing
Notes
Body
1. Change into scrubs
2. Sit on chair
3. Place booty over shoes and tape to scrubs (if using tyvek suit with booties skip this procedure)
4. Place feet into PPE suit
5. Apply chemical resistant boot and seal boot to suit with chemical tape

FIGURE 33

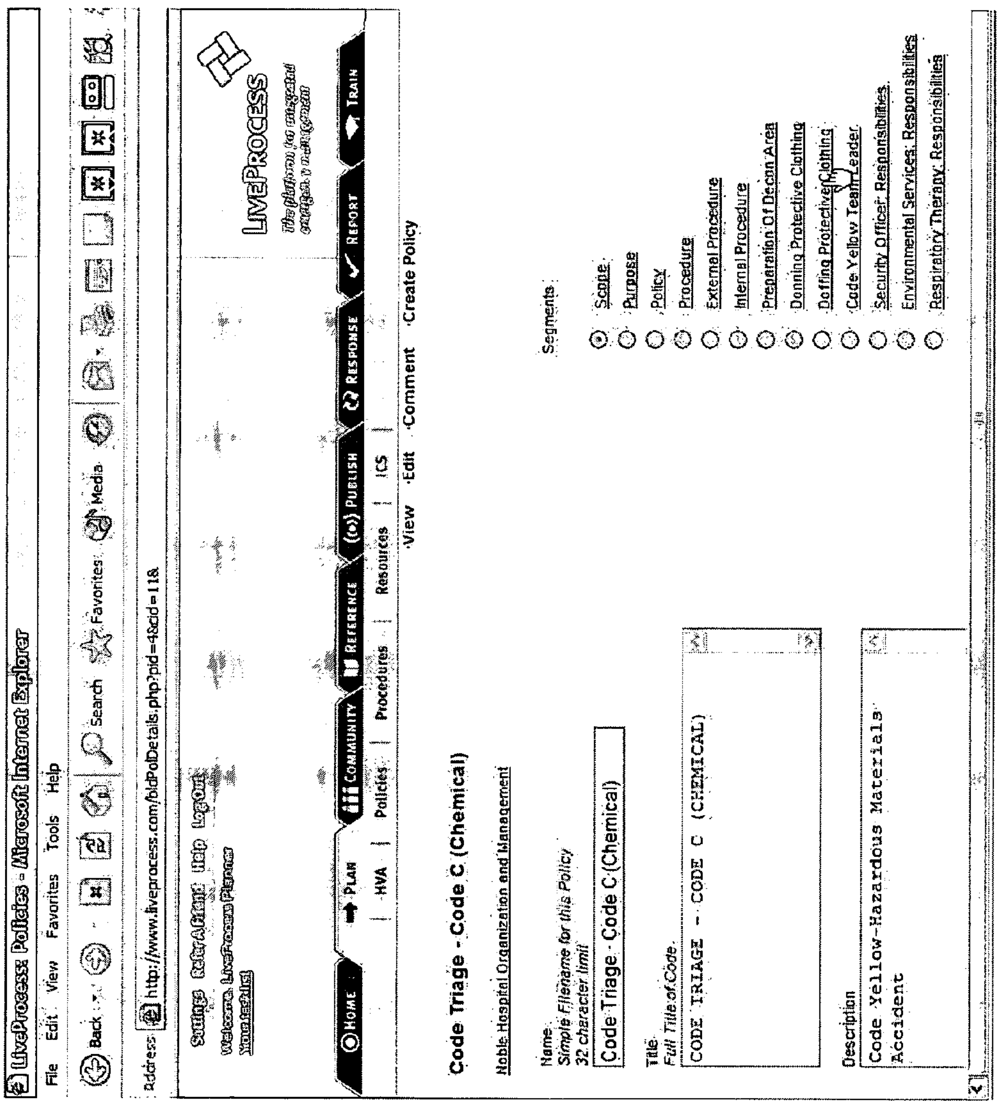

LiveProcess: Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/oldPolDetails.php?pid=4&cid=118
Settings Refer A Friend Help Log Out
Welcome, LiveProcess Planner
Your task list
LiveProcess
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
HVA Policies Procedures Resources ICS
·View ·Edit ·Comment ·Create Policy
Code Triage - Code C (Chemical)
Noble Hospital Organization and Management
Name
Simple Filename for this Policy
32 character limit
Code Triage - Code C (Chemical)
Title
Full Title of Code
CODE TRIAGE - CODE C (CHEMICAL)
Description
Code Yellow-Hazardous Materials Accident
Segments
Scope
Purpose
Policy
Procedure
External Procedure
Internal Procedure
Preparation Of Decon Area
Donning Protective Clothing
Doffing Protective Clothing
Code Yellow Team Leader
Security Officer: Responsibilities
Environmental Services: Responsibilities
Respiratory Therapy: Responsibilities

FIGURE 34

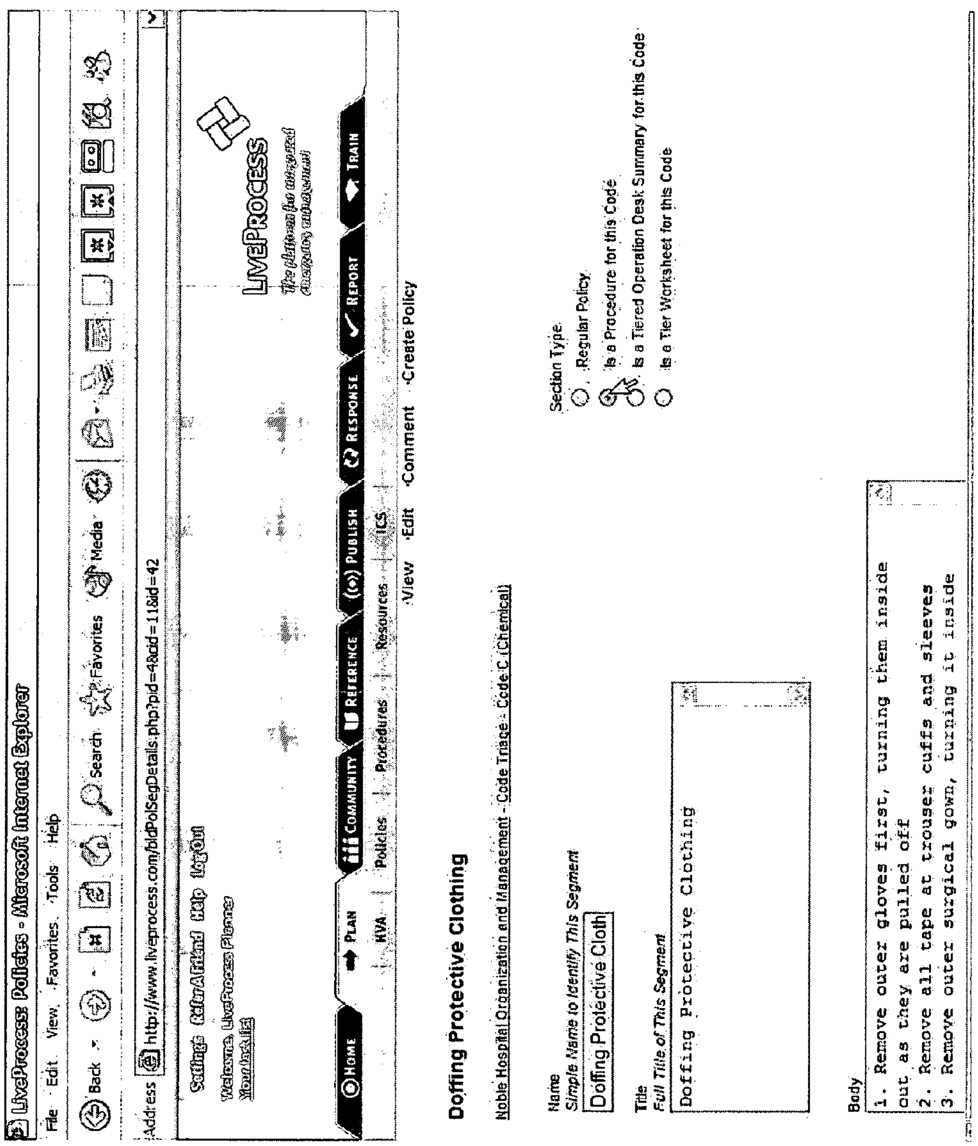
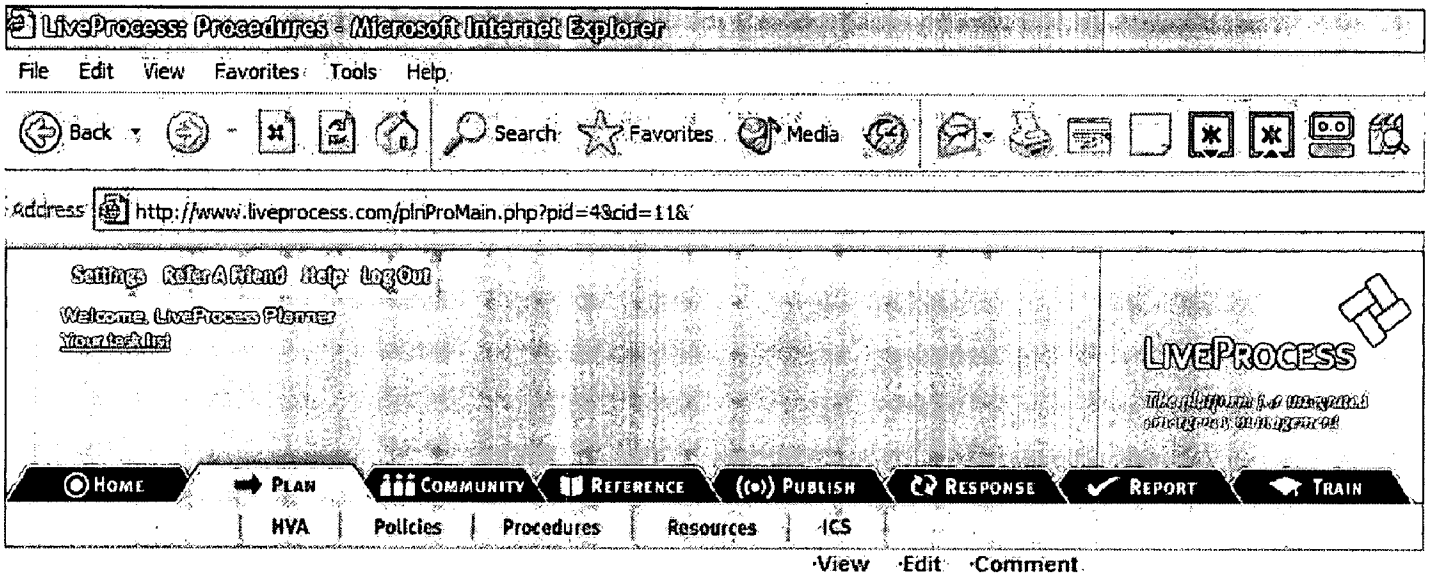

LiveProcess: Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/bldPolSegDetails.php?pid=4&cid=11&id=42
Settings Refer A Friend Help Log Out
Welcome, LiveProcess Planner
Your Task list
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA Policies Procedures Resources ICS
View Edit Comment Create Policy
Doffing Protective Clothing
Noble Hospital Organization and Management - Code Triage - Code C (Chemical)
Name
Simple Name to Identify This Segment
Doffing Protective Cloth
Title
Full Title of This Segment
Doffing Protective Clothing
Section Type
Regular Policy
Is a Procedure for this Code
Is a Tiered Operation Desk Summary for this Code
Is a Tier Worksheet for this Code
Body
1. Remove outer gloves first, turning them inside out as they are pulled off
2. Remove all tape at trouser cuffs and sleeves
3. Remove outer surgical gown, turning it inside

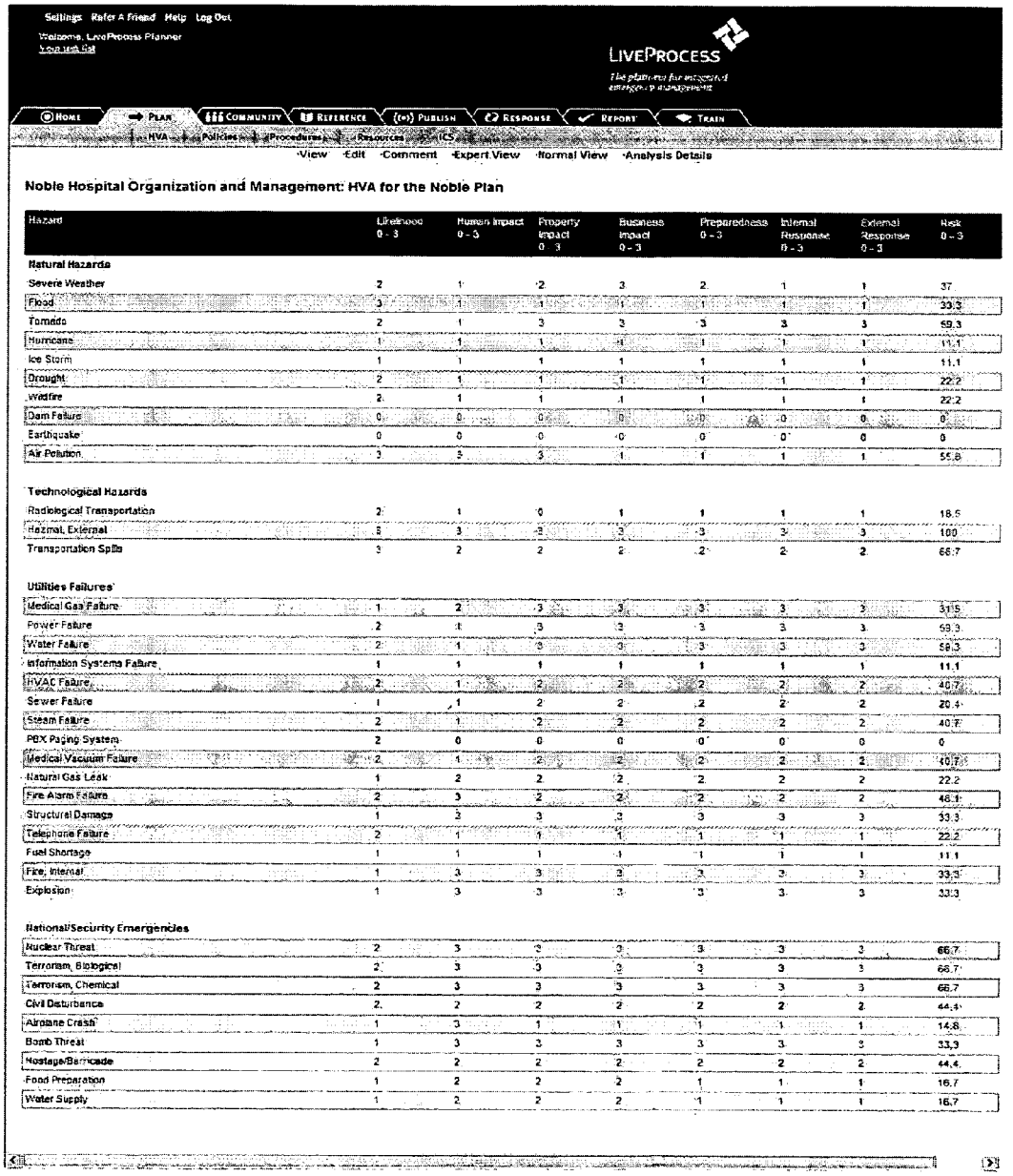
FIGURE 35



Noble Hospital Organization and Management: List of Procedures

1. CODE TRIAGE - INTERNAL DISASTER: Personnel Call Procedures
2. CODE TRIAGE - EXTERNAL DISASTER: Personnel Call Procedures
3. CODE TRIAGE - CODE C (CHEMICAL): Donning Protective Clothing
4. CODE TRIAGE - CODE C (CHEMICAL): Doffing Protective Clothing
5. CODE RED - FIRE: Procedure
6. BOMB THREAT: Response / Recovery
7. CIVIL DISTURBANCE: Response / Recovery
8. View All Procedures

FIGURE 36



Noble Hospital Organization and Management: HVA for the Noble Plan

Hazard	Likelihood 0 - 3	Human Impact 0 - 3	Property Impact 0 - 3	Business Impact 0 - 3	Preparedness 0 - 3	Internal Response 0 - 3	External Response 0 - 3	Risk 0 - 3
Natural Hazards								
Severe Weather	2	1	2	3	2	1	1	37
Flood	3	1	1	1	1	1	1	33.3
Tornado	2	1	3	3	3	3	3	59.3
Hurricane	1	1	1	1	1	1	1	11.1
Ice Storm	1	1	1	1	1	1	1	11.1
Drought	2	1	1	1	1	1	1	22.2
Wildfire	2	1	1	1	1	1	1	22.2
Dam Failure	0	0	0	0	0	0	0	0
Earthquake	0	0	0	0	0	0	0	0
Air Pollution	3	3	3	1	1	1	1	55.6
Technological Hazards								
Radiological Transportation	2	1	0	1	1	1	1	18.5
Hazmat, External	3	3	3	3	3	3	3	100
Transportation Spills	3	2	2	2	2	2	2	66.7
Utilities Failures								
Medical Gas Failure	1	2	3	3	3	3	3	31.5
Power Failure	2	1	3	3	3	3	3	59.3
Water Failure	2	1	3	3	3	3	3	59.3
Information Systems Failure	1	1	1	1	1	1	1	11.1
HVAC Failure	2	1	2	2	2	2	2	40.7
Sewer Failure	1	1	2	2	2	2	2	20.4
Steam Failure	2	1	2	2	2	2	2	40.7
PBX Paging System	2	0	0	0	0	0	0	0
Medical Vacuum Failure	2	1	2	2	2	2	2	40.7
Natural Gas Leak	1	2	2	2	2	2	2	22.2
Fire Alarm Failure	2	3	2	2	2	2	2	48.1
Structural Damage	1	3	3	3	3	3	3	33.3
Telephone Failure	2	1	1	1	1	1	1	22.2
Fuel Shortage	1	1	1	1	1	1	1	11.1
Fire, Internal	1	3	3	3	3	3	3	33.3
Explosion	1	3	3	3	3	3	3	33.3
National Security Emergencies								
Nuclear Threat	2	3	3	3	3	3	3	66.7
Terrorism, Biological	2	3	3	3	3	3	3	66.7
Terrorism, Chemical	2	3	3	3	3	3	3	66.7
Civil Disturbance	2	2	2	2	2	2	2	44.4
Airplane Crash	1	3	1	1	1	1	1	14.8
Bomb Threat	1	3	3	3	3	3	3	33.3
Hostage/Barricade	2	2	2	2	2	2	2	44.4
Food Preparation	1	2	2	2	1	1	1	16.7
Water Supply	1	2	2	2	1	1	1	16.7

FIGURE 37

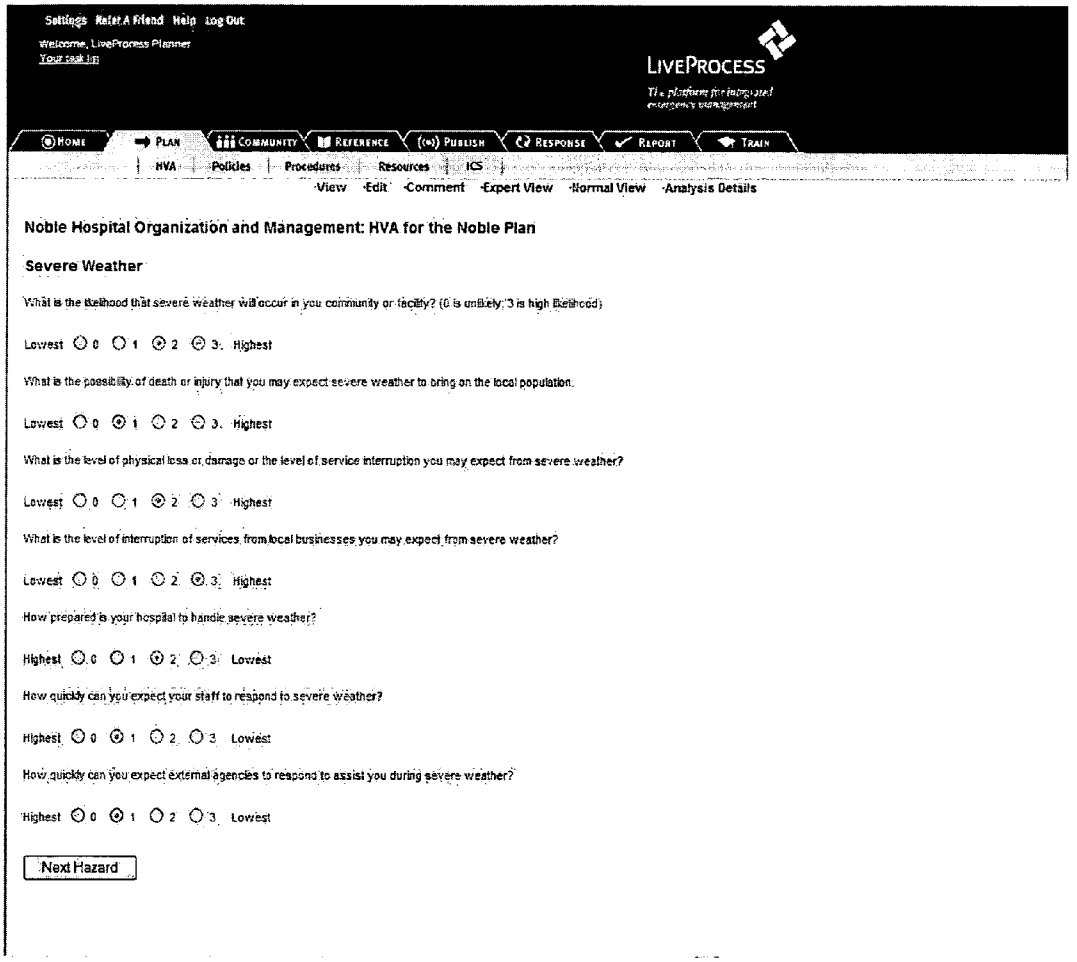

Settings Refer A Friend Help Log Out
Welcome, LiveProcess Planner
Your task list
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
View
Edit
Comment
Expert View
Normal View
Analysis Details
Noble Hospital Organization and Management: HVA for the Noble Plan
Severe Weather
What is the likelihood that severe weather will occur in you community or facility? (0 is unlikely; 3 is high likelihood)
Lowest 0 1 2 3 Highest
What is the possibility of death or injury that you may expect severe weather to bring on the local population.
Lowest 0 1 2 3 Highest
What is the level of physical loss or damage or the level of service interruption you may expect from severe weather?
Lowest 0 1 2 3 Highest
What is the level of interruption of services from local businesses you may expect from severe weather?
Lowest 0 1 2 3 Highest
How prepared is your hospital to handle severe weather?
Highest 0 1 2 3 Lowest
How quickly can you expect your staff to respond to severe weather?
Highest 0 1 2 3 Lowest
How quickly can you expect external agencies to respond to assist you during severe weather?
Highest 0 1 2 3 Lowest
Next Hazard

