

7

~~AGC~~

Recd in AGE Committee
on 12/5/04. A.E.

From Patricia McPherson

on behalf of Grassroots

for clerk of committee

to retain for record.

Items 1 + 2

CF- 06-2922-ST

+

07-2141

Subject 1

Subject 2

CLERK

~~06-29-22-51~~

Dec. 5, 2007

(Nov 7, 2007)
rescheduled to Dec 5, 2007

PLAYA VISTA

Audits + Governmental
EFFICIENCY

HEARING

12/5/2007

11/7/07
(rescheduled)

From: Grassroots Coalition

ETIWA, Patricia
McHeser

~~ETIWA~~

12/5/07

Audits + Government Efficiency
Committee Hearing

RE: Oversight of Playa Vista
Gas Mitigation Safety Measures

>
>
> SEC. 91.7106. TESTING, MAINTENANCE AND SERVICE OF GAS-DETECTION AND
> MECHANICAL VENTILATION SYSTEMS.
>

> All gas detection and mechanical ventilation systems shall be
> maintained and serviced in proper working condition and meet all
> requirements of the Electrical and Mechanical Code. The testing,
> maintenance and service procedure for each gas-detection and
> mechanical ventilation systems shall be performed in accordance with
> the manufacturer's current written instructions and the following:
>

> A. Fire Department. The manufacturer's instructions shall be
> approved by the Fire Department. Testing and servicing of each system
> shall be performed by a person certified by the Fire Department.
>

> (91.7104.3.8. Buildings Located in the First Phase Playa Vista
> Project. The First Phase Playa Vista project, as approved by the City
> on September 21, 1993 and December 8, 1995, shall comply with the
> methane mitigation program as required by the Department pursuant to
> the Methane Prevention, Detection and Monitoring Program approved by
> the Department on January 31, 2001, in lieu of the requirements of
> this division.)
>

> 91.104.2.7. Building Materials Inspection Required.

> 91.104.2.7.1. No person shall use or cause to be used, in the
> construction of any building or structure for the erection of which a
> permit is required by this chapter, any materials which are not
> specifically permitted by this Code, without having first secured the
> approval of said materials by the department.
>

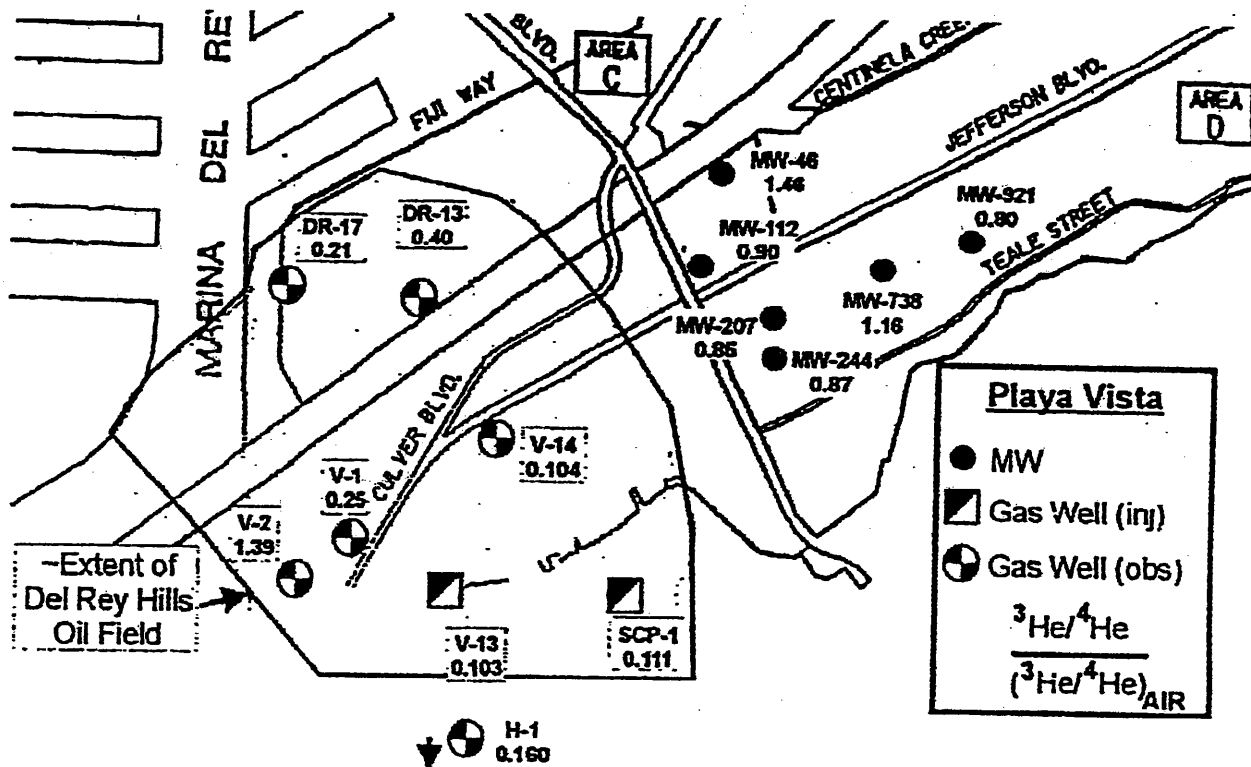
> 91.104.2.7.2. The department may require that all materials to be
> used in the construction of any building or structure, or materials
> already used or fabricated into a building or structure, be submitted
> for test to a testing agency approved by the department.
>

