# EMERGENCY RESPONSE ACTION PLAN

(Titled Emergency Response Action Plan to satisfy the federal requirements of 40CFR, Subpart D, Section 112.20)

Also Known As

# **EMERGENCY RESPONSE PLAN**

(Titled Emergency Response Plan to satisfy the state requirements of CCR Title 19, Section 2765.2. Applicable only to the Inglewood Gas Plant)

# Sentinel Peak Resources California, LLC Los Angeles Basin Facilities

Inglewood and Montebello Oil Fields

Inglewood Gas Plant

This Emergency Response Action Plan (ERAP) contains pages from the Integrated Contingency Plan (ICP) that may be needed by personnel during the initial phase of an emergency response. The ERAP is placed in the front of the ICP and additional copies are provided to members of the Sentinel Peak Resources California, LLC (SPR) Spill Management Team and other Facility personnel that may be involved in initial response actions. Refer to the ICP for more detailed Emergency Response information.

# EMERGENCY RESPONSE ACTION PLAN

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#### FIGURE 1.2 FACILITY INFORMATION

# **GENERAL INFORMATION**

	GENERAL INFORMATION
Facility Name:	Los Angeles Basin Facilities 5640 South Fairfax Avenue Los Angeles, CA 90056 (323) 298-2200 (323) 293-2941 Fax
ICP ID#:	OSPR: P1-19-6086
Owner Name:	Sentinel Peak Resources California, LLC 5640 South Fairfax Avenue Los Angeles, CA 90056
Qualified Individual: (Emergency Coordinator)	Jim Bowen, Superintendent (323) 298-2274 (Office), (323) 855-3201 (Cell)
Alternate Qual. Indivs.: (Alternate Emergency	
Coordinators)	George Paspalof, Executive Vice President (323) 298-2202 (Office), (949) 293-0561 (Cell)
	Daniel Taimuty, Sr. Reservoir Engineer (661) 395-5200 (Office), (323) 804-8031 (Cell)
Contact for questions about plan:	Brian Edwards EH&S Supervisor (661) 395-5240 (Office), (661) 303-0635 (Cell)
Telephone/FAX:	Additional telephone references, including 24-hour numbers, for the Facility, Owner, and Qualified Individual are provided in Figure 2.2.
NAICS:	211111
Date of Initial Oil Storage:	Inglewood Field – About Mid 1920s Montebello Field – About Mid 1930s Oil and Gas Gathering Lines – About Mid 1960s Las Cienegas Field - About Mid 1960s
Date of Ownership:	Inglewood Field – December 2016 Montebello Field – December 2016 Oil and Gathering Lines – December 2016 Las Cienegas Field – December 2016
Agent for Service of Process:	Corporation Service Company which will do business in California as CSC-Lawyers Incorporating Service 2710 Gateway Oaks Dr., Suite 150N Sacramento, CA 95833 (800) 927-9800 (916) 641-5151 (Fax) Email – sop@cscgobal.com

## LOS ANGELES BASIN FACILITIES IMMEDIATE EMERGENCY NOTIFICATION CHART



Note:

- This is for immediate notifications. See ERAP and ICP for more extensive notification information.
- Cal OES must be notified within 30 minutes by EH&S On-Call after discovery of a reportable discharge of oil or threatened discharge of oil. Do not delay notification awaiting availability of others.
- This notification chart is to be posted at all field offices and other locations with telephone access where it may be necessary to initiate emergency response.

TITLE	NAME	OFFICE	MOBILE
Qualified Individual (Q.I.)	Jim Bowen	323-298-2274	323-855-3201
Alternate Q.I.	Daniel Taimuty	661-395-5200	323-804-8031
Supervisors	Tyrone King	323-298-2260	562-655-9250
	Tyrone King	323-298-2260	951-454-2550
	George Rodriguez	323-721-3834	323-855-3204
	Jan Woody	323-298-2220	323-855-3205

#### Internal Notification References (Refer to Section 4, Figures 4.1 a, b, c for Spill Management Team Organization Charts)

SENTINEL PEAK RESOURCES CALIFORNIA, LLC SPILL MANAGEMENT TEAM CONTACT LIST					
CON	IMAND STAFF	OFFICE PHONE	HOME PHONE	MOBILE	
Mike Fernandez	Incident Commander	323-298-2276	NA	323-855-1001	
Jim Bowen	Incident Commander	323-298-2274	NA	323-855-3201	
George Paspalof	Deputy Incident Commander	323-298-2202	NA	949-293-0561	
Brian Edwards	Safety Officer / Medical Unit	661-395-5240	NA	661-303-0635	
Johnny Simpson	Safety Officer / Medical Unit	661-395-5531	NA	661-316-7387	
Brandon Grayson	Safety Officer / Medical Unit	323 298-2236	NA	323-321-5423	
Brock Morrow	Safety Officer / Medical Unit	661-395-5290		661-440-2005	
Patty Cook	Liaison Officer	323-298-2218	NA	661-212-3111	
Brian Edwards	Liaison Officer	661-395-5240	NA	661-303-0635	
Heather Pearce	Public Information Officer	323-298-2213	NA	949-549-4056	
Susan Scire	Scribe	323-298-2214	NA	NA	
	SEC	TION CHIEFS			
Tyrone King	Operations	323-298-2260	951-454-2550	951-454-2550	
Sean Kavanagh	Operations	323-298-2240	NA	323-219-3677	
Jan Woody	Operations	323-298-2220	N/A	323-855-3205	
George Rodriguez	Operations	323-721-3834	NA	323-855-3204	
Jose Crespo	Planning	NA	N/A	323-219-1915	
Matthew Cardona	Planning	661-395-5260	N/A	323-206-1501	
Daniel Taimuty	Planning	661-395-5200	NA	323-804-9031	
Ernie Grimm	Logistics	323-298-2205	714-965-0686	323-855-3208	
Rick Norton	Logistics	323-298-2296	NA	323-244-6840	
David Blair	Logistics	661-395-5251	NA	661-440-2737	
Tim Rushing	Finance	661-395-5275	NA	NA	
	OTHER	TEAM MEMBERS			
Jan Woody	Staging Area Manager	323-298-2220	NA	323-855-3205	
George Rodriguez	Staging Area Manager	323-721-3834	562-426-5361	323-855-3204	
Kouy My	Situation Unit Leader	323-298-2445	NA	323-206-0246	
Tyrone King	Situation Unit Leader	323-298-2260	951-454-2550	951-454-2550	
Matthew Cardona	Situation Unit Leader	661-395-5260	N/A	323-206-1501	
Ryan O'Neal	Situation Unit Leader	661-395-2257	NA	213-718-3707	
Kouy My	Resource Unit Leader	323-298-2445	NA	323-206-0246	
Matthew Cardona	Resource Unit Leader	661-395-5260	N/A	323-206-1501	
Ryan O'Neal	Resource Unit Leader	661-395-2257	NA	213-718-3707	
OTHER TEAM MEMBERS					
Mike Fernandez	Well/Source Control Branch	323-298-2276	805-987-6454	323-855-1001	
George Rodriguez	Shoreside Recovery Group	323-721-3834	562-426-5361	323-855-3204	

#### Internal Notification References (Refer to Section 4, Figures 4.1 a, b, c for Spill Management Team Organization Charts)

