E-mails and correspondence regarding Rancho LPG facility
Kit Fox

From: Carolyn Lehr
Sent: Friday, December 07, 2012 2:41 PM
To: Kit Fox
Subject: FW: "LA City Fire (CUPA) Rancho LPG Situation..urgent!"
Attachments: final fire department letter on cupa deficiency.doc; rancho nuisance abatement nov 2012.doc; safyelt.pdf; bea correspondence aug 3 2012.pdf

Kit, fyi.
CL

From: Bonnie Christensen [mailto:sphomeunited@earthlink.net]
Sent: Friday, December 07, 2012 11:55 AM
To: sally.magnani@doj.ca.gov; brian.cummings@lacity.org; daryl.osby@fire.lacounty.gov; helmlinger.andrew@epamail.epa.gov; welsing.mary@epamail.epa.gov; blumenfeld.jared@epamail.epa.gov; Hamilton.cloud@mail.house.gov; Ricardo.Hong@lacity.org; meveloff@gmail.com; william.carter@lacity.org; marisol.espinoza@lacity.org; joe.buscaino@lacity.org; jacob.haik@lacity.org; gnatz@portofla.org; jcynthiaperry@acom; rkim@lachos.org; CC: g.sugano@lomitacity.com; June Smith; diananave@gmail.com; info@centralsanpedro.org; ksmith@klct.com; Anthony Patchett; noelweiss@ca.rr.com; Lacombe Lacombe; Jody James; Connie; Pat Herrera-Duran; vimmerarchitect@aim.com; Andrew Mardesich; David L.Rivera; Bonnie Christensen; christie.whitman@whitmanstrategygroup.com; dpettit@nrdc.org; elise.swanson@mail.house.gov
Subject: Fwd: "LA City Fire (CUPA) Rancho LPG Situation..urgent!"

There should be 5 attachments. Let me know if you do not receive all five.

zbiddy.com
November 27, 2012

LA Fire Chief, Brian Cummings
Los Angeles Fire Department
200 No. Main St., 16th Floor
Los Angeles, CA 90012

RE: RANCHO LPG NUISANCE ABATEMENT COMPLAINT
Rancho LPG
2110 No. Gaffey St.
San Pedro, CA 90731

Dear Chief Cummings,

Please find the attached Nuisance complaint filed with the LA Zoning administrator against Rancho LPG storage facility in San Pedro.

The LA City Fire Department has been charged with the responsibility of oversight as it pertains to the safety management of hazardous facilities such as Rancho Liquid Petroleum Gas LLC and their voluminous 25+ Million Gallon storage of butane and propane gas. This gas storage facility is operated by Plains Mid-Stream Canada (Plains All American Pipeline) under the supervision of the fire department’s Certified Unified Program Agency (CUPA). In the 1990’s, there was a consolidation of a number of agencies having jurisdiction over these types of facilities with added emphasis upon CUPA’s responsibility as the primary enforcement. It is painfully obvious that while the CUPA was formally responsible for this important duty, the LA City Fire Department is woefully understaffed and under-funded in competently fulfilling its obligation. That reality can be witnessed by reviewing California EPA’s “deficiency findings letter”. The EPA findings letter stems from their evaluation of the City of LA Fire Departments CUPA and is dated September 15, 2011 with a subsequent Deficiency Progress Report-Update 3 submitted June 15, 2012.

While this summary confirms an inordinate amount of deficiency associated with the collection and charging of various fees, there is also substantial acknowledgement of CUPA’s (the LA City Fire Department’s) inadequate inspection and review of facility conditions related to an operation’s compliance with existing laws. Rancho LPG is a glaring illustration of that deficiency. While installed over 40 years ago, and exempted from CEQA conditions and LA City Fire Regulations at that time, many facts under the supervision of CUPA have continued to be ignored with complete disregard to the elevated hazard that the facility poses.
Possibly the most flagrant is the continuation of the “fallacy” that the single impound basin below the two 12.5 Million gallon butane tanks would serve as some kind of safety measure in the event of a substantial tank leak or rupture. Clearly, at the time of its introduction most authorities involved were ignorant of the chemical and physical properties of Butane/Propane gas and how it would react upon release. Butane gas is only liquefied under refrigeration and upon release into the ambient air will vaporize and expand over 200 times its volume. The gas is heavier than air, and will hug the ground seeking the lowest levels until finding any ignition source. There are 5 ignition sources on the facility’s very premises. The impound basin, (the company’s emphasized safety measure) would be able to contain less than 1% of the volume of a single tank as a vapor upon total rupture. Any confidence of this basin’s effectiveness in the “containment” of a single 12.5 Million gallon tank’s contents is bogus. This particular point, that is so absent of educated consideration, should be the first point that the Fire Department identifies in relation to the safety of such a facility.

Upon visiting any fire station in the immediate Harbor region, you will find a map of the area that will have two red circles identifying Rancho’s two largest tanks. These tanks are clearly regarded as an elevated risk by the Fire Department, standing above and apart from other hazardous facilities, yet the LA City Fire Department representing CUPA continues to ignore the obvious problem allowing this extraordinary risk to jeopardize public safety.

Another legal issue at hand, is the geologic conditions of the facility. The facility and its tanks sit directly upon the Palos Verdes Fault (mag 7.3). Legally, any structure built upon an earthquake fault demands an exemption by a State Geologist. That law has been in effect since before 1973. Yet, this criteria was never followed. In addition to this, the existing butane/propane tanks at Rancho LPG were built to a seismic substandard of 5.5-6.0 and were constructed without benefit of LA City Building and Safety permits. The tanks were only “certified” by LA Building & Safety in 1978 while the facility was already in operation.

Rules created through various jurisdictional agencies instruct CUPA to re-evaluate a facility that experiences any significant change in operation. Over these past 40 years there have been many changes to this LPG facility. The facility (Petrolane LPG) in 1973 was located in the Harbor region for the expressed purpose of capturing the highly profitable opportunity of importing and exporting their gaseous commodity (propane) by sea. Over 68% was shipped by this method. The storage facility has been located on private property within the City of LA with pipeline access to a wharf at the adjacent Port of LA under a lease agreement. There have been additional tanks added to this facility as well as a major shift in their business in the 1980’s when it changed from the predominant storage of propane gas to that of butane gas. In 2006 the port refused to renew the wharf lease with the company (then Amerigas), and ALL LPG product was transferred from ocean shipping to land transport by rail and truck. This change should have flagged a completely new EIR process responsive to the new business operation. However, it did not.
The American Petroleum Industry set forward 9 recommendations (under their design specifications 2510 for appropriate siting to minimize risk from explosion and fire) for an LPG facility. Eight out of nine recommendations for proper responsible siting are violated by the Rancho LPG facility location. Only one solitary item, “availability of needed utilities” falls into the perimeter of API’s proper guidance for hazardous siting of LPG facilities. Also, the existing tank set back conditions of Rancho violate current standards for these types of facilities.

It is incumbent upon the LA City Fire Department and all jurisdictional and other governmental authorities to begin to face the grim reality of the presence of this risk-prone facility and deal with the problem before it materializes into the cataclysmic inferno that it has the capability to become. With the aftermath of failing infrastructures (gas leaks & explosions) being recently felt across our Nation, and the likelihood of earthquake and terrorism rising daily, the culpable indifference and ignorance associated with continuing on this course so ripe for disaster is intolerable.

Without question, the LA City Fire Department has been unfairly and unwisely saddled with the monumental task of supervision of hazardous facilities with insufficient resources to complete the job. There is an inordinate number of petrochemical facilities assigned for monitoring by the LA City Fire Department as CUP A without enough staff and expertise to responsibly meet the challenge.