FIGURE 38

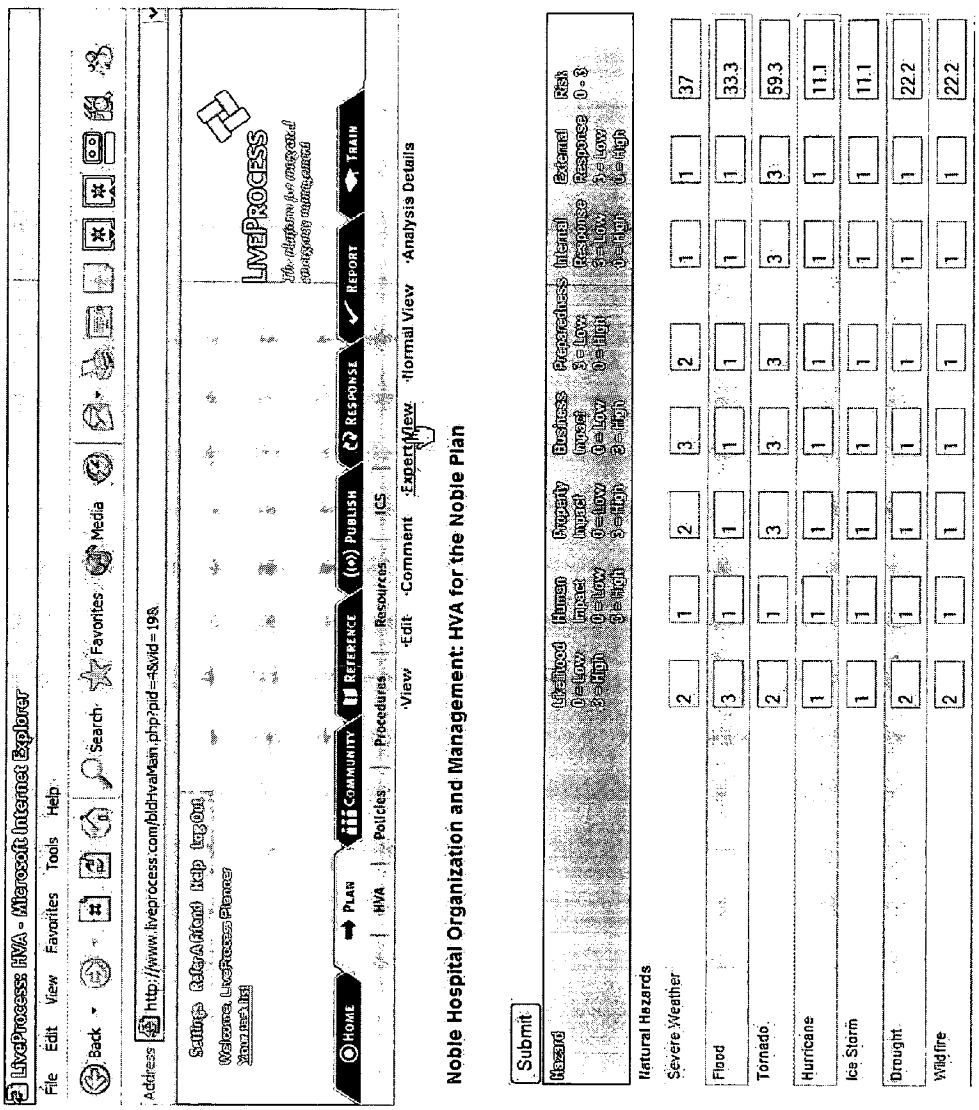

LiveProcess: HVA - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/bldHvaMain.php?pid=4&vid=198
Settings Refer A Friend Help Log Out
Welcome, LiveProcess Planner
Your task list
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA Policies Procedures Resources ICS
·View ·Edit ·Comment ·Expert View ·Normal View ·Analysis Details
Noble Hospital Organization and Management: HVA for the Noble Plan
Submit
Hazard
Likelihood 0 = Low 3 = High
Human Impact 0 = Low 3 = High
Property Impact 0 = Low 3 = High
Business Impact 0 = Low 3 = High
Preparedness 3 = Low 0 = High
Internal Response 3 = Low 0 = High
External Response 3 = Low 0 = High
Risk 0 - 3
Natural Hazards
Severe Weather 2 1 2 3 2 1 1 37
Flood 3 1 1 1 1 1 1 33.3
Tornado 2 1 3 3 3 3 3 59.3
Hurricane 1 1 1 1 1 1 1 11.1
Ice Storm 1 1 1 1 1 1 1 11.1
Drought 2 1 1 1 1 1 1 22.2
Wild fire 2 1 1 1 1 1 1 22.2

FIGURE 39

LivePROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
ICS
View Edit Comment Create Resource Import Resource
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0-9 All
FBI - Sacramento
4500 Orange Grove
Sacramento, CA 95841
(916) 481-9110
(916) 977-2300
http://sacramento.fbi.gov/
Goleta Valley Medical Pharmacy
334 South Patterson Avenue
Suite 110
Santa Barbara, CA 93111
(805) 967-5634
Vortran Medical Technology 1, Inc
3941 J Street
Suite 354
Sacramento, CA CA 95819-3633
(800) 434-4034
(916) 648-9751
http://www.vortran.com

FIGURE 40

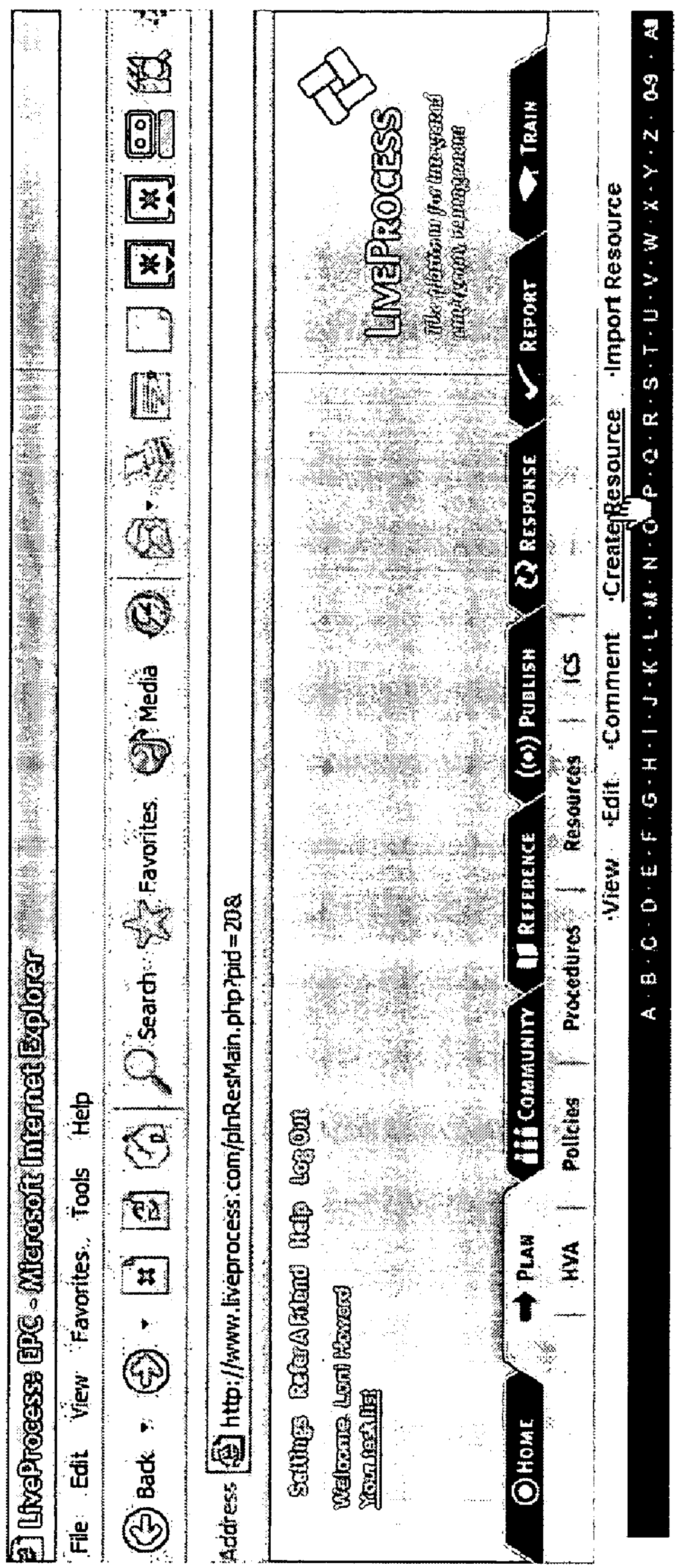

LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/plnResMain.php?pid=208
Settings Refer A Friend Help Log Out
Welcome Lori Howard
Your task list
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
·View ·Edit ·Comment ·Create Resource ·Import Resource
A · B · C · D · E · F · G · H · I · J · K · L · M · N · O · P · Q · R · S · T · U · V · W · X · Y · Z · 0-9 · All

FIGURE 41

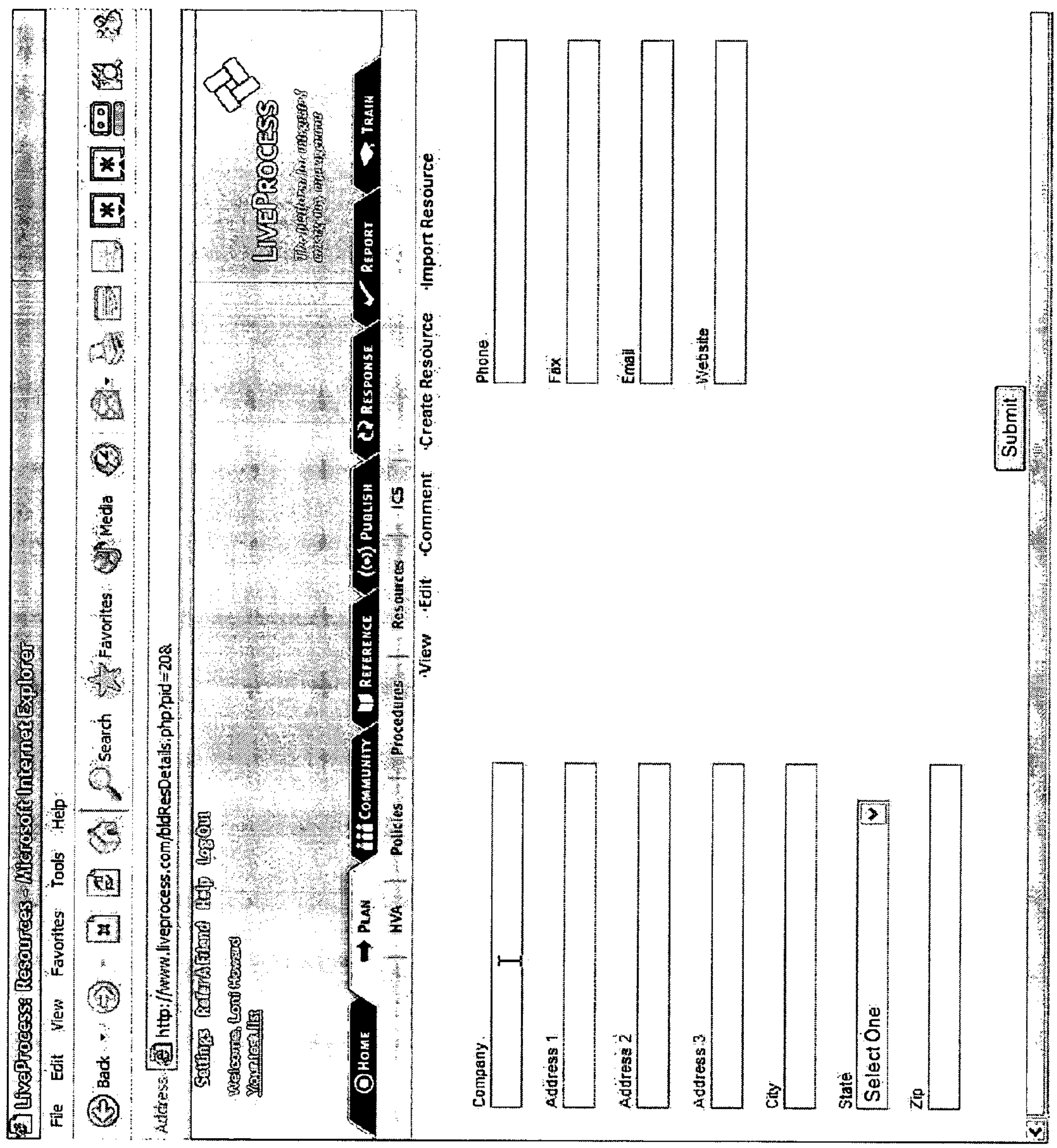

LiveProcess: Resources - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/bldResDetails.php?pid=20&
Settings Refer A Friend Help LogOut
Welcome, Lori Howard
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
·View ·Edit ·Comment ·Create Resource ·Import Resource
Company
Address 1
Address 2
Address 3
City
State
Select One
Zip
Phone
Fax
Email
Website
Submit

FIGURE 42

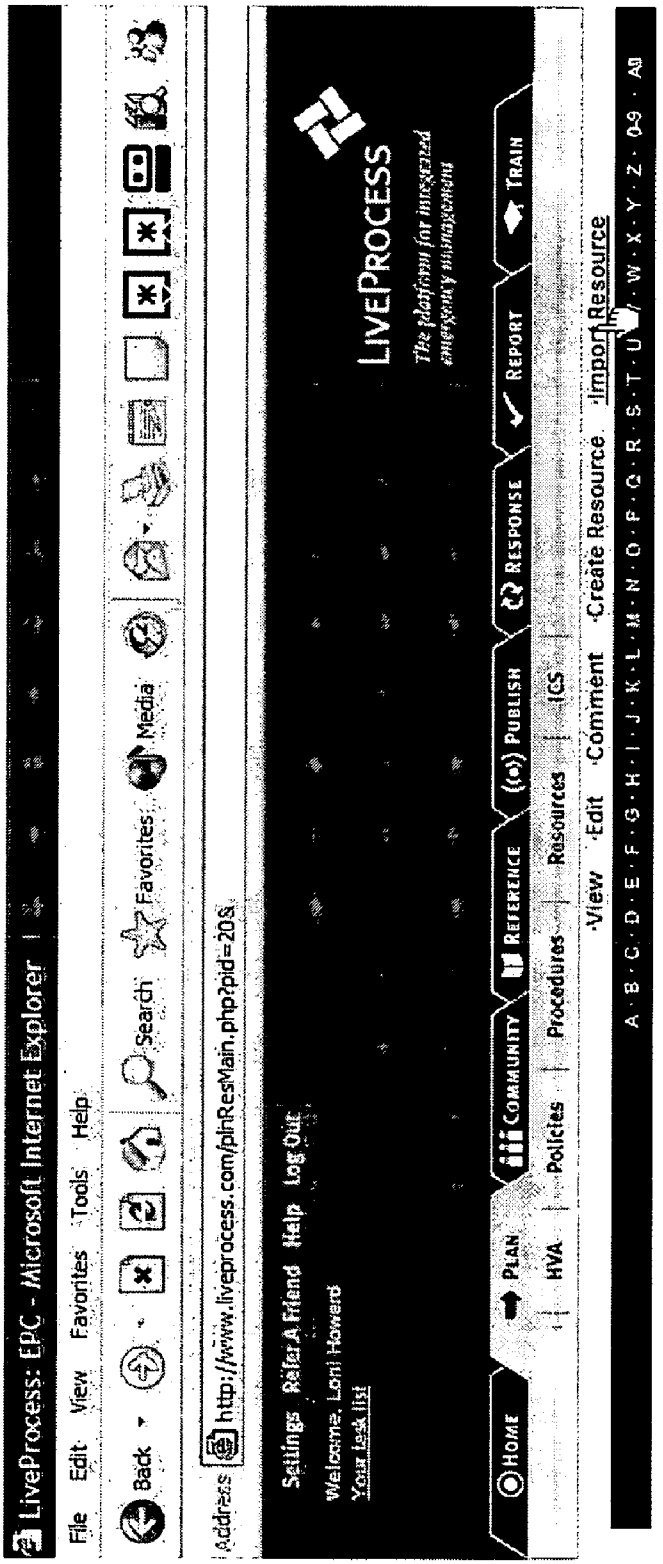
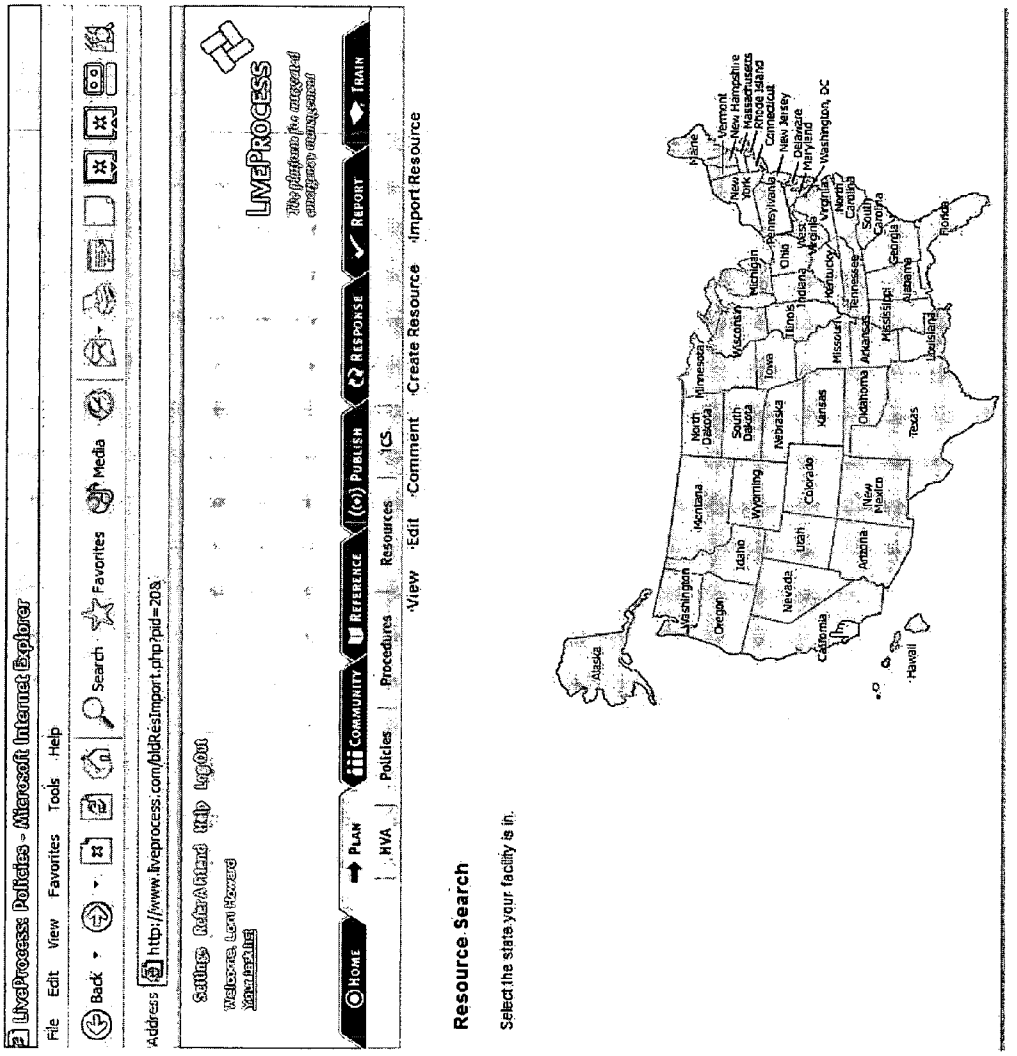

LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/plnResMain.php?pid=208
Settings Refer A Friend Help Log Out
Welcome, Loni Howard
Your task list
LIVEPROCESS
The platform for integrated emergency management
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
HVA Policies Procedures Resources ICS
View Edit Comment Create Resource Import Resource
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0-9 All

FIGURE 43

FIGURE 44


LiveProcess: Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/bldResImport.php?pid=208
Settings Refer A Friend Help Logout
Welcome, Leon Hazard
View Messages
LiveProcess
The platform for integrated emergency management
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
HVA Policies Procedures Resources ICS
View Edit Comment Create Resource Import Resource
Resource Search
Select the state your facility is in.
Alaska
Hawaii
Washington
Oregon
California
Idaho
Nevada
Montana
Wyoming
Utah
Arizona
Colorado
New Mexico
North Dakota
South Dakota
Nebraska
Kansas
Oklahoma
Texas
Minnesota
Iowa
Missouri
Arkansas
Louisiana
Wisconsin
Illinois
Michigan
Indiana
Ohio
Kentucky
Tennessee
Mississippi
Alabama
Georgia
Florida
South Carolina
North Carolina
Virginia
West Virginia
Pennsylvania
New York
Maine
Vermont
New Hampshire
Massachusetts
Rhode Island
Connecticut
New Jersey
Delaware
Maryland
Washington, DC

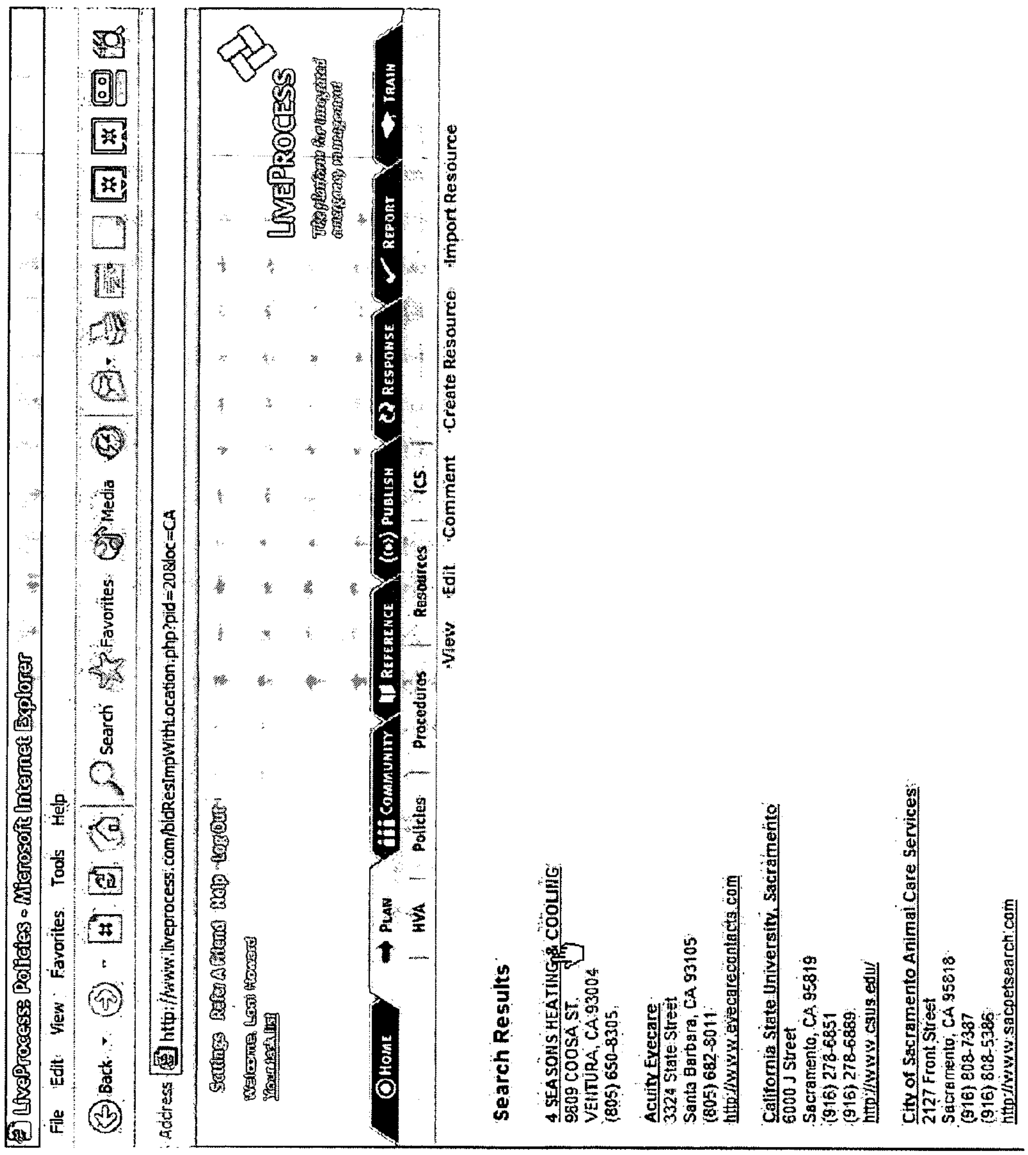

LiveProcess: Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Media
Address http://www.liveprocess.com/bidResImpWithLocation.php?pid=20&loc=CA
Settings Refer A Friend Help Log Out
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
·View ·Edit ·Comment ·Create Resource ·Import Resource
Search Results
4 SEASONS HEATING & COOLING
9609 COOSA ST.
VENTURA, CA 93004
(805) 650-8305
Acuity Eyecare
3324 State Street
Santa Barbara, CA 93105
(805) 682-8011
http://www.eyecarecontacts.com
California State University, Sacramento
6000 J Street
Sacramento, CA 95819
(916) 278-6851
(916) 278-6889
http://www.csus.edu/
City of Sacramento Animal Care Services
2127 Front Street
Sacramento, CA 95818
(916) 808-7387
(916) 808-5386
http://www.sacpetsearch.com