SENTINEL PEAK RESOURCES CALIFORNIA, LLC SPILL MANAGEMENT TEAM CONTACT LIST					
Alisha Hargett	Documentation Unit Leader	323-298-2258	310-644-6215	N/A	
Susan Scire	Documentation Unit Leader	323-298-2214	NA	NA	
Joe Walters	Environmental Unit Leader	323-298-2209	NA	323-835-4145	
Kouy My	Service Branch Director	323-298-2445	N/A	323-206-0246	
lan Fitzpatrick	Communications Unit Leader	661-395-5561	NA	661-619-6128	
Sean Sullivan	Communications Unit Leader	661-395-5489	661-664-7999	661-444-6675	
Susan Scire	Facilities/ Food Unit Leader	323-298-2214	NA	NA	
Rick Norton	Support Branch Director	323-298-2296	NA	NA	
Karina Ramirez	Supply Unit Leader	323-298-2293	NA	NA	
Billy Letender	Transportation Unit Leader	323-298-2219	562-924-4087	323-855-3199	
Jessica Brentham	Transportation Unit Leader	661-395-5271	NA	661-381-3382	
Karina Ramirez	Time/Cost Unit Leader	323-298-2293	NA	NA	
Ernie Grimm	Procurement Unit Leader	323-298-2205	714-965-0686	323-855-3208	
Alisha Hargett	Procurement Unit Leader	323-298-2258	310-644-6215	N/A	
Billy Letender	Boom Deployment Team	323-298-2219	562-924-4087	323-855-3199	
Karen Miller	Compensation/Claims Unit Leader	661-395-5332	N/A	661-444-6527	
Benny Marin	Compensation/Claims Unit Leader	661-395-5225	NA	NA	

While on shift, some team members will also be available via the company mobile radio system Inglewood Base Station – KBQ 896, Urban Base Station KMA478.

- Response time for most responders would be 60 minutes.
- All Spill Management Team members are trained according to the elements listed in Section 4.5.

ERAP-6

# **EMERGENCY CONDITION INITIAL NOTIFICATION DATA SHEET**

This form should be used for the immediate initial reporting of information. The more thorough form (Figure 2.3a of the ICP) should be completed as available information is collected.

Person Reporting Event:	Name:	
Preser	nt physical location:	
Telepho	ne number (if one):	
Where can cor	tact for further info:	
Location of Condition:	Name of Facility:	
	Nearest City:	
Street name an	d number if known:	
Significant land	mark (if applicable):	
Description of Emergency Condition:	]	

#### COMPLETE THE FOLLOWING PROVIDING INFORMATION IS KNOWN OR WAS REPORTED:

Prod	uct known or suspected to be:	Poter	ntial Hazards:
	Crude Oil		Evacuation/traffic control required immediately
	Natural Gas		Fire has occurred or in progress
	Unknown		Visible vapor cloud present
	Odor or vapor present only		Product in or moving towards populated area
	Spraying or misting		Product in/near occupied dwelling
	Visible in liquid form		Product in/near road or traffic
	Spill flowing away from area or release		Product in/moving towards storm drain, manhole or other underground intake
	Audible (night)		Product on/moving towards waterway
			Local responders (police, fire, EMS) on scene or called
-	Other Comments:		
-			
Date	: Time:	R	eported to:
Date	: Time:	R	eported to:
Date	: Time:	R	eported to:
Date	: Time:	R	eported to:

## FIGURE 2.3 a NOTIFICATION DATA SHEET

This form should be completed as information becomes available - use Figure 2.3 for initial data gathering / reporting.

Date:		Time:	
	INCIDENT D	ESCRIPTION	
Reporter's Full Name:		Position:	
Dav Phone Number:		Evening Phone Numbe	r:
<b>Company:</b> Sentinel Peak Resources California	ornia. LLC		
Facility Address: Los Angeles Basin Facil	ities	Owner's Address: Senti	nel Peak Resources
			California, LLC
5640 S. Fairfax Road		_5640	S. Fairfax Road
Los Angeles, CA 90056		Los A	Angeles, CA 90056
Facility Latitude:		Facility Longitude:	
Spill Location:			
(if not at Facility)			
Responsible Party's Name		Phone Number:	
Responsible Party's Address:			
Source and/or cause of discharge:			
Nearest City:			
County:	State:	Zip co	de:
Section: Township:	Rai	nge: Borou	gh:
Distance from City:		Direction from City:	-
Container Type:		Container Storage Capa	acity:
Facility Oil Storage Capacity: Material:			
Total Quantity Released	Total Quantity Released      Water Impact (YES or NO)      Quantity into Water		
	RESPONS	E ACTION(S)	
Action(s) taken to Correct, Control, or Mit	tigate Incident:		
Number of Injuries:	Number of	Deaths:	
Evacuation(s):	Number Eva	acuated:	
Damage Estimate:			
More information about impacted mediun	n:		
	CALLER NO	TIFICATIONS	
Additional Notifications (Circle all applica	ble): USCG	EPA State	Other
	ADDITIONAL	INFORMATION	
Any information about the incident not re	corded elsowber	e in this report:	
		e m uns report	

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.

# TYPICAL EXTERNAL VERBAL NOTIFICATION GUIDELINE



## **IMPORTANT REMINDER**

Upon discovery of a release <u>immediately</u> notify the Environmental, Health & Safety Department 24-hour compliance line at (**800-766-4108**) of all releases. EH&S will make the appropriate government regulatory agency notifications as detailed above and in Figure 2.5. Cal OES must be notified within 30 minutes by EH&S On-Call after the discovery of a reportable discharge of oil or threatened discharge of oil. Do not delay notification awaiting availability of others.

# EXTERNAL NOTIFICATION REFERENCES

REQUIRED VERBAL NOTIFICATIONS			
AGENCY	LOCATION	OFFICE / ALTERNATE	
California CALGEM	Cypress, CA	714-816-6847	
California Office of Emergency Services	Sacramento, CA	800-852-7550	
California OSHA *	Los Angeles, CA	213-576-7451	
L.A. County Fire Department Health & Haz. Mat. Division <b>(CUPA)</b>	Los Angeles, CA	7 AM – 5 PM 323-890-4317 After 5 PM 323-881-2411 (L.A. Co. Dispatch)	
National Response Center	Washington, D.C.	800-424-8802	
OSHA *	Washington, D.C.	800-321-6742	

\*If reportable injuries or death involved.

NON-REQUIRED ASSISTANCE / ADVISORY NOTIFICATIONS				
AGENCY	LOCATION	OFFICE / ALTERNATE		
Air Quality Management District	Diamond Bar, CA	909-396-2000 800-288-7664		
California Department of Fish & Wildlife Office of Spill Prevention & Response	Los Alamitos, CA	562-342-7214		
California State Fire Marshal	Lakewood, CA	562-497-9100		
California State Lands Commission	Long Beach, CA	562-590-5201		
CHEMTREC		800-424-9300		
Environmental Protection Agency (Region 9)	San Francisco, CA	415-947-4400		
LA County Industrial Waste Operations – Environmental Programs Division	Los Angeles, CA	626-458-3504 626-458-3539		
LA County, Department of Public Works	Los Angeles, CA	323-261-2160		
LA County, Department of Public Works (Flood Maintenance) Radio Room (Ballona Wetland flood gate control – 24 hrs.)	Los Angeles, CA	626-458-4357		
Los Angeles County Health Services	Los Angeles, CA	800-427-8700		
National Oceanic and Atmospheric Administration (NOAA)	Alameda, CA	510-437-5344		
National Weather Service (Recorded)	Los Angeles, CA	805-988-6610		
Regional Water Quality Control Board, Los Angeles	Los Angeles, CA	213-576-6600		
U.S. Coast Guard, Marine Safety Office	San Pedro, CA	310-823-2300		
U.S. Fish and Wildlife (Endangered Species Recovery)	Sacramento, CA	916-414-6600		