We urge the LA City Fire Department to acknowledge the obvious governmental negligence in allowing this ultra hazardous facility to expose the innocent public and the ports of both LA and Long Beach to extreme harm. The Los Angeles Fire Department, as CUP A, will take the most blame in the event of a disaster from this facility. The LA City Fire department has become the virtual scapegoat for other jurisdictional agencies who have burdened LAFD with an onerous task. We urge you, Chief Cummings, to fulfill your leadership role in representing and protecting the people of the City of Los Angeles and all other citizens within the estimated (through EPA’s formula) catastrophic 10.6 mile blast radius of Rancho LPG. This blast radius is very real and totally feasible if the entire Rancho facility blows. This scenario doesn’t even take into consideration the probable “domino effect” of that explosion upon the multitude of other adjacent chemical and fuel resources available. Please stand with us in our complaint of Rancho LPG as a public nuisance that needs to be removed or relocated.

Previous EPA Chief, Christine Todd Whitman’s comments regarding issues of risks from hazardous facilities reported on in April of this year are well founded.

The McClatchy Report: April 15, 2012

WASHINGTON — Wading into a decade-old controversy, former Environmental Protection Agency chief Christine Todd Whitman has urged current EPA administrator Lisa Jackson to close loopholes in a 2006 chemical security law "before a tragedy of historic proportions occurs."
Whitman, who led the EPA under George W. Bush, suggests the agency use its authority to seal gaps in "extremely limited" Department of Homeland Security rules designed to prevent releases of toxic chemicals, according to an April 3 letter she wrote to Jackson that was obtained by the Center for Public Integrity.

Those 2007 rules, Whitman wrote, bar DHS from requiring industry to take specific measures to prevent accidental or terrorism-related toxic releases. The rules exempt "thousands of chemical facilities, including all water treatment plants and hundreds of other potentially high-risk facilities, such as refineries located on navigable waters," she wrote.

The EPA has the power to regulate chemical security under 1990 amendments to the Clean Air Act, Whitman noted, writing that the act's "general duty" clause "obligates chemical facilities handling the most dangerous chemicals to prevent potentially catastrophic releases to surrounding communities.

"Facilities with the largest quantities...should assess their operations to identify safer cost-effective processes that will reduce or eliminate hazards in the event of a terrorist attack or accident," Whitman wrote. "This has never been required and today hundreds of these facilities continue to put millions of Americans at risk."

According to DHS testimony this year, there are 4,458 high-risk facilities nationwide.

In 2006, then-Sen. Barack Obama co-sponsored legislation that would have required high-hazard plants — which Obama called "stationary weapons of mass destruction" — to consider using safer technologies and enhance security. The bill failed.

LAFD as CUPA has the authority and responsibility to respond to this facility's deficiencies and identify the Rancho LPG facility for the hazard that it represents. We urge you to do so. It is time for the LA City Fire Department and other responsible agencies and government officials to represent the constituents that they have been appointed and elected to protect and serve. The time is now. There may not be much time left.

Thank you for your time.

Sincerely,

Chuck Hart, President

Cc: Lisa Jackson EPA, Andrew Helmlinger EPA, Jared Blumenfeld EPA, Mary Westling EPA, Sally Magani DOJ, Congresswoman Janice Hahn, Congresswoman Maxine Waters, LA County District Attorney Jackie Lacy, LA County Board of Supervisors, LA County Fire Dept., LA Mayor Antonio Villaraigosa, LA City Atty Carmen Trutanich, LA City Controller Wendy Greuel, LA City Councilman Joe Buscaino, LA City Councilwoman Jan Perry, Assemblyman Rod Wright, Assemblywoman Bonnie Lowenthal, Rancho Palos Verdes City Council, Lomita City Council, Rolling Hills Estates City Council, Atty. Anthony Patchett, David Pettit NRDC, Christine Todd Whitman
November 22, 2012

Michael J. LoGrande, Zoning Administrator
Los Angeles Planning Department
201 North Figueroa Street #4
Los Angeles, CA 90012

RE: FILING FOR NUISANCE ABATEMENT/REVOCATION
RANCHO LPG (ORIGINALLY, PETROLANE LPG)
2110 No. Gaffey St.
San Pedro, CA 90731

Dear Mr. LoGrande:

The San Pedro Peninsula Homeowners United is a non-profit 501 C-3 corporation that was a litigant and prevailed in the interest of the community in the China Shipping lawsuit in 2003.

Unfortunately, our Homeowners have been unaware until recently of the changes in 2008 to Nuisance Abatement criteria that now offers the opportunity to take action on situations that have been "grandfathered in" as a means to protect the citizenry. We applaud the long overdue wisdom of this inclusion. We now "officially" lodge our complaint and action with a demand to the City of LA to protect our community.

The above listed Liquid Petroleum Gas storage facility has been a matter of consistent concern to residents since inception in 1973. Since that time an extensive list of LA City and County officials, State officials and Agencies, Federal officials and agencies have all been solicited to take action on this ultra hazardous facility due to the risk it poses to the public to no avail.

The introduction of the liquid petroleum gas facility (initially, Petrolane) created a condition that is harmful to the public's health and safety. The large radius of impact endangers a great number of people. Ordinary citizens are negatively affected by the presence of this facility. The incorporation of this facility was a violation of the 1st principle of Civil Law; "Exposure of the public to risks that they do not know about, nor have agreed to accept." The seriousness of the potential harm significantly outweighs the social utility of Rancho LPG. Plaintiffs within the radius of impact suffer harm that is different from the type of harm experienced by the general public. Rancho LPG’s operation is a substantial factor in causing harm to the plaintiffs.

This LPG facility was introduced without benefit of a risk analysis, without a proper EIR; The EIR does not respond to the volatility of its gas commodity, the existence of residential neighborhoods, and the myriad of geologic and seismic vulnerabilities of the property. The facility was given an undefined "emergency exemption" to CEQA and LA City fire regulations. Governor Brown’s 1977 report by the PUC confirms these facts.
We have included a copy of the City of LA Planning Department's own map which clearly shows that the two 12.5 to 13 million gallon capacity tanks of the storage facility are located directly in the Earthquake Rupture Zone of the Palos Verdes Fault (mag. 7.3). As if that is not worrisome enough, the existing tanks were built "without having pulled LA City Building Permits" and were only "certified" after serious controversy and pressure in 1978 while the facility was in operation. The tanks construction meets a seismic sub-standard of 5.5-6.0! The cataclysmic potential of this facility is incredible. Yet, the City of LA has appeared unconcerned about the danger.

LA City's business permitting process demands that a business must "re-file" as a new business if there is a change of over 50% in their business operation. Rancho/Petrolane/Amerigas LPG facility located in the Harbor area for the main purpose of shipping their LPG by sea. Although only one EIR was conducted under a "Marine Terminal" at the Port of LA, the actual storage facility was always located on a remote and separate piece of LA City private property with a pipeline to a "wharf" located at the Port of LA. Over 68% of their propane product was shipped by sea with the remaining percentage made up of rail and truck transport.

In approximately 2006, the Port of LA refused to renew the company's 30 year old pipeline lease to the wharf. At that time, there was an immediate and demonstrative change in their operation shifting ALL hazardous Liquid Energy Gas transport to Rail and Truck! This is an inherently more dangerous mode of transport. Also, sometime within those 30 years, the business of major "propane" shipping, changed to "butane" shipping. The largest tanks are now storing "butane" rather than the original "propane". These business changes should have triggered a new EIR, but that never happened.

The bottom line is now this:
As tragically irresponsible as the above conditions are and have been since 1972, the situation has only gotten more intense with time. We are continually witnessing devastation caused by antiquated infrastructure problems in the US. This facility is now sitting on an infrastructure that is over 40 years old. The likelihood of significant earthquake has increased dramatically and we now understand with climate change an increase in concern for tsunami in the port region as well. The facility sits within ½ mile of the inner harbor of the port with a storm drain at its base that leads directly into the LA harbor. Any significant rise in that harbor is going to channel water back to the facility site, which happens to be in a "flood zone". There was recently a sign removed within 200 ft. of the facility that said, "You are now exiting a tsunami zone" yet there is no rise in elevation nor apparently was there any consideration of the storm drain location. The potential for terrorism has greatly increased making this site one of the most obvious choices for attack. This volatile gas burns at over 3500 degrees F, and the heat generated from a fire there would ignite flammables for miles. This makes the available cadre of refineries, fuel storage facilities and marine oil terminals abutting and across the street from these tanks a virtual "bonanza" target of opportunity for terrorists.