> 91.104.2.7.3. It is unlawful for any person to fail to submit to an
> approved testing agency within five days after having received a
> written notice from the department a sample, sufficient for analysis,
> of any material to be used in the erection or construction of a
> building or structure, or which has been used or fabricated into a
> building or structure.
>

> 91.104.2.7.4. No material required by the department to be submitted
> to a testing agency for analysis shall be approved by the department
> unless the person requesting said approval submits a written report of
> the analysis by such testing agency.
>

Figure 7

A site map of the Playa Vista site showing the locations and helium isotope ratios of the injection (half-filled squares) and observation gas (half-filled circles) wells, and monitoring wells (solid circles).





Exploration Technologies, Inc.

3698 Warchase Drive Houston, Texas 77042 (713) 785 - 0393 FAX (713) 785 - 1550
99 - 2119 - PLAYA VISTA

TABLE 5
SUMMARY OF METHANE STABLE CARBON ISOTOPE ANALYSES OF FREE GAS FROM 50-FOOT GRAVEL AQUIFER

SAMPLE NO.	METHANE	ETHANE	PROPANE	I-BUTANE	N-BUTANE	I-C3	N-C3	C6+	DELTA C-13 of		H2	AR	O2	CO2	N2
									CI	C2					
Area B Wells															
MMW16-DW-2	0.65	ND	0.01	ND	ND	ND	ND	ND	-59.59	-185.80	0.08	0.04	0.08	0.81	1.99
MMW209-FG-1	73.59	0.48	0.01	ND	ND	ND	ND	ND	-34.55	ND	ND	0.94	0.07	0.69	97.52
MMW214-FG-3	92.28	0.52	0.01	ND	ND	ND	ND	ND	-30.10	-163.60	ND	0.37	0.04	1.10	23.55
MMW220-FG-4K	96.80	0.47	0.01	ND	ND	ND	ND	ND	-188.00	-19.26	ND	0.14	0.06	0.47	6.84
MMW242-FG-4K				ND	ND	ND	ND	ND	-56.69	-195.80	ND	0.05	0.09	0.60	1.84
Tract-01 Wells															
MMW153-FG-3	96.53	0.45	0.01	ND	ND	ND	ND	ND	-57.03	-199.70	0.08	0.04	0.08	0.81	1.99
MMW175-FG-4	96.66	0.43	0.01	ND	ND	ND	ND	ND	-57.51	-198.10	ND	0.04	0.17	0.68	1.79
MMW202-FG-4	96.39	0.32	0.01	ND	ND	ND	ND	ND	-60.30	-204.90	ND	0.08	0.10	0.65	31.37
MMW211-FG-4	61.29	0.10	0.00	ND	ND	ND	ND	ND	-69.16	-190.40	0.00	0.24	0.16	0.65	9.88
MMW244-FG-4	88.69	0.33	0.00	ND	ND	ND	ND	ND	-60.15	-198.90	0.00	0.01	0.16	0.97	67.00
MMW732-FG-2	30.77	0.07	0.00	ND	ND	ND	ND	ND	-79.33	-169.60	0.10	0.80	0.11	1.10	66.34
MMW742-FG-1	31.41	0.15	0.01	ND	ND	ND	ND	ND	-57.54	-76.60	0.10	0.75	0.13	1.40	66.34
MMW676-FG-4K	70.49	0.11	0.00	ND	ND	ND	ND	ND	-72.44	-20.56	ND	0.49	0.87	1.40	41.45
MMW1-FG-2	37.19	0.10	0.00	ND	ND	ND	ND	ND	-68.85	-181.20	ND	ND	ND	1.21	41.45
MMW2-FG-3	65.35	0.29	0.00	ND	ND	ND	ND	ND	-32.47	-64.15	0.00	0.49	0.10	1.03	32.13
MMW23-FG-4	64.02	0.13	0.00	ND	ND	ND	ND	ND	-49.11	-200.00	ND	0.57	0.10	0.71	35.47
MMW24-FG-4	67.50	0.48	0.01	ND	ND	ND	ND	ND	-58.01	-208.60	ND	ND	ND	1.18	4.33
MMW25-FG-4	67.50	0.48	0.01	ND	ND	ND	ND	ND	-58.01	-192.60	ND	0.03	0.11	0.73	1.13
MMW238-FG-4	67.06	0.11	0.00	ND	ND	ND	ND	ND	-76.90	-192.60	0.00	0.52	0.17	1.05	31.09
Tract-02 Wells															
MMW918-FG-4	93.96	0.48	0.01	ND	ND	ND	ND	ND	-54.33	-170.60	ND	0.00	0.05	2.82	2.44
MMW912-FG-4	96.01	0.45	0.01	ND	ND	ND	ND	ND	-57.28	-199.50	ND	0.04	0.11	1.62	1.67
MMW921-FG-4	90.65	0.52	0.01	ND	ND	ND	ND	ND	-57.50	-187.20	ND	0.00	0.06	1.77	6.88
MMW946-FG-4K	94.86	0.44	0.01	ND	ND	ND	ND	ND	-55.67	-180.00	ND	0.06	0.10	2.36	2.17
Tract-03 Wells															
MMW102-FG-4K	79.93	0.18	0.00	ND	ND	ND	ND	ND	-65.42	-197.90	ND	0.37	0.11	1.23	18.18
MMW112-FG-4K	93.95	0.48	0.01	ND	ND	ND	ND	ND	-56.19	-25.40	ND	0.12	0.07	0.97	4.40
MMW239-FG-2	9.58	0.01	0.00	ND	ND	ND	ND	ND	-68.02	-100.30	0.00	0.80	ND	3.38	86.23
MMW46-FG-4K	83.13	0.16	0.00	ND	ND	ND	ND	ND	-64.18	-198.70	0.00	0.31	0.10	1.73	14.56
MMW77-FG-4K	89.02	0.34	0.01	ND	ND	ND	ND	ND	-59.95	-198.00	ND	0.22	0.08	1.13	9.20
MMW82-FG-4K	86.41	0.30	0.00	ND	ND	ND	ND	ND	-60.86	-194.90	ND	0.00	0.00	1.25	11.75
MMW1-FG-4	80.95	0.20	0.00	ND	ND	ND	ND	ND	-64.05	-20.01	ND	0.32	0.12	1.47	16.96
MMW2-FG-7	84.22	0.16	0.00	ND	ND	ND	ND	ND	-42.63	-200.90	ND	0.38	0.12	1.63	12.89
MMW14-FG-4	84.22	0.16	0.00	ND	ND	ND	ND	ND	-70.07	-19.75	ND	0.40	0.14	1.82	22.67
MMW14-FG-6	82.33	0.32	0.00	ND	ND	ND	ND	ND	-59.28	-20.31	ND	0.02	0.02	1.32	15.87
MMW54-FG-4	88.30	0.33	0.01	ND	ND	ND	ND	ND	-59.66	-191.20	ND	0.14	0.11	1.21	9.82
Tract-05 Wells															
MMW216-FG-3	97.34	0.36	0.01	ND	ND	ND	ND	ND	-59.28	-202.40	0.09	0.03	0.19	0.71	1.28
MMW276-FG-4	40.89	0.18	0.00	ND	ND	ND	ND	ND	-56.51	-148.50	0.00	0.74	0.13	0.55	57.51
MMW272-FG-1	0.33	ND	ND	ND	ND	ND	ND	ND	-23.48	ND	0.00	0.97	0.09	0.78	97.83
Tract-06 Wells															
MMW311-FG-4	44.17	0.08	0.00	ND	ND	ND	ND	ND	-66.61	-174.30	0.00	0.73	0.08	0.57	54.37
MMW800-FG-1	49.22	0.29	0.02	ND	ND	ND	ND	ND	-57.24	-125.40	0.01	0.55	0.12	1.97	47.71
MMW319-FG-1	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.92	1.13	0.49	97.42
MMW362-FG-4	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.81	0.11	0.70	98.37
MMW813-FG-4	87.71	0.27	0.01	ND	ND	ND	ND	ND	-63.40	-198.70	ND	0.00	0.09	1.54	10.12