# FIGURE 2.5 (Cont'd)

# **EXTERNAL NOTIFICATION REFERENCES**

SERVICE		OFFICE / ALTERNATE	
Ambulance – Rescue Paramedic		911	
Beverly Hospital	Montebello, CA	323-726-1222	
Brea Community Hospital	Brea, CA	714-529-0211	
Centinela Hospital	Inglewood, CA	310-673-4660	
Reliant 24/7 Urgent Care	Los Angeles, CA	310-215-6000	
Culver City Fire Department (Dispatch)	Culver City, CA	310-253-6244	
Fire Department – Emergency	(All Locations)	911	
Grossman Burn Center	Sherman Oaks, CA	818-981-7111	
Los Angeles Community Hospital	Los Angeles, CA	323-267-0477	
Los Angeles County Lifeguards (So. Sec. Hdqts.)	Hermosa Beach, CA	310-372-2166	
Los Angeles County Sheriff	Los Angeles, CA	911	
Los Angeles County Sheriff (Marina Division)	Marina Del Rey, CA	310-482-6000	
Los Angeles County Sheriff (Substation)	Ladera Heights	310-410-7604	
Los Angeles County Sheriff (Substation)	West LA College	310-287-4314	
Orthopedic Hospital	Los Angeles, CA	213-742-1000	
Presbyterian Hospital	Whittier, CA	562-698-0811	
Providence Holy Cross Medical Center	Mission Hills, CA	818-365-8051	
UCLA Medical Center	Westwood, CA	310-825-2111	

OSROs			
SERVICE	LOCATION	OFFICE / ALTERNATE	
MSRC (Marine Spill Response Corporation)	Long Beach, CA	800-259-6772	
Patriot Environmental Services (Primary OSRO)	Long Beach, CA	800-624-9136 (24 Hr. Emergency Response)	

# FIGURE 2.5 (Cont'd)

# **EXTERNAL NOTIFICATION REFERENCES**

ADDITIONAL RESOURCES						
SERVICE	LOCATION	OFFICE / ALTERNATE				
Chevron Pipeline Company (Emergency)	La Mirada, CA	800-762-3404				
Chevron Refinery (Dispatch for Pacifica boom deployment)	El Segundo, CA	310-615-5172				
CTEH (Center for Toxicology & Environmental Health) – air monitoring	Little Rock, AK	866-869-2834				
Oiled Wildlife Care Network (OWCN)	Davis, CA	877-823-6926				
Phillip Services (PSC) (All Waste)	Long Beach, CA	800-275-3658				
Poison Control Center		800-222-1222				

PIPELINE/UTILITIES CONTACTS						
SERVICE	LOCATION	OFFICE / ALTERNATE				
California American Water		888-422-5264 - 24 hr.				
Chevron Pipeline (24 Hr.)		800-762-3404				
Crimson Pipeline		866-351-7473				
		811				
DIGALERI		800-227-2600				
Golden State Water (Culver City)		800-999-4033				
Inglewood Field						
Inglewood Water Department (Inglewood)		310-412-5310				
L.A. County Sanitation District		562-908-4288				
L.A. Department of Water & Power (24 Hr.)		800-342-5397				
Las Cienegas						
Montebello Field						
San Gabriel Valley Water (24 Hr.)		626-448-6183				
SBC/PacBell (Telephone/Fiber Optics) (24 Hr.)		510-645-2929				
Southern California Edison (24 Hr.)		800-962-6269				
Southern California Edison (24 Hr.)		800-962-6269				
Southern California Gas Co. (24 Hr.)		800-858-5601				
Tesoro Petroleum Pipeline		562-728-2295				
Tesoro Petroleum Refinery		310-816-8450				

# FIRST SENTINEL PEAK RESOURCES CALIFORNIA, LLC PERSON NOTIFIED/ON SCENE

- \_\_\_\_\_ Follow the appropriate "Specific Incident Response Check list" in Figure 3.1 and "Product Specific Response Considerations" in Figures 3.2 and 3.3.
- \_\_\_\_\_ Notify **Facility Management** of the incident.
- \_\_\_\_\_ Utilize local emergency services as necessary (police, fire, medical).
- \_\_\_\_\_ Alert other personnel that might be adversely impacted by the Incident.

## **FACILITY MANAGEMENT**

- \_\_\_\_\_ Evaluate the Severity, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- \_\_\_\_\_ Assume the role of **Incident Commander**.
- \_\_\_\_\_ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- \_\_\_\_\_ Activate the **Spill Management Team and primary response contractors**, as the situation demands.
- \_\_\_\_\_ Coordinate activation of additional spill response contractors, as the situation demands (telephone reference is provided in Figure 2.5).
- \_\_\_\_\_ Perform notifications as per Figure 2.1.
- Coordinate **regulatory agency notification**, as the situation demands (notification procedures and telephone references are provided in Figures 2.4 and 2.5 respectively).
- \_\_\_\_\_ Proceed to spill site and coordinate response and clean-up operations.
- \_\_\_\_\_ Direct containment and clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2 and 3.3.

## SPILL MANAGEMENT TEAM

- \_\_\_\_\_ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- \_\_\_\_\_ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- Assist as directed at the spill site.
  Sentinel Peak Resources California, LLC
  Los Angeles Basin Facilities

## SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

# **INITIAL RESPONSE**

- \_\_\_\_\_ Take appropriate personal protective measures.
- \_\_\_\_\_ Call for medical assistance if an injury has occurred.
- \_\_\_\_\_ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- \_\_\_\_\_ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- \_\_\_\_\_ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- \_\_\_\_\_ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- \_\_\_\_\_ Identify / Isolate the source of the discharge and minimize the loss of product.
- \_\_\_\_\_ Contain and estimate the volume of the spill.
- \_\_\_\_\_ Take necessary fire response actions.
- \_\_\_\_\_ Eliminate possible sources of ignition in the near vicinity of the spill.
- \_\_\_\_\_ Notify Facility Management of the incident.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# LINE BREAK OR LEAK (including piping rupture/leak, valve rupture/leak and manifold failure), SPECIFIC RESPONSE

- \_\_\_\_\_ Shut down pumping equipment.
- \_\_\_\_\_ Close upstream and downstream block valves.
- \_\_\_\_\_ Utilize Combustible Gas Indicator, O<sub>2</sub> meter, or other air sampling measurements to assure that areas are safe to enter for continued response operations.
- \_\_\_\_\_ If located within containment area, ensure that drainage valve(s) is "closed".
- \_\_\_\_\_ Drain the line section, as the situation demands.
- \_\_\_\_\_ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Cut diversion berms to direct flow to collection traps.
  - Deploy boom (Reference ACP for potential strategies)
  - Spreading sorbent material over the spill
  - Blocking storm drain inlets
- \_\_\_\_\_ Prevent the spill from entering the water to the greatest extent possible.
- \_\_\_\_\_ Clean up spilled product to minimize environmental problems.
- \_\_\_\_\_ Be alert for underground cables or pipelines if excavation is required.
- \_\_\_\_\_ Inform local operators of utilities in the vicinity.
- \_\_\_\_\_ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- \_\_\_\_\_ Determine the direction and expected duration of spill movement. Refer to the maps in Section 6.0.
- \_\_\_\_\_ Request local authorities to establish traffic control in the area, as the situation demands.
- \_\_\_\_\_ Make all necessary repairs.
- \_\_\_\_\_ Return the line to service when repairs are complete.
- Complete follow-up and written reporting, as the situation demands. Sentinel Peak Resources California, LLC Los Angeles Basin Facilities

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# STORAGE TANK LEAK (including tank failure/leak), SPECIFIC RESPONSE

- \_\_\_\_\_ Shut down all tank battery product and isolate the tank.
- \_\_\_\_\_ Initiate Confined Space Entry procedures, as applicable.
- \_\_\_\_\_ If a potential vapor cloud release exists, refer to the specific response actions outlined in this figure (Figure 3.1) for a "Vapor Cloud".
- \_\_\_\_\_ Ensure that the dike area drain valves are <u>all closed</u> to contain product.
- \_\_\_\_\_ Locate the point of leak.
- \_\_\_\_\_ If near tank bottom, consider filling tank with water and maintain water bottom to eliminate the product leak temporarily.
- \_\_\_\_\_ Utilize Combustible Gas Indicator, O<sub>2</sub> meter, or other air sampling measurements to assure that areas are safe to enter for continued response operations.
- \_\_\_\_\_ If possible, block drainage of spilled material from traveling offsite.
- \_\_\_\_\_ Clean up product spill to eliminate any possible environmental problems.
- \_\_\_\_\_ Be alert for underground cables or pipelines if excavation is required.
- \_\_\_\_\_ Inform local operators such as utilities, telephone company, railway.
- \_\_\_\_\_ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- \_\_\_\_\_ Collect spilled product with vacuum trucks and transfer it to approved recycling or storage facilities.
- \_\_\_\_\_ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# STORAGE TANK LEAK (including tank failure/leak), (Cont'd)