FIGURE 45

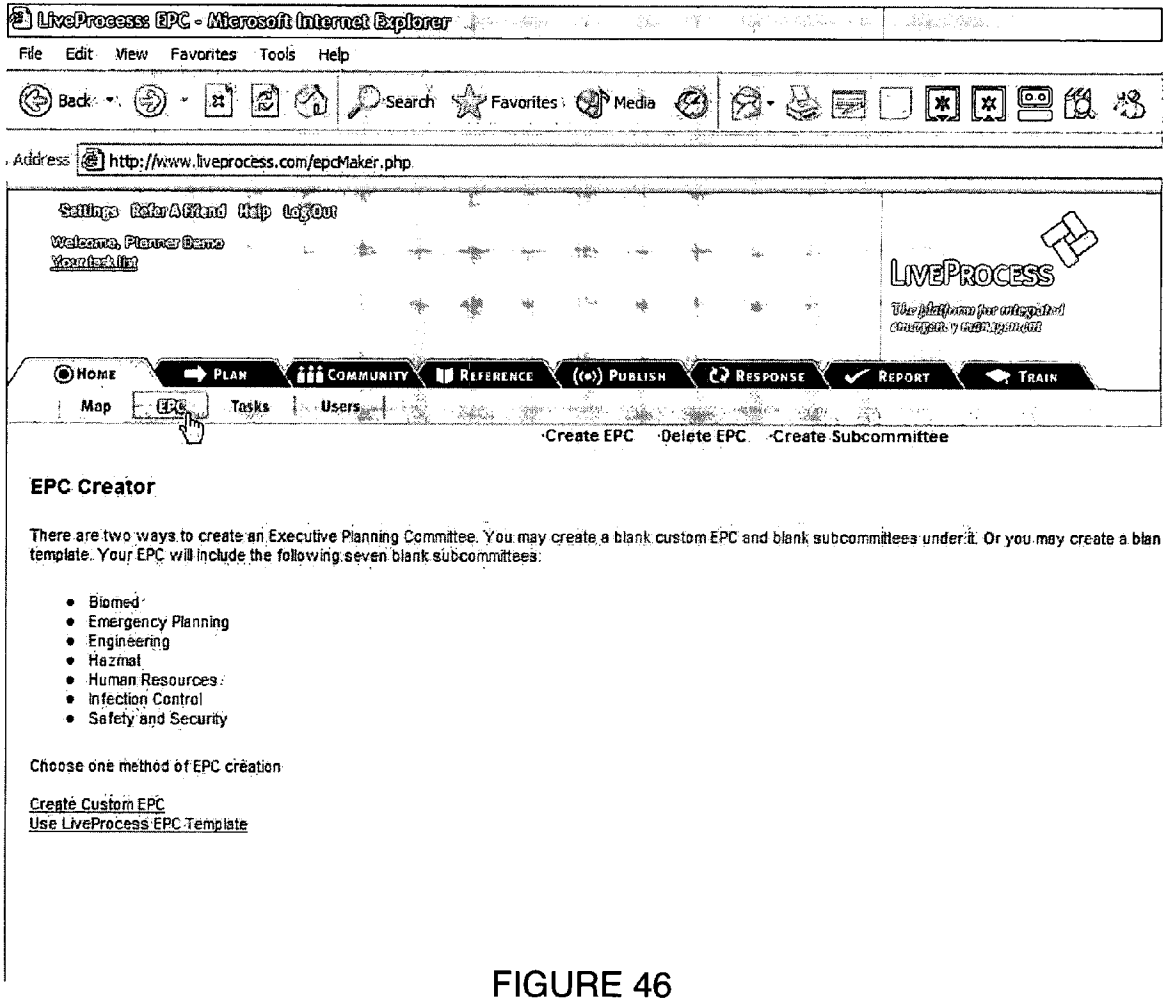

LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/epcMaker.php
Settings Refer A Friend Help LogOut
Welcome, Planner Beans
Your task list
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Map EPC Tasks Users
Create EPC Delete EPC Create Subcommittee
EPC Creator
There are two ways to create an Executive Planning Committee. You may create a blank custom EPC and blank subcommittees under it. Or you may create a blan template. Your EPC will include the following seven blank subcommittees:
Biomed
Emergency Planning
Engineering
Hazmat
Human Resources
Infection Control
Safety and Security
Choose one method of EPC creation
Create Custom EPC
Use LiveProcess EPC Template

FIGURE 46

LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/epcDetails.php
Settings Refer A Friend Help Log Out
Welcome, Planner Demo
Your task list
LiveProcess
The platform for integrated emergency management
Home Plan Community Reference Publish Response Report Train
Map EPC Tasks Users
Create EPC Delete EPC Create Subcommittee
Create New EPC
Name
Description
Submit

FIGURE 47

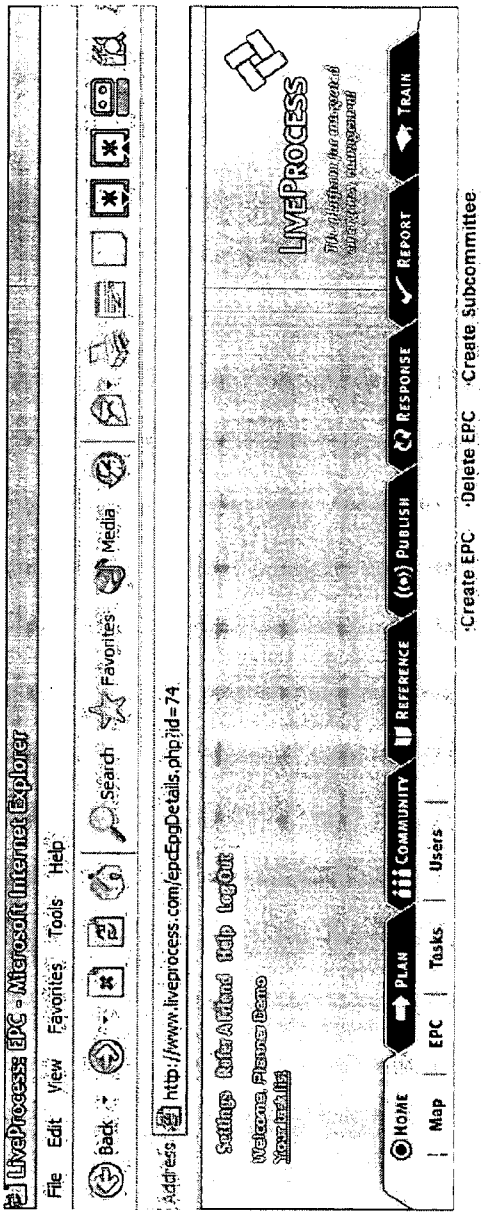

LiveProcess EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/epcEpgDetails.php?id=74
Settings Administration Help Logout
Welcome, Planner Demo
Your Activities
LiveProcess
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
Map | EPC | Tasks | Users |
Create EPC Delete EPC Create Subcommittee
Name
Emergency Planning
Description
This is the Emergency Planning Committee.
Group Members
Demo, Joe
Demo, Sue
Demo, Mike
Demo, Linda
Add User
Remove User
Submit

FIGURE 48

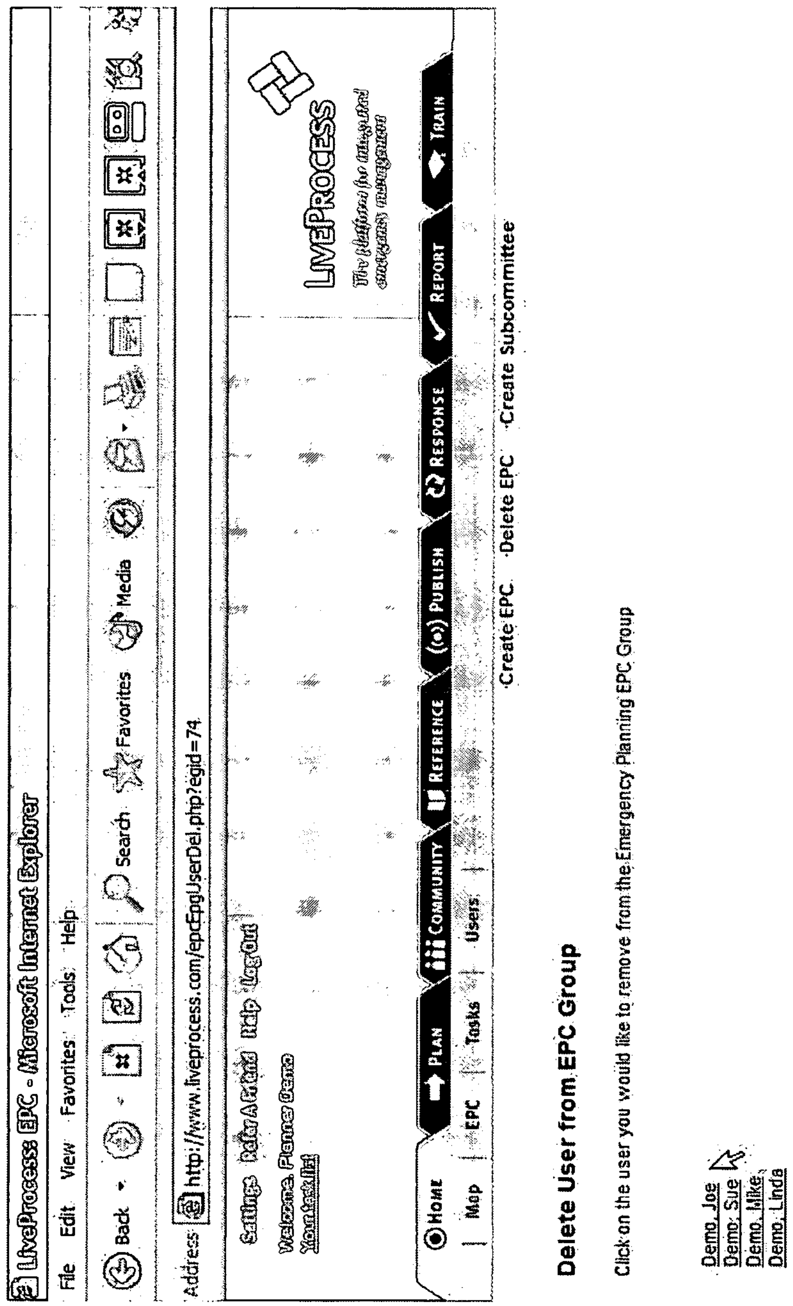

LiveProcess: EPC - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/epcEpgUserDel.php?egid=74
Settings Refer A Friend Help Log Out
Welcome, Planner Demo
Your task list
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Map EPC Tasks Users
·Create EPC ·Delete EPC ·Create Subcommittee
Delete User from EPC Group
Click on the user you would like to remove from the Emergency Planning EPC Group
Demo, Joe
Demo, Sue
Demo, Mike
Demo, Linda

FIGURE 49

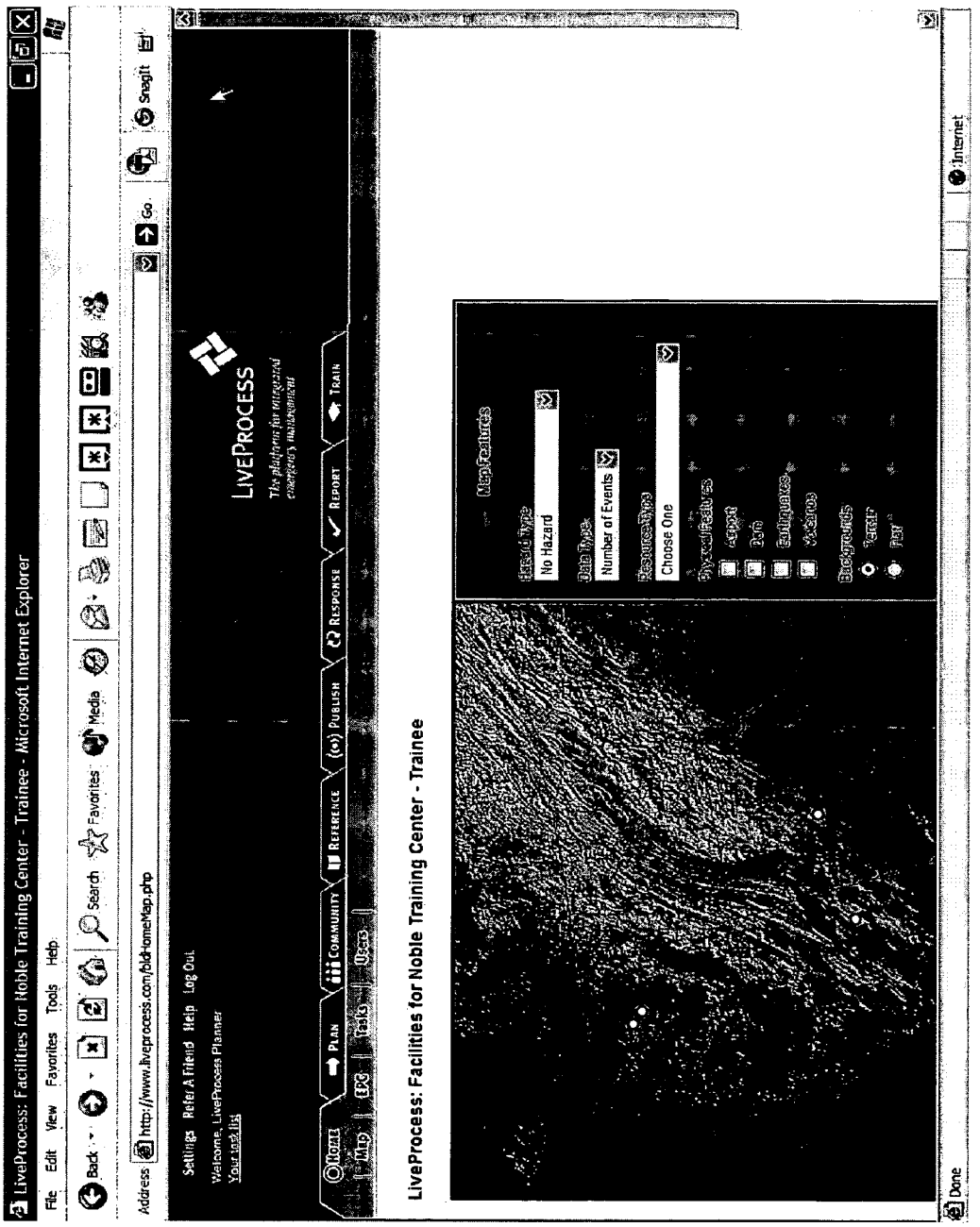

LiveProcess: Facilities for Noble Training Center - Trainee - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/oldHomeMap.php
Go
SnagIt
Settings Refer A Friend Help Log Out
Welcome, LiveProcess Planner
Your last list
LIVEPROCESS
The platform for integrated emergency management
NAVIGATE
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
Map
EMS
Tasks
Users
LiveProcess: Facilities for Noble Training Center - Trainee
Map Features
Hazard Type
No Hazard
Data Type
Number of Events
Resource Type
Choose One
Overlays
Airport
Dam
Earthquakes
Volcanos
Backgrounds
Terrain
Flat
Done
Internet

FIGURE 50

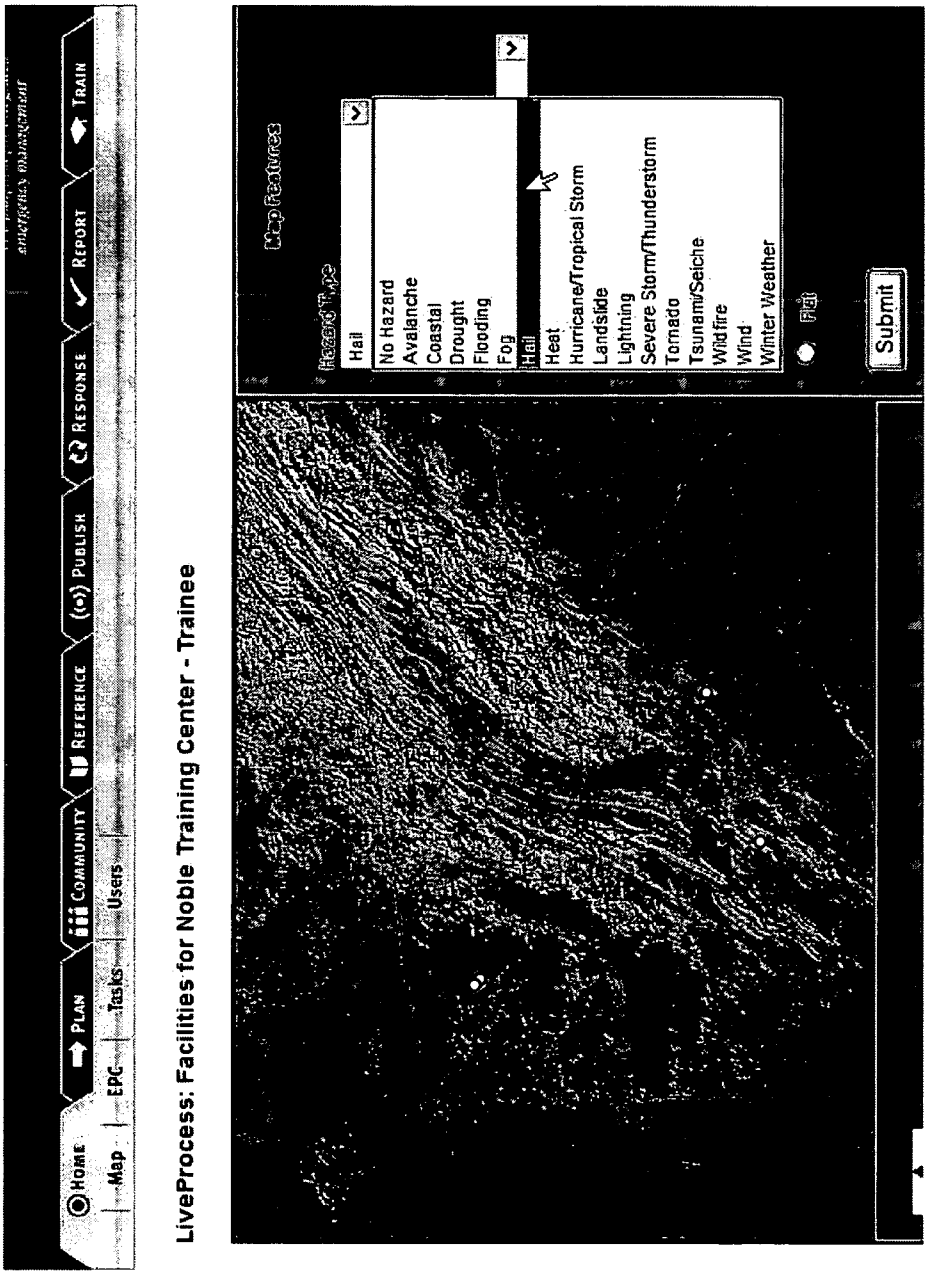

HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
Map
EPC
Tasks
Users
LiveProcess: Facilities for Noble Training Center - Trainee
Map Features
Hazard Type
Hail
No Hazard
Avalanche
Coastal
Drought
Flooding
Fog
Hail
Heat
Hurricane/Tropical Storm
Landslide
Lightning
Severe Storm/Thunderstorm
Tornado
Tsunami/Seiche
Wildfire
Wind
Winter Weather
Fill
Submit

FIGURE 51

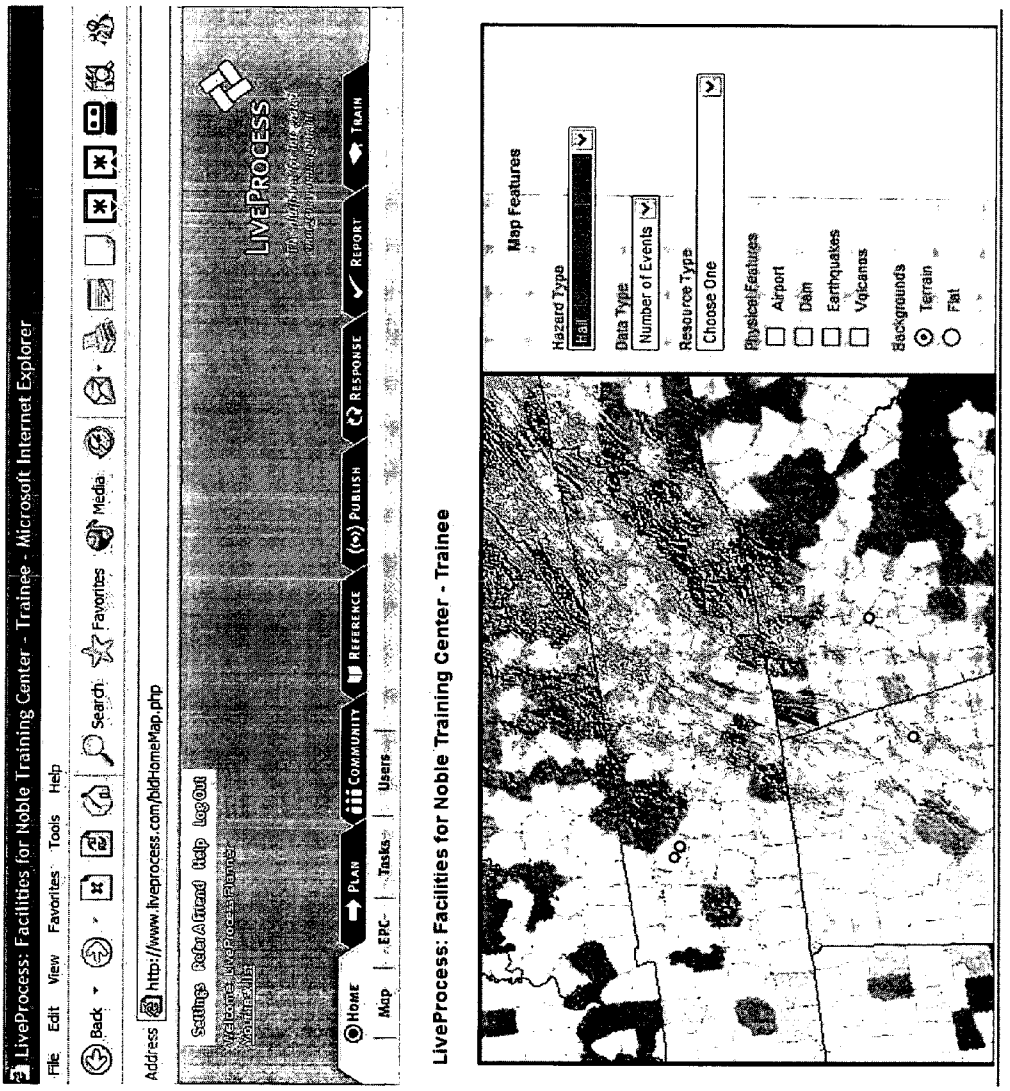

LiveProcess: Facilities for Noble Training Center - Trainee - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/jbldHomeMap.php
Setting Refer A Friend Help Log Out
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Map EPC Tasks Users
LiveProcess: Facilities for Noble Training Center - Trainee
Map Features
Hazard Type
Hail
Data Type
Number of Events
Resource Type
Choose One
Physical Features
Airport
Dam
Earthquakes
Volcanos
Backgrounds
Terrain
Flat