All Gas Analyses in mol Percent
Carbon Isotopes in parts per mill in relation to PDB
ND = Not Detected



Exploration Technologies, Inc.

3698 Westchase Dr. • Houston, Texas 77042 • (713) 785-0393 • FAX (713) 785-1550

January 31, 2001

Mr. David Hsu
Chief, Grading Section
City of Los Angeles
Dept. of Building and Safety
201 North Figueroa Street
Los Angeles, CA 90012-2827

Dear David:


We have reviewed the proposed plan for the methane prevention, detection and monitoring systems from Methane Specialist and CDM, as defined in their report of January 30th, 2001 and outlined by their matrix table "METHANE SYSTEM REQUIREMENTS," and find that the proposed systems meet our recommendations, provided that the systems meet, or exceed all detail specifications as required by Department of Building and Safety.

One of the proposed methane prevention systems, the subsurface venting for the Level III areas which overlay the methane soil gas anomalies, is currently in the research and design stages. The subsurface venting system, which primarily targets the 50-foot gravel aquifer, provides a necessary level of protection, supplementing the building systems, for development of the Level III areas.

Building in Level III areas is contingent upon a functional subsurface venting system to the satisfaction of the Department of Building and Safety in consultation with the peer review team.

If you have any questions or require additional information, please contact me.

Sincerely,
Exploration Technologies, Inc.