- \_\_\_\_\_ Determine the direction and expected duration of spill movement. Refer to the maps in Section 6.0.
- \_\_\_\_\_ Request local authorities to establish traffic control in the area, as necessary.
- \_\_\_\_\_ Empty tank as soon as possible.
- \_\_\_\_\_ If necessary, call one (1) of the approved waste removal companies to remove the remaining sludge and residue from the containment area. Refer to Appendix F for waste disposal considerations.
- \_\_\_\_\_Make all necessary repairs. Return the tank to service when repairs are complete and tested.
- \_\_\_\_\_ Complete follow-up and written reporting, as the situation demands.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE (including a pipeline facility)

In the event of a fire, the Facility Supervisor or his designate will coordinate all activities and act as liaison with fire personnel.

### FIRE ALARMS:

If the fire is within an office building or other location, sound alarms and expedite evacuation procedures that have been established for the location.

#### DURING BUSINESS HOURS: INDIVIDUAL DISCOVERING THE FIRE - (All Employees)

- \_\_\_\_\_ Call the Fire Department (911) or notify other available personnel to do so.
- \_\_\_\_\_ Open entrance and exit gates at the facility and if necessary clear the access routes of any vehicles that could impede response vehicles.
- \_\_\_\_\_ Notify Facility Management.
- \_\_\_\_\_ Notify all other personnel on the premises.
- \_\_\_\_\_ Stay at, or return to, the scene of the fire and, if practical, attempt to extinguish same with the nearest fire equipment available. Do not place yourself or others at risk in doing so.
- In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.
- \_\_\_\_\_ Shut off pumps and curtail operations, as the situation demands.
- \_\_\_\_\_ Enlist the aid of other personnel to be positioned at the entrance gate to direct fire personnel.
- \_\_\_\_\_ Contact local police for assistance, as the situation demands.
- \_\_\_\_\_ Remember CALGEM is required to be notified of all fires associated with oil or gas drilling or production operations and related facilities.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# EXPLOSIONS AND/OR FIRE, (Cont'd)

## AFTER BUSINESS HOURS: INDIVIDUAL DISCOVERING THE FIRE (in the absence of Supervision) – "Night Man"

- \_\_\_\_\_ In the event of fire in the absence of a member of supervision, any SPR employee on duty is designated as the individual in charge.
- \_\_\_\_\_ The individual discovering the fire will adhere to the instructions issued for the normal operation.
- \_\_\_\_\_ Ensure that the fire department has been notified.
- \_\_\_\_\_ Move portable equipment from hazardous area.
- \_\_\_\_\_ Prepare extinguishing equipment, and if practical, attempt to fight fire. Do not place yourself or others at risk in doing so.
- \_\_\_\_\_ Ensure supervision is notified by telephone (refer to Figure 2.2).
- \_\_\_\_\_ Prior to the arrival of a member of supervision, the individual will remain in charge and will direct the fire department to the scene of the fire.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by management. Be courteous with media representatives and direct them to the designated spokesman.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# LPG VESSEL FIRES, SPECIFIC RESPONSE

In the event of an LPG Vessel Fire, the Facility Supervisor or his designate will coordinate all activities and act as liaison with fire personnel. The Supervisor should take command and assess the situation. Initial assessment of LPG storage fires is essential for the safety of personnel. Imminent danger of vessel failure and injury to personnel exists under the following conditions:

- There is flame impingement on the unwetted portion (vapor space) of the storage vessel.
- There is no application of cooling water to the impinged area.
- There is no fireproofing on the flame impingement area.
- These three conditions have persisted for 10 minutes or more.

Under these conditions immediate evacuation is recommended. Before a vessel ruptures, bubbles may be visible in the vessel shell and a metallic pinging sound may be audible indicating that the vessel is overstressed. If the vessel relief value is venting it may not be possible to hear the pinging sound.

Indications that the fire is escalating are as follows:

- The relief valve lifts, indicating considerable heat input to the tank.
- The relief valve lifts and does not reseat even though cooling streams have been applied.
- The noise level of a venting relief valve increases, indicating ineffective cooling of the exposed vessel.

When it has been determined the fire is safe to approach, a plan of attack should be developed and should include the following considerations:

- What storage vessels will need cooling in addition to the one involved?
- What water application rates will be needed, and is there sufficient water supply?
- What is the source of fuel to the fire, and can it be safely shut off?
- Is there a safe evacuation route if conditions change?

If an LPG fire has been extinguished, but the fuel source has not been shut off, the fuel will continue to vaporize rapidly, creating a flammable vapor cloud that will travel downwind. If it encounters an ignition source, a vapor cloud explosion may occur, and the fire will begin anew. This is why it is advisable to shut off the fuel source before extinguishing an LPG fire.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# LPG VESSEL FIRES, SPECIFIC RESPONSE, (Cont'd)

In the event of a fire, the Facility Supervisor or his designate will coordinate all activities and act as liaison with fire personnel.

### FIRE ALARMS:

Sound alarms and expedite evacuation procedures that have been established for the location.

- \_\_\_\_\_ Call the Fire Department (911) or notify other available personnel to do so.
- \_\_\_\_\_ If the source of the fire cannot be isolated, shut-in the entire facility, ESD.
  - Do not extinguish a leaking LPG fire unless the source can be isolated.
  - Eliminate all sources of ignition.
- \_\_\_\_ Evacuate the facility
  - Utilize alarm and loudspeaker systems.
  - Consider evacuation distance of 1 mile in all directions.
  - Account for all personnel.
- \_\_\_\_\_ Ensure fire systems are activated. Do not place yourself or others at risk in doing so. Fight fire from maximum distance. Used unmanned fire system to apply cooling water to vessels affected by the fire.
  - Deluge systems.
  - Fixed monitors.
  - Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel.
- \_\_\_\_\_ Notify Facility Management.
- \_\_\_\_\_ Enlist the aid of other personnel to be positioned at the entrance gate to direct fire personnel.
  - Brief fire department upon arrival.
- \_\_\_\_\_ Contact local police for assistance, as the situation demands.

### SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# SUSTAINED UNCONTROLLED RELEASE OF WELLBORE FLUIDS/GAS, SPECIFIC RESPONSE

A "kick results when the pressure in the wellbore becomes less that the pressure in the formation. If the "kick" is not circulated out in the proper manner, it can result in the uncontrolled release of pressure which could exceed the maximum allowable limits of the blowout prevention equipment or casing.

Well control problems may result in fire, explosion, and the release of natural gas or H2S, flying debris, release of flammable liquids or hazardous materials. Only qualified and trained personnel should respond. The following qualified companies should be contacted if assistance is required:

Boots and Coots Services 3000 N. Sam Houston Pkwy. E Houston, TX 77032 (800) 256-9688 Fax: (281) 912-0771 Cudd Well Control 2800 Technology Forest Woodlands, TX 77384 (800) 990-2833 Fax: (713) 849-3681 Wild Well Control 2202 Oil Center Court Houston, TX 77073 (281) 784-4700 Fax: (281) 784-4750

**INDICATION:** "Kick" indications include an increase in flowline discharge, an increase in pit volume, loss of mud weight due to gas or water entry, and/or an increase in salinity, to name a few.

**FIRST RESPONDER (DRILLING FOREMAN)** Note: These actions are to be taken after attempts of well control have failed using the rig's blowout prevention equipment and the well is flowing uncontrolled to the surface.