FIGURE 52

LiveProcess: Facilities for Noble Training Center - Trainee

FIGURE 53

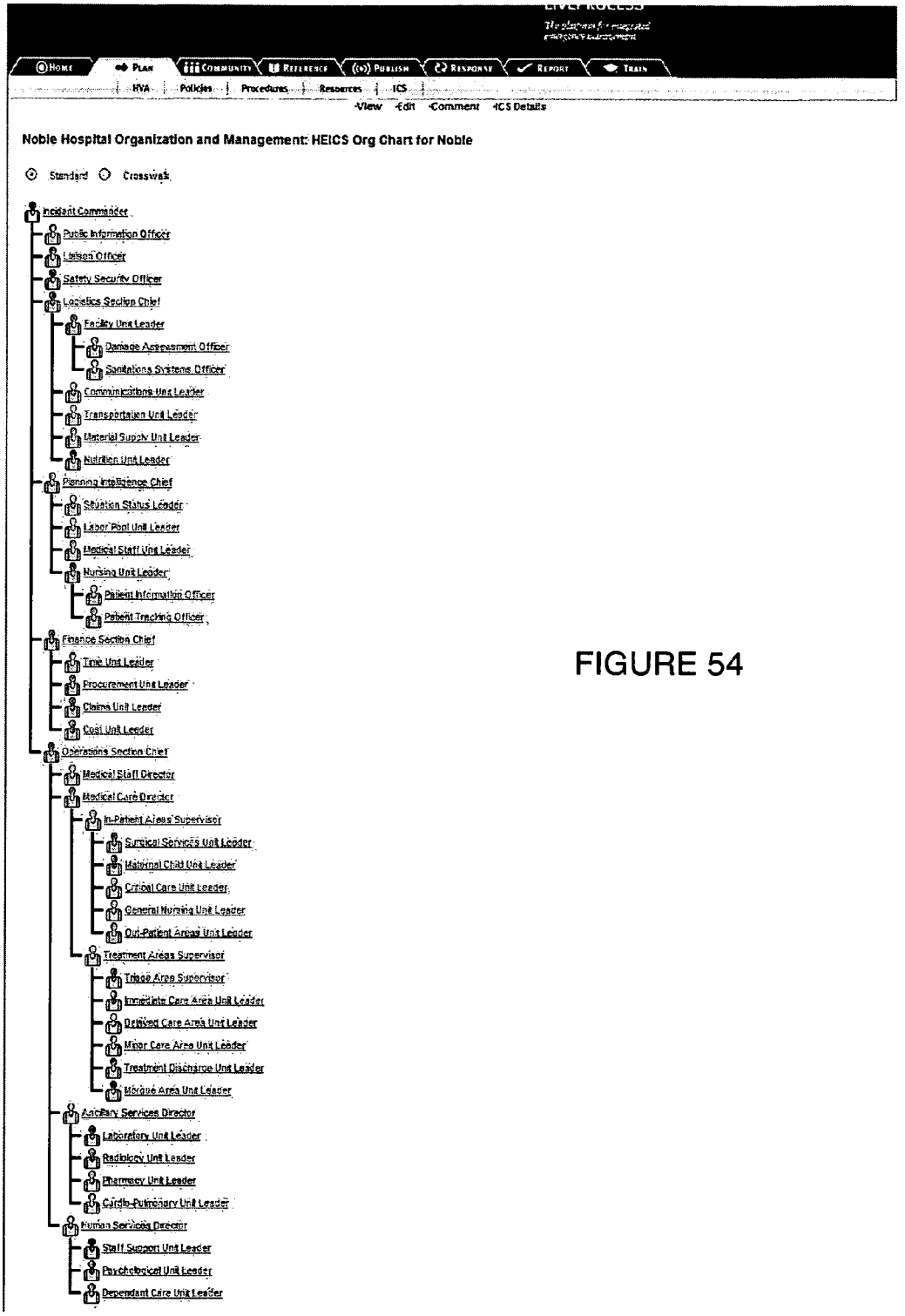

HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
HVA
Policies
Procedures
Resources
ICS
View
Edit
Comment
ICS Details
Noble Hospital Organization and Management: HEICS Org Chart for Noble
Standard
Crosswalk
Incident Commander
Public Information Officer
Liaison Officer
Safety Security Officer
Logistics Section Chief
Facility Unit Leader
Damage Assessment Officer
Sanitations Systems Officer
Communications Unit Leader
Transportation Unit Leader
Material Supply Unit Leader
Nutrition Unit Leader
Planning Intelligence Chief
Situation Status Leader
Labor Pool Unit Leader
Medical Staff Unit Leader
Nursing Unit Leader
Patient Information Officer
Patient Tracking Officer
Finance Section Chief
Time Unit Leader
Procurement Unit Leader
Claims Unit Leader
Cost Unit Leader
Operations Section Chief
Medical Staff Director
Medical Care Director
In-Patient Areas Supervisor
Surgical Services Unit Leader
Maternal Child Unit Leader
Critical Care Unit Leader
General Nursing Unit Leader
Out-Patient Areas Unit Leader
Treatment Areas Supervisor
Triage Area Supervisor
Immediate Care Area Unit Leader
Delayed Care Area Unit Leader
Minor Care Area Unit Leader
Treatment Discharge Unit Leader
Morgue Area Unit Leader
Ancillary Services Director
Laboratory Unit Leader
Radiology Unit Leader
Pharmacy Unit Leader
Cardio-Pulmonary Unit Leader
Human Services Director
Staff Support Unit Leader
Psychological Unit Leader
Dependant Care Unit Leader

FIGURE 54

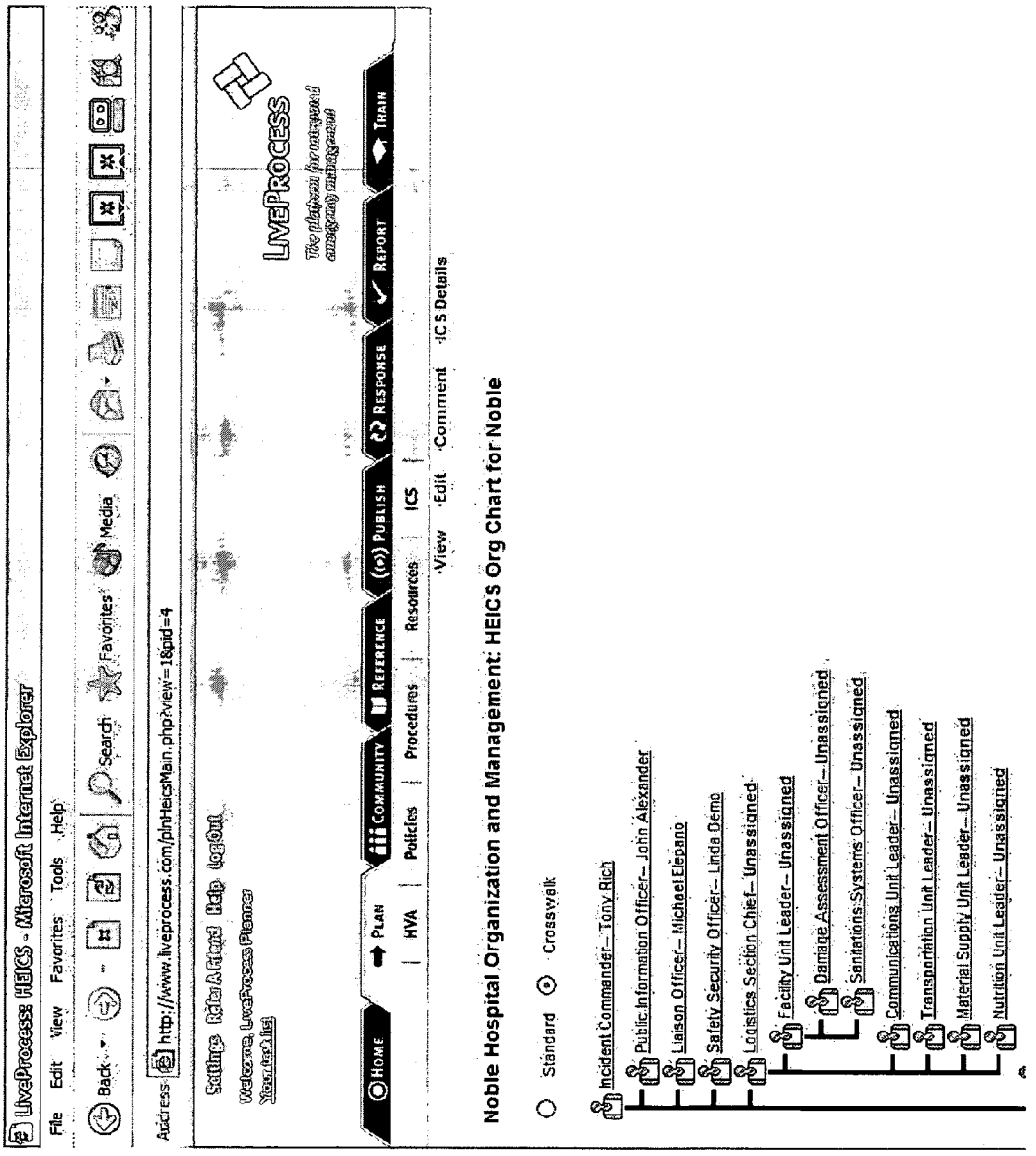
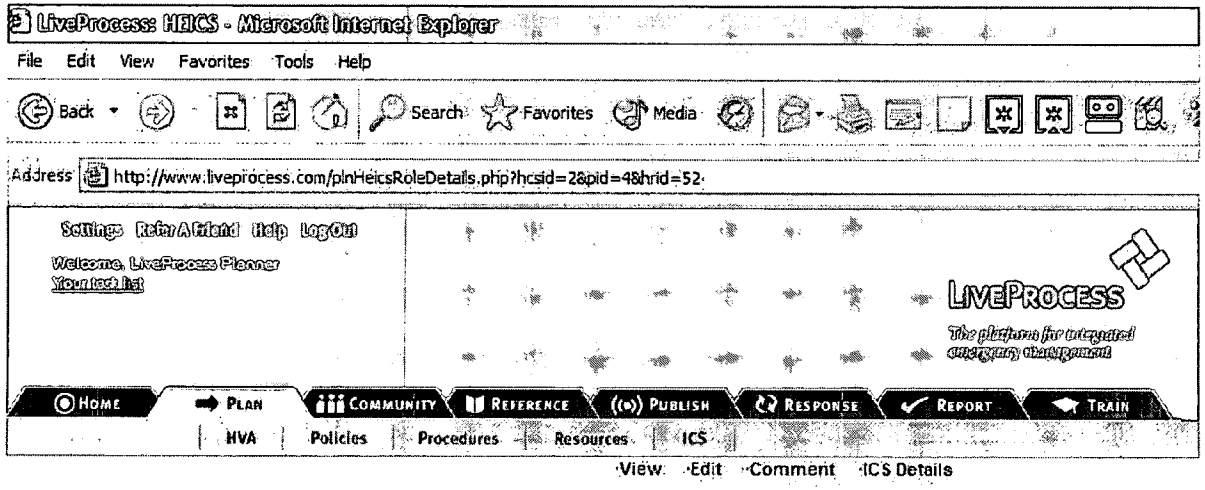

LiveProcess: HEICS - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/plnHeicsMain.php?view=1&pid=4
Settings Admin Help Logout
Welcome, LiveProcess Pearce
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
HVA Policies Procedures Resources ICS
View Edit Comment ICS Details
Noble Hospital Organization and Management: HEICS Org Chart for Noble
Standard Crosswalk
Incident Commander-- Tony Rich
Public Information Officer-- John Alexander
Liaison Officer-- Michael Elepano
Safety Security Officer-- Linda Demo
Logistics Section Chief-- Unassigned
Facility Unit Leader-- Unassigned
Damage Assessment Officer-- Unassigned
Sanitation Systems Officer-- Unassigned
Communications Unit Leader-- Unassigned
Transportation Unit Leader-- Unassigned
Material Supply Unit Leader-- Unassigned
Nutrition Unit Leader-- Unassigned

FIGURE 55



Noble Hospital Organization and Management: HEICS Org Chart for Noble: Incident Commander

Command Center Office:
Executive Conference Room

Command Center Phone:
x3734

Reports to

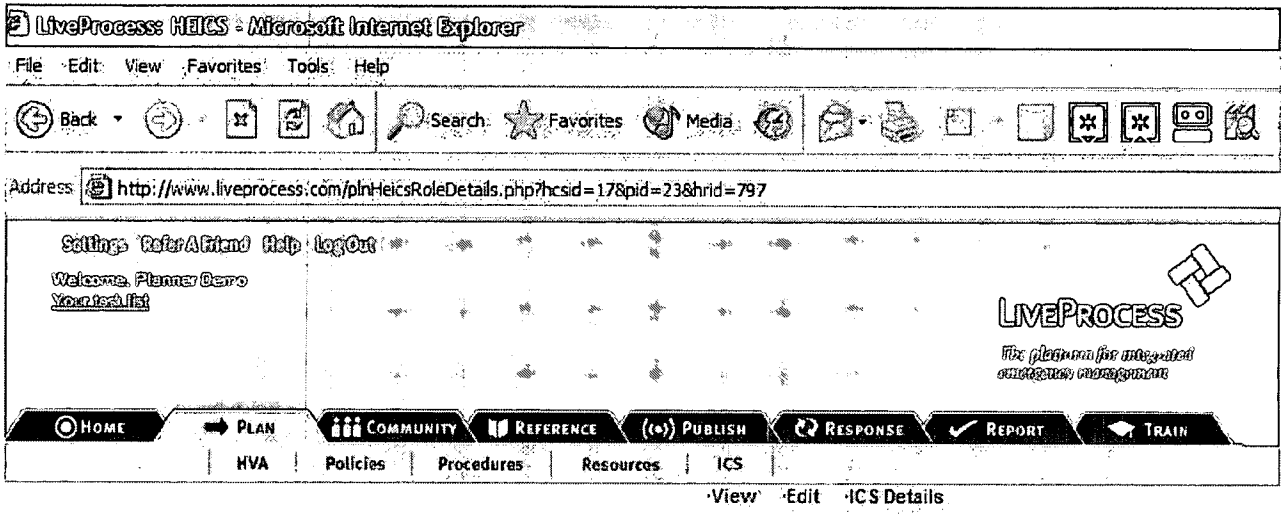
Job Action Sheets
Emergency Incident Commander

Forms
Action Plan
Activity Log
Emergency Incident Message Form

FIGURE 56

Emergency Incident Commander - Microsoft Internet Explorer
Emergency Incident Commander
Position Assigned To: Tony Rich
Mission:
Organize and direct Emergency Operations Center (EOC). Give overall direction for hospital operations and if needed, authorize evacuation.
Immediate
Initiate the Hospital Emergency Incident Command System by assuming the role of Emergency Incident Commander
Read this entire Job Action Sheet and review the organizational chart.
Appoint all Section Chiefs and the Medical Staff Director positions; distribute the four section packets which contain Job Action Sheets for each position, Identification vest for each position, Forms pertinent to sections and positions
Announce a status/action plan meeting of all Section Chiefs and Medical Staff Director to be help within 5 to 10 minutes.
Assign someone as Documentation Recorder/Aide.
Noble Hospital Organizat
Command Center Office:
Executive Conference Room
Command Center Phone:
x3734
Reports to
Job Action Sheets
Emergency Incident Commander
Forms
Action Plan
Activity Log
Emergency Incident Messsage Form

FIGURE 57



DemoHospitalPlan: HEICS for Demo Hospital: Material Supply Unit Leader

Command Center Office:
None Assigned

Command Center Phone:
None Assigned

Reports to Logistics Section Chief

Job Action Sheets
There are no job action sheets assigned to this role.
Create a standard HEICS-based Job Action Sheet.
Create a Job Action Sheet using the Job Action Sheet Wizard

FIGURE 58

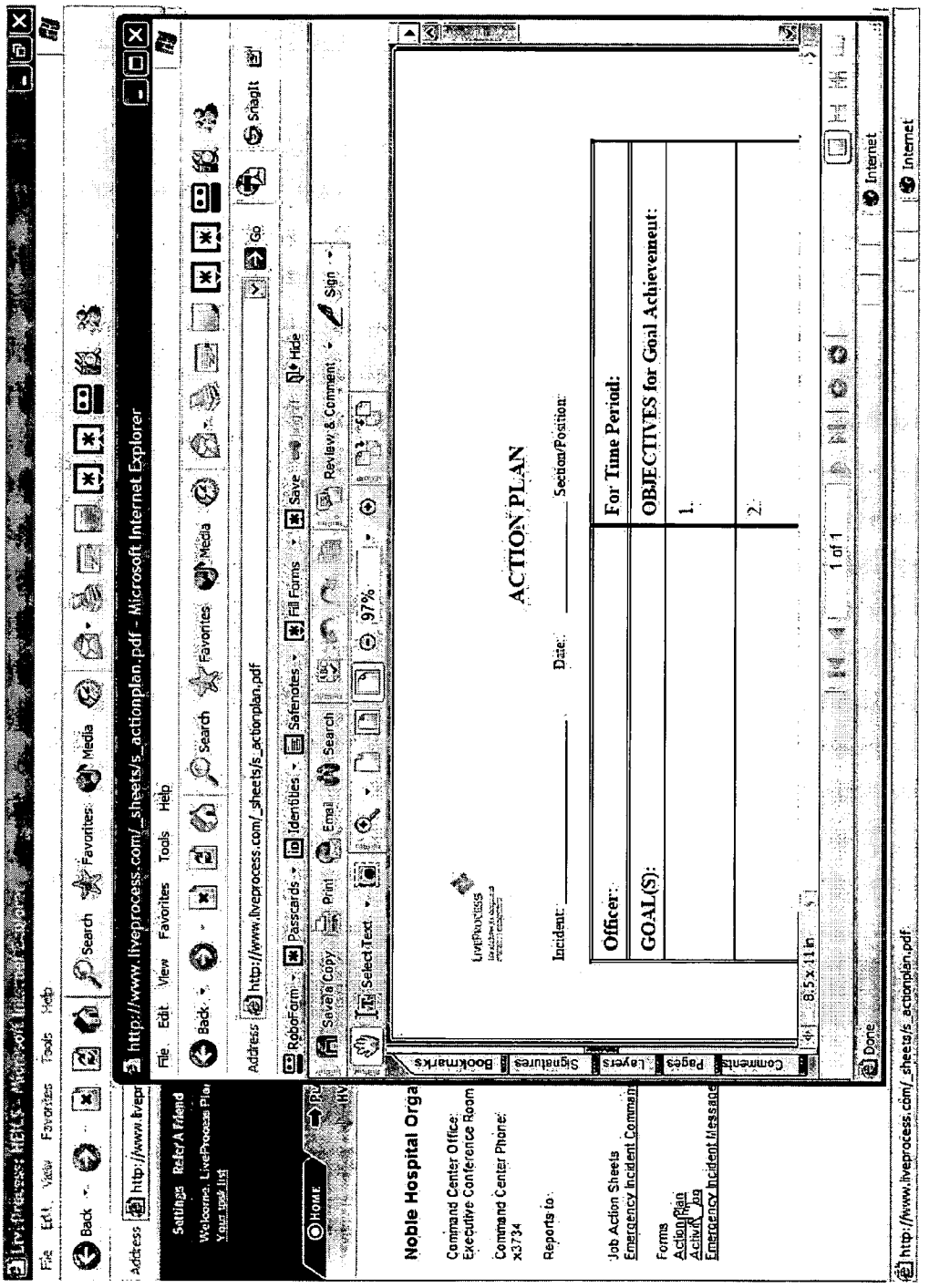

http://www.liveprocess.com/_sheets/s_actionplan.pdf - Microsoft Internet Explorer
ACTION PLAN
Incident:
Date:
Section/Position:
Officer:
For Time Period:
GOAL(S):
OBJECTIVES for Goal Achievement:
1.
2.
Noble Hospital Orga
Command Center Office:
Executive Conference Room
Command Center Phone:
x3734
Reports to:
Job Action Sheets
Emergency Incident Comman
Forms
Action Plan
Activity Log
Emergency Incident Messag
Bookmarks
Signatures
Layers
Pages
Comments
Internet

FIGURE 59

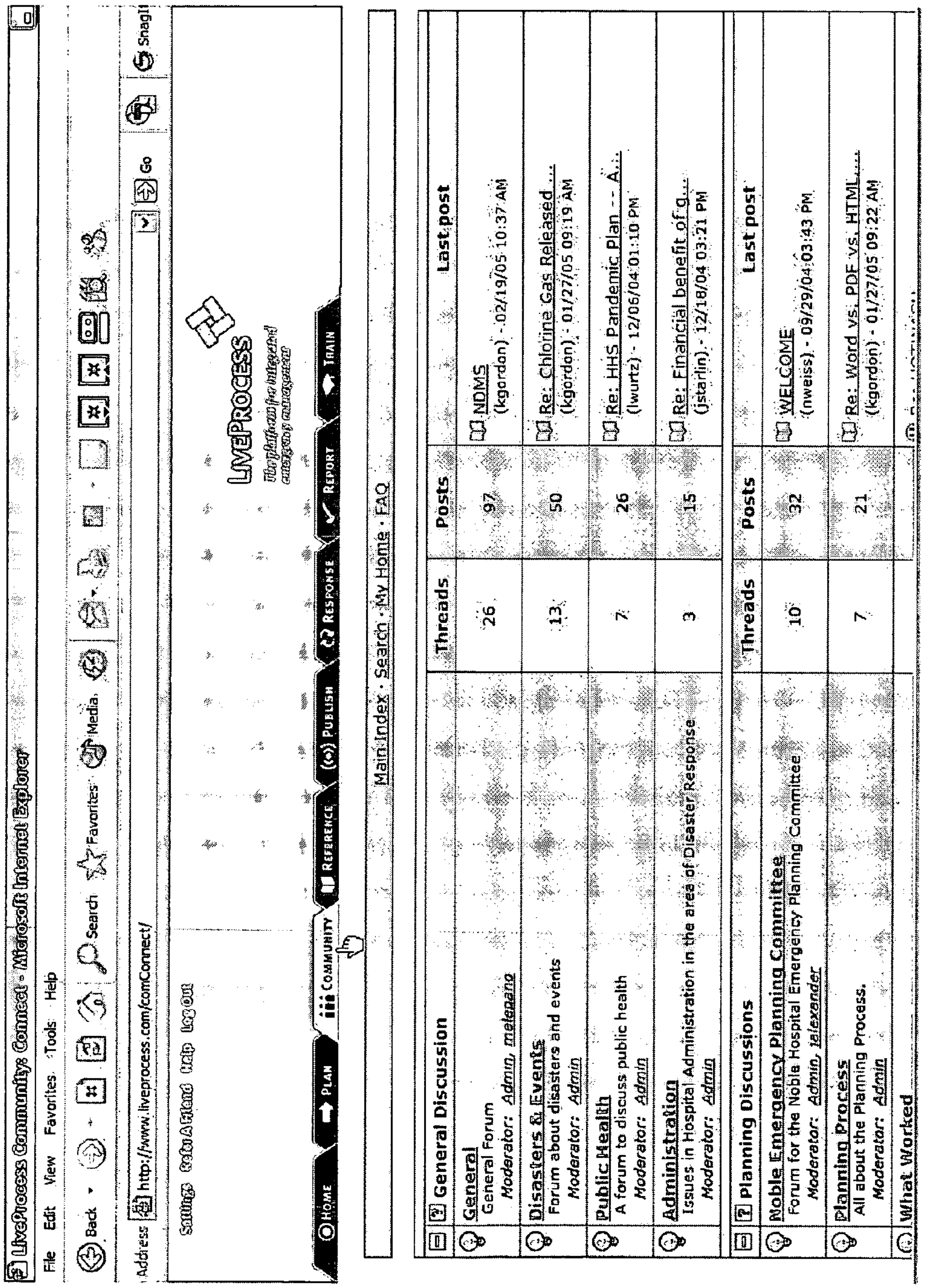

LiveProcess Community: Connect - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Media
Address http://www.liveprocess.com/comConnect/
Go
Settings Refer A Friend Help Log Out
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
Main Index · Search · My Home · FAQ
General Discussion
Threads
Posts
Last post
General
General Forum
Moderator: Admin, melepang
26
97
NDMS
(kgordon) - 02/19/05 10:37 AM
Disasters & Events
Forum about disasters and events
Moderator: Admin
13
50
Re: Chlorine Gas Released ...
(kgordon) - 01/27/05 09:19 AM
Public Health
A forum to discuss public health
Moderator: Admin
7
26
Re: HHS Pandemic Plan -- A...
(lwurtz) - 12/06/04 01:10 PM
Administration
Issues in Hospital Administration in the area of Disaster Response
Moderator: Admin
3
15
Re: Financial benefit of g...
(jstarlin) - 12/18/04 03:21 PM
Planning Discussions
Threads
Posts
Last post
Noble Emergency Planning Committee
Forum for the Noble Hospital Emergency Planning Committee
Moderator: Admin, jalexander
10
32
WELCOME
(nweiss) - 09/29/04 03:43 PM
Planning Process
All about the Planning Process.
Moderator: Admin
7
21
Re: Word vs. PDF vs. HTML ...
(kgordon) - 01/27/05 09:22 AM
What Worked