Victor T. Jones, III, Ph.D.
Peer Reviewer for LADBS
President, Exploration Technologies, Inc.

from CLA Report

The report included a Methane System Requirements matrix that detailed specific mitigation and monitoring requirements for the entire project site based on the level of methane concentration. There are three different levels of methane concentrations identified for the project site: Level I, Level II and Level III. Level I represents concentration levels of less than 100 parts per million of volume (ppmv). Level II represents concentration levels of between 100 and 12,500 ppmv and Level III represents concentration levels of above 12,500 ppmv. All levels require a basic mitigation prevention system below the building, including a 12-inch gravel blanket, with pipes to ventilate gas from underneath an impermeable membrane and methane detection alarm systems within the building. For Levels II and III, automatic ventilation systems triggered by elevated methane concentration levels beneath the impermeable membrane and continuous monitoring systems are also required. Additionally, Level III requires a subsurface venting system consisting of vent pipes drilled into the 50-foot gravel aquifer to vent methane gas, thereby mitigating the accumulation of methane within the aquifer and below the ground surface and also reducing the surface emissions of methane. Playa Vista implemented a pilot program wherein more than 70 temporary vent wells were drilled at the site to determine the feasibility and effectiveness of venting subsurface accumulations of methane. The program demonstrated that subsurface methane gas can be vented. A permanent subsurface venting system is currently in a progressive design stage that will establish criteria for determining the exact number of, locations of, and size of permanent subsurface wells.

The report concluded that, "Each of the levels will provide a comprehensive program of prevention, detection, and monitoring systems along with a maintenance and testing program. These systems will ensure adequate and appropriate safety for all building occupants." (Attachment 9, Page 1)

Peer Reviewer, ETI, reviewed and analyzed the above report and concluded in their January 31, 2001 letter to LADBS that, "...the proposed systems meet our recommendations, provided that the systems meet, or exceed all detail specifications as required by Department of Building and Safety." (Attachment 10)

LADBS staff reviewed and agree with ETI's conclusion that the proposed methane prevention, detection and monitoring systems for the Playa Vista project are adequate for safe development. (Attachment 11)

If you have any questions or need additional information, please call Raymond Chan, Chief of Engineering Bureau, at (213) 977-6380, or me at (213) 977-5960.

Very truly yours,



ANDREW A. ADELMAN, P.E.
General Manager

RE: November 7, 2007 Audit & Governmental Efficiency Hearing.....2:00 pm Hearing Re: Controller Chick's Audit/Report of Playa Vista Safety & Oversight Of

Methane Mitigation Measures (2001

CLA Report/Directives/PVMPDMP

List of Documents Provided to the Council Office Regarding Playa Vista , Controller Chick's Audit Report (2001 CLA Report/Directives/ Playa Vista Methane Prevention and Detection and Monitoring Program)

- 1. 2005 Appeals Court Ruling - ETINA V City of Los Angeles & Playa Capital LLC
- 2. Chart prepared by Attorney for ETINA providing issues won by ETINA in 2005.
- 3. Exploration Technologies Inc. - Summary section of Report entitled - "Still Workin On It".....this report reveals the failure of the pilot program 50' vent wells.

The City Council was falsely told by Andrew Adelman (LADBS) at the CLA Hearing in 2001- that the 50' methane mitigation system, tho in a "progressive design stage" worked properly. Later, in both the Superior Court and the Court of Appeal, both the City and Playa Capital LLC argued falsely that the critically necessary 50' methane vent wells performed properly. Because of this false and misleading characterization by the City and Playa Capital to the courts, the Appeal Court "impliedly" found that the methane mitigation systems for Playa Vista would reduce the level of gases to insignificant.

The City withheld the City's expert consultant's report "Still Workin On It" which contained clear statements in the Summary that the pilot 50' vent well system was a failure due to clogging and filling with silt- thus failed to perform.

- 4. State Lands Commission Attorney (now retired) - Rick Ludlow's Declaration (part of the current ETINA v City of LA & Playa Capital LLC , SEIR lawsuit to enforce the Appeal Court Ruling of 2005) which reveals the City Attorney's direction to Mr. Ludlow to NOT give out the ETI - "Still Workin On It" Summary & Report CD to the public. Mr. Ludlow did provide the CD to Grassroots Coalition.

- 5. "STILL WORKIN ON IT" - Cover page and pertinent section regarding the failure of the pilot 50' vent well program. And Section 4.0 Recommendations:
Speaks to the absolute need for regular gas testing to be done through the SAMPLING PORTS -WHICH MUST BE ANALYZED IN A LABORATORY.

ETI states that this testing HAS NOT been done and that these procedures MUST BE FOLLOWED or a HAZARDOUS situation may exist. The sampling port data shows the true level of current gases beneath a building and compares it to what is sampled above the gas protection membrane. ETI explains that this sampling procedure is the only way to determine the true levels of sub-slab gases AND, it is the only way to determine if the above-slab detection devices are registering true amounts of gas levels. THIS ENSURES THAT THE GAS SYSTEM HAS NOT CLOGGED OR FAILED.

- 6. Public Record Act response from LADBS to Grassroots Coalition regarding any/all data on critically necessary 50' vent well gas mitigation system.

LADBS response- THERE ARE NO DOCUMENTS RESPONSIVE TO YOUR REQUEST.

- 7. Letter to Councilman Rosendahl from Grassroots Coalition outlining main points of Playa Vista Phase 1 gas mitigation measures NOT FULFILLED.

- 8. COUNCIL FILE - 99-0385-S4 - the City's approval of the " Note and File" of the 2001CLA Report/ Directives and Playa Vista Methane Prevention Detection and Monitoring Program (PVMPDMP).