It is time for sanity to prevail on this issue. Attached is one of the personal emails sent to one of our activists from Professor Bob Bea of UC Berkeley. Professor Bea has been the premiere expert hired by the US government to establish the "why" of engineering failures in catastrophes such as the Gulf disaster, Katrina and San Bruno. He was contacted after his appearance on "60 Minutes" and has reviewed details of the Rancho facility. Like our residents, Bea has grave concerns about this facility and its potential of "domino effect" that could likely cause an inferno never witnessed before by man. There is no reason why our citizens should have to prove to
government the perilous potential of this facility with their lives. The handwriting has been written boldly on the wall for years now.

In closing, we invite all City Officials and other Civic groups to join in this complaint to remove this looming threat to our public.

This is the City of LA's opportunity to step up in a legal action that can save lives and property. It is long overdue. Take action before it is too late!

Sincerely,

Chuck Hart  
President, San Pedro Peninsula Homeowners United, Inc.  
PO Box 6455  
San Pedro, CA 90734

For more information:  
Janet Gunter (310) 251-7075

Attach. (3): map of rupture zone  
source document: p.47, Safety Element of the Los Angeles City Plan  
copy, Bea email correspondence

Cc: Mayor Antonio Villaraigosa  
City Atty Carmen Trutanich  
City Controller Wendy Greuel  
City Councilman Joe Buscaino  
City Councilwoman Jan Perry  
LA County Supervisors  
RPV City Councilmembers  
Lomita City Councilmembers  
San Pedro Neighborhood Councils  
Port Community Advisory Committee
very good summary Janet.

status report from UC Berkeley Rancho LPG study group. three members of group are 'totally engaged' in the San Bruno disaster litigation (since BP trial was suspended end February). trial date October 10th. all Rancho work put on hold until trial is completed.

i had a 'mild stroke' July 22nd. major effect was loss of left eye vision. still undergoing tests to determine short and long term prognosis. no signs the circulation system 'trash' reached my brain.

perhaps the San Bruno trial will provide opportunities to raise the flags about Rancho and about the prices of ignoring infrastructure risk assessment and management...industry and government. we will stay alert for the opportunities...San Bruno is a perfect analog for a future Rancho disaster...lack of any realistic assessment of the SYSTEM RISKS...denial by industry....more denial by government.....public not informed....you know the rest.

bob bea

On 8/3/12 11:13 AM, Janet Gunter wrote:

Hi Kit –

I doesn’t appear that you were copied on this exchange.

CP

From: Janet Gunter [mailto:arriane5@aol.com]
Sent: Tuesday, January 01, 2013 7:17 PM
To: Wong.Jeannie@epamail.epa.gov
Cc: Simmons.Joan@epamail.epa.gov

Subject: Re: EPA-R9-2013-001262 Geo-technical Report for Rancho LPG

Dear Ms. Wong-

Thank you for providing this information. This long awaited information certainly underscores our reasons for extreme concern and emphasizes the critical need for urgency regarding the safety and security of our public due to the presence of this ultra hazardous facility. This report's direction for further analysis and evaluation of the geologic conditions of the Rancho site should be assigned to an "uninterested party" immediately in the interest of public safety. An obvious area of discrepancy is the lack of acknowledgement of the LPG facility site as being in an "Earthquake Rupture Zone" as clearly defined in official LA City Planning Department documents. How ... and why...would that not be acknowledged? However, there are many other very serious issues regarding soils and geologic conditions that remain reported in this document.

We are still awaiting the correspondence between the EPA and Rancho that was requested months ago. In particular, is a letter referenced by the manager of Rancho LPG, Ron Conrow, at a Rancho Palos Verdes City Council meeting over 4 months ago. Please provide this correspondence at your earliest convenience. It is important for our public to understand the dialogue that has been conducted between the operators of Rancho and your agency.

Thank you for your time and cooperation.

Janet Gunter

-----Original Message-----
From: Wong.Jeannie <Wong.Jeannie@epamail.epa.gov>
To: arriane5 <arriane5@aol.com>
Cc: Simmons.Joan <Simmons.Joan@epamail.epa.gov>
Sent: Mon, Dec 31, 2012 12:02 pm
Subject: EPA-R9-2013-001262

Hi Ms. Gunter:

Attached is our response to your FOIA Request EPA-R9-2013-001262 regarding "Geotechnical analysis performed by the EPA on Rancho LPG".

Regards,
Environmental Protection Agency
Superfund Division

Jeannie Wong
(415) 972-3079
Email: wong.jeannie@epa.gov

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre.

Attachment File Type: PDF, Multi-Page

WorkCentre Location: USEPA Region 9, 8th Floor, Room R8102
Device Name: PN_R8102_Xerox5755_PS

For assistance, please call IRM helpline at 415-947-8023. Thanks.

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•
Subject: Third Party Expert Technical Review
Seismic Hazards Analysis
San Pedro Terminal, Rancho LPG, LP.
2110 North Gaffey Street, San Pedro, California
SAIC Prime Contract No. #EP-W-09-032

Ladies and Gentlemen:

This letter transmits the third party review of the referenced report. This review was performed in order to verify the accuracy and adequacy of the evaluation by GMU dated July 19, 2010. The referenced report was prepared to address geotechnical-related questions posed earlier by the USEPA resulting from a review of a Tank Assessment Report by ABS Consulting. The criteria by which the evaluation by GMU Geotechnical, Inc. was reviewed were those from the Guidance for California Accidental Release Prevention (CalARP) Program Seismic Assessment by the CalARP Program Seismic Guidance Committee dated September 2009.

No new subsurface work was performed by Geotechnologies, Inc. as part of this third party review. A review of published geotechnical-related references for the area was performed as well as a site visit. Separate commentary resulting from these tasks is provided. Geotechnologies, Inc. appreciates the opportunity to provide our services on this project. Should you have any questions please contact this office.

Should you have any questions please contact this office.

Respectfully Submitted,
GEOTECHNOLOGIES, INC.

REINARD T. KNUR
G.E. 2755, C.E.G. 1547

Distribution: (1) SAIC, Attn: Diane Bodine
(1) EPA, Attn: Mary Wesling

Email to: [Diane.C.Bodine@SAIC.com], Attn: Diane Bodine
[Wesling.Mary@epamail.epa.gov], Attn: Mary Wesling
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## ENCLOSES

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- Southern California Fault Map
- Geotechnical Map by GMU
- Geotechnical Sections by GMU

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**Geotechnologies, Inc.**
439 Western Avenue, Glendale, California 91201-2837 • Tel: 818.240.9600 • Fax: 818.240.9675
www.geoteq.com
INTRODUCTION

This report presents the results of the third party review of the Geotechnical Seismic Evaluation for the Rancho LPG Holding Facility in San Pedro by GMU Geotechnical, Inc. dated July 19, 2010. The purpose of this review was to assess the accuracy and adequacy of the evaluation by GMU Geotechnical, Inc. (GMU). The report by GMU was prepared to address Geotechnical-related questions posed by the USEPA after review of a report “Tank Assessment Report for Compliance with CalARP” by ABS Consulting dated August 17, 2010. Since the initial report by ABS Consulting was prepared for compliance with CalARP, the work by GMU Geotechnical was reviewed in consideration with the objectives outlined by CalARP (California Accidental Release Prevention Program).

The methods and findings by GMU were compared to the geotechnical guidelines found in the CalARP Program Seismic Guidance Committee document, “Guidance for California Accidental Prevention Program Seismic Assessment”, dated September 2009. The CalARP guidelines provide for a conservative level of assessment as they apply to the release of regulated substances and potential consequences that may occur in the event of their release. The CalARP guidelines have geographic jurisdiction over the site and were prepared for facilities similar to those found on the subject site. It should be noted that the report by GMU does not refer to or intentionally address the criteria outlined in the CalARP seismic assessment guidance document.