FIGURE 60

LiveProcess Community Research - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/comResearch.php
Go
Settings Refer A Friend Help Logout
Welcome, Please Demo
Your last login:
LiveProcess
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Search by: Keyword decon Search
Separate multiple terms with a plus (+) sign
9 records found.
DECONTAMINATION.ppt
PowerPoint presentation providing info on Decontamination & PPE (Personal Protective Equipment).
Source: Judith T. Edwards, Director Emergency Preparedness, HCA
Import
L1B30 Decon and Triage.doc
The care needed following a chemical agent or hazardous industrial chemical exposure will vary depending on the substance. The well being of the exposed victims and care facility staff is dependent on fully decontaminating exposed victims before they enter the facility.
Source: EMSA
Import
L1D19 Rad Decontamination.doc
Decontamination Radioactive contamination results from coming into contact with radioactive material. Patients contaminated with radioactive material continue to receive radiation from the material and, unless decontaminated, can spread contaminants to their surrounding environment.
Source: EMSA
Import

FIGURE 61

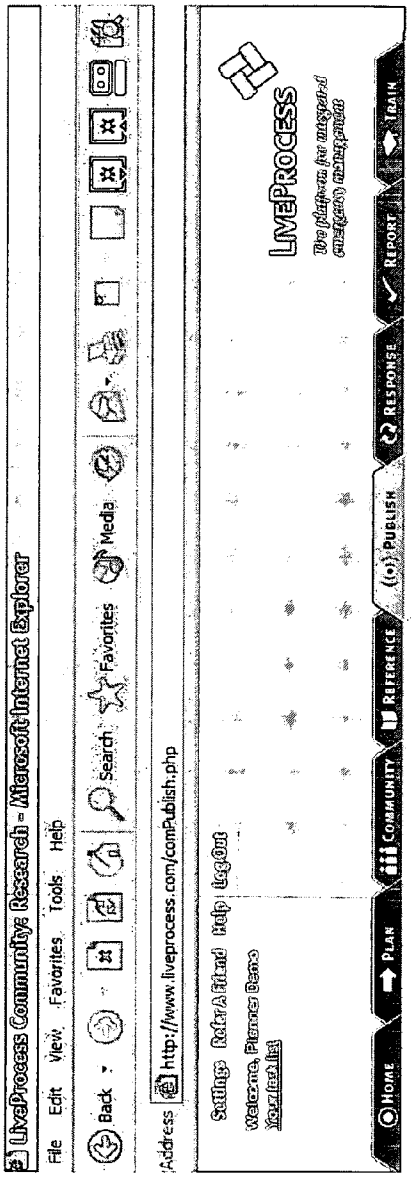

LiveProcess Community: Research - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/comPublish.php
Settings Refer A Friend Help Logout
Welcome, Pioneer Beta
Your feedback
LIVEPROCESS
HOME PLAN COMMUNITY REFERENCE PUBLISH RESPONSE REPORT TRAIN
Title
Untitled Document
Author
Location
Browse...
Description
Enter a short description here.
Submit
Keywords
one to three keywords

FIGURE 62

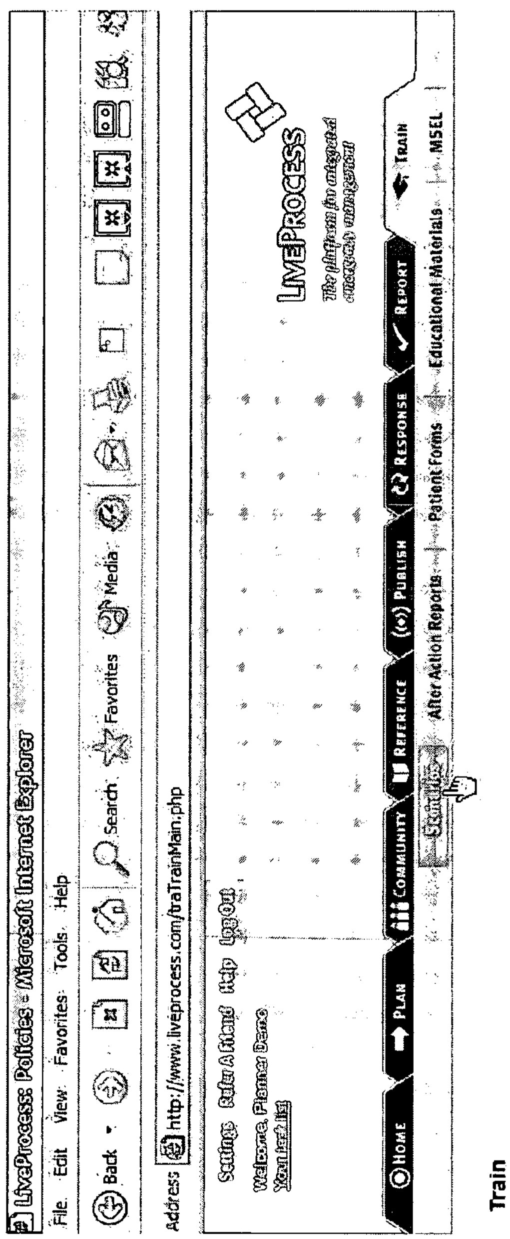

LiveProcess: Policies - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Media
Address
http://www.liveprocess.com/traTrainMain.php
Settings Refer A Friend Help Log Out
Welcome, Planner Demo
LiveProcess
Home
Plan
Community
Reference
Publish
Response
Report
Train
After Action Reports
Patient Forms
Educational Materials
MSEL
Train

FIGURE 63

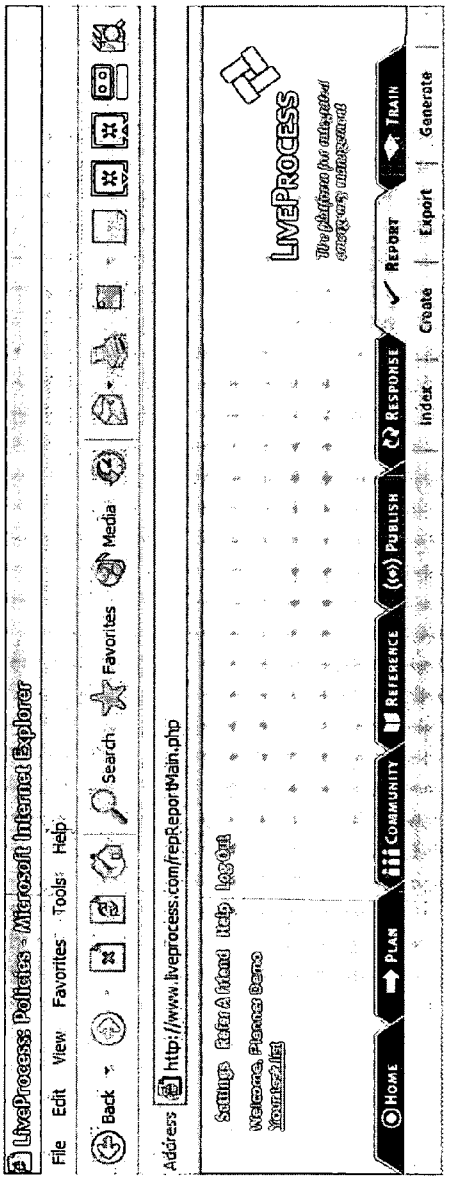

LiveProcess Portlets - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.liveprocess.com/repReportMain.php
Settings Tell A Friend Help Logout
Welcome, Please Sign
Yourself In
LIVEPROCESS
HOME
PLAN
COMMUNITY
REFERENCE
PUBLISH
RESPONSE
REPORT
TRAIN
Index
Create
Export
Generate
Reports

FIGURE 64

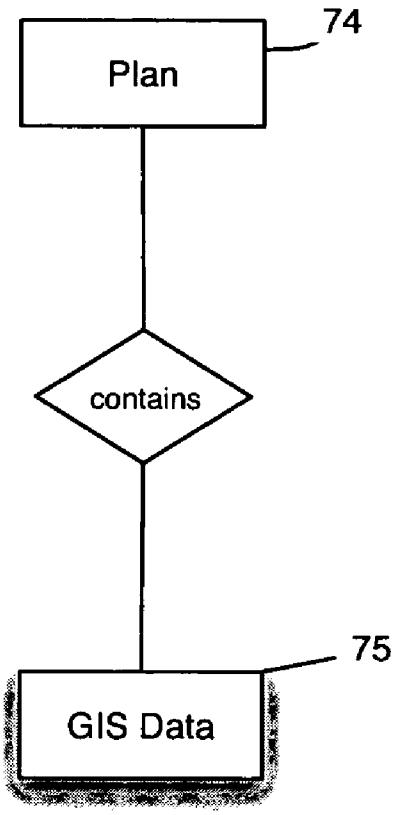


FIGURE 65

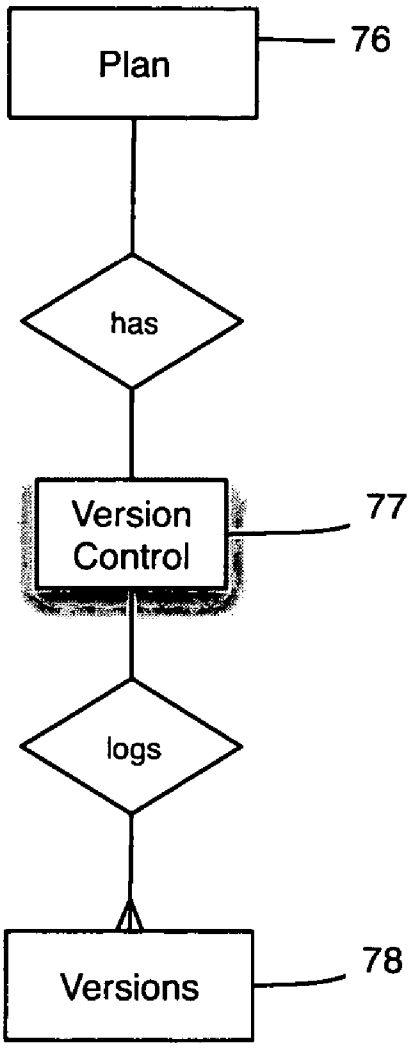


FIGURE 66

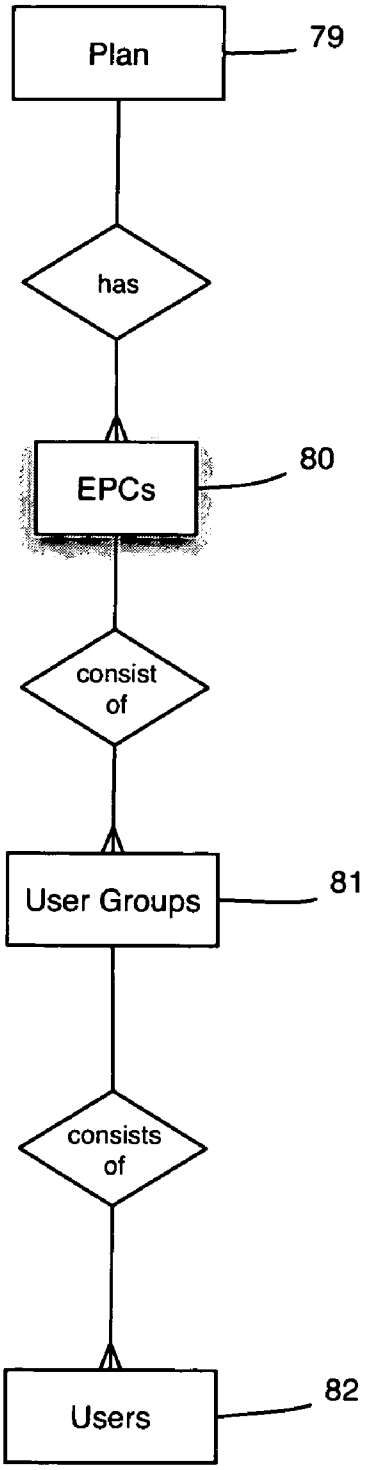

Plan
79
has
EPCs
80
consist of
User Groups
81
consists of
Users
82

FIGURE 67

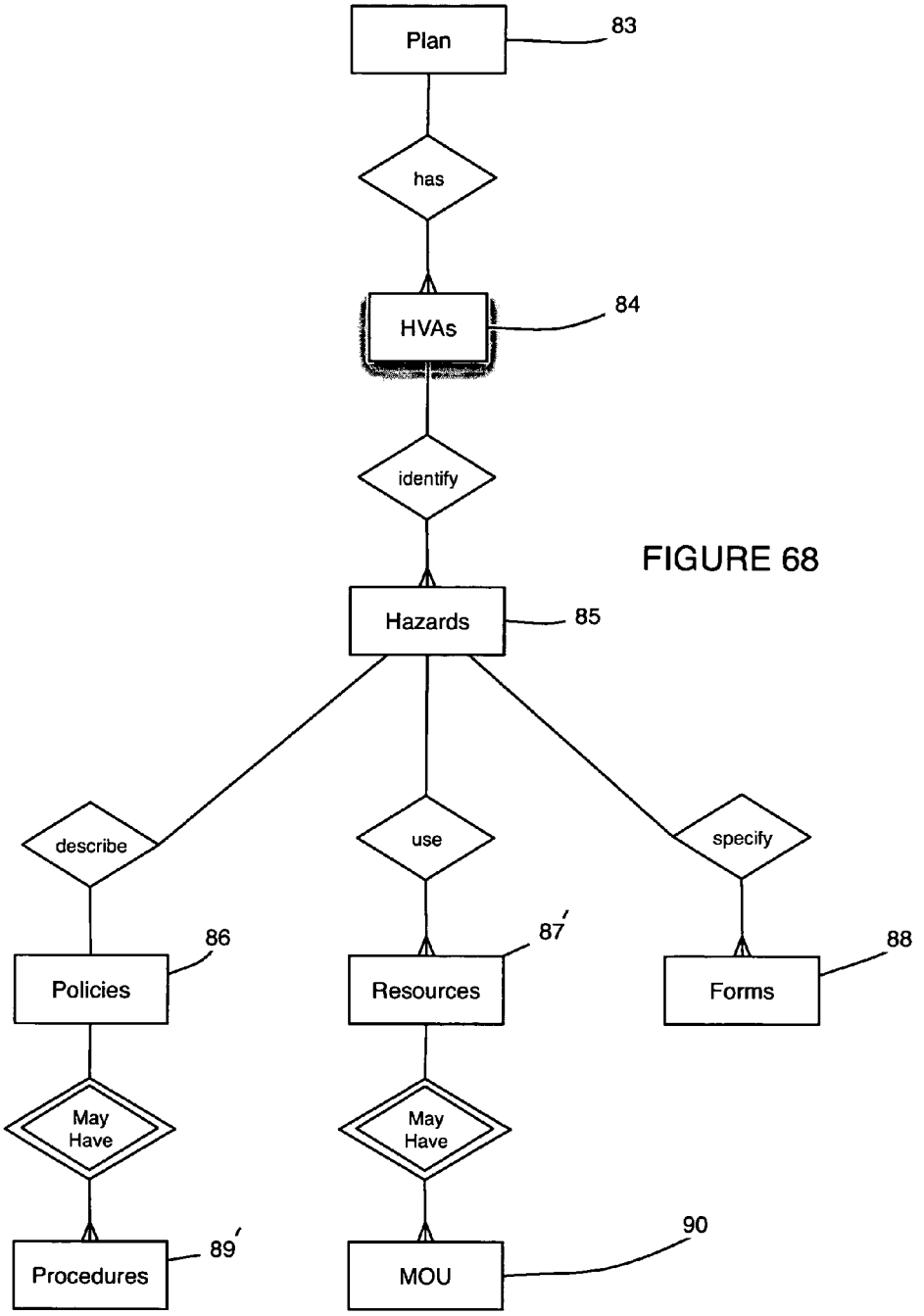

Plan
83
has
HVAs
84
identify
Hazards
85
describe
use
specify
86
87
88
Policies
Resources
Forms
May Have
May Have
89
90
Procedures
MOU

FIGURE 68

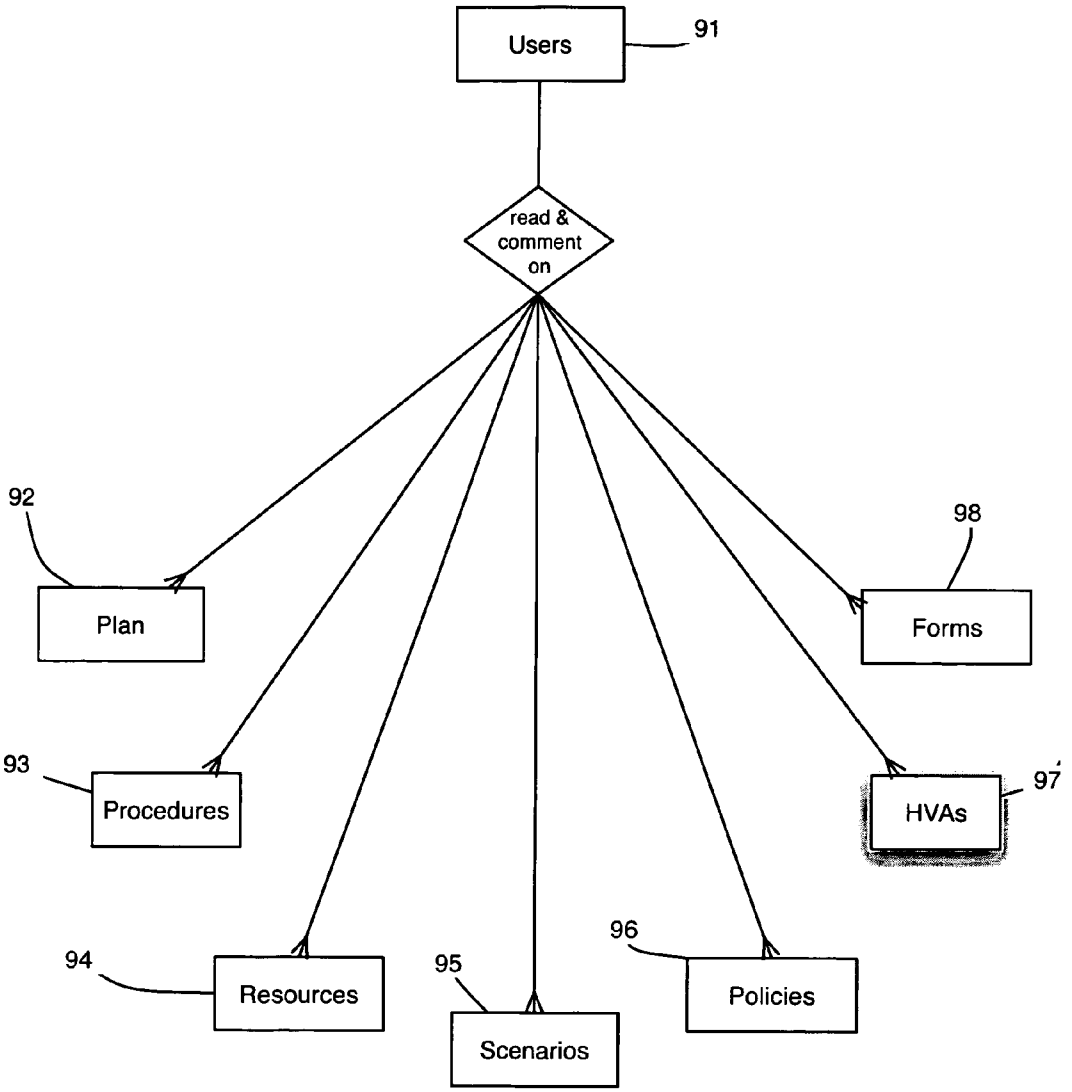

Users
91
read & comment on
92
Plan
93
Procedures
94
Resources
95
Scenarios
96
Policies
97
HVAs
98
Forms

FIGURE 69

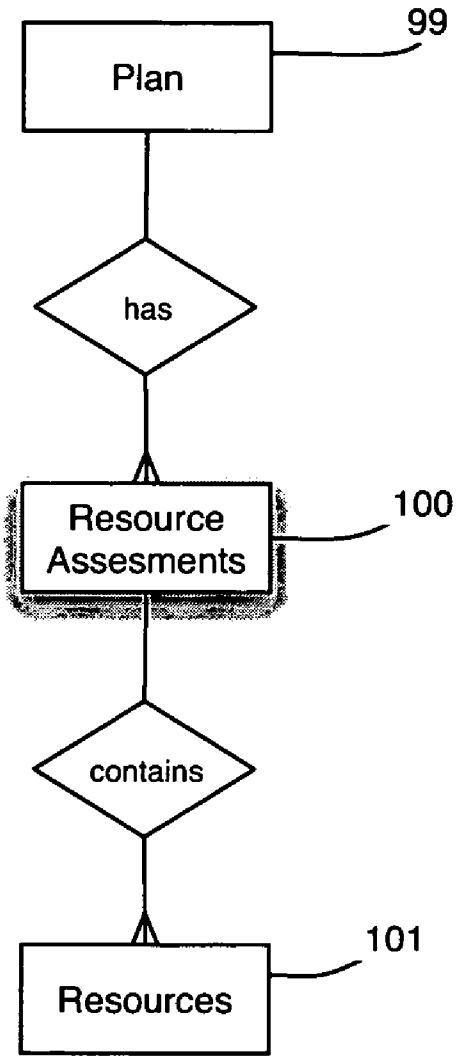

99
Plan
has
Resource Assesments
100
contains
101
Resources

FIGURE 70

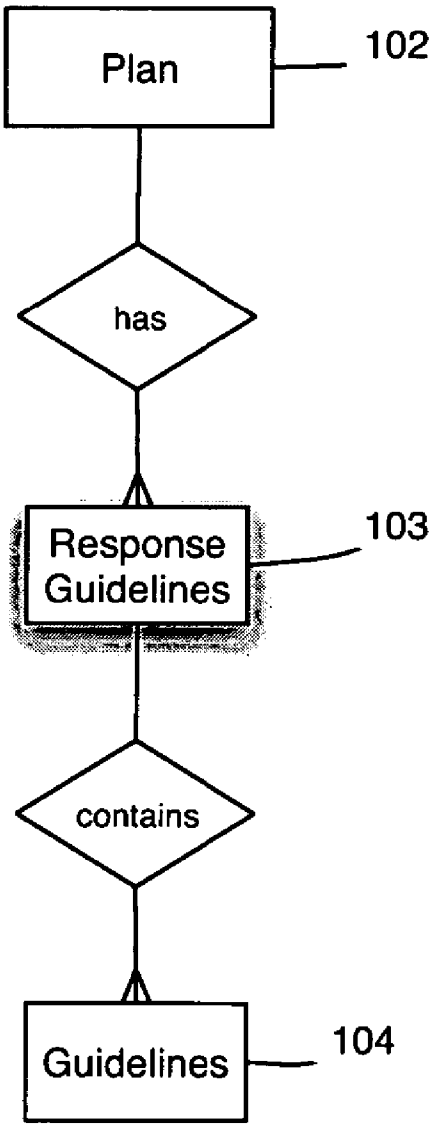

Plan
102
has
Response Guidelines
103
contains
Guidelines
104

FIGURE 71

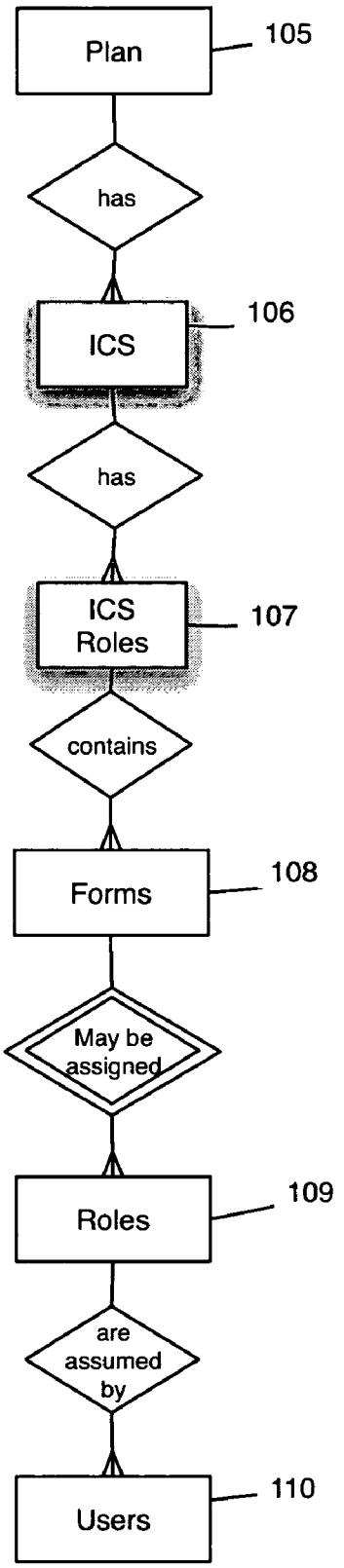

Plan
105
has
ICS
106
has
ICS Roles
107
contains
Forms
108
May be assigned
Roles
109
are assumed by
Users
110