NOV 7, 2007 ADDED TO each Com. Council person's file + Clerk file for Hearing 11/7/07 Audit + Governmental Efficiency

- A - Alfred Babayan Declaration - former LADBS*
 - B - B. Endres RE: De-water of 50' Vent wells - Declaration*
 - C - Reporter's Transcript - City Council meeting 7/10/07 RE: city liability AT PLAYA Vista*
- KABC DVDs - (2) Burning Questions; Power Politics*

The 2005 Court of Appeal Ruling establishes that this APPROVAL IS NOT SIMPLY A NOTE AND FILE with LADBS approval. The Court of Appeal Ruling establishes that the 2001 CLA Report..... was a discretionary approval made by the full City Council and as such, the mitigation measures carry the full force of CALIFORNIA ENVIRONMENTAL QUALITY ACT LAW (CEQA).

9. CALIFORNIA ENVIRONMENTAL QUALITY ACT - MITIGATION MEASURES- cites the CEQA law that MANDATES Enforcement and Enforceability of Approved Mitigation Measures.

10. Marianne Brown's (Ven Mar Neighborhood Council) letter to the Director of LA City Planning regarding the LACK OF INFORMATION AT PLANNING REGARDING PLAYA VISTA PHASE 1 GAS MITIGATION MONITOR INFORMATION. (Marianne Brown is also a member of the Westside LA City Planning Commission)

11. E-Mail from Controller Chick's office to Grassroots Coalition regarding the refusal of the Controller's Office to answer any queries regarding the 2001 CLA Report/ Directives/ PVMPDP and her failure to acknowledge the 2005 Court of Appeal Ruling in her audit/report of Playa Vista Phase 1.

This failure to acknowledge the 2005 Appeal Court Ruling - the force of law behind the 2001 CLA Report/ Directives and PVMPDP- leaves the Controller- MISCHARACTERIZING THE GAS MITIGATION MEASURES AND CLA REPORT/DIRECTIVES AS "GUIDELINES ONLY" . The 2001 CLA Report/ Directives and PVMPDP (ORDINANCE #91.7104.3.8) has the full force of CEQA LAW WHICH REQUIRES THAT THE GAS MITIGATION MEASURES AND OVERSIGHT BE FULLY ENFORCED AND ENFORCEABLE FROM 2001 TO THE PRESENT.

12. ORDINANCE 91.7104.3.8 -Part of the totality of the 2001 (Approved by City Council) CLA Report / Directives / PVMPDP

13. Public Record Act requests to LADBS, PLANNING, LAFD in 2007 from Grassroots Coalition regarding methane testing protocol, certificates, ordinances .

14. Grassroots Coalition's additional review of the 2007 Playa Vista audit done by Controller Chick's office. (This is in addition to concurrence with comments and queries from KNBC),

15. July 25, 2007 Retraction letter of Laura Chick to KNBC. The Controller's office did not provide notification to the city departments of the retracted conclusion in the Playa Vista performance audit/report. After the retraction letter was sent to KNBC, the city departments responded to the Controller's office- Summary Review on Playa Vista -that they were pleased nothing had come to the Controller's attention that the required inspections were not done.... - thus, responding and citing to the very conclusion that the Controller had retracted in her letter to KNBC. The "working papers" that are the basis for the Controller's Summary confirm the fact that much had been documented to show that the required inspections were NOT done.

16. Feb. 22, 2007 letter from Councilman Bill Rosendahl to the Planning and Land Use Committee, cc J. Huizar, J. Weiss---Cites Rosendahl's rejection of an improper 2007 CLA process instead of performing an Supplemental or Subsequent (SEIR) EIR on Playa Vista Phase 1.

17. Letter to Gail Goldberg from Controller Chick's office - citing problems not being acknowledged by Planning as well as numerous problematical issues regarding mitigation measures of Playa Vista Phase 1 and 2.

Nov. 7, 2007 Additions cont'd:

*D - Jan. 31, 2001 ETL letter to LADBS (tko)
Jan 31, 2001 LADBS letter to Playa Cap. (Nelson) } re: need for functional 50' system + all system meet or exceed ETL + DBS require*

E - Bond documents citing 50' vent wells use for monitoring + mitigation of gases. City approval of authorization of bonds.

Audit + Governmental Efficiency
HEARING 11/7/07

DOCUMENTS PROVIDED (cont'd)

F - November 18, 2004 California
Public Utilities / Consumer Protection
+ Safety Division report entitled
Complaint Case Facts + Findings
(Playa Del Rey Storage Field)
(Greater than 50% chance POR gas leaking into Playa Vista)

F1 - June 9, 2000 Playa Vista Risk Analysis
TASK Force Summary

"BTS stated that the source of contamination is important because, if it is the reservoir, the gas is under much more pressure, and the design of the mitigation measures must take that into account."

Decision 10/25/05

Filed 10/26/05 Environmentalism Through Inspiration v. City of LA CA2/3

NOT TO BE PUBLISHED IN THE OFFICIAL REPORTS

California Rules of Court, rule 977(a), prohibits courts and parties from citing or relying on opinions not certified for publication or ordered published, except as specified by rule 977(b). This opinion has not been certified for publication or ordered published for purposes of rule 977.