- \_\_\_\_\_ Call the Fire Department (911) or notify other available personnel to do so.
- \_\_\_\_\_ Eliminate all sources of ignition.
- \_\_\_\_\_ Evacuate all personnel to a safe area, upwind.
- \_\_\_\_\_ Take head count of all personnel and assess the situation. Notify emergency rescue units if personnel are injured or missing.
- \_\_\_\_ Notify Field Foreman.
- \_\_\_\_\_ Barricade off area to deny entry to all unauthorized personnel.
- \_\_\_\_\_ Stay at, or return to, the scene of the blowout and, if practical, attempt to close manual shut-off valve. **Do not place yourself or others at risk in doing so**.
- \_\_\_\_\_ Stay at, or return to, the scene of the blowout and, if practical, attempt to build additional containment structures in order to contain any migrating fluids near the well location as much as possible. Do not place yourself or others at risk in doing so.
- \_\_\_\_\_ Set up Command Post and gather additional pertinent information. Explore possibility of pumping water (mud or cement) into wellbore. Re-assess containment issues and begin additional migration control actions.

### SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# SIGNIFICANT UNCONTROLLED HIGH-PRESSURE STEAM RELEASE, SPECIFIC RESPONSE

High pressure steam is produced on certain SPR properties. The steam is pumped through distribution lines to wells for injection.

Steam used in the SPR fields has extremely high temperatures and pressures. Steam may be found in the equipment producing steam, the high-pressure lines to the wells, casing annulus, and in underground pockets during drilling.

<u>CAUTION:</u> High pressure steam can cause severe burns and penetrate the skin to carry contamination through skin to inside the body.

- \_\_\_\_\_ Assess the situation, stay upwind of release, and note details of release: source, location, and time.
- \_\_\_\_\_ Alert others nearby of emergency.
- \_\_\_\_\_ Evacuate all personnel to a safe area, upwind.
- \_\_\_\_\_ Notify Field Foreman.
- \_\_\_\_\_ Barricade off area to deny entry to all unauthorized personnel.
- Shut off source of steam production, if trained and safe to do so, after consultation with Field Supervisor. Refer to Field Operator for Emergency Shut Down (ESD) procedures.
- \_\_\_\_\_ Complete initial assessment report.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# VAPOR CLOUD (from a massive spill, line rupture, etc.), SPECIFIC RESPONSE (including inside or near a building)

## IMMEDIATE AND TOTAL EVACUATION OF THE AREA:

- \_\_\_\_\_. If a heavy concentration of vapors is detected, everyone should be alerted and immediately evacuate the area.
- \_\_\_\_\_ The evacuation route should be up-wind if possible.
- \_\_\_\_\_ All employees should assemble up-wind at least <u>fifty</u> yards from the vapor contamination area.
- \_\_\_\_\_ A supervisor or senior employee should take charge and ascertain that all employees are accounted for.

### **EVACUATION OF ADJACENT PROPERTIES AND REQUESTING ASSISTANCE:**

- \_\_\_\_\_ Dispatch a person or persons to advise people on adjacent properties they should evacuate the area as the situation demands.
- \_\_\_\_\_.Call the Fire Department (911) and ask for assistance.
- \_\_\_\_\_ Call the Police Department (911) and ask for assistance.

## SECURE THE AREA:

• \_\_\_\_\_ Stop all traffic on adjacent streets if appropriate. Secure the entire area from all vehicle and pedestrian traffic.

#### POSSIBLE ADDITIONAL ACTION:

- \_\_\_\_\_ Contact Facility Management as soon as it can be done safely.
- \_\_\_\_\_ Disconnect electrical power supply, <u>ONLY</u> if it is possible without entering the vapor area. Disconnect or deactivate all potential ignition sources.
- \_\_\_\_\_ Move any vehicles to a secure location, <u>ONLY</u> if they are not in the vapor area.
- \_\_\_\_\_ The perimeter of the vapor area should be continuously monitored with an explosimeter. No one should re-enter the vapor area until the source of the vapors has been located and controlled.
- If the vapors are the result of a continuing spill, stop the flow, <u>ONLY</u> if it is possible from a remote location without entering the vapor area. Vapors may be purged from the area with water fog, foam, or natural elements, after the source of the vapors has been controlled.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# VAPOR CLOUD (from a massive spill, line rupture, etc.), (Cont'd)

## POSSIBLE ADDITIONAL ACTION (Cont'd):

- If level of vapors allow, entry into spill area is possible and the following action can proceed:
  - Shutdown all engines/motors.
  - Close all lines and valves, as the situation demands.
- \_\_\_\_\_ If the vapors are the result of a spill, then refer to the specific response actions outlined in this figure (Figure 3.1) for "Leak/Spill".

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# **BOMB THREATS, SPECIFIC RESPONSE**

The usual notification or warning is by telephone call and occasionally by mail. In the event of a bomb threat, the Facility Supervisor or designated alternate will coordinate all activities and act as liaison between the Facility and Civil Authorities.

## **GENERAL INSTRUCTIONS:**

- \_\_\_\_\_ Be especially careful to note the time you received the threat and (if given) the time the device is supposed to go off. The importance of this cannot be overstated.
- \_\_\_\_\_ Notify SPR Management and any other personnel on the premises of the threat.
- \_\_\_\_\_ Do not attempt to remove any equipment from the Facility until instructed to do so by the Management or civil authority.
- \_\_\_\_\_ If the bomb threat is received by telephone, immediately obtain the Telephone Bomb Threat Checklist located in Appendix K for guidance during conversation with the caller.
- \_\_\_\_\_ The amount of time required to search the premises can be minimized if the following rules are adhered to on a continuing basis:
  - Good housekeeping - keep all areas in orderly condition.
  - Familiarize yourself thoroughly with work area and surrounding area. If possible, know what is "normal" and what is "not normal". This will be of great help when a search is conducted.
- \_\_\_\_\_ As with any other "in-house" problem, make no unauthorized statement to anyone.

## **INSTRUCTIONS – DURING NORMAL BUSINESS HOURS:**

- \_\_\_\_\_ Facility Supervisor will notify civil authorities, manage, and supervise overall search efforts.
- \_\_\_\_\_ Facility Supervisor will be responsible for supervision of immediate search of office and yard areas.
- \_\_\_\_\_ Equipment Operators DO NOT MOVE automotive equipment. Each driver will search his own vehicle, then report to the Facility Supervisor for further instructions.
- \_\_\_\_\_ Office personnel will initiate immediate search of office area under supervision of the Facility Supervisor.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# BOMB THREATS, (Cont'd)

### **INSTRUCTIONS – AFTER HOURS:**

- \_\_\_\_\_ Notify the Facility Manager the SPR Management (who will notify the other supervisors) and call the Police and Fire Departments.
- \_\_\_\_\_ Open the access gates for civil authorities.
- \_\_\_\_\_ Advise authorities of the situation and the number of personnel currently on the premises.
- \_\_\_\_\_ Stop all vehicles from entering the Facility.

### **INSTRUCTIONS - DURING SEARCH OF PREMISES:**

- \_\_\_\_\_ DO NOT TOUCH MOVE TAMPER with any unusual or strange object.
- \_\_\_\_\_ If any unusual, odd, or out-of-place object is observed, clear the area immediately and notify Management or the civil authorities.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

## NATURAL DISASTER (Earthquakes and Severe Storms), SPECIFIC RESPONSE

Although many disasters cannot be prevented or predicted, preparation can significantly reduce losses. In the event of a severe weather condition or a natural disaster, the Facility Supervisor will be the emergency coordinator.