FIGURE 72

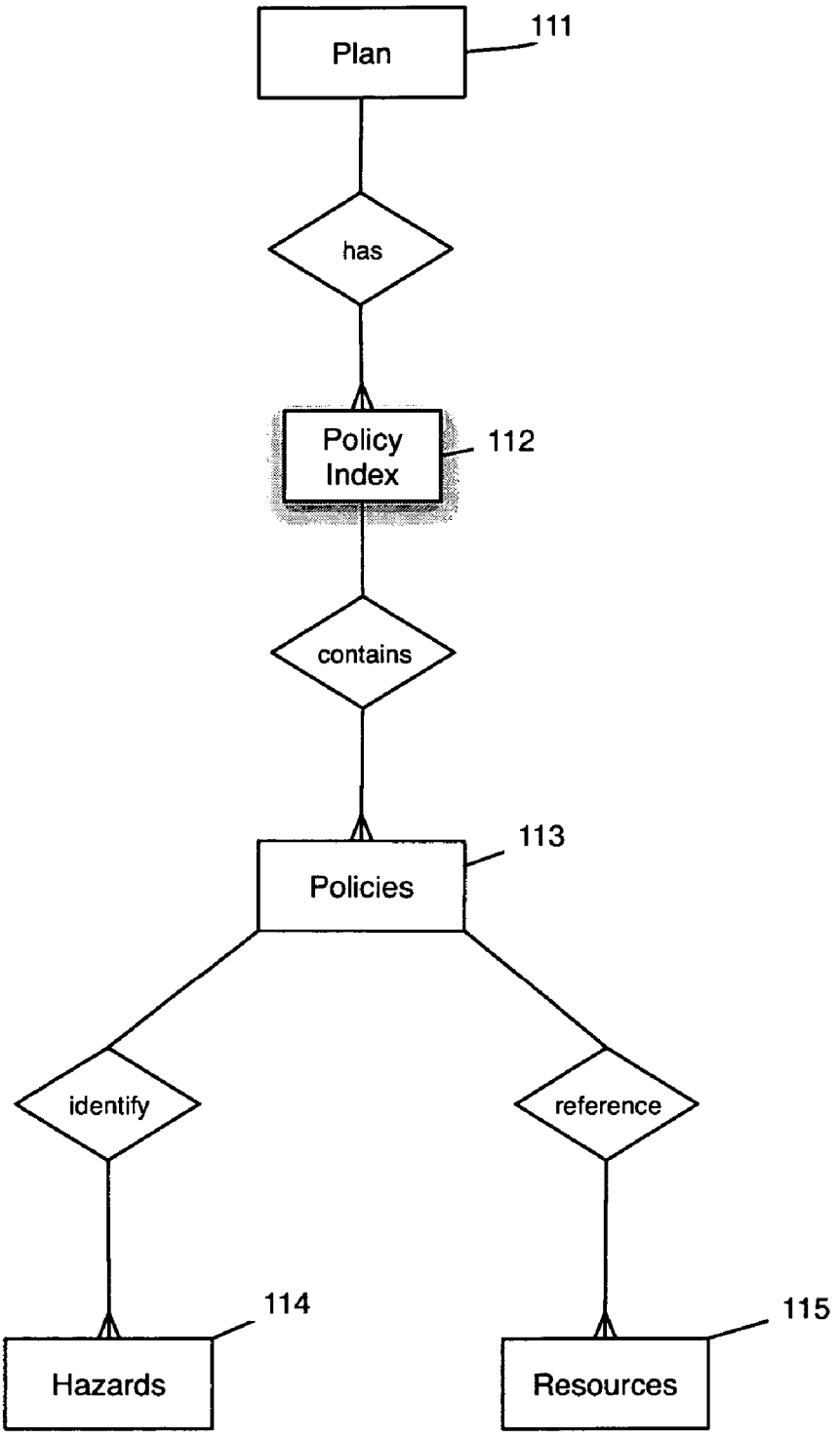

Plan
111
has
Policy Index
112
contains
Policies
113
identify
reference
Hazards
114
Resources
115

FIGURE 73

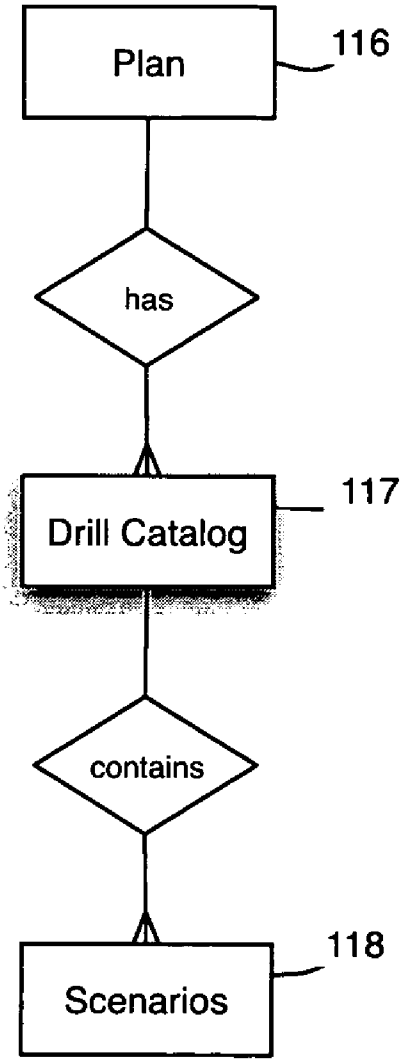


FIGURE 74

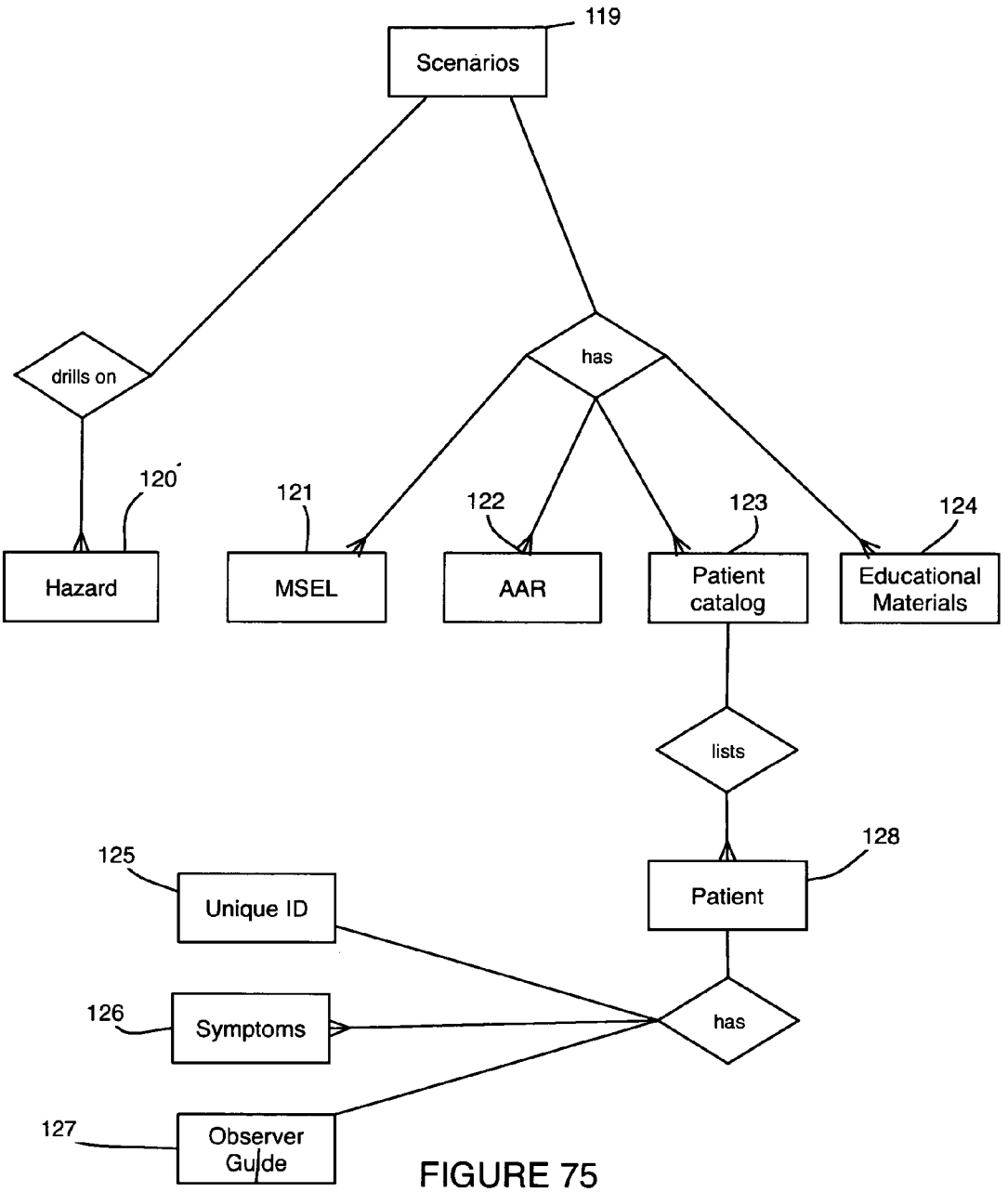

119
Scenarios
drills on
has
120
121
122
123
124
Hazard
MSEL
AAR
Patient catalog
Educational Materials
lists
128
125
Unique ID
Patient
126
Symptoms
has
127
Observer Guide

FIGURE 75

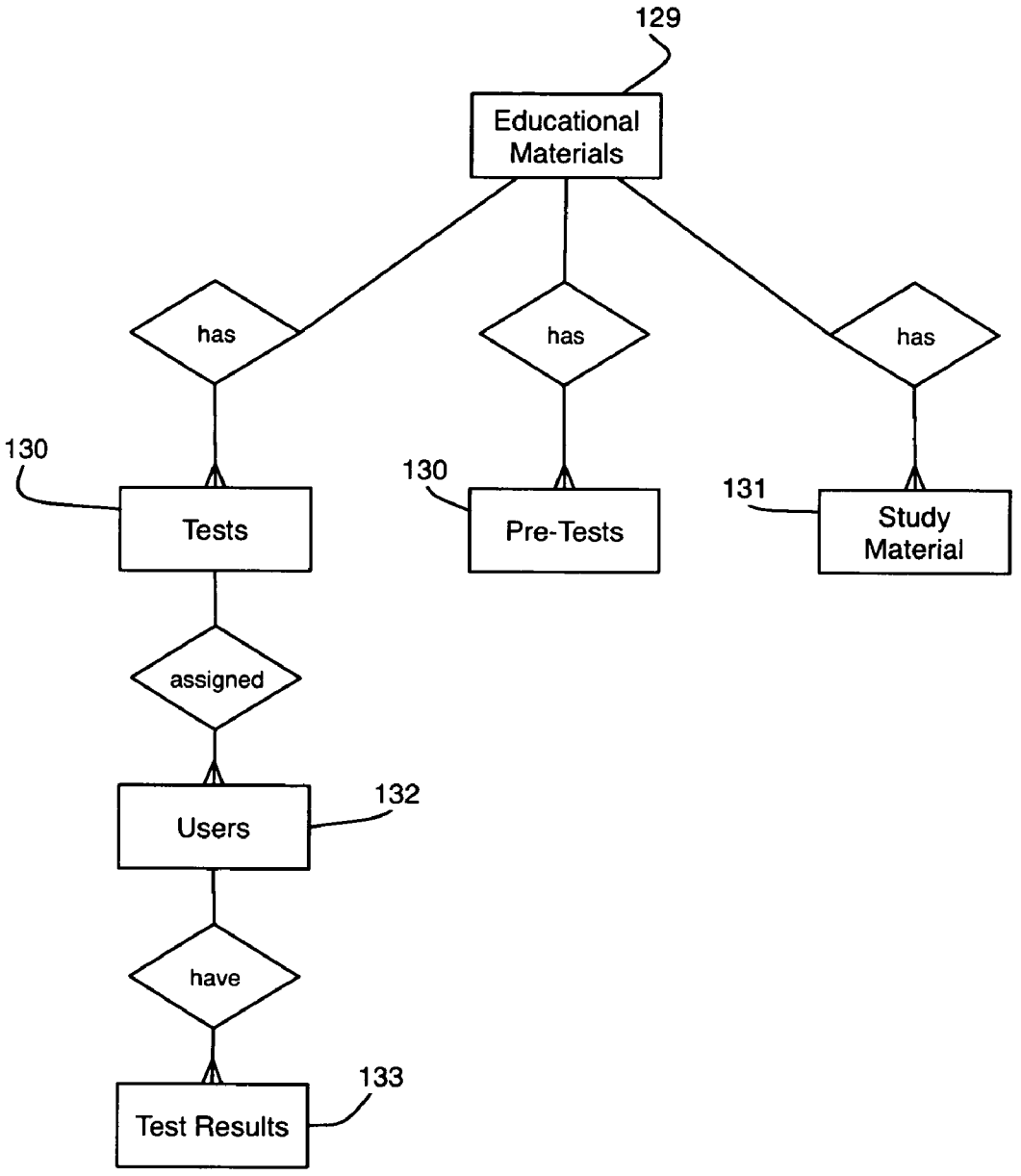

129
Educational Materials
has
has
has
130
Tests
130
Pre-Tests
131
Study Material
assigned
132
Users
have
133
Test Results

FIGURE 76

NETWORKED EMERGENCY MANAGEMENT SYSTEM

CROSS REFERENCE TO RELATED APPLICATION

This application claims the benefit of U.S. Provisional Patent Application No. 60/663,463 filed Mar. 18, 2005 and entitled "Networked Emergency Management System."

COMPACT DISC APPENDIX

This patent application includes an Appendix on one compact disc having a file named appendix.txt, created on Feb. 7, 2006, and having a size of 1,426,049 bytes. The compact disc is incorporated by reference into the present patent application.

COPYRIGHT NOTICE AND AUTHORIZATION

BACKGROUND OF THE INVENTION

Natural and man-made disasters are more common than ever. In healthcare, their impact is far more serious than facility damage and standard business continuity and extends to the safety of the patients, employees and surrounding community. Yet most hospital emergency managers use a word processor to create emergency management plans and training materials and store them in cumbersome three-ring binders. This makes updating the plan, running drills and responding to an emergency difficult, time-intensive and often ineffective. In addition to the broader safety issues, these tasks are strictly mandated and monitored by regulatory agencies such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the Occupational Safety and Health Administration (OSHA), and poor performance has direct impact on Medicare reimbursement, fines, and patient perception. There is a clear unmet need for an easy-to-use solution for creating and updating emergency management plans and training materials.

The Networked Emergency Management System enables emergency managers to share emergency plans and their component parts, best practices, and training materials in a standardized format for the first time. This content is Hospital Emergency Incident Command System (HEICS), National Incident Management System (NIMS) and JCAHO compliant and can be readily customized to one's unique facility. The present invention transforms a traditional emergency management plan from a lengthy and convoluted set of text documents in a three-ring binder into an immediately accessible live process.

Existing emergency management software includes at least the following offerings:

1. Real-time systems designed to focus on broad county-level emergency response. (Examples: WebEOC® available from Emergency Services integrators, Augusta, Ga., World Wide Web.webeoc.com; E Team, available from E Team, Inc., World Wide Web.eteam.com; and Blue 292 software, available from Blue292, Inc., Durham, N.C., World Wide Web.blue292.com).

2. Real-time systems designed to provide information on emergency-room bed availability in the event of an incident. (Examples: Reddinet®, available from Reddinet, Los Angeles, Calif., World Wide Web.reddinet.com; and EMSystem®, available from EMSystem, LLC, Milwaukee, Wis., World Wide Web.emsystem.com).
3. Incident Management software designed for security professionals to document and track incidents or investigations in an emergency in order to recover the most money from federal reimbursement agencies or private insurers. (Example: IRIMS® software available from PPM 2000 Inc., Edmonton, Alberta, Canada, World Wide Web.ppm2000.com).
4. Business Continuity recovery solutions, primarily focused on corporations and their IT systems. (Examples: Software available from Symantec Corporation, Cupertino, Calif., World Wide Web.symantec.com; and Strohl Systems Group Inc., King of Prussia, Pa., World Wide Web.strohl-systems.com).
5. Learning management systems that address compliance and safety. (Examples: PureSafety, Nashville, Tenn., pure-safety.com; and Blackboard Inc., Washington, D.C., World Wide Web.blackboard.com)
6. Offerings for Compliance. (Example: Compliance Suite, available from Environmental Support Solutions, Inc. (ESS), Denver, Colo., World Wide Web.ess-home.com)

The present invention is distinct from each of these in that it is a platform focused on healthcare, and it is a solution focused primarily on preparedness and mitigation rather than response or recovery.

BRIEF SUMMARY OF THE INVENTION

The present invention is described in the context of a preferred embodiment of a web-based software application commercialized as LiveProcess™ (World Wide Web.liveprocess-.com), which is a platform for integrated emergency management. LiveProcess is a service of LiveProcess Corporation, Chatham, N.J. However, the scope of the present invention is not limited to this particular implementation of the invention. The present invention is described in the context of a plurality of distributed computers, all of which are linked together by an electronic network, such as the Internet. The computers may be any type of computing device that allows a user to interact with a web site via a web browser. For example, the computers may be personal computers (PC) that run a Microsoft Windows® operating system. The computers may also be handheld, wireless devices.

The foundation of the present invention lies in the implementation of a standard organization of the emergency management plan format. (FIG. **10**) This format first divides an emergency plan into five areas; a Hazard Vulnerability Analysis (**62**), emergency policies (**63**), procedures that must be followed (**64**), emergency resources that are available to the emergency planner (**65**) and an Incident Command System command structure, and second, provides a system in which this organization may be utilized. These areas of the emergency plan are common to all emergency plans for all facilities.

Organizing the high level structure in this manner allows the present invention to operate on emergency management plans, allows interoperability of emergency plan components, allows flexibility to accommodate the differences of facilities, and allows the users of emergency management plans to coordinate their efforts in the four areas of emergency management: Mitigation, Planning, Response and Recovery.

The present invention allows emergency planners representing a facility (FIG. **1**), or networks of facilities (FIG. **5**), to interchange elements of their emergency plans (FIG. **3**), for example policies, procedures or training modules, instantly. Furthermore, it allows entities without fixed facilities, for example the Centers for Disease Control (CDC), to publish (FIG. **6**), and route (FIG. **8**), emergency procedures, guidelines or training modules and have those procedures, guidelines or training modules instantly implemented at facilities on the network.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1**:

Permissions to the emergency plan and its component parts are organized into levels. The emergency planner (**2**) is the person or persons whose primary responsibility is creating, updating and maintaining the emergency plan for the facility or network of facilities. This person has full access to his or her facilities emergency plans, procedures, resources and training data. Secondary in permissions to the emergency planner is the emergency planning committee (**3**). This is a person or group of persons whose responsibility is to participate in the planning of the facility through review and commentary on the emergency plan. Emergency planning committee members may be blocked from seeing the entire plan, they only need to see what they need to facilitate emergency planning—the particular policies, procedures, resources etc that they have been asked to comment on. The third level of permission is the Incident Command System (ICS) role (**4**). Each role in a facilities ICS organizational chart may view the plan, especially his or her part in the plan, but will not have permission to change, edit, or add to the plan. The next level of permission is that of the facility employee (**5**). This person does not have a specific role in the ICS, but still must know, and be familiar with, general emergency plan policies of the facility. This person only has access to the non-ICS portions of the plan that pertain to employees or residents of a particular facility. The final level of permission is that of the general public who have a need for access to a facilities emergency plan (**6**). This level of permission is read-only and is limited to information designated as for public use. All of these levels of permission taken together constitute a facilities planning and training permissions levels (**1**).

FIG. **2**:

During a Drill or an Actual event, the emergency plan will be accessed using the permissions shown in FIG. **2**. Every emergency response is judged as to its severity, if the emergency warrants the Incident Command System will be activated. The top level of permissions in the Incident Command System are given to the Incident Commander (**8**). This allows him or her to change the status of the emergency response, direct the facilities response to the given emergency, and to change the roles required in the emergency response as needed. The ICS roles he or she activates (**9**) have permissions to read the emergency plan, with focus on their part of the emergency plan—meaning that their procedures are displayed upon login to facilitate the emergency response. The remaining permissions, that of the facility staff (**10**) and the general population (**11**) are give further access to the emergency plan, at levels equal to their participation in the emergency response.

FIG. **3**:

A network of facilities may interchange elements of the emergency plan during planning and training phases. The emergency planner (**13**) at facility **1** (**12**) may exchange (**13***a*) policies, data, or communications with his or her counterparts (**18**) and (**23**) at facilities (**17**) and (**22**). The emergency planning committee associated to facility **1** (**12**) may participate (**14***a*, **14***b*) on the planning committees of other facilities (**17**) and (**22**) by providing review, commentary and feedback on elements of any given emergency plan or component of an emergency plan. Each Facility (**12**,**17**,**22**) may have a different ICS organization (**15**,**20**,**25**) and facility staff roles in the emergency response planning and training (**16**,**21**,**26**).

FIG. **4**:

During an emergency response drill or emergency event, Incident Commanders (**28**, **32**) at separate facilities (**27**,**31**) may exchange information (**28***a*) in the form of plan components, event log messages, communications, and data file interchange. Activated ICS roles at separate facilities may exchange communications and data, log message events with their counterparts at other facilities. This would be the case in a multi-facility response during a drill or actual event.

FIG. **5**:

Facilities, constituting an emergency planner, an emergency planning committee, ICS roles, facility employees and general public associated with a particular facility, may form a network of facilities (**39**,**40**,**41**). Each of these facilities may exchange emergency plan components with the other (**39***a*, **40***a*,**41***a*).

FIG. **6**:

FIG. **6** shows an entity (**42**), such as the CDC, publishing information (**42***a*,**42***b*) such as a specific health guideline, to a network of facilities (**43**, **45**). members of the network may elect not to recieve guidelines (**44**), or may not have plans that are pertinent to the information being broadcast. Since all facilities are on the network, they may then exchange the information with each other on an as-needed basis (**43***a*, **43***b*, **44***a*).

FIG. **7**:

Facilities on a network (**49**, **47**, **48**), who regularly exchange information (**47***a*, **48***a*, **49***a*) may also publish information to an entity (**46**). A sample use is in a public health early warning system where facilities are on the lookout for specific indicators, and are instructed to report incidents to an entity who correlates the data (**49***a*) into a composite picture.

FIG. **8**:

An entity E**1** (**50**) may also route data (**50***a*) received from facility F**4** (**51**) to (**50***b*,**50***c*) a network of facilities F**1**, F**2**, F**3** (**54**, **52**, **53**). These facilities may then share the information (**52***a*,**53***a*,**54***a*).

FIG. **9**:

Entities may be associated with each other, creating a network of entities E**1**, E**2**, E**3** (**55**,**56**,**57**). These may share emergency plan information (**57***a*, **55***a*, **55***b*), receive reporting information (**61***a*), as well as route that information to networks of facilities (**57***b*, **57***c*).

FIG. **10**:

The Standard Emergency Plan Format consists of the Hazard Vulnerability Analysis (HVA) (**62**), Facility specific policies (**63**), Procedures (**64**), Emergency resources that are available to the facility (**65**), and a described ICS such as the Hospital Incident Command System (HEICS).

FIG. **11**:

The structure of the platform at each facility or entity consists of the following areas: A mapping and geospatial information system (GIS) area (**67**), the planning area (**68**), an area which presents the entire community (**69**) of emergency planners for information interchange, an area for reference (**70**) where emergency planners may look up information using simple and advanced search techniques such as keyword or facility type, and area where facilities or entities may publish information to the community (**71**), a response area

(72) where those with ICS roles may set or view the current response phase of the emergency plan, and view information pertaining to their particular role in the response to an emergency, or in a drill for a particular emergency. A reporting area (72*a*) allows the emergency planner and select ICS roles to create and view reports pertaining to the emergency plan. A Training area is provided where the emergency planner creates, maintains and updates drills, training materials and their component parts.