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION THREE

ENVIRONMENTALISM THROUGH
INSPIRATION AND NON-VIOLENT
ACTION et al.,

Plaintiffs and Appellants,

v.

CITY OF LOS ANGELES et al.,

Defendants and Respondents;

PLAYA CAPITAL COMPANY, LLC,
et al.,

Real Parties in Interest and
Respondents.

B174856

(Los Angeles County
Super. Ct. No. BS073182)

APPEAL from a judgment of the Superior Court of Los Angeles County,
George H. Wu, Judge. Reversed with directions.

Lawrence Teeter and Sabrina Venskus for Plaintiffs and Appellants.

Rockard J. Delgadillo, City Attorney, Susan D. Pfann and Jack L. Brown,
Assistant City Attorneys, for Defendants and Respondents.

Latham & Watkins, Robert D. Crockett, Kathleen O'Prey Truman and
Damon P. Mamalakis for Real Parties in Interest and Respondents.

1

Several environmental advocacy groups and individuals challenge the adoption by the City of Los Angeles of mitigation measures in connection with the previously approved first phase of the Playa Vista development project, and challenge the city's failure to require a subsequent environmental impact report (EIR) or a supplement to the EIR. Environmentalism Through Inspiration and Non-Violent Action (ETINA), Grassroots Coalition, Spirit of the Sage Council, John Davis, and Daniel Cohen (collectively Petitioners) appeal a judgment denying their petition for writ of mandate. Real party in interest Playa Capital Company, LLC (Playa Capital), is the developer. Real parties in interest Playa Investments LLC, Playa Commercial Debt Company LLC, and Playa Phase 1 Apartments LLC are related to Playa Capital in some manner.¹

We conclude that substantial evidence supports the city's determination with respect to certain purported new information of substantial importance that conditions requiring the preparation of a subsequent EIR or a supplement to the EIR are not present. We conclude further, however, that the city failed to determine whether groundwater dewatering in connection with methane mitigation measures approved by the city council would result in new or substantially more severe significant environmental impacts, as required. We therefore reverse the judgment with directions to the superior court to grant the petition in part and issue a peremptory writ of mandate ordering the city to vacate its approval of the mitigation measures and determine

¹ We refer to Playa Capital alone or collectively with the other real parties in interest as Playa Capital.

whether conditions requiring the preparation of a subsequent EIR or a supplement to the EIR are present with respect to groundwater dewatering.

FACTUAL AND PROCEDURAL BACKGROUND

1. Playa Vista Project First Phase EIR

The city certified an EIR for the first phase of the Playa Vista project in September 1993, approving the development of 3,426 residential units, 1.25 million square feet of office and light industrial space, 35,000 square feet of retail space, and 300 hotel rooms on 246.3 acres of land east of Lincoln Boulevard and mostly south of Ballona Creek, including 25 acres of Ballona Creek. The first phase also includes approximately 108 acres of public open space, including a freshwater marsh on 34.2 acres west of Lincoln Boulevard.

The city approved a modification to the project to reconfigure internal roads, develop additional office space for entertainment, media, and technology uses in lieu of developing 300 hotel rooms, and construct a water feature. The city certified an EIR addendum and approved the modifications in December 1995. The city also adopted a mitigated negative declaration at that time pertaining to the subdivision of land that was not included in the first phase EIR.

2. Community Facilities District Formation, Funding, and the Methane Issue

The city adopted an ordinance establishing a community facilities district under the Mello-Roos Community Facilities Act of 1982 (Gov. Code, § 53311 et seq.) on the project site in August 1999. The city repealed the ordinance due to a notice deficiency

and adopted a new ordinance in December 1999 establishing a community facilities district on the project site.

The city council's Budget and Finance Committee held hearings in May and June of 2000 to consider the issuance of bonds to fund public infrastructure improvements in the community facilities district. The committee considered the presence of methane and other gases on the site and a proposed methane monitoring system and expressed concerns about public safety and liability. The committee heard testimony by Victor Jones of Exploration Technologies, Inc. (ETI), a "peer reviewer" hired by the city's Department of Building and Safety to evaluate methane issues. The committee also heard testimony on the subject by John Sepich, an expert hired by Playa Capital. At the conclusion of the hearings, the committee decided to direct the city's Chief Legislative Analyst (CLA) to conduct a public hearing to discuss the issues requiring further evaluation, devise a process for consultation among various city departments and outside experts, and then make recommendations concerning mitigation of methane and other matters. The city council approved the committee's decision to proceed in that manner at a meeting on June 20, 2000, and directed the CLA to report to the city council's Planning and Land Use Management (PLUM) Committee at the conclusion of its study.

3. *Playa Vista Methane Prevention, Detection and Monitoring Program*

Sepich designed a methane mitigation system to detect and reduce methane concentrations beneath and inside the buildings. The proposed system was designated the Playa Vista Methane Prevention, Detection and Monitoring Program. Sepich

submitted the proposal to the Department of Building and Safety on January 30, 2001. ETI stated in a letter to the department dated January 31, 2001, "We have reviewed the proposed plan for the methane prevention, detection and monitoring systems . . . as defined in their report of January 30th, 2001 and outlined by their matrix table 'METHANE SYSTEM REQUIREMENTS,' and find that the proposed systems meet our recommendations, provided that the systems meet, or exceed all detail specifications as required by Department of Building and Safety." The Department of Building and Safety sent a letter to Playa Capital dated January 31, 2001, stating, "LADBS reviewed and agrees with ETI's conclusion that the proposed methane prevention, detection and monitoring systems for the Playa Vista project are adequate for safe development."