## **EARTHQUAKES**

Earthquakes occur without warning and nothing can be done to prepare for a response to an earthquake in advance. Although the Facility is designed to withstand significant earthquake events, damage can occur to the Facility and to the utilities that serve the Facility. The potential for Facility damage depends on distance from the epicenter and magnitude of the event. The following procedures should be followed if the Facility or Facility utilities are impacted by an earthquake event:

- Take appropriate measures to assure safety of personnel, as the situation demands. Shut down operations and initiate evacuation if personnel safety is in doubt.
- Locate and assess any apparent damage to facilities.
- Monitor all on-going transfer operations to confirm that operational integrity has not been jeopardized.
- Call for emergency services (police, fire, medical) only if such services are required, recognizing that such services may be in demand elsewhere.
- If utilities serving the Facility have been impacted, secure Facility operations so that restoration of service (typically without advance notice) will not result in hazardous conditions.
- Recognize the possibility that continuing earthquake shocks may occur, possibly more severe than the initial quake.
- Monitor news reports to assess the extent of damages within the locality of the Facility, to better understand the impact of such damage on Facility operations.
- If facilities have been damaged, initiate steps to make necessary repairs, enlisting the aid of others as the situation demands.
- Confirm the integrity of all operational safety devices (pressure regulators and alarms, tank level alarms, etc.) that may have been rendered inoperative as a result of the quake, before resuming operations.

## SEVERE ELECTRICAL STORMS/TORNADOES

The National Weather Service issues severe weather warnings, using the following terms: **Severe Thunderstorm Watch** indicates the possibility of frequent lightning and/or damaging winds of greater than 50 mph, hail <sup>3</sup>/<sub>4</sub> inch or more in diameter, and heavy rain; **Severe Thunderstorm Warning** indicates the possibility of tornadoes, thunderstorms, frequent lightning, hail, winds of greater than 75 mph; **Tornado Watch** means tornadoes could develop in a specific area; and **Tornado Warning** means a tornado has actually been sighted in the area or is indicated by radar. Flash floods may also result from severe storms.

## FIGURE 3.1 (Cont'd)

## SPECIFIC INCIDENT RESPONSE CHECKLIST

# NATURAL DISASTER (Earthquakes and Severe Storms), (Cont'd)

## SEVERE ELECTRICAL STORMS/TORNADOES (Cont'd)

Since tornadoes occur with little or no warning, very little can be done before the event. As severe weather develops, normal operating procedures will be followed. As the weather intensifies, the following procedures should be taken:

- Alert Facility personnel of the condition.
- If "tornado like" conditions seem likely, direct employees to take shelter immediately. If time permits, all personnel should assemble within secure buildings, keeping away from windows. If outside, lie flat in a ditch, ravine, or culvert.
- Close all doors to outside rooms.
- Monitor news broadcast for storm updates.
- After the storm passes, account for all personnel.
- Survey for damage to Facility property.
- Assemble a team for repairs if needed.

Your help in adhering to these guidelines can mean the difference between a minor incident and a major disaster.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

# **MEDICAL EMERGENCY, SPECIFIC RESPONSE**

- \_\_\_\_\_ Apply appropriate first aid for both injury and shock, exercising care not to cause further injury.
- \_\_\_\_\_ If victim is unconscious and not breathing, immediately apply artificial respiration (if trained in CPR) and continue without interruption until natural breathing is restored or relived by another trained CPR personnel or other qualified medical personnel.
- \_\_\_\_\_ Call for ambulance or other medical evacuation resources, if appropriate.
- \_\_\_\_\_ Notify hospital of patient arrival and extent of injury.
- \_\_\_\_\_ Notify victim's immediate family.
- \_\_\_\_\_ Complete follow-up and written reporting, as the situation demands.

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

## CIVIL DISORDERS/PICKETING, SPECIFIC RESPONSE

## **INSTRUCTIONS - DURING NORMAL BUSINESS HOURS:**

- \_\_\_\_\_ Facility Supervisor will notify Management.
- \_\_\_\_\_ All Facility personnel will report to the Facility Supervisor for instructions.
- \_\_\_\_\_ Close entrance gates and access roads as the situation demands.

## **INSTRUCTIONS - AFTER HOURS:**

- \_\_\_\_\_.DO NOT, under any circumstances, engage the individuals at the gate.
- \_\_\_\_\_ DO NOT attempt to leave the Facility if your safety is uncertain.
- \_\_\_\_\_ Notify Management of the circumstances.
- \_\_\_\_\_ Call the Police Department, for assistance, as the situation demands.

## **INSTRUCTIONS – SUSTAINED PICKETING ACTIVITY:**

SPR will normally attempt to continue normal operations and will do everything possible to protect its employees' right to work. If it becomes necessary to cross a picket line, the following rules should be observed.

- It is not necessary to engage in conversation with pickets except to identify yourself and DO NOT, under any circumstance, engage in conversation with pickets in a manner to incite breach of the peace.
- \_\_\_\_\_ If pickets refuse to allow you through, leave and report by telephone to the Management.
- If in a vehicle, stop before crossing any picket line and DO NOT engage in any forward or backward movement that will place the life and limb of any picket in jeopardy.
- \_\_\_\_\_ DO NOT --- OVERREACT --- to any situation. KEEPING A "COOL HEAD" IS THE MAIN THING!!!

## SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

## ABNORMAL PIPELINE OPERATIONS

- If operating design limits have been exceeded (increase or decrease pressure or flow) and no emergency condition exists, stop operations, and immediately investigate the pipeline.
- \_\_\_\_\_ Verify whether a true safety problem, equipment malfunction, or operator error is present.
- \_\_\_\_\_ If the situation is due to malfunctioning equipment, can transfer operations continue <u>safely</u>? If yes, then bypass the faulty equipment until the completion of the transfer and make appropriate repairs. Note: In all cases, safety to operations, the general public, and property will govern actions taken.
- \_\_\_\_\_ If the transfer cannot continue safely, make appropriate repairs before continuing operations. Note: Corrective action will only be done by qualified personnel to perform the type of work involved.
- \_\_\_\_\_ Monitor affected systems until normal operations are resumed.
- \_\_\_\_\_ Inform local operators such as utilities, telephone, and/or railway.
- \_\_\_\_\_ Complete follow-up and written reporting, as the situation demands.
- Note: For more specific details, refer to Company's Operations and Maintenance (O & M) Manual.

#### PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for Crude Oil

# Flash Point Range: Above 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. **The following are intended for guideline purposes only.** 

These materials are not extremely flammable, and the preferred response is containment and mechanical recovery.

- \_\_\_\_ Identify source and stop discharge if possible.
- \_\_\_\_ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- \_\_\_\_\_ If spill occurs in Tank Farm, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.
- \_\_\_\_ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.
- \_\_\_\_ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.
- \_\_\_\_ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.
- \_\_\_\_ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.
- \_\_\_\_ Request local authorities to establish traffic control in the area, as the situation demands.
- \_\_\_\_\_ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

#### PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for NATURAL GAS LIQUIDS

## Flash Point Range: Below 100°F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. **The following are intended for guideline purposes only.** 

These materials float on water and are extremely flammable. However, MTBE is very soluble in water (24 times more so than benzene and degrades very slowly in the natural environment.) Therefore, MTBE spills require a more immediate and thorough response than typical gasoline spills. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

- \_\_\_\_ Identify source and stop discharge if possible.
- \_\_\_\_ Make appropriate notifications to regulatory agencies and internal SPR Management/ Regulatory Compliance. (Refer to Figure 2.5 for notifications.)
- \_\_\_\_ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- Eliminate sources of vapor ignition.
- \_\_\_\_ Stay upwind and evacuate nonessential personnel.
- \_\_\_\_ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.
- \_\_\_\_ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.
- \_\_\_\_ Recover pooled hydrocarbon as soon as possible.
- \_\_\_\_ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)
- \_\_\_\_\_ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.
- If MTBE is involved, recover all free water in contact with the release area.