FIG. **12**: Database tables—Plan Table Structure

FIG. **13**: Database tables—Hazard Vulnerability Analysis Table Structure

FIG. **14**: Database tables—Policy Table Structure

FIG. **15**: Database tables—Resource Table Structure

FIG. **16**: Database tables—Incident Command System Table Structure

FIG. **17**: Database tables—Emergency Planning Committee Task table structure

FIG. **18**: Database tables—Emergency Planning Committee table structure

FIG. **19**: Database tables—User Facility table structure

FIGS. **20-64**: Scenario Screenshots (see scenario section)

FIG. **65**: Plan ERD—Plan (**74**) contains GIS Data information (**75**)

FIG. **66**: Plan ERD—Plan (**76**) contains version log (**77**) of version records (**78**).

FIG. **67**: Plan ERD—Plan (**79**) contains Emergency Planning Committees (**80**) which contain multiple user groups (**81**) each of which may contain multiple users (**82**).

FIG. **68**: Plan ERD—Plan (**83**) may contain multiple HVAs, each of which identify a multitude of Hazards (**85**), each of which may contain Policies (**86**), Resources (**87**) and Forms(**88**). Policies may have Procedures associated with them (**89**), and resources may have specific forms associated with them such as Memoranda of Undersatandings (MOU) (**90**).

FIG. **69**: Users have abilities according to their permission level. Users (**91**) may variously view, edit, or comment on: Plans(**92**), Procedures(**93**), resources(**94**), Training Scenarios (**95**), Policies (**96**), HVAs (**97**), and Forms (**98**).

FIG. **70**: The Plan (**99**) may contain one or many resource assessments (**100**), each of which may contain Resources (**101**).

FIG. **71**: The emergency plan (**102**) may contain one or many Response Guidelines (**103**) each of which may contain a single guideline (**104**).

FIG. **72**: The emergency plan (**105**) contains one or more organization charts representing an ICS, each of which designates ICS Roles (**107**), each role may contain references to specific forms (**108**) used by that role in the ICS. Roles (**107**,**109**) may be assigned to one or more Users (**110**).

FIG. **73**: The emergency plan (**111**) has a collection of policies, a poly index (**112**) which contains one or many pollicies (**113**), which may identify a related Hazard (**114**) and resources (**115**) that may be used in that policy.

FIG. **74**: The Emergency Plan has a collection of Drill catalogs (**117**) each of which contain one or many Drill Scenarios (**118**).

FIG. **75**: Drill Scenarios may be associated to a specific hazard or hazards (**120**), and may contain one or many; Master Sequence of Events Lists (**121**), After Action Reports (**122**), Patient Catalogs(**123**) and Educational Materials (**124**). The Patient Catalog lists multiple patient cards (**128**) each with an ID (**125**), a list of symptoms (**126**) and an observer guide (**127**).

FIG. **76**: Educational Materials (**129**) consist of Tests (**130**), pre-tests (**130**) and Study material (**131**). Tests have associated Users (**132**) and Test Results (**133**).

DETAILED DESCRIPTION OF THE INVENTION

I. Overview

The Networked Emergency Management System is preferably realized as a web application located on one or more servers and is accessed using standard web protocols (HTTP, HTTPS) from an internet web browser such as Microsoft Internet Explorer, Mozilla Firefox, or Apple Safari, web enabled personal digital assistants (PDAs), or web-enabled wireless telephones.

The present invention allows the user, through a secure login, to access the platform according to permission level, from emergency planner (FIGS. **1-2**) to member of the general public (FIGS. **1-6**). What the user sees, and what they are allowed to do with the present invention, relies on the amount of permissions they have been granted on the system. The Emergency Planner has the highest level of permissions and will be presented with the tools needed to create, update and maintain an emergency management plan for a facility of network of facilities.

Emergency Planners use the system to exchange emergency management information centered around a standardized emergency plan and each of the plans component parts; the Hazard Vulnerability Analysis (HVA), Policies, Procedures, Resources and a detailed Incident Command System. (FIG. **10**) For example, the emergency planner may wish to import a policy from a facility that has more experience with a particular kind of hazard. Using the present invention, they may do so instantly (FIGS. **24-26**).

The HVA (FIGS. **10-62**) is a standard tool of the emergency planner. The advantage of the present invention's implementation of the HVA is the standardization of the format used in calculation of risk, allowing all emergency planners to use the same basis of risk. It also standardizes the hazards risk is calculated for. The function used to calculate risk is

$$r=(p/\text{maxtotal\_}p)*((\text{sum\_impacts})/\text{maxtotal\_impacts})*100$$

where

r is risk in terms of a percentage

p is likelihood

maxtotal_p is sum of maximum possible likelihoods

sum_impacts is a summation of all impact scores

maxtotal_impacts is a sum of the maximum possible impacts

This function may be seen in use in the HVA (FIG. **39**) In addition, the present invention provides an optional simple method of entering information into the HVA, intended to simplify use by the new or inexperienced planner. (FIG. **38**). This method asks the planner a series of questions, the answers to which inform the results of the HVA. When the questionnaire is complete, the user is shown the completed HVA. (FIG. **37**).

Policies (FIG. **10-63**) in the framework of the present invention constitute all of the textual material of the plan with the present invention and provide two important advantages, namely, the ability to interchange policies between plans with a single click (FIG. **24**), and the ability to label a segment of the Policy as a Procedure, allowing it to be listed separately with other policies for rapid review during an emergency drill or actual response.

Procedures (FIGS. **10-64**) are sections of policies that directly correspond with steps or instructions that must be

taken in an emergency plan. An example of a procedure is "How to don protective gear in a hazardous materials response". Such instructions would be labeled a Procedure in the present invention and added to the facilities emergency management plan. Since these instructions have been labeled, a procedure allows them to be listed separately in the Procedures area, and may be read with a single click.

Resources in the present invention address the need to collect records of all emergency management resources available to the emergency plan in the event of an emergency, a drill, or during planning or recovery phase to estimate the financial expense of an emergency. These resources list the type of resource (fire department, pharmaceutical supplies, or bed availability), details on the resource, number, contact information, and the geospatial location of those resources so that they may be plotted on a map (FIG. **52**).

The Incident Command System is an organizational chart specifically for use in emergency management. It lists all roles in the emergency response, their titles and hierarchical relationship to each other. (FIG. **54**) The advantage that the present invention provides, besides providing all relevant emergency information in one place in the form of HVA, policies, procedures, resources and ICS, is that each role of the ICS may be edited. This allows the emergency planner to edit any chosen role in the ICS, and change the specifics of their role, such as the title of that role, its mission or any of its responsibilities or forms that are required by the role. (FIG. **57**).

The Emergency Planner has access to all areas of the system: Home/Map, Plan, Community, Reference, Publish, response, Report, and Train. The Home mapping area is used by the planner to visualize the status of the network and to determine the geospatial importance of the facility's location, the location of potential hazards, the location of existing or potential physical features, and geospatial historical data, such as flood, hurricane or earthquake risk. (FIG. **53**, FIG. **52**)

The Plan area offers the emergency planner access to all components of the emergency plan via a tabbed graphic user interface. (FIG. **22**). Each area of the plan listed in FIG. **10** may be accessed.

Emergency Planners may communicate with each other using the common interface of a bulletin board in the Community area. (FIG. **60**) This area is available only to users with emergency planner permissions, and is organized into emergency management related forums such as "Disasters & Events" and "Public Health". Forums may be used to post messages between emergency planner, facilitating cooperation between organizations.

The Reference area (FIG. **61**) allows the emergency planner to search the internal database for information published by others on the network. Users may search by means of keyword, facility type, facility size, bed count and geographical location. Items in the internal database are uploaded by users on the network via the Publish area. (FIG. **62**). To upload a data file, the emergency planner simply fills out the supplied fields, selects the file and presses Submit. At this point, the uploaded file may be accessed by all other planners on the network.

Response is used by the users of the plan with ICS permissions—this area allows them to see the portions of the plan that specifically relate to them, as they have been assigned to specific roles of the ICS. (FIG. **55**, FIG. **57**)

The Reporting Area allows the emergency planner to generate reports related to the emergency plan, including but not limited to: all Emergency Planning Committee comments, communication dates and times, and feedback, historical changes to the emergency plan and its component parts, audit trails of user access to the plan, actions logged during training, training test results by user or by test, After Action reports, changes and status of emergency resource inventories.

II. Database Tables

1. lp_user

This table holds every user in the LiveProcess community from Noble Trainees to LP Administrators. It is primarily tied to the LPUser class defined in classUser.php.

key_user_id	int(11)
usr_forum_id	int(11)
usr_keys	smallint(6)
usr_planner	tinyint(4)
usr_first	varchar(50)
usr_last	varchar(50)
usr_username	varchar(50)
usr_password	varchar(50)
usr_salutation_id	int(11)
usr_dcreated	int(11)
usr_dmodified	int(11)
usr_status	tinyint(4)

2. lp_group

This table holds the groups of the LiveProcess community. It is primarily tied to the LPGroup class defined in classGroup.php.

key_group_id	int(11)
grp_forum_id	int(11)
grp_fullname	varchar(255)
grp_name	varchar(64)
grp_abbreviation	varchar(8)
grp_prefx	tinyint(4)
grp_prefy	tinyint(4)
grp_prefzoom	tinyint(4)
grp_status	tinyint(4)

3. lp_user_group

This table links entries in the lp_user table to entries in the lp_group table. Through this table, users may belong to more than one group.

key_user_group_id	int(11)
ug_user_id	int(11)
ug_group_id	int(11)
ug_isprimary	tinyint(4)

4. lp_group_plan

This table links entries in the lp_group table to entries in the pln_plan table. Through this table, one group can have many plans and one plan can belong to multiple groups.

key_group_plan_id	bigint(20)
gpp_group_id	bigint(20)
gpp_plan_id	bigint(20)
gpp_sortorder	int(11)

5. lp_facility

This table holds all the facilities that will have a plan.

key_facility_id	bigint(20)
fac_name	varchar(255)
fac_bedcount	int(11)
fac_type	tinyint(4)
fac_description	text
fac_address1	varchar(255)
fac_address2	varchar(255)
fac_address3	varchar(255)
fac_city	varchar(255)
fac_state	varchar(32)
fac_zipvarchar(32)	
fac_phone	varchar(64)
fac_faxvarchar(64)	
fac_url varchar(128)	
fac_country	varchar(255)
fac_region	varchar(255)
fac_county	varchar(255)
fac_latitude	float(10,5)
fac_longitude	float(10,5)
fac_altitude	int(11)
fac_prefx	tinyint(4)
fac_prefy	tinyint(4)
fac_prefzoom	tinyint(4)
fac_status	tinyint(4)

6. lp_group_facility

This table joins facilities to groups

key_group_facility_id bigint(20)	
gfc_group_id	bigint(20)
gfc_facility_id	bigint(20)
gfc_dcreated	int(11)
gfc_status	tinyint(4)

7. lp_user_facility

This table joins users to facilities. This will be helpful in picking out which users sees which plans.

key_user_facility_id	bigint(20)
ufc_user_id	bigint(20)
ufc_facility_id	bigint(20)
ufc_dcreated	int(11)
ufc_status	tinyint(4)

8. lp_potentialclient

This table holds contact information of people who filled in our join page form during the early summer of 2004 before our SalesForce connection was implemented. This table is now obsolete.

key_potentialclient_idint(11)	
pc_first	varchar(255)
pc_last varchar(255)	
pc_email	varchar(255)
pc_status	int(11)

9. lp_profile

This table holds the profile information used to create our profile page. This table is used primarily by classProfile.php.

key_profile_id	int(11)
pro_user_id	int(11)
pro_type_id	int(11)
pro_name	varchar(255)
pro_title	varchar(255)
pro_facility	varchar(255)
pro_body	text
pro_snippet	text
pro_photo_name	varchar(255)
pro_thumbnail_name	varchar(254)
pro_logo_name	varchar(255)
pro_photo_caption	text
pro_date_published	int(11)
pro_status	tinyint(4)

10. lp_salutation

This table holds all the salutations. It links to the lp_user.usr_salutaion_id cell for each user.

key_salutation_id	int(11)
sal_name	varchar(50)
sal_sortorder	tinyint(4)

Plan Tables

11. pln_plan

This table lists all the plans available on the LiveProcess Community. It is used primarily by the LPPlan class in class-Plan.php.

key_plan_id	bigint(20)
pln_name	varchar(255)
pln_title	varchar(255)
pln_path	text
pln_filename	varchar(255)
pln_description	text
pln_author_id	bigint(20)
pln_overview_id	bigint(20)
pln_heics_id	bigint(20)
pln_dcreated	int(11)
pln_dmodified	int(11)
pln_version	varchar(255)
pln_status	tinyint(4)

12. pln_overview

This table holds all the overviews for LiveProcess plans. It is not being used currently.

key_overview_id	bigint(20)
ovr_name	varchar(255)
ovr_title	varchar(255)
ovr_copy	text
ovr_description	text
ovr_author_id	bigint(20)
ovr_dcreated	int(11)
ovr_dmodified	int(11)
ovr_status	tinyint(4)

13. pln_plan_epc

This table links executive planning committees (EPCs) to plans. Through this table, EPCs can look at multiple plans and plans can be reviewed by more than one EPC.

key_plan_epc_id	bigint(20)
ple_plan_id	bigint(20)
ple_epc_id	bigint(20)

14. pln_plan_heics

This table links HEICS systems to plans. Through this table, one plan can hold one or many HEICS or one HEICS can belong to one or many plans.

key_plan_heics_id	bigint(20)
plh_plan_id	bigint(20)
plh_heics_id	bigint(20)

15. pln_plan_hva

This table links HVAs to plans. Through this table, one plan can hold one or many HVAs or one HVA can belong to one or many plans.

key_plan_hva_id	bigint(20)
phv_plan_id	bigint(20)
phv_hva_id	bigint(20)
phv_sortorder	int(11)

16. pln_plan_resource

This table links resources to plans. Through this table, one plan can hold one or many resources or one resource can belong to one or many plans.

key_plan_resource_id	bigint(20)
plr_plan_id	bigint(20)
plr_resource_id	bigint(20)

17. pln_plan_facility

key_plan_facility_id	bigint(20)
plf_plan_id	bigint(20)
plf_facility_id	bigint(20)

EPC Tables

18. pln_epc

This table describes an EPC. It is primarily used by the LPEpc class defined in classEPC.php.

key_epc_id	bigint(20)
epc_name	varchar(255)
epc_description	text
epc_author_id	bigint(20)
epc_dcreated	int(11)
epc_dmodified	int(11)
epc_keys	int(11)
epc_status	tinyint(4)

19. pln_epcgroup

This table describes an EPC group. It is primarily used by the LPEpcgroup class in classEPC.php.

key_epcgroup_id	bigint(20)
epg_name	varchar(255)
epg_description	text
epg_author_id	bigint(20)
epg_dcreated	bigint(20)
epg_dmodified	bigint(20)
epg_keys	int(11)
epg_status	tinyint(4)

20. pln_user_epcgroup

This table joins users to an EPC group. Through this table an EPC group can have multiple users and one user can belong to multiple EPC groups.

key_user_epcgroup_id	bigint(20)
uep_user_id	bigint(20)
uep_epcgroup_id	bigint(20)
uep_keys	int(11)
uep_status	tinyint(4)

21. pln_epc_epcgroup

This table joins EPCs and EPC groups. Through this table, an EPC can have one or many EPC groups and one EPC group can belong to one or many EPCs.

key_epc_epcgroup_id	bigint(20)
eeg_epc_id	bigint(20)
eeg_epcgroup_id	bigint(20)
eeg_sortorder	int(11)

Incident Tables

22. inc_incident

This table is used by the response section of the platform which will allow incident commanders to create the incident and general staff to view the various states of the incident. Reports can be created from the data in this table as well.

key_incident_id	bigint(20)
inc_facility_id	bigint(20)
inc_code_id	bigint(20)
inc_tier_id	bigint(20)
inc_dstart	int(11)
inc_dend	int(11)
inc_dstatus	tinyint(4)

HEICS Tables

23. pln_heics

key_heics_id	bigint(20)
hcs_name	varchar(255)
hcs_description	text
hcs_author_id	bigint(20)
hcs_dcreated	int(11)
hcs_dmodified	int(11)
hcs_status	bigint(20)

24. pln_heicsrole

key__heicsrole__id	bigint(20)
hsr__formtemplate__id	bigint(20)
hsr__author__id	bigint(20)
hsr__name	varchar(255)
hsr__dcreated	int(11)
hsr__dmodified	int(11)
hsr__status	tinyint(4)

25. pln_heics_heicsrole

key__heics__heicsrole__id	bigint(20)
hsr__heics__id	bigint(20)
hsr__heicsrole__id	bigint(20)
hsr__parent__id	bigint(20)
hsr__commandcenter	varchar(255)
hsr__commandcontact	varchar(255)
hsr__sortorder	int(11)

26. pln_heicsrole_user

key__heicsrole__user__idbigint(20)	
hru__heics__heicsrole__id	bigint(20)
hru__user__id	bigint(20)
hru__firstname	varchar(255)
hru__lastname	varchar(255)

27. pln_heicsformtemplate

key__heicsformtemplate__id	bigint(20)
hft__name	varchar(255)
hft__description	text
hft__mission	text
hft__blueprint	text
hft__author__id	bigint(20)
hft__dcreated	int(11)
hft__dmodified	int(11)
hft__status	tinyint(4)

28. pln_heicsform

key__heicsform__id	bigint(20)
hsf__heicsformtemplate__id	bigint(20)
hsf__name	varchar(255)
hsf__description	text
hsf__mission	text
hsf__header	text
hsf__effectivestart	varchar(255)
hsr__effectiveend	varchar(255)
hsf__author__id	bigint(20)
hsf__dcreated	int(11)
hsf__dmodified	int(11)
hsf__status	tinyint(4)

29. pln_heicssheet

key__heicssheet__id	bigint(20)
hss__name	varchar(255)
hss__filename	varchar(255)
hss__path	varchar(255)
hss__dcreated	int(11)
hss__dmodified	int(11)
hss__status	tinyint(4)

-continued

30. pln_heicsrole_heicsform

key__heicsrole__heicsform__id	bigint(20)
hrf__heicsrole__id	bigint(20)
hrf__heicsform__id	bigint(20)

31. pln_heicsrole_heicssheet

key__heicsrole__heicssheet__id	bigint(20)
hrs__heicsrole__id	bigint(20)
hrs__heicssheet__id	bigint(20)

32. pln_heicsformsection

key__heicsformsection__id	bigint(20)
hfs__name	varchar(255)
hfs__author__id	bigint(20)
hfs__dcreated	int(11)
hfs__dmodified	int(11)
hfs__status	tinyint(4)

33. pln_heicsform_heicsformsection

key__heicsform__heicsformsection__id	bigint(20)
hfs__heicsform__id	bigint(20)
hfs__heicsformsection__id	bigint(20)
hfs__sortorder	int(11)

34. pln_heicsformitem

key__heicsformitem__idbigint(20)	
hfi__name	varchar(255)
hfi__body	text
hfi__type	tinyint(4)
hfi__author__id	bigint(20)
hfi__dcreated	int(11)
hfi__dmodified	int(11)
hfi__status	tinyint(4)

35. pln_heicsformsection_heicsformitem

key__heicsformsection__heicsformitem__id	bigint(20)
hfh__heicsformsection__id	bigint(20)
hfh__heicsformitem__id bigint(20)	
hfh__sortorder	int(11)

36. pln_heicstemplate

key__heicstemplate__id bigint(20)	
hst__name	varchar(255)
hst__title	varchar(255)

-continued

hst__description	text
hst__heics__heicsrole__chain	text
hst__heicsformtemplate__heicsrole__chain	text
hst__heicssheet__heicsrole__chain	text
hst__author__id	bigint(20)
hst__dcreated	int(11)
hst__dmodified	int(11)
hst__status	tinyint(4)

Task Tables

37. tsk_plantask

key__plantask__id	bigint(20)
plt__name	varchar(255)
plt__tablename	varchar(255)
pit__baseurl	text
plt__idprefix	varchar(8)
plt__status	tinyint(4)

38. tsk_task

key__task__id	bigint(20)
tsk__plan__id	bigint(20)
tsk__element__id	bigint(20)
tsk__plantask__id	bigint(20)
tsk__assigner__id	bigint(20)
tsk__message	text
tsk__dcreated	int(11)
tsk__dclosed	int(11)
tsk__status	tinyint(4)

39. tsk_task_user

key__task__user__id	bigint(20)
tku__task__id	bigint(20)
tku__user__id	bigint(20)
tku__dassigned	int(11)
tku__dseen	int(11)
tku__dlastseen	int(11)
tku__dclosed	int(11)

40. tsk_comment

key__comment__id	bigint(20)
cmt__task__id	bigint(20)
cmt__plantask__id	bigint(20)
cmt__element__id	bigint(20)
cmt__user__id	bigint(20)
cmt__body	text
cmt__dcreated	int(11)

Tables for HVA

41. hva_analysis

key__analysis__id	int(11)
anl__name	varchar(255)
anl__description	text
anl__version	varchar(255)
anl__facility__name	varchar(255)
anl__facility__bedsize	int(11)
anl__author__id	int(11)
anl__dcreated	int(11)
anl__dmodified	int(11)
anl__status	int(11)

42. hva_analysis_section

key__analysis__section__id	bigint(20)
ans__analysis__id	bigint(20)
ans__section__id	bigint(20)
ans__sortorder	int(11)

43. hva_analysis_template

key__analysis__template__id	int(11)
ant__name	varchar(255)
ant__description	text
ant__hazardlist	text
ant__vulnerabilitylist	text
ant__author__id	int(11)

44. hva_hazard

key__hazard__id	int(11)
haz__name	varchar(255)
haz__description	text
haz__category__id	int(11)
haz__author__id	int(11)
haz__status	int(11)

45. hva_hazard_analysis

key__hazard__analysis__id	int(11)
hza__section__id	bigint(20)
hza__hazard__id	int(11)
hza__analysis__id	int(11)
hza__sortorder	int(11)

46. hva_hazard_category

key__hazard__category__id	int(11)
hzc__name	varchar(255)
hzc__status	int(11)

47. hva_section

key__section__id	bigint(20)
sec__name	varchar(255)
sec__author__id	bigint(20)
sec__dcreated	int(11)
sec__dmodified	lint(11)
sec__status	tinyint(4)

48. hva_vulnerability

key_vulnerability_id	int(11)
vul_type	varchar(255)
vul_label	varchar(255)
vul_ismitigation	tinyint(4)
vul_min	int(11)
vul_max	int(11)
vul_question	text
vul_author_id	int(11)
vul_sortorder	int(11)
vul_status	int(11)

49. hva_vulnerability_analysis

key_vulnerability_analysis_id	int(11)
vla_hza_id	int(11)
vla_vulnerability_id	int(11)
vla_value	varchar(255)

Tables for Resources

50. pln_resource

key_resource_id	bigint(20)
res_company	varchar(255)
res_address1	varchar(255)
res_address2	varchar(255)
res_address3	varchar(255)
res_city	varchar(255)
res_state	varchar(8)
res_zipvarchar(32)	
res_phone	varchar(64)
res_faxvarchar(64)	
res_email	varchar(255)
res_website	varchar(255)
res_type_id	bigint(20)
res_author_id	bigint(20)
res_latitude	float(10,5)
res_longitude	float(10,5)
res_altitude	decimal(10,0)
res_dcreated	int(11)
res_dmodified	int(11)
res_status	int(11)

51. pln_resourcetype

key_resource_type_id	bigint(20)
rst_name	varchar(255)
rst_category_id	int(11)
rst_sortorder	int(11)
rst_dcreated	int(11)
rst_dmodified	int(11)
rst_status	int(11)

52. pln_contact

key_contact_id	bigint(20)
cnt_resource_id	bigint(20)
cnt_first	varchar(255)
cnt_last	varchar(255)
cnt_title	varchar(255)
cnt_address1	varchar(255)
cnt_address2	varchar(255)
cnt_address3	varchar(255)

-continued

cnt_city	varchar(255)
cnt_state	varchar(8)
cnt_zipvarchar(16)	
cnt_phone	varchar(64)
cnt_mobile	varchar(64)
cnt_faxvarchar(64)	
cnt_email	varchar(255)
cnt_dcreated	int(11)
cnt_dmodified	int(11)
cnt_status	int(11)

Tables for Codes

53. pln_code

key_code_id
cod_name
cod_color
cod_title
cod_description
cod_author_id
cod_dcreated
cod_dmodified
cod_status

54. pln_plan_code

key_plan_code_id
plc_plan_id
plc_code_id
plc_sortorder

55. pln_segment

key_segment_id
seg_author_id
seg_name
seg_title
seg_body
seg_isprocedure
seg_type
seg_dcreated
seg_dmodified
seg_status

56. pln_code_hazardannex

key_code_hazardannex_id
cdh_code_id
cdh_hazard_id
cdh_sortorder

57. pln_code_segment

key_code_segment_id
cds_code_id
cds_segment_id
cds_sortorder

58. pin_code_heicsform

key_code_heicsform_id
chf_code_id
chf_heicsform_id
chf_sortorder

Training Tables

59. tm_patient

key_patient_id
pnt_first
pnt_last
pnt_sex
pnt_age
pnt_dob
pnt_race
pnt_address
pnt_city
pnt_state
pnt_complaint
pnt_presenting
pnt_meds
pnt_presentillness
pnt_historymed
pnt_historysoc
pnt_exam
pnt_pulse
pnt_resp
pnt_bp
pnt_temp
pnt_spo2
pnt_author_id
pnt_dcreated
pnt_dmodified
pnt_status

III. Scenarios

1. Introduction

This section will provide usage scenarios for the LiveProcess platform.