4. *CLA Report and Subsequent Events*

The CLA consulted with several city agencies and released a draft proposal for a study to investigate methane and other gases, conducted a public hearing on the proposal, expanded the proposed study in response to comments, completed the study by hiring an expert and consulting with state and city agencies, and released the study results for public comment. The CLA issued a report on its conclusions in May 2001, including responses to comments. The CLA considered the potential risks to public health and safety on the project site posed by methane and BTEX (benzene, toluene, ethyl-benzene, and xylene), hydrogen sulfide, subsidence, soil and groundwater contamination, and earthquakes, and considered appropriate mitigation. The CLA recommended the methane mitigation system designed by Sepich.

The proposed mitigation system is graduated to correspond with the level of methane concentrations detected on site. The CLA report stated, "All three levels would require a basic mitigation prevention system below the building, including a 12-inch gravel blanket, with pipes to ventilate gas from underneath the impermeable membrane, and methane detection alarm systems within the building. For Levels II and III, automatic ventilation systems triggered by elevated methane concentration levels beneath the impermeable membrane and continuous monitoring systems would . . . also be required. Additionally, Level III would require a subsurface venting system consisting of vent pipes drilled into the 50-foot gravel aquifer to extract methane gas, thereby alleviating the accumulation of methane within the aquifer and below the ground surface and also reducing the surface emissions of methane."

The CLA concluded that there was sufficient information to assess the potential risks presented by the presence of methane and that the proposed methane mitigation system was adequate, that the mitigation would not increase the risk of subsidence, and that BTEX and hydrogen sulfide emissions were insignificant, among other conclusions.

The PLUM Committee considered the CLA report on June 5, 2001. The CLA recommended to the PLUM that the city council "note and file" the report, direct the city planning department to require the project mitigation monitor to oversee implementation of the new mitigation measures, and direct other city departments to coordinate with the planning department regarding implementation of the methane mitigation system. The PLUM Committee endorsed the CLA's recommendations. The city council approved the recommendations on June 12, 2001.

The Budget and Finance Committee at a hearing on June 13, 2001, reconsidered the issuance of Mello-Roos bonds in light of the CLA report and the city council's approval of the CLA's recommendations. The committee recommended issuance of the bonds. On June 26, 2001, the city council approved the bond issuance and levy of special taxes and determined that the decision was categorically exempt under CEQA. The city filed and posted a notice of exemption on June 27, 2001.

5. *Prior Petitions for Writ of Mandate*

Grassroots Coalition, Spirit of the Sage Council, and Earthways Foundation filed a petition for writ of mandate in the superior court in April 2000 challenging the city's failure to require a subsequent EIR for the project. The first amended petition filed in June 2000 alleged that new information concerning the presence of methane and other gases on site and other matters required the preparation of a subsequent EIR and that the CLA report could not substitute for a subsequent EIR. The petitioners also alleged that the new mitigation measures were inadequate, among other allegations. The court denied the petition in November 2000 after a hearing on the merits. (*Grassroots Coalition v. City of Los Angeles (Playa Capital Company, LLC)* (Super. Ct. L.A. County, No. BS062858).) A minute order denying the petition stated that the petitioners failed to identify the administrative decision being challenged, failed to show that the decision was not supported by substantial evidence, and failed to show evidence of new information of methane seepage or any other condition that was not known and reasonably could not have been known at the time of EIR certification in 1993. There was no appeal.

Santa Monica Baykeeper filed a petition for writ of mandate in the superior court in July 2001 challenging the city's approval of the CLA report, its failure to require a subsequent EIR, its decision to issue Mello-Roos bonds and levy special taxes, and its decision that the bond issuance was categorically exempt under CEQA. The court sustained a demurrer to the petition in April 2002, concluding that the decision to issue bonds was categorically exempt and was not a discretionary project approval under CEQA, and that the petition was untimely because it was not filed within the 30-day period provided under Government Code section 53359 to commence a proceeding challenging the validity of Mello-Roos bonds. (*Santa Monica Baykeeper v. City of Los Angeles (Playa Capital Company, LLC)* (Super. Ct. L.A. County, No. BS070757).) There was no appeal.

There have been several other petitions for writ of mandate challenging other decisions made in connection with the project over the years.

6. *Superior Court Proceedings in this Case*

Petitioners filed a petition for writ of mandate in the superior court in December 2001 alleging that the city council's decision on June 12, 2001, to implement the new mitigation measures was a discretionary approval under CEQA and that in light of new information, project changes, and changes in the circumstances surrounding the project, a subsequent EIR was required. Petitioners also alleged that there was no substantial evidence to support the conclusion that the new mitigation measures would be effective. After a hearing on the merits, the court issued a minute order denying the petition and issued a lengthy statement of decision.