This review included research of published geotechnical documents, and a site reconnaissance. Summaries of the findings from these tasks are provided. No subsurface exploration or testing was performed as part of this review. This report was performed in concert with the Seismic Risk

BACKGROUND

The basis for the CalARP Program is summarized in the following statement: “The objective of the California Accidental Release Prevention (CalARP) program seismic assessment is to provide reasonable assurance that the release to Regulated Substances (RS) as listed in California Code of Regulations (CCR) Title 19 Division 2 Chapter 4.5 having offsite consequences (caused by a loss of containment or pressure boundary integrity) would not occur as a result of an earthquake” (CalARP, 1999). The CalARP program guidelines are narrow in scope than those in the California Building Code whose purpose is to “establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength... safety to life and property from fire and other hazards attributed to the built environment...”

The CalARP document “Guidance for California Accidental Release Prevention (CalARP) Program Seismic Assessments prepared by the CalARP program Seismic Guidance Committee” (CalARP, 2009), provides criteria for evaluation the geotechnical and seismic aspects of a site. In order to meet the objective that release of regulated substances would not occur as a result of an earthquake, the guidelines provide several performance criteria for structures and systems:

- Maintain structural integrity,
- Maintain position,
- Maintain containment of material and,
- Function immediately following an earthquake.
Since these criteria are of interest for the on-site structures, the recommendations set forth in the CalARP guidelines should be considered appropriate for the type of facilities constructed on the subject site.

The subject site was developed in the early 1970's, prior to the existence of the CalARP Guidelines. The CalARP guidelines recognize facilities that were constructed to earlier building codes. For facilities that were constructed to the 1985 Uniform Building Code and earlier, the document states “there were no specific seismic code requirements for non-building structures and non-structural components in heavy industrial applications and they were rarely reviewed and inspected by building departments...” Since 1998 the seismic assessment study has been a necessary requirement of the State’s CalARP program reports. In general, the performance objectives for new facilities are more restrictive than those for existing facilities. The guidance document recognizes the disparity in design and construction requirements between old and new facilities by suggesting “any regular inspecting and repair of systems containing regulated substances should make them significantly safer than similar systems for which these steps are not taken.”

SITE DESCRIPTION

The site is located near the toe of the east side of Palos Verdes Hills at 2110 North Gaffey Street in San Pedro, California. The site is bordered by a petroleum tank farm to the north, warehouses to the east, Westmont Drive to the south, and North Gaffey Street to the west. The site vicinity is developed with a mix of industrial, commercial and residential properties. The site is shown relative to nearby topographic features on the attached Vicinity Map.
The site was graded and construction commenced in 1971; construction was completed in 1972. Based on photographs provided during the site visit, the site consisted of undeveloped, rolling hills.

Elevations vary from 130 feet above mean sea level (msl) on the east side site of the site to 20 feet above msl on the west side. Grading on the site has resulted in a moderately steep, westerly descending, terraced slope. The slope ranges in elevation from 130 feet to approximately 40 feet for a total height of 90 feet. The slope descends at a 1.5 to 1 gradient between terraces and a 1.75 to 1 gradient average gradient over the entire slope. Graded terraces support several small one structures and one two story structure. Several berms are placed around to deflect and contain liquids in the event of releases and to contain rainfall runoff. The slopes are vegetated with annual grasses. Detailed site topography is shown on the attached Plot Plan 1 and Plot Plan 2.

The site is developed with the following above-ground tanks:

- Two, 13,000,000-gallon refrigerated butane tanks (labeled as T-1 and T-2 on the attached Plot Plans),
- Three, 20,000-gallon propane tanks,
- Three, 20,000-gallon butane tanks,
- One, 3,500-gallon Ethyl Mercaptan tank,
- Two, 127-gallon Accumulators (V-17 and V-28),
- One, 509 cubic foot knock out butane Tank (V-19),
- One truck loading rack and a Railcar Loading Rack.

Due to their large capacity, the two atmospheric, refrigerated butane tanks are the focus of this assessment. The butane tanks are located on two separate, relatively flat terraces at elevation 50 feet (Butane Tank T-1) and 40 feet (Butane Tank T-2). A large, soil-bermed containment basin is located on the west side of the two large butane tanks. The butane tanks are located
approximately 20 feet from the toe of the high westerly-descending slope and approximately 50 feet from the top of the containment basin slope.

The containment basin measures approximately 90 by 160 feet at its base, and is over 20 feet deep with slopes that are inclined at a 1.5 to 1 gradient (horizontal to vertical). The slopes are covered with an asphalt emulsion and the bottom is vegetated with annual grasses. The bottom of the containment area ranged from elevation 20.7 to 24.5 feet.

**LOCAL GEOLOGY**

The site is located in the San Pedro Hills near the northeast side of Palos Verdes. Palos Verdes is a large hill in the Los Angeles Basin that has been uplifted due to compression by nearby faults. The basement rock underlying Palos Verdes is the Catalina Schist and is found at a relatively shallow depth of less than 1 kilometer. Overlying the basement rock are Miocene sedimentary rocks with various Pleistocene-age, poorly-consolidated sediments. The subject site is underlain by Quaternary alluvium, San Pedro Sand and old, uplifted alluvium (Dibblee, 1999). A copy of the geologic map by Dibblee is attached to this letter as “Local Geologic Map (Dibblee, T.W.)". Earlier geologic mapping work by Woodring, Bramlette, and Kew (1946) is attached as "Local Geologic Map (Woodring, W.P., et al)". The map by Woodring, Bramlette, and Kew shows geologic materials of similar composition to those indicated on the geologic map by Dibblee. The map also shows the topography of the site vicinity prior to development.

GMU Geotechnical drilled two borings located at the top of the hill on the east corner of the property and DH-2 located at the toe of the hill between Tanks T-1 and T-2. DH-1 was drilled to 100 feet below the ground surface (bgs). DH-2 was drilled to a depth of 50 feet bgs.
Review of the boring logs indicate 12 feet of artificial fill at the top of the westerly-descending slope. The fill is composed of poorly graded sand that is damp, dense, massive and has no cementation.

The San Pedro Formation underlies the fill in Boring DH-1 and was identified at the ground surface in DH-2. The San Pedro Formation is described as poorly graded sand that is dense, moist and without cementation. In Boring DH-1, drilled at the top of the slope, silty sand and sandy silt were identified between the depths of 70 to 90 feet bgs, which in turn is underlain by poorly graded sand.

Water was not identified in the 100 foot deep boring, DH-1. The ground surface of this boring was 120 feet, therefore the boring terminates at an elevation of 20 feet above mean sea level. Boring DH-2 was drilled at a surface elevation of 50 feet above mean seal level to a depth of 50 feet bgs. Water was identified at a depth of 37.3 feet bgs which correlates with an elevation of 12.7 feet above mean sea level. Therefore, the water surface is approximately 27.3 and 37.3 feet below the Tanks T-1 and T-2, respectively.

According to Seismic Hazard Zone Report for the Torrance 7.5-Minute Quadrangle (CDMG, 2006), the historically highest groundwater is approximately 10 feet below the ground surface at Gaffey Street. The ground surface elevation of Gaffey Street is near elevation 28 feet above mean sea level, therefore the historically highest groundwater elevation is at 18 feet above msl. Since the water surface is relatively planar and horizontal in the granular San Pedro Formation sand, the historically highest ground water surface can be projected to the containment basin and Tanks T-1 and T-2. The depth to the historically highest groundwater surface beneath these features is summarized in the following table.
Faults

The site is not underlain by the surface trace of any known faults. A generalized map showing regional faults is attached as Southern California Fault Map. The Local Geologic Map (Dibblee, T.W.) shows the nearest fault to the subject site is the “inferred position of the Palos Verdes Fault”. This fault is located 400 feet northeast.