## FIGURE 3.3 (Cont'd)

#### PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for NATURAL GAS LIQUIDS

- \_\_\_\_ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.
- Place in a <u>bin/rolloff</u> or a waste pile lined on the bottom and covered on the top with plastic sheeting to <u>prevent contact with rainwater and contamination of other areas</u>.
- \_\_\_\_ Drums may be used for very small spill cleanups.
  - If removal of heavily impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:
    - \_\_\_\_ Cover area with plastic sheeting, overlap seams, weigh down with sandbags.
    - Use shallow ditches to divert rainwater around contaminated site; and
    - \_\_\_\_ Promptly remove any rainwater that does accumulate on the site.
  - The following steps should be taken together with the Regulatory Compliance Dept. to minimize long term risk from the site:
    - \_\_\_\_ Sample contaminated soil still in place.
    - Characterize and dispose of removed soil.
    - \_\_\_\_ Estimate proper cleanup target.
    - Remove and dispose of more soil, if necessary.
    - Install groundwater monitoring wells or monitor existing wells, if necessary; and
    - Provide follow-up communication with regulatory agencies, if necessary.
- Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.
  - Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.
- \_\_\_\_ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.
- \_\_\_\_ Request local authorities to establish traffic control in the area and to post a "High Flammability" advisory, as the situation demands.
  - \_\_\_\_\_ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

### SPECIFIC RESPONSE CONSIDERATIONS For AVOIDANCE OF SENSITIVE BIOLOGICAL RESOURCES At The INGLEWOOD OIL FIELD

In the event that an oil spill occurs at the Inglewood Oil Field the physical response to the oil spill needs to address methods for avoiding impact to sensitive biological resources. If an oil spill occurs during a period of high flows in Ballona Creek coupled with an extreme high tide event at Ballona Wetlands the potential exists for oil to enter the Ballona Wetlands. The retention basins at the Inglewood Oil Field are designed to handle a 100-year storm event, which should minimize the likelihood that oil would ever enter the Ballona Wetlands. The remainder of this section of the ERAP/ERP provides suggested physical response actions for the worst-case scenario of a maximum oil spill at the Inglewood Oil Field. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. **The following are intended for guideline purposes only.** 

Identify source and stop discharge if possible.

- If spill occurs in Tank Farm, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.
- Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.
- If a spill escapes the primary containment areas, response and recovery measures should be directed to preventing spilled materials from entering Ballona Creek as much as possible. Berms and/or trenches shall be constructed to contain the spill prior to entry into Ballona Creek. Other appropriate measures may be required and would be determined by the Incident Commander and Spill Management Team, as appropriate.
- Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.
- \_\_\_\_\_ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area. Access and egress points, staging areas, and material stockpile areas that avoid sensitive habitat areas should be identified and used.
- Sensitive biological resources within Inglewood Oil Field, as identified in the Special Status Species and Habitat Protection Plan, should be avoided to the extent feasible during all emergency efforts to reduce or halt discharge, and during any potential recovery and cleanup effort.
- If clean-up is recommended by regulatory agencies at Inglewood Oil Field, the operator shall comply with all provisions of the Special Status Species and Habitat Protection Plan that has been approved by the director. These provisions would include appropriate protection and restoration efforts.

### SPECIFIC RESPONSE CONSIDERATIONS For AVOIDANCE OF SENSITIVE BIOLOGICAL RESOURCES At The INGLEWOOD OIL FIELD (Cont'd)

- In the event that a spill enters Ballona Creek, the Ballona Creek schematic identifies potential locations for the placement of containment booms within the creek that should be considered, depending on the source of the spill. In addition, the U.S. Army Corps of Engineers Los Angeles District and the Los Angeles County Flood Control District operate several flow control structures on Ballona Creek and within the Ballona Wetlands. Accordingly, the Spill Management Team should contact the U.S. Army Corps of Engineers Los Angeles District and the Los Angeles County Flood Control District to discuss options to isolate the spill prior to the entering the Ballona Wetlands or reduce/limit migration of the spill to the Ballona Wetlands.
  - In the worst case scenario that a maximum oil spill enters Ballona Wetlands, the Spill Management Team shall follow the guidelines and procedures described within the Wildlife Response Plan for California (California Department of Fish and Wildlife, June 2005) for collection, transport, and treatment for oiled wildlife.
- Product on vegetation and surface water in Ballona Wetlands should not be removed in most cases to avoid further ecological impacts. If clean-up is recommended/required by regulatory agencies, low-impact site specific techniques such as hand-cuttings, low pressure water flushing, or burning oiled vegetation when ground is wet, are recommended. Implementation of the clean-up effort would require coordination with regulatory agencies, qualified restoration biologists and possibly the County.
- If habitat disturbance is unavoidable a site-specific habitat restoration plan including species specific mitigation measures should be developed and implemented to restore native plant and animal communities to appropriate reference conditions. The restoration plan will be developed in coordination with the California Department of Fish and Wildlife and the designated Wildlife Branch Director. The restoration plan will include a timeline goal for achievement of re-establishment of vegetation and a monitoring plan and criteria to determine if restoration is successful.
- In the event of spills at Inglewood Oil Field, which would not require emergency or immediate actions (e.g., smaller spills that would not threaten Ballona Creek but may threaten other biological resources), typical protection measures described in full in CSD E.7.a shall be adhered to. Such measures include requirements to hire a biologist, approved by the County, to conduct a survey of the area following a spill to determine if significant impact to sensitive natural habitat areas, as identified in the Special Status Species and Habitat Protection Plan.

In case of an emergency within the Facility that would necessitate evacuation, some or all of the following steps are taken, depending on type of emergency and circumstances:

- Sound an alarm or give verbal alarm.
  - o Inglewood Gas Plant specific alarms:
    - Fire Alarm High pitch intermittent tone
    - Evacuation Extended blast from handheld air horn
  - Facility Offices:
    - Public Address system, notifying personnel evacuation is in progress.
- Call 911.
- If safe send an employee to the suggested entrance location to accompany the Fire Department to the appropriate location(s). Do not place yourself or others at risk in doing so.
- Shut down affected operations as the situation demands.
- Evacuate vehicles from facility (provided that a safe operating environment exists).
- Evacuate personnel to staging areas and muster points at least fifty yards up-wind from any vapor contamination area. If appropriate, remove shift schedules, logs, sign-in sheets, and employee rosters and proceed to the staging area.
  - *Production Fields:* personnel should evacuate the affected area and proceed to a muster point at the nearest field office.
  - *Facility Offices and Urban Drill Sites:* personnel should evacuate to the primary or alternate muster points designated on the evacuation diagrams.
- Account for all personnel utilizing above list of registers. Inform emergency response personnel of any personnel on the register not accounted for.

For emergencies at locations through the production fields, personnel should evacuate the affected area and proceed to a muster point at the nearest field office. For Facility offices and the urban drill sites, personnel should evacuate to the primary or alternate muster points designated on the evacuation diagrams. Wind condition may change remember to evacuate at least fifty yards up-wind from any vapor contamination area. Roll calls will be completed at the muster points utilizing shift schedules, logs, sign-in sheets, and employee rosters to assist emergency response personnel in identifying potential missing personnel.

Evacuation diagrams are posted in the Facility offices, showing evacuation routes and muster points. Copies of the diagrams are on the following pages.

# Inglewood Office Evacuation Plans





## **INGLEWOOD GAS PLANT**

Evacuation Diagram





## LAS CIENEGAS FIELD – JEFFERSON SITE



Figure 1.3 Inglewood Oil Field Facility Diagram

WELL SURFACE LOCATION EASE LINE GRAPHIC SCALE 500' 1000 BALDWIN FEE A SEDMONTO DATA BARRING Þ10 EMPLE 5 Montabello Dil Pield Los Angeles County, California Montebello Base Map Leases and All Wells ADALE NOR REALE LATTE CAL HAD 1927, DAL PLANE, LONG DRAWNING:

Figure 1.4 Montebello Field Facility Diagram



Figure 1.6 Las Cienegas Field – Jefferson Site

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The diagrams on the following pages will assist initial responders in locating spills that may have been reported along the pipeline route or at other locations away from the production field and drill sites. They include:

Figure 1.7 – Pipeline Route Map – Las Cienegas

The Ballona Creek schematic identifies potential locations for the placement of containment booms within the creek that should be considered, depending on the source of the spill.