Key features of LiveProcess include:

1. Easily create, maintain and update an accurate, current and facility specific all-hazards HEICS-based plan.
2. Provide a clear understanding of potential roles and responsibilities in any incident as well as reports that is so simple anyone can be an incident commander.
3. Provide role-specific, immediate 24/7 secure access anywhere to the most current plan and real-time response activation.
4. Ability to quantify actual and potential losses and therefore value the mitigation effort.
5. Reduce time away from the worksite for training.
6. Ability to more quickly develop a broad range of customized drills.
7. Effectively and efficiently integrate into regional plan without rewriting your facility's plan.

2. Documentation of Usage Scenarios

2.1 S1 Create New Plan

2.1.1 Scenario Definition

A user wishes to create an emergency management plan for his facility and have it available online for authorized users to view.

2.1.2 Description

To create a new plan, the user would log into LiveProcess, click on the "PLAN" tab, and then on the "Create New Plan" link as illustrated in FIG. **1**. This would bring up the "Add New Plan" page, where the user would fill in a filename, title, description, and version number for the plan and then click "Submit." A corresponding screenshot is shown in FIG. **20**.

2.2 S2 Select Plan/Open Plan

2.2.1 Scenario Definition

A user wishes to select and open an existing emergency management plan for his facility so that he can view and edit the content.

2.2.2 Description

To select and open a previously saved version of a plan, the user would click on the "PLAN" tab. This would bring up the plan main page, where he could view a list of available plans, categorized into sections entitled "Your Plans" and "Group Plans." To open a plan, he would click on the plan title, as illustrated in FIG. **2**. This would bring up the plan details page shown in FIG. **3**. A corresponding screenshot is shown in FIG. **21**.

2.3 S3 Add a Policy

2.3.1 Scenario Definition

The user wishes to add a policy to his emergency management plan. He may already have the policy content in a Microsoft Word document or an Adobe Acrobat PDF but would like it to be available online at LiveProcess where authorized users may access it.

2.3.2 Description

Once a user has created a plan, he is able to add policies to it. To add a policy, the user would click on the "PLAN" tab, select and open a plan, and then click on the "Add a Policy" link located on the plan details page, as illustrated in FIG. **3**. This would take the user to the "Add Code" page, shown in FIG. **4**, where he would input a title and description for the policy. The "Add Code" page also enables him to indicate whether the policy is an "Active Policy" and/or a "Shared Policy." After filling in the information, the user would click "Submit" to save the new policy. Corresponding screenshots are shown in FIGS. **22** and **23**.

2.4 S4 Import a Policy

2.4.1 Scenario Definition

The user wishes to import a policy created by another hospital or user, into his own emergency management plan.

2.4.2 Description

When a user adds a policy to his plan, he has the option to make it private or to share the policy with other users of LiveProcess. If a policy has been made public, other users may import it into their own plans. To import a policy, the user would click on the "PLAN" tab, select and open a plan, and then click on the "Import a Policy" link located on the plan details page, as illustrated in FIG. **5**. This would take the user to the "Policy Search" page, shown in FIG. **6**, where he would input keywords to search for a policy. After hitting "Search" the user will see a list of search results. He would then click on one of the policies to view it, as shown in FIG. **7**. To import the policy into his plan, he would click on the "Attach (Policy Name)" link. The policy would immediately be added to his plan, where he could edit it to make it specific to his facility. Corresponding screenshots are shown in FIGS. **24-26**.

2.5 S5 Add Segment

2.5.1 Scenario Definition

The user would like to add a segment, or section, to a policy in his emergency management plan.

2.5.2 Description

To add a segment or section to a policy, the user would click on the relevant policy, and then click on "Edit" as shown in FIG. **8**. This would take him to the policy details page where he would click "Add Segment" as shown in FIG. **9**. This would take him to the "Add Segment" page, shown in FIG. **10**, where he would type or paste in the text of his policy segment, and then click "Submit." Corresponding screenshots are shown in FIGS. **27-29**.

2.6 S6 Add Comment

2.6.1 Scenario Definition

The user wishes to post a comment on a particular policy, segment of a policy, or procedure. He wishes to send this comment to certain members of his emergency planning committee and have it time/date stamped.

2.6.2 Description

In order to post a comment, the user would first select the relevant policy, segment, or procedure, and then click "Comment," as show in FIG. **11**. This would take him to the "Comment" page, shown in FIG. **12**, where he could choose to comment on the entire policy or a particular segment of the policy. The user would then type in his comment or question into the "Message" box, select which committee members should receive his comment, and then click "Submit." Corresponding screenshots are shown in FIGS. **30-31**.

In the example in FIG. **12** above, the user is posting a comment on the "Donning Protective Clothing" segment of the "Code Triage—Code C (Chemical) policy. Specifically, he is asking whether staff will be using "Tyvek suits with booties." He has selected that this question be sent to members of his "Emergency Planning" and "Hazmat Committees."

2.7 S7 Respond to Comment

2.7.1 Scenario Definition

A user or emergency planning committee member wishes to view and respond to comments posted on the plan.

2.7.2 Description

When a comment is posted on a policy, members of the selected committees receive an email indicating a comment has been made. When the committee members log into LiveProcess, they will be able to view the comment by clicking on "Your Task List." In the example shown in FIG. **13**, a person named "Sue Demo" who is a member of the "Emergency Planning" committee has logged in and clicked on "Your Task List." She can now view a list of Tasks or Comments. A corresponding screenshot is shown in FIG. **32**.

When "Sue Demo" clicks on a Comment title, she is taken to the "Comment page" where she can view the comment and respond to it by typing into the Message box and clicking "Submit." In the example shown in FIG. **14**, "Sue Demo" has responded to the comment by indicating what type of Tyvek suit staff will be using. Every comment and response is time date stamped, so that a complete record of communication is kept for accrediting agencies such as JCAHO. A corresponding screenshot is shown in FIG. **33**.

2.8 S8 Add a Procedure

2.8.1 Scenario Definition

The user would like to add a procedure to his emergency management plan.

2.8.2 Description

The user would like to quickly view and access the parts of his emergency plan policies that are procedures. This is done via the Procedures page. The user can add a procedure to this page by tagging it within his policies. To do this, the user would select the policy that contains the procedure, as shown in FIG. **15**. The user would then put a check next to the option "Is a Procedure for this Code" as shown in FIG. **16**. Corresponding screenshots are shown in FIGS. **34-35**.

After clicking Submit, the procedure selected will then appear on the Procedures page as show in FIG. **17**. A corresponding screenshot is shown in FIG. **36**.

2.9 S9 View HVA

2.9.1 Scenario Definition

A user wishes to view the HVA (Hazard Vulnerability Analysis) for his facility.

2.9.2 Description

A user would be able to view the HVA for his facility by clicking on the "PLAN" tab and then "HVA." This would display a standard Kaiser model of the facility's HVA as shown in FIG. **18**. A corresponding screenshot is shown in FIG. **37**.

2.10 S10 Create/Edit HVA

2.10.1 Scenario Definition

A user wishes to create or edit the HVA (Hazard Vulnerability Analysis) for his facility.

2.10.2 Description

A user would be able to create or edit the HVA for his facility by clicking on the "PLAN" tab, selecting "HVA," and then clicking either "Normal View" or "Expert View." Clicking "Normal View" presents the HVA in questionnaire format as shown in FIG. **19**. Clicking on "Expert View" presents the HVA in grid format as shown in FIG. **20**. Either format allows the user to edit the information. As soon as new data is entered and submitted, the "Risk" column in the HVA is automatically recalculated. Corresponding screenshots are shown in FIGS. **38-39**.

2.11 S11 View Resources

2.11.1 Scenario Definition

A user wishes to view the resources available to his facility.

2.11.2 Description

A user would be able to view the resources for his facility by clicking on the "PLAN" tab and then "Resources." This would display a list of all resources relevant to his facility, as shown in FIG. **21**. The user can zoom in to resources beginning with a particular letter by clicking on the alphabet bar header at the top of the page. A corresponding screenshot is shown in FIG. **40**.

2.12 S12 Create Resource

2.12.1 Scenario Definition

A user wishes to create or add new resources to the resource list in his plan.

2.12.2 Description

To add a new resource to his plan, the user would click on the PLAN tab, Resources, and then "Create Resource" as shown in FIG. **22**. This would take him to the "Create

Resource" page shown in FIG. **23**, where he would enter the name, address, and contact info for the resource. Corresponding screenshots are shown in FIGS. **41-42**.

2.13 S13 Import Resource

2.13.1 Scenario Definition

A user wishes to import a resource, from the existing LiveProcess database of resources, into his plan.

2.13.2 Description

A user has the option to create his own resources or to import resources into his plan from the LiveProcess database of resources. To import a resource, he would click on the PLAN tab>Resources>Import a Resource, as shown in FIG. **24**. A corresponding screenshot is shown in FIG. **43**.

After clicking on "Import Resource," the user is taken to the "Resource Search" page, shown in FIG. **25**. From here, he would click on the state in which he would like to locate an import a resource. A corresponding screenshot is shown in FIG. **44**.

For example, if the user clicked on California, the "Search Results" page, shown in FIG. **26**, would display all the California resources available in the LiveProcess Resource Database. From there, the user would simply click on a resource to add it to his plan. A corresponding screenshot is shown in FIG. **45**.

2.14 S14 Create EPC

2.14.1 Scenario Definition

A user wishes to set up his emergency planning committees (EPC) in LiveProcess so that he can submit plans for review and approval.

2.14.2 Description

A user is able to set up his EPCs by clicking on HOME>EPC. This takes him to the EPC Creator page shown in FIG. **27**. From here the user has two options, he can use the LiveProcess EPC template, which automatically sets up 7 blank committees, or he can create a custom EPC. A corresponding screenshot is shown in FIG. **46**.

If the user chooses "Custom EPC," he is presented with the "Create New EPC" page shown in FIG. **28**. A corresponding screenshot is shown in FIG. **47**.

2.15 S15 Edit EPC

2.15.1 Scenario Definition

A user wishes to edit his emergency planning committees (EPC) in LiveProcess. For example, he may want to remove some people from an EPC.

2.15.2 Description

To edit an EPC, the user would click on HOME>EPC and then click on the title of the committee he would like to change. This brings up the page shown in FIG. **29**. From here, he can choose to "Add User" or "Remove User." A corresponding screenshot is shown in FIG. **48**.

If the User clicks on "Remove User," he is taken to the page shown in FIG. **30**. From here, he simply clicks on the name of the user he would like to remove. A corresponding screenshot is shown in FIG. **49**.

2.16 S16 Map of Region

2.16.1 Scenario Definition

A user wishes to view a map showing his facility and local region.

2.16.2 Description

To view a map showing his facility and local region, the user would click on HOME>Map. He would automatically be shown a map specific to his region, as shown in FIG. **31**. This is based on his login. A corresponding screenshot is shown in FIG. **50**.

2.17 S17 Mapping Hazards

2.17.1 Scenario Definition

A user wishes to have a visual way to assess which hazard types pose a risk in a particular region or across the United States.

2.17.2 Description

A user may gather historical hazard incident data by using the GIS MAP located on the HOME tab of LiveProcess. For example, the user could select "hail" from the "Hazard Type" picklist as shown in FIG. **32**. A corresponding screenshot is shown in FIG. **51**.

After selecting "Hail" as Hazard Type and "Number of Events" as Data Type, the user would click "Submit." The map would then automatically change to a color-coded display indicating the incidence of hail throughout the region, as shown in FIG. **33**. (Red=High, Orange=Moderate, Yellow=Low) A corresponding screenshot is shown in FIG. **52**.

2.18 S18 Mapping Resource Types

2.18.1 Scenario Definition

A user wishes to have a visual way to view the types of resources located in a particular region or across the United States.

2.18.2 Description

A user may gather info on available resources by using the GIS MAP located on the HOME tab of LiveProcess. As shown in FIG. **34**, the "Resource Type" picklist contains options such as Fire Depts., Pharmaceuticals, Ventilators, and Water. A corresponding screenshot is shown in FIG. **53**.

2.19 S19 ICS View

2.19.1 Scenario Definition

A user wishes to view the ICS (Incident Command System) or HEICS (Hospital Incident Command System) structure used by his facility. This includes a listing of all roles and associated responsibilities.

2.19.2 Description

To view the ICS structure for his facility, the user would click on the PLAN tab, select a plan, and then click on ICS. This would bring up a page displaying all 49 of the standard HEICS roles. The standard view, shown in FIG. **35**, displays each position title. The Crosswalk view, shown in FIG. **36**, displays each position title and the name of the person assigned to the position. Corresponding screenshots are shown in FIGS. **54-55**.

2.20 S20 ICS Job Action Sheet

2.20.1 Scenario Definition

A user wishes to view the job action sheet (JAS) associated with a specific role in the incident command system (ICS).

2.20.2 Description

To view role-specific job action sheets, the user would click on ICS, and then click on one of the 49 position titles. If a JAS has already been created, this would bring up the role details page, shown in FIG. **37**. From there, the user would click on the link under "Job Action Sheets." This would automatically open a new web browser displaying the Job Action Sheet, shown in FIG. **38**. Corresponding screenshots are shown in FIGS. **56-57**.

As shown in FIG. **38**, the Job Action Sheet autofills in the name of the person who has been assigned the position. If there is a "Reports to" person, that name will be autofilled in as well, based on assignments made by the user.

2.21 S21 ICS Custom Job Action Sheet

2.21.1 Scenario Definition

A user wishes to create a custom job action sheet for a specific role in the incident command system (ICS).

2.21.2 Description

To create a custom job action sheets, the user would click on ICS, and then click on one of the 49 position titles. If no JAS has been created yet for the role, this would bring up the role details page, shown in FIG. **39**. From there, the user has the choice to either "Create a standard HEICS-based Job Action Sheet" or "Create a Job Action Sheet using the Job Action Sheet Wizard." A corresponding screenshot is shown in FIG. **58**.

2.22 S22 ICS Forms

2.22.1 Scenario Definition

A user wishes to view the standard forms associated with a specific role in the incident command system (ICS).

2.22.2 Description

To view the standard HEICS forms associated with a role, the user would click on the links located under "Forms" on the role detail page. This would automatically open a new web page displaying the selected form, as shown in FIG. **40**. A corresponding screenshot is shown in FIG. **59**.

2.23 S23 Community

2.23.1 Scenario Definition

A user wishes to communicate with other emergency management professionals in a secure online forum.

2.23.2 Description

To communicate with other members of the LiveProcess community, the user would click on the Community tab. This would display the Community page shown in FIG. **41**. In Community, the user can access various online discussion forums. The user may post comments, polls, file attachments, and links in the online discussion forums. A corresponding screenshot is shown in FIG. **60**.

2.24 S24 Reference

2.24.1 Scenario Definition

A user wishes to search and view reference materials provided by other emergency management professionals.

2.24.2 Description

To search and view reference materials posted by other LiveProcess members, the user would click on the REFERENCE tab and type keywords into the search box. In the example shown in FIG. **42**, the user has done a search on the keyword "decon." To view one of the documents, the user would click "Import" and then choose to open or save the document to his computer. The Reference area contains many different file types, including MS Word docs, Excel files, PowerPoint presentations, and PDFs. A corresponding screenshot is shown in FIG. **61**.

2.25 S25 Publish

2.25.1 Scenario Definition

A user wishes to publish reference materials so that they can be accessed by other emergency management professionals.

2.25.2 Description

To publish reference materials so that other LiveProcess members may access them, the user would click on the PUBLISH tab, fill in the brief form describing the material, and then upload the file from his computer. The user may publish many different file types, including MS Word docs, Excel files, PowerPoint presentations, and PDFs. A corresponding screenshot is shown in FIG. **62**.

One preferred embodiment of the present invention is implemented via the source code in the accompanying Appendix.

The present invention may be implemented with any combination of hardware and software. If implemented as a computer-implemented apparatus, the present present invention is implemented using means for performing all of the steps and functions described above.

The present invention can be included in an article of manufacture (e.g., one or more computer program products) having, for instance, computer useable media. The media has embodied therein, for instance, computer readable program code means for providing and facilitating the mechanisms of the present invention. The article of manufacture can be included as part of a computer system or sold separately.

It will be appreciated by those skilled in the art that changes could be made to the embodiments described above without departing from the broad inventive concept thereof. It is understood, therefore, that this invention is not limited to the particular embodiments disclosed, but it is intended to cover modifications within the spirit and scope of the present invention.

What is claimed is:

1. A computer-implemented method of providing emergency plans for a plurality of different facilities, wherein each of the facilities are entities that implement their respective emergency plans, when necessary, the method comprising:

(a) providing in electronic form an emergency plan for each facility, each emergency plan having a standardized format with a plurality of component parts, each emergency plan having at least some component parts that are accessible by other facilities, wherein the plurality of component parts includes at least one of a Hazard Vulnerability Analysis, emergency policies, procedures that must be followed, available emergency resources, and an Incident Command System command structure;

(b) providing an electronic network which allows the plurality of different facilities to communicate with each other;

(c) at least some of the facilities using the electronic network to electronically share one or more accessible component parts of the emergency plans of at least some of the other facilities with each other, wherein the electronic sharing is a sharing of at least one of the Hazard Vulnerability Analysis, emergency policies, procedures that must be followed, available emergency resources, and an Incident Command System command structure;

(d) electronically importing selected content of the electronically shared one or more accessible component parts of the emergency plan of another facility into one or more component parts of the emergency plans of facilities that received the electronically shared component parts, wherein the electronic importing is facilitated via the use of the standardized format for the emergency plans, and wherein the electronically imported content becomes part of the emergency plans of the facilities that received the electronically shared component parts;

(e) one or more third-party entities electronically publishing information for incorporation into emergency plans of selected facilities; and

(f) at least some of the facilities being programmed to receive the published information and to electronically import and incorporate the published information into their respective emergency plans via the electronic network.

2. The method of claim **1** wherein one of the component parts of the emergency plan includes emergency policies, and step (c) further comprises:

(i) entering one or more search terms into a user interface,

(ii) via the electronic network, searching emergency plans of other facilities that contain the entered one or more search terms, and

(iii) displaying the search hits, and step (d) further comprises electronically importing the emergency policy of a desired search hit into the emergency plan of the facility.

3. The method of claim **2** wherein the search term is related to an emergency condition, and the imported emergency policy relates to the emergency condition.

4. The method of claim **1** wherein the electronic network is the internet or an intranet and the user interface is accessed via an internet web browser.

5. The method of claim **1** wherein the plurality of component parts include emergency drill procedures.

6. The method of claim **1** wherein textual material of an emergency plan constitutes the plan's policies, and one of the component parts of the emergency plan are the emergency plan procedures, the method further comprising:

(g) providing a user interface that allows sections of policies to be labeled as procedures, the user interface also allowing all previously identified procedures to be shown on a single listing for rapid review.

7. The method of claim **1** wherein a facility is a single facility entity.

8. The method of claim **1** wherein a facility is a network of related facility entities.

9. The method of claim **1** further comprising:

(g) providing via the electronic network a geographic information system (GIS) data set; and

(h) projecting facility data onto the GIS data set, the facility data including the plurality of component parts of each emergency plan, wherein in step (c), the accessible component parts of the emergency plans are electronically shared by using the GIS data set that has the facility data projected thereon.

10. The method of claim **1** wherein one of the component parts of the emergency plan includes emergency policies, and the method further comprises:

(g) each facility designating which emergency policies in their respective emergency plans are accessible to other facilities, wherein only emergency policies that are designated as being accessible to other facilities can be electronically shared and imported into another facility.

11. The method of claim **1** wherein the electronic sharing is an electronic exchanging among facilities.

12. An article of manufacture for providing emergency plans for a plurality of different facilities, wherein each of the facilities are entities that implement their respective emergency plans, when necessary, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

(a) providing in electronic form an emergency plan for each facility, each emergency plan having a standardized format with a plurality of component parts, each emergency plan having at least some component parts that are accessible by other facilities, wherein the plurality of component parts includes at least one of a Hazard Vulnerability Analysis, emergency policies, procedures that must be followed, available emergency resources, and an Incident Command System command structure;

(b) providing an electronic network which allows the plurality of different facilities to communicate with each other;

(c) at least some of the facilities using the electronic network to electronically share one or more accessible component parts of the emergency plans of at least some of the other facilities with each other, wherein the electronic sharing is a sharing of at least one of the Hazard Vulnerability Analysis, emergency policies, procedures that must be followed, available emergency resources, and an Incident Command System command structure;

(d) electronically importing selected content of the electronically shared one or more accessible component parts of the emergency plan of another facility into one or more component parts of the emergency plans of facilities that received the electronically shared component parts, wherein the electronic importing is facilitated via the use of the standardized format for the emergency plans, and wherein the electronically imported content becomes part of the emergency plans of the facilities that received the electronically shared component parts;

(e) one or more third-party entities electronically publishing information for incorporation into emergency plans of selected facilities; and

(f) at least some of the facilities being programmed to receive the published information and to electronically import and incorporate the published information into their respective emergency plans via the electronic network.

13. The article of manufacture of claim **12** wherein one of the component parts of the emergency plan includes emergency policies, and step (c) further comprises:

(i) entering one or more search terms into a user interface,

(ii) via the electronic network, searching emergency plans of other facilities that contain the entered one or more search terms, and

(iii) displaying the search hits, and

step (d) further comprises electronically importing the emergency policy of a desired search hit into the emergency plan of the facility.

14. The article of manufacture of claim **13** wherein the search term is related to an emergency condition, and the imported emergency policy relates to the emergency condition.

15. The article of manufacture of claim **12** wherein the electronic network is the internet or an intranet and the user interface is accessed via an internet web browser.

16. The article of manufacture of claim **12** wherein the plurality of component parts include emergency drill procedures.

17. The article of manufacture of claim **12** wherein textual material of an emergency plan constitutes the plan's policies, and one of the component parts of the emergency plan are the emergency plan procedures, and wherein the computer-executable instructions perform a method further comprising:

(g) providing a user interface that allows sections of policies to be labeled as procedures, the user interface also allowing all previously identified procedures to be shown on a single listing for rapid review.

18. The article of manufacture of claim **12** wherein a facility is a single facility entity.

19. The article of manufacture of claim 12 wherein a facility is a network of related facility entities.

20. The article of manufacture of claim 12 wherein the computer-executable instructions perform a method further comprising:

(g) providing via the electronic network a geographic information system (GIS) data set; and

(h) projecting facility data onto the GIS data set, the facility data including the plurality of component parts of each emergency plan, wherein in step (c), the accessible component parts of the emergency plans are electronically shared by using the GIS data set that has the facility data projected thereon.

21. The article of manufacture of claim 12 wherein one of the component parts of the emergency plan includes emergency policies, and the computer-executable instructions perform a method further comprising:

(g) each facility designating which emergency policies in their respective emergency plans are accessible to other facilities, wherein only emergency policies that are designated as being accessible to other facilities can be electronically shared and imported into another facility.

22. The article of manufacture of claim 12 wherein the electronic sharing is an electronic exchanging among facilities.

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