An Earthquake Fault Zone is designated if the State of California deems a fault to have a relatively high potential for ground rupture. The criteria for such zoning is if a fault has evidence of surface displacement in the last 11,000 years (sufficiently active) and if the fault trace is clearly detectable by a trained geologist as a physical feature (well defined). The Palos Verdes Fault has not been designated by the California Geological Survey (CGS) with an Earthquake Fault Zone (Hart and Bryant, 2008).

In 1972, the Alquist-Priolo Special Studies Zones Act (now known as the Alquist-Priolo Earthquake Fault Zoning Act) was passed into law. The Act defines “active” and “potentially active” faults utilizing the same aging criteria as that used by California Geological Survey (CGS). However, established state policy has been to zone only those faults which have direct evidence of movement within the last 11,000 years. It is this recency of fault movement that the CGS considers as a characteristic for faults that have a relatively high potential for ground rupture in the future.
The Palos Verdes Fault is considered to have been active in Holocene time (last 11,000 years). The fault is oriented in a northwest-southeast direction and has a left-lateral, strike-slip motion. Recent work suggests that the fault has slip rate of 2.7 to 3.0 mm/yr. and is capable of an Mw event of 7.0 to 7.2 at an interval of 400 to 900 years (McNeilan, T.W., et. al, 1995).

The nearest CGS-designated Earthquake Fault Zone is for the Newport Inglewood Fault, located 6.6 miles to the northeast. A map showing the site location relative to the nearest Earthquake Fault zone is attached to this letter as “Earthquake Fault Zone Map”.

SITE VISIT

A site visit was performed on February 10, 2012 to observe the site conditions and meet with the facility operators. The site visit consisted of a walk-through of the entire facility, including the top of the eastern slope, the bottom of the containment basin, as well as review of construction documents and photos available in the office. The purpose of the site visit was to observe geotechnical-related issues such as the conditions of slopes, indications of settlement or instability at the ground surface, the condition of observable of footings, drainage-related installations and general maintenance of the drainage facilities.

The site visit was performed in the presence of representatives from the following entities:

- United States Environmental Protection Agency (Region IX)
- Strong Motions Inc.
- Plains All-American
- Rancho LPG Holding, LLC
The site reconnaissance was led by personnel of Plains All-American and they permitted access to all locations requested by this firm and Strong Motions, Inc. The site appeared to be generally well maintained and organized. Work was being performed during the site visit to drain one of the large butane tanks for scheduled maintenance of the tank. The following paragraphs summarize the geotechnical-related observations by this firm.

Slopes-Containment Basin

The purpose of the containment basin is to capture butane (as a liquid) should any escape from Butane Tanks T-1 or T-2 resulting from catastrophic failure. The containment basin is labeled on the attached Plot Plan 1 (East). The containment area consists of an enclosed pit measuring 180 feet by 320 feet at its base with slopes that range in height from 15 to 25 feet and are inclined at a 1.5 to 1 gradient (horizontal to vertical). The slopes are covered with an asphalt emulsion. Cracks up to 1½ inches in width in the emulsion appear near the top of the slopes. Holes and soil piles from ground-burrowing rodents were observed on the surface of the asphalt emulsion at several locations of the containment basin. No scarps or deformations in the slopes suggestive of a previous or incipient failure were noted.

The bottom of the containment basin is unlined and vegetated with grasses. In order to permit the drainage of storm runoff water from the basin, an outlet drain is located near the southwest corner. The drain consists of a 16-inch diameter, corrugated, metal pipe. It is the understanding of this firm that the pipe discharges to the storm drain system on North Gaffey Street. No device exists to contain liquid butane (or other released substance) from entering the drain in the event of discharge by the tanks. However, a control valve near Gaffey Street controls the flow of stormwater and, in the event of a liquid release into the storm drain system.
Slopes - East Side of Tanks T-1 and T-2
The slopes rise to the east from 75 to 90 feet above the base of tanks. The slopes were cut during mass grading of the site around 1973 and have concrete lined terrace drains at approximately 25 foot vertical intervals. The terrace drains discharge to concrete-lined downdrains. The slopes expose light brown silty sand that is consistent with the descriptions found on the attached geologic maps. The slopes are vegetated with annual grasses. No indications of instability such as cracked and displaced terrace drains, hummock topography, or surficial scars on the slopes were noted.

Area Drains
It was noted that the surficial drains that collect rainfall runoff from the terraces at Tanks T-1 and T-2 were partially filled with sediment that will impede drainage of the runoff. The sediment needs to be removed as part of regular maintenance of the site.

Ring Foundation for Tanks T-1 and T-2
The foundation appeared to be in good condition with no cracks greater than hairline in width noted.

Flare Stack
A flare stack is located near the southeast corner of the site near the top of the 90 foot high, westerly-descending slope. The foundations for the flare stack have been recently upgraded. The concrete foundation of the flare stack appeared to relatively new and uncracked. The ground surface around the flare stack did not exhibit indications of slope instability such as cracks, ground settlement, or surficial scars. However, evidence of rodent activity was noted nearby. Rodent burrows will directly reduce the stability of a slope and permit pathways for water infiltration that will further destabilize a slope.
REVIEW OF EVALUATION BY GMU GEOTECHNICAL

The purpose of the evaluation by GMU Geotechnical, Inc. (GMU, 2010) was to respond to questions raised by the EPA following a review of a seismic hazard assessment report completed by ABS Consulting (ABS, 2010). The EPA raised questions about the facility concerning the findings found in the ABS. The facility operator commissioned a follow-up evaluation by GMU to respond to the EPA's questions. Geotechnologies, Inc. has not attached a copy of the email correspondence between the EPA and the facility operator concerning the ABS report. However, the questions are repeated in the report with the consultant responses immediately following. The issues that were addressed in the report include:

- Field exploration
- Laboratory testing
- Site specific seismic parameters
- Stability analysis of on-site slopes
- Liquefaction potential

General commentary of the work by GMU as well as correlation of the work to the CalARP seismic guidance document follows.

Field Exploration

The field exploration by GMU included drilling and sampling two borings to depths of 50 and 100 feet with a hollowstem auger, and three soundings to depths ranging from 37 to 50 feet with a cone penetrometer. Soil samples taken from the borings were tested for various soil properties. Three of the explorations (DH-1, DH-2, and CPT-1) were performed either at the toe or the top of the west-descending slope near the tanks T-1 and T-2. The remaining two explorations were conducted in the vicinity of the office, located near the northeast corner of the site.
Comment 1: No borings were drilled between the butane tanks and the containment area slope by GMU. As mentioned in the Local Geology section of this report, groundwater was identified at an elevation of 12.8 feet above msl in Boring DH-2. This elevation corresponds to a depth of 10.2 feet below the ground surface at the bottom of the containment basin. Additional investigation is warranted to characterize the soils comprising the slope between the containment basin and the butane tanks. This information should be used to address comments found later in this review.

One of the CPT soundings (CPT-3) was excavated near the office building to a depth of 50 feet. This sounding was used to obtain the value Vs30 that is used in a later calculation for the site specific ground motion hazard analysis. The value obtained for Vs30 was 510 ft./second (155 m/s).

Comment 2: The value obtained 155 m/s is considered by this firm to be low for the San Pedro sand. Based on the research by Tinsley and Fumal (1985) a higher velocity value may be appropriate. The value of Vs30 should be based on measurements from the upper 100 feet of soils and therefore may yield a higher value. It is recommended that a shear wave velocity measurement to a depth of 100 feet be obtained by either a CPT sounding or a downhole measurement in a boring.

Labatory Testing

The selection of tests appears appropriate and the tabulated results appear reasonable. However, the soil samples were not obtained from the location between the butane tanks and containment area.

Comment 3: Additional geotechnical tests of the soils obtained from the recommended boring(s) between the butane tanks and the containment basin are warranted. The results should be used to respond to comments that appear later in this review.