Figure 6.2 – Ballona Creek Boom and Staging Locations

Other information that might be helpful during the initial response effort includes the Los Angeles County Flood Control storm drain inlets maps and the more detailed Environmental Sensitivity Maps (ESM's) in Section 6.0 of the ICP. The storm drain maps consist of overlay sheets placed in the Los Angeles County Thomas Map Guide, with the storm drains inlets, routing and outlets marked. SPR field supervisors and other key response personnel maintain a copy of this Thomas Guide along with their copy of the ERAP.

Figure 1.7 Oil Pipeline Route Map – Las Cienegas





Sentinel Peak Resources California, LLC Los Angeles Basin Facilities

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# **DECONTAMINATION PROCEDURES**

During responses to spill incidents, decontamination of personnel, equipment, and the release site is essential for individual safety and to minimize movement of hazardous material into unaffected areas. To minimize the transfer of hazardous substances from the site as a result of response activities, contamination control and decontamination procedures are needed.

## **Contamination Control**

The Safety Officer will establish control at a contaminated response site to reduce the possibility of exposure to any contaminants including their transport by personnel and/or equipment from the site. Procedures include:

- Set up security and physical barriers (e.g., hazard tape, rope, road cones, or a combination of restraints) to exclude unnecessary personnel and visitors from the contaminated area.
- Minimize the number of personnel and equipment onsite consistent with effective operations.
- Establish work zones within the site to reduce the migration of hazardous substances.
- Establish control points to regulate access to work zones.

## Work Zones and Access Control Points

Work zones will be used to prevent or reduce the migration of contamination from a site where operations occur. Access control points will be used to limit the movement of personnel and equipment between work zones and onto the site itself.

The Safety Officer will establish three contiguous work zones (see Figure 1.12) surrounding each separate contaminated area on the site where response operations will occur. These zones are:

- Zone 1: Exclusion Zone.
- Zone 2: Contamination Reduction Zone.
- Zone 3: Support Zone.



Movement of personnel and equipment into and out of the contaminated areas and between zones will be limited to access control points located upwind of the contaminated area. Refer to the table below for work zone descriptions.

Zone	Туре	Zone Location	Contamination Level	PPE	Access Control Point
1	Exclusion or Hot Zone	Innermost or Hot Zone	Known or expected to occur	Specified level of protection	Must establish or located upwind of the contaminated area(s) along the outer boundary (i.e., the Hot Line)
2	Contamination Reduction or Warm Zone	Between the Exclusion and Support Zones	Clean Area: designed to provide a transition between Zones 1 and 3	Prescribed level of protection. Decontami- nation of PPE will occur at a series of stations	Entry and exit between Zones 2 and 3 will be restricted to access control points upwind of Zone 1 on the Contamination Control Line
3	Support or Cold Zone	Outermost: may include Field Command Post, transport vehicles, equipment, supplies, etc.	Clean Area	Normal work clothes, no contaminated clothing, equipment or supplies permitted	None: traffic will be restricted to authorized response personnel

Work Zones and Access Control Points

The physical size of the zones will be determined by the:

- Nature of the released material.
- Climatic conditions of the area.
- Topography of the area.

The Hot Line (see Figure 1.12) will be established initially:

- Visually surveying the immediate area of the release.
- Determining the location(s) of the involved hazardous substance(s).
- Studying monitoring data obtained during the initial site survey.

The boundary may be modified and adjusted over time, as more information becomes available.

## Procedures

The Safety Officer is responsible for routine decontamination procedures and emergency contamination procedures. Routine decon is the primary focus of this section; however, emergency decon procedures should be established and carried out if it is safe to do so. In an emergency, the primary concern is to prevent loss of life or severe injury to site personnel. If immediate medical treatment is required to save a life, decon should be delayed until the victim is stabilized. Consider the following:

• If decon can be performed without interfering with essential lifesaving techniques or first aid, decon must be performed immediately.

- If an emergency due to a heat-related illness develops, protective clothing should be removed from the victim as soon as possible.
- During an emergency, provisions must also be made for protecting medical personnel and disposing of contaminated clothing and equipment.

## Decontamination Area Site Setup

The Safety Officer will select a level site at the edge of the Exclusion/Hot Zone where an entrance to the Exclusion Zone and an exit through the Contamination Reduction Zone/Warm Zone and into the Support/Cold Zone may be located (see Figure 1.12). The site selected should be away from the travel of equipment and supplies and not of value or needed for any future activities during the response. Steps for the design of the area include:

- 1. Construct a low berm around the decon site. Lay a sheet of visqueen over the entire surface area and over the berm. Weight sheet with soil around the outside edge of the berm. An example of a decontamination area is shown in Figure 1.13
- 2. Arrange all equipment in a fashion commensurate with the level of protection (e.g., Level D through A). Figure 1.14 represents decontamination levels associated with Level A protection.
- 3. Lay down sorbent pads at decon entrance and near all tubs, buckets, and paths of travel where liquids may be tracked or deposited.
- 4. Set marker stakes and tape off decon area consistent with marking used for Exclusion/Hot Zone.
- 5. Post entrance and exit signs.
- 6. Label all waste containers appropriately. Have containers for contaminated debris and uncontaminated wrappings or trash.
- 7. Set up boot washing tubs or pools, tub #1 containing Simple Green or other biodegradable soap and tub #2 containing clear water. An optional tub may also be used between tubs #1 and #2 with a milder soap concentration. Provide scrub brushes in each tub.
- 8. Set up a glove washing area on a table, bucket #1 containing soap and bucket #2 containing clear water. An optional bucket may also be used between, buckets #1 and #2 with a milder soap concentration. Provide rags or towels on the table.
- 9. If SCBAs are used in the Exclusion/Hot Zone, set up one bucket with mild bleach solution for mask washing, one with soap for mask washing, one for rinse, and have wipes or towel available.
- 10. Organize extra equipment and store neatly.
- 11. Take inventory of all PPE and decon equipment upon mobilization of decon. Log all PPE and equipment as it is resupplied or used on the response. Take inventory of PPE and decon equipment upon demobilization. Create a report of PPE used and status of equipment inventory at the end of the response.

## 12. KEEP DECON AREA NEAT AND CLEAN AT ALL TIMES!

The number of stations will depend on the amount and type of PPE. The maximum number of decontamination stations will be required for Level A protections. Decontamination procedures for lower levels of protection will consist of fewer decontamination stages for the amount of equipment worn or involve the elimination of wash and rinse stations when disposing of clothing.

## Standard Decon Procedures for PPE Up To and Including Level B

Enter Decontamination Area from Exclusion/Hot Zone entrance and proceed through the following steps and stations:

- 1. Clean boots in Tub #1 using scrub brush.
- 2. Rinse boots in Tub #2 using scrub brush.
- 3. Clean gloves in Bucket #1.
- 4. Rinse gloves in Bucket #2.
- 5. Have Decon Technician (in PPE) remove tape from gloves, boots, and Tyvek suits.
- 6. Have Decon Technician remove outer gloves (leave inner gloves on).
- 7. Have Decon Technician remove SCBA (if worn and when decon area is verified to be below PEL exposure limits).
- 8. Have Decon Technician unzip Tyvek suit and assist removal of boots first, then Tyvek suit. Step into own shoes when clear of boots and suit.
- 9. If applicable, wash SCBA mask in Bucket #3 and rinse in Bucket #4. Dry mask.
- 10. Remove inner gloves, being careful not to touch outer surfaces.
- 11. Have Decon Technician deposit all throwaway PPE items in appropriate DOT drum.
- 12. Have Decon Technician stow all reusable PPE items neatly in temporary storage and made ready for reuse.
- 13. Depart through designated exit to Support/Cold Zone.



Figure 1.9 Decontamination Area Layout