Comment 4: It is not stated in the evaluation if the direct shear tests on the San Pedro Sand were performed at field moisture or saturated conditions. The tests should be run under
saturated conditions and the results utilized in the slope stability calculations as appropriate. Saturated conditions can occur during extended period of rainfall and represent the most critical soil moisture state from the standpoint of soil strength.

Site-Specific Seismic Parameters
Site-specific seismic parameters were calculated using the US Geological Survey computer program, Ground Motion Parameter Calculator (Version 5.0.09a). The results were used in the calculation of seismic slope stability and for liquefaction analyses.

Comment 5: According to the CalARP guidance manual, the procedure of ASCE 7-05, Chapter 21 should be used for site-specific, ground motion hazard assessments. The more detailed and site specific procedure of ASCE 7-05 Chapter 21 be followed.

Comment 6: The site is located 400 feet from the Palos Verdes Fault which has a recurrence interval of 400 to 900 years (McNeilan, T.W., et. al, 1995). As a result of this proximity and recurrence interval, the near source directivity option should be used when performing the site specific analysis of ASCE 7-05 chapter 21.

Comment 7: The Vs30 value used in the analysis should be derived from a site-specific measurement that extends to a depth of 100 feet as mentioned in Comment 2.

Slope Stability - Westerly Descending Slope above Butane Tanks
GMU Geotechnical performed a slope stability analysis along Cross Section 2-2' that shows the profile of the westerly descending slope through Butane Tank T-1.

Comment 8: A slope stability analysis should also be performed through the westerly-descending slope and Butane Tank T-2. The slope is 15 feet higher and may be more critical. A new cross section perpendicular to the slope face that would be the most critical section should be drawn.

Comment 9: The pseudostatic slope stability analysis should be performed using the results from an updated seismic hazard analysis described in Comment 5.

Geotechnologies, Inc.
439 Western Avenue, Glendale, California 91201-2837 • Tel: 818.240.9600 • Fax: 818.240.9675
www.geoteq.com
Comment 10: The summary page of the slope stability analyses (pages C1 and C2) identifies the seismic displacement of the high slope on the east side of the site to be 7 inches and 8 inches. GMU Geotechnical concluded the tanks located at the toe of the slope are not likely to be impacted by the slope displacement. It should be noted that the values yielded by the methodology used (Bray, 2007) are not actual displacement distances but should be used as an index of performance (Blake, Hollingsworth and Stewart, 2002). The calculated index value (7 and 8 inches for a slope 75 to 90 feet high) is significant, and should be addressed.

Slope Stability-Westerly Descending Slope of Containment Area, Below Butane Tanks
GMU Geotechnical performed a slope stability analysis along Cross Section 2-2' that shows the profile of the westerly-descending slope through Butane Tank T-1. The analyzed cross section includes a portion of the Butane Tank.

Comment 11: The cross section used in the analysis is not oriented perpendicular to the slope to yield the most conservative value for Factor of Safety. The cross section should be redrawn and to include the steepest slope orientation.

Comment 12: Based on the information provided in the report, it does not appear stability analysis was performed that considers the surcharge caused by the butane tank with contents. A new analyses should consider the surcharge on the slope caused by a tank at operational capacity.

Comment 13: As mentioned in Comment 4, it is unknown if the soil strength obtained from the direct shear testing was performed under saturated conditions. A saturated shear strength should be used in light of the shallow depth to groundwater table beneath the containment basin.

Comment 14: A large fill wedge is shown on the cross sections used for the stability analysis on the east face of containment basin. The geometry of the fill wedge is likely based on review of a Grading Plan cited in the references. Subsurface explorations should be performed to identify the properties of the fill soil comprising this slope as addressed in Comment 1.
Comment 15: The groundwater elevation shown on the slope stability analysis Cross Sections (Figure C-8.1) is approximately coincident with the groundwater depth identified in the borings by GMU Geotechnical. Review of the Seismic Hazard Report for the Torrance 7.5-Minute Quadrangle (CDMG, 2006) suggest that groundwater may reach an elevation of 20 feet. The stability analysis (and lateral spreading) analysis should consider the groundwater at this higher elevation.

Comment 16: The data input file from the computer program should be included for all analyses results.

Liquefaction
The potential for liquefaction was addressed at the locations near the base of the westerly descending hill (CPT-1) and near the office building (CPT-2 and CPT-3). The values in the analysis using a peak ground acceleration of 0.5g which appears adequate.

Comment 17: The potential for liquefaction in the containment basin should be addressed since the basin is downslope of Butane Tanks T-1 and T-2 and the historically highest groundwater level is shallow in this area (less than 5 feet below the ground surface). Additional boring(s) and laboratory analyses in the containment area and adjacent berm will be necessary.

Lateral Spreading
Lateral spreading is a seismic related phenomenon that occurs to gently sloping ground with a free face when layers of geologic materials are liquefied and move in a downslope direction. This hazard was not addressed in the evaluation.

Comment 18: This hazard should be addressed according to the CalARP guidance document. The analysis should also be performed in the containment area, below the Butane Tanks T-1 and T-2. The borings and analyses identified in Comment 18 may be used for this purpose.
Seismic Settlement

Seismic settlement occurs when loose dry, cohesionless soils settle as a result of seismic shaking. This hazard is listed in the CalARP guidance document, but was not addressed in the referenced evaluation.

Comment 19: Analysis for these phenomena should be performed for the soil column in the vicinity of the butane tanks, to the depth of the current ground water surface.

RECOMMENDATIONS BASED ON THE SITE VISIT

Based on the observations made by this firm during the site visit, the following geotechnical-related maintenance recommendations are provided but are unrelated to the review by GMU. The items listed are not listed in the Cal-ARP document but are prudent maintenance practices, and should be addressed by the site owner.

Item 1:
Several slope areas were noted to have evidence of burrowing rodents. The burrows will degrade the strength of the materials comprising the slope as well as provide avenues for water infiltration. An eradication program for the rodents should be implemented.

Item 2:
The asphalt emulsion that lines the containment area was observed to have cracks up to 1½ inches wide. The cracks should be filled with new emulsion to prevent rainfall runoff from entering the cracks.

Item 3:
Two area drain inlets that collect water from butane Tank T-1 and T-2 terraces were partially filled with sediment. These storm drains should be cleaned of the debris to restore full capacity.

Item 4:
The site maintenance program should include regular observations and cleaning or repair, as needed, of all area drains, terrace drains and asphalt emulsion surfaces.
Item 5: The design of the storm water outlet at the southwest corner of the containment basin should be checked. Also, the valve near Gaffey Street should be included on a maintenance program.

CONCLUSION

Although the GME report addressed some the data collection and analysis requirements for a seismic hazard analysis found in the Guidance for CalARP Program Seismic Assessments document, some analysis critical for the evaluation of the seismic hazards at the site were not addressed as described in this review.

CLOSURE AND LIMITATIONS

The purpose of this review is to aid in the analysis of the described facility. Implementation of the advice presented in this report is intended to reduce certain risks. The professional opinions and geotechnical advice contained in this report are sought because of special skill in engineering and geology and were prepared in accordance with generally accepted geotechnical engineering practice. Geotechnologies, Inc. has a duty to exercise the ordinary skill and competence of members of the engineering profession. Those who hire Geotechnologies, Inc. are not justified in expecting infallibility, but can expect reasonable professional care and competence.
REFERENCES


California Division of Mines and Geology, 1999, Seismic Hazard Zones, Torrance Quadrangle.

California Division of Mines and Geology, 1998, revised 2006, Seismic Hazard Zone Report for the Torrance 7.5 Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 03529.

Campbell, K.W., and Bozorgnia, Y., 2008, Campbell-Bozorgnia NGA Ground Motion Relations for the Geometric Mean Horizontal Component of Peak and Spectral Ground Motion Parameters, Pacific Earthquake Engineering Research Center, PEER 2007/02.
REFERENCES - continued

Chiou, B.S., Youngs, R.R., 2008, Chiou and Youngs PEER-NGA Empirical Ground Motion Model for the Average Horizontal Component of Peak Acceleration and Pseudo Spectral Acceleration for Spectral Periods of 0.01 to 10 Seconds, Pacific Earthquake Engineering Research Center, PEER 2008.


Somerville, P.G., et al., 1997, Modification of Empirical Strong Ground Motion Attenuation Relations to Include the Amplitude and Duration Effects of Rupture Directivity, Seismological Research Letters, Volume 68, Number 1, pp. 199.
REFERENCES - continued


REFERENCE: U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE SERIES,
TORRANCE, CA QUADRANGLE

VICINITY MAP

Geotechnologies, Inc.
Consulting Geotechnical Engineers

SAIC - SAN PEDRO
FILE NO. 20278
LEGEND
af: Artificial fill or cut and fill
Qb: Beach Sediments - Sand to cobble-boulder gravel
Qa: Alluvium - Mostly loamy clay
Qas: Alluvium - Similar to Qa, but slightly elevated and locally dissected
Qld: Landslide debris - Mostly of Monterey shale
Qoa: Older Alluvium - Non-Marine terrace cover, sandy loam, and loamy clay
Qsp: San Pedro Sand - Sand and pebble gravel
Tmg: Malaga Mudstone - Mudstone with diatomaceous strata and limestone concretions
Tmv: Monterey Formation: Valmonte Diatomite - Siltite and mudstone
Tma: Monterey Formation: Altamira Shale - Upper part
Tmal: Monterey Formation: Altamira Shale - Upper part
Fault: Fault - dashed where indefinite or inferred, dotted where concealed, queried where existence is doubtful

LOCAL GEOLOGIC MAP
(DIBBLEE, T.W.)

Consulting Geotechnical Engineers

Geotechnologies, Inc.

SAIC - SAN PEDRO

FILE No. 20278

DATE: May '12
LEGEND
Qal: Alluvium and artificial fill
Qgr: Stream terrace gravel
Qtc: Nonmarine terrace cover
Qpv: Palos Verdes sand
Qsp: San Pedro sand
Ql: Lomita marl
Tm: Malaga mudstone member
Tv: Valmonte diatomite member
Ta: Altamira shale member

LOCAL GEOLOGIC MAP
(WOODRING, W.P., ET AL)

Geotechnologies, Inc.
Consulting Geotechnical Engineers

SAIC - SAN PEDRO
FILE No. 20278
DATE: May '12
HISTORICALLY HIGHEST GROUNDWATER LEVELS

Geotechnologies, Inc.
Consulting Geotechnical Engineers

SAIC - SAN PEDRO
FILE No. 20278

REFERENCE: CDMG, SEISMIC HAZARD ZONE REPORT, 035
torrance 7.5 - minute quadrangle, los angeles county, california (1998, revised 2006)
Carl is a professional "risk analysis expert"......

-----Original Message-----
From: Carl Southwell <carl.southwell@gmail.com>
To: Janet Gunter <arriane5@aol.com>
Sent: Wed, Jan 2, 2013 8:59 am
Subject: Re: EPA-R9-2013-001262 Geo-technical Report for Rancho LPG

Hi Janet,

The report, in summary, states "It should be noted that the report by GMU does not refer to or intentionally address the criteria outlined in the CalARP seismic assessment guidance document. This review included research of published geotechnical documents, and a site reconnaissance. Summaries of the findings from these tasks are provided. No subsurface exploration or testing was performed as part of this review." (emphasis mine)

The takeaway is that subsurface exploration, testing, and analysis sufficient to comply with the CalARP seismic assessment guidance document (see, e.g., http://fire.lacounty.gov/HealthHazMat/PDFs/CalARPGuidelineIndustry.pdf) is needed as part of the facility's RMP...

It's amazing that pre-existing infrastructure gets a pass on so many regulations.

Carl

On Tue, Jan 1, 2013 at 7:17 PM, Janet Gunter <arriane5@aol.com> wrote:
Dear Ms. Wong-

Thank you for providing this information. This long awaited information certainly underscores our reasons for extreme concern and emphasizes the critical need for urgency regarding the safety and security of our public due to the presence of this ultra hazardous facility. This report's direction for further analysis and evaluation of the geologic conditions of the Rancho site should be assigned to an "uninterested party" immediately in the interest of public safety. An obvious area of discrepancy is the lack of acknowledgement of the LPG facility site as being in an "Earthquake Rupture Zone" as clearly defined in official LA City Planning Department documents. How...and why...would that not be acknowledged? However, there are many other very serious issues regarding soils and geologic conditions that remain reported in this document.

We are still awaiting the correspondence between the EPA and Rancho that was requested months ago. In particular, is a letter referenced by the manager of Rancho LPG, Ron Conrow, at a Rancho Palos Verdes City Council meeting over 4 months ago. Please provide this correspondence at your earliest convenience. It is important for our public to understand the dialogue that has been conducted between the operators of Rancho and your agency.

Thank you for your time and cooperation.

Janet Gunter

-----Original Message-----
From: Wong.Jeannie <Wong.Jeannie@epamail.epa.gov>

2-242
Hi Ms. Gunter:

Attached is our response to your FOIA Request EPA-R9-2013-001262 regarding "Geotechnical analysis performed by the EPA on Rancho LPG".

Regards,

Environmental Protection Agency
Superfund Division

Jeannie Wong
(415) 972-3079
Email: wong.jeannie@epa.gov

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre.

Attachment File Type: PDF, Multi-Page

WorkCentre Location: USEPA Region 9, 8th Floor, Room R8102
Device Name: PN_R8102_Xerox5755_PS

For assistance, please call IRM helpline at 415-947-8023. Thanks.

Carl Southwell

Contact me at (use whichever you prefer):
carl.southwell@gmail.com
carl.southwell@usc.edu

My blog: anotheruniqu,eperspective.blogspot.com

Also visit: www.pressfriends.org
Making writing fun for elementary school kids, empowering kids to become mentors and leaders, and creating friendships among youth from diverse backgrounds.
From: Noel Weiss [mailto:noelweiss@ca.rr.com]
Sent: Wednesday, January 02, 2013 9:25 AM
To: connie@rutter.us; det310@juno.com; jody.james@sbcglobal.net; MrEnvirlaw@sbcglobal.net; chateau4us@att.net; CC; Janet Gunter

Connie:

I don't believe that it is lawful for the storm drain to go unprotected here... The report says on Page 9 that "no device exists to contain liquid butane (or other released substance) from entering the drain in the event of a discharge by the tanks." I haven't researched this down to the 'nth' degree, but my sense is that the City does have laws which require storm drains to be protected from fluid contamination... If so, Rancho is in violation... Which is why I have encouraged Janet to get this report out to the other City Attorney candidates and get their reaction... In addition, the point (and the other points raised in the report) need to be made in the response to the Draft EIR on Pointe Vista... with a request that further environmental review be undertaken, along with an objective tie-breaker' risk assessment analysis... which can be commented on by the public as part of the Pointe Vista EIR.

The Rancho Palos Verdes City Council also needs to follow-up and ascertain if Rancho ever met its commitment to provide evidence of insurance to the RPV City Attorney...

That fact also needs to be cited in the Draft EIR since none of the Pointe Vista property owners are insured against damages or personal injury occasioned by an accident at the Rancho facility.

Noel
(310) 822-0239

From: Janet Gunter
Sent: Wednesday, January 02, 2013 9:17 AM
To: connie@rutter.us; det310@juno.com; jody.james@sbcglobal.net; MrEnvirlaw@sbcglobal.net; noelweiss@ca.rr.com; chateau4us@att.net; cc@rpv.com

Carl is a professional "risk analysis expert".....

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Janet Gunter

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From: Wong.Jeannie <Wong.Jeannie@epamail.epa.gov>
To: arriane5 <arriane5@aol.com>
Cc: Simmons.Joan <Simmons.Joan@epamail.epa.gov>
Sent: Mon, Dec 31, 2012 12:02 pm
Subject: EPA-R9-2013-001262

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Regards,

Environmental Protection Agency
Superfund Division

Jeannie Wong
(415) 972-3079
Email: wong.jeannie@epa.gov

Please open the attached document. It was scanned and sent to you using a Xerox
WorkCentre.

Attachment File Type: PDF, Multi-Page

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Device Name: PN_R8102_Xerox5755_PS

2
For assistance, please call IRM helpline at 415-947-8023. Thanks.

Carl Southwell

Contact me at (use whichever you prefer):
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Also visit: www.pressfriends.org
Making writing fun for elementary school kids, empowering kids to become mentors and leaders, and creating friendships among youth from diverse backgrounds.
Hello All & Happy New Year-

In doing a bit more intensive research to produce my comments for the Ponte Vista Housing development EIR, the following has been discovered. This below information is documented in a seismic report to the EPA from May of 2012 by "Strong Motions". Apparently, they looked at what Rancho LPG/Plains All American had in the way of "earthquake insurance."

"Plains LPG has provided results of a "desktop" analysis of the earthquake loss. According to this analysis, the "probable maximum loss" is $8.4 million and the "maximum foreseeable loss" is $18.6 million. These estimates were based on 250-year MRP ground shaking at the site. These estimates include ONLY the replacement value of the structures (tanks); they do NOT include losses from: 1) business interruption; 2) spilled contents; 3) environmental clean-up; 4) fires; 5) explosions; and 6) third party liability. Plains LPG maintains earthquake insurance up to $60 million. It has not been demonstrated that the facility is insured up to the maximum possible earthquake loss."

Also, upon review of the recent geologic report provided for the EPA from "Geotechnologies" (which I previously forwarded to you) there is a designation of the soil at Rancho as a "Grade D Stiff Soil". Unfortunately, my lack of education about geology left me void of any reference to what this actually meant until my research yesterday which I am providing. I had to go to the Indiana item since I was looking for "free information." However, this is very valid information. I've provided their references.

Short description:
Liquefaction Potential of Surficial Materials in Indiana, 2011 (1:500,000) - Shows shows highly generalized categories (low, moderate, and high) of liquefaction potential, based on soil classes of the National Earthquake Hazards Reduction Program (NEHRP). This data set provides a digital coverage of the predicted response of surficial geologic materials in Indiana to liquefaction induced by earthquakes. It is intended to be used by Indiana Department of Homeland Security, emergency planners, and responders on the state and local level as a general reference guide to identify potential areas of evaluated risks of liquefaction. Low liquefaction potential includes NEHRP Soil Class B (consisting of rock: sandstone, limestone, shale). Moderate liquefaction potential includes NEHRP Soil Class C (hard or stiff soil, or gravel) and part of NEHRP Soil Class D (stiff soil, stiff clay, and some gravel). High liquefaction potential includes parts of NEHRP Soil Class D (stiff soil, stiff clay, and some gravel), and all of NEHRP Soil Class E (soft soil and soft to medium clay) and F (lake and river deposits of sand and mud). The following is excerpted from Indiana Geological Survey Miscellaneous Map 81: 'Liquefaction is a common ground-failure hazard associated with earthquakes. It is defined as the sudden and temporary loss of strength of a water-saturated sediment. This could result in the structural failure of buildings, bridges, and other structures.'

Tags:
IndianaMap, IGS, Indiana, geoscientificInformation, geology, surficial geology, quaternary, stratigraphy, earthquake, ground shaking, seismic, soil classification, liquefaction, shear-wave velocity, National Earthquake Hazard Reductions Program (NEHRP)
Also of note, is that the geologic reports on Rancho rely entirely on existing information either provided by the company's own consultants, or other existing data. There has been absolutely no independent testing or modeling of conditions that can prove safety of geologic conditions. Also, in looking at the coverage and estimation of seismic risk potential the analyses NEVER respond to "liquefaction" of the soil during an earthquake! The condition of soil "liquefaction" is acknowledged, yet never analyzed under resulting seismic impacts.

On top of all of this, the issue of "tsunami" is never approached regardless of the fact that according to maps the facility sits approximately 200 ft. north of a "designated tsunami zone". How the tsunami wave is estimated to stop at that point needs explanation since there is no ground elevation that would prevent further invasion. What was the tsunami wave size used to estimate this result? There are two underwater landslide areas directly in our vicinity capable of causing a tsunami at the local level. It is obvious in that in estimating that tsunami impact, there was no consideration of the fact that there is a storm drain just below the tanks that leads directly out into LA Harbor. That storm drain that would channel the force of a tsunami wave directly onto Gaffey St. and Westmont Drive seriously impacting the area and extending the tsunami zone and its potentially devastating impacts significantly.

To borrow an important line from Apollo 13, "Houston, we have a problem".

I have the sense that the EPA (due to some of the results from their recent commissioned reports on Rancho) may be pursuing some type of action on the facility. I hope that your City Council members will contact them and let them know your concerns regarding the safety of your community. This is a time that we need to band together collectively in our effort to protect our residents. Let's hope that 2013 brings results that deliver a safer and saner environment to us all.

Thanks for your time,
Janet Gunter
San Pedro homeowners have pursued assistance from the State of California's Local Planning Emergency Committee for well over a decade with our chronic and very real concerns regarding the highly elevated risk to population due to the existence of the Amerigas/Rancho Liquid Petroleum Gas facility. This facility stores a massive volume (over 25 Million gallons) of this gas.
The LEPC dismissed homeowner members at your meeting late last year with the statement that the LEPC’s input is limited to “emergency planning”. You stated that the Rancho LPG facility is a grandfathered in facility and you have no power to do anything since they are legal. However, we have noticed that your mission statement is a bit broader than that:

"The Mission of the Local Emergency Planning Committee (LEPC) is to identify incidents or events that present a threat to the health, safety, and well being of people, and to coordinate the planning and preparation efforts of the local response community and private sector.

In our view, the LEPC has not lived up to this directive. Certainly, your interaction is warranted in identifying any jeopardy involved in exposing greater population to harm and establishing the means to "mitigate" that harm”. It is the obligation of your Committee to intervene in such projects as the proposed Ponte Vista housing project to ensure both the identification of hazard and proper mitigation to eliminate public risk.

Attached are documents representing a portion of my personal submission to the Ponte Vista Draft Environmental Impact Report. That DEIR fails to identify the true risk of Rancho LPG. The Ponte Vista project is planning to introduce yet another approximately 2,000 + residents (potential victims) to North San Pedro. This proposed housing project would create over 1,100 new homes within 3/4 mile of the Rancho LPG facility. There is also an additional low income housing project slated for abutting property of this Ponte Vista site for the housing of widows and children of American veterans. Placement of the low income housing at this site is in direct violation to HUD regulations because of its close proximity to both Rancho LPG and Conoco Phillips. In addition, there is a proposal for a new school at the same site.

Although the increased risk due to Rancho LPG has been acknowledged by various governmental agencies and officials for many years, the area has been allowed great growth of housing despite that risk acknowledgment.

The lack of energy in your LEPC, with its chronic vacancy of board positions, is more than likely attributable to an inability to move the committee in a direction that reflects meaning and purpose. It is obvious that the leadership necessary to restore a focus and an infusion of sense of duty and function is absent. It is unfortunate. We hope that 2013 will bring an invigorated sense of duty and commitment to this Committee. A State body that could effectively serve in safeguarding public safety in the sea of hazards in which we live, is sorely needed.

This Ponte Vista housing proposal offers an open invitation to the LEPC to do precisely what it should be doing. The homeowners in San Pedro and the Harbor Peninsula region deserve your attention to this matter. The potential for disaster and loss of human life is already too great to ignore. We respectfully request that the LEPC oppose the DEIR because it does not address the safety issue of the Rancho tanks and, accordingly, provides no mitigation measures.

Thank you for your time.
Janet Gunter

-----Original Message-----
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If you plan on attending the meeting, please RSVP via email: lanette.long@calema.ca.gov

Time: 10:00 am
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