The court concluded that (1) the city council decided on June 20, 2000,² that a subsequent EIR was unnecessary, and Petitioners filed their petition challenging that decision more than 180 days later in December 2001, so the petition was untimely; (2) the city council's approval of the CLA's and the PLUM Committee's recommendations in June 2000 was not a discretionary approval under CEQA, and the city council did not approve the new mitigation measures at that time because the Department of Building and Safety had previously approved the measures; (3) there was no substantial change in the project or the circumstances surrounding the project, there is no need for major revisions of the EIR, and substantial evidence supports the conclusion in the CLA report that the mitigation measures are adequate; and (4) the purported new information identified by Petitioners concerning environmental impacts either (i) was considered in the EIR, (ii) with the exercise of reasonable diligence could have been known at the time the EIR was certified, (iii) is not supported by substantial evidence in the record, (iv) was considered after the EIR was certified and substantial evidence supports the conclusion that the impact is insignificant; or (v) was considered after the EIR was certified and substantial evidence supports the city's conclusion that the impact will be mitigated.

The court entered a judgment denying the petition in February 2004. Petitioners appealed the judgment.

² The statement of decision stated that the city council meeting and decision occurred on June 23, 2000, but quoted from the transcript of the June 20 meeting.

CONTENTIONS

Petitioners contend (1) the city council's approval of the CLA report and adoption of new mitigation measures was a discretionary approval; (2) substantial changes in both the project and the circumstances surrounding the project and new information of substantial importance present the possibility of environmental impacts different from or more severe than those identified in the EIR, so a subsequent or supplemental EIR was required; (3) the city failed to determine whether a subsequent or supplemental EIR was required, so Petitioners are entitled to a writ of mandate directing the city to make that determination; and (4) the petition for writ of mandate was timely filed within the 180-day limitations period.

Playa Capital disputes these contentions and contends (1) the 180-day limitations period began to run either in June 2000 when the city council decided to direct the CLA to oversee further investigation of the environmental issues and produce a report with recommendations, or in January 2001 when the Department of Building and Safety determined that the proposed methane mitigation system was adequate, so the petition filed in December 2001 was untimely; (2) alternatively, a 35-day limitations period commenced on June 27, 2001, when the city posted a notice of exemption pertaining to the approval of Mello-Roos financing; (3) Petitioners' failure to challenge the permit decision by the Board of Building and Safety Commissioners was a failure to exhaust administrative remedies; and (4) Grassroots Coalition and Spirit of the Sage Council are collaterally estopped based on the judgment in *Grassroots Coalition v. City of Los Angeles (Playa Capital Company, LLC)*, *supra*, and the other petitioners in this

proceeding are in privity with them and therefore are also collaterally estopped. The city joins in Playa Capital's respondents' brief.

DISCUSSION

1. *CEQA Requirements*

“CEQA is a comprehensive scheme designed to provide long-term protection to the environment. [Citation.] In enacting CEQA, the Legislature declared its intention that all public agencies responsible for regulating activities affecting the environment give prime consideration to preventing environmental damage when carrying out their duties. [Citations.] CEQA is to be interpreted ‘to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.’ [Citation.]” (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 112.)

An EIR is required for any project that a public agency proposes to carry out or approve that may have a significant effect on the environment. (Pub. Resources Code, §§ 21100, subd. (a), 21151, subd. (a); Guidelines,³ § 15064, subd. (a)(1).) An EIR must describe the proposed project and its environmental setting, state the objectives sought to be achieved, identify and analyze the significant effects on the environment, state how those impacts can be mitigated or avoided, and identify alternatives to the project,

³ All references to Guidelines are to the CEQA Guidelines (Cal. Code Regs., Tit. 14, § 15000 et seq.) developed by the Office of Planning and Research and adopted by the California Resources Agency. (Pub. Resources Code, §§ 21083, 21087.) “[C]ourts should afford great weight to the Guidelines except when a provision is clearly unauthorized or erroneous under CEQA.” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391, fn. 2 (*Laurel Heights I*)).

among other requirements. (Pub. Resources Code, §§ 21100, subd. (b), 21151; Guidelines, §§ 15124, 15125.) “The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.” (Pub. Resources Code, § 21061.)

The agency must notify the public of the draft EIR, make the draft EIR and all documents referenced in it available for public review, and respond to comments that raise significant environmental issues. (Pub. Resources Code, §§ 21092, 21091, subds. (a), (d); Guidelines, §§ 15087, 15088.) The agency also must consult with and obtain comments from other agencies affected by the project and respond to their comments. (Pub. Resources Code, §§ 21092.5, 21104, 21153; Guidelines, § 15086.) The agency must prepare a final EIR including any revisions to the draft EIR, comments received from the public and from other agencies, and responses to comments. (Guidelines, § 15089, subd. (a), 15132.) Before approving the project, the agency must certify that its decisionmaking body reviewed and considered the information contained in the EIR, that the EIR reflects the agency’s independent judgment and analysis, and that the EIR was completed in compliance with CEQA. (Pub. Resources Code, § 21082.1, subd. (c); Guidelines, § 15090.)

“We have repeatedly recognized that the EIR is the ‘heart of CEQA.’
[Citations.] ‘Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR

“protects not only the environment but also informed self-government.” [Citations.]’

To this end, public participation is an ‘essential part of the CEQA process.’

[Citations.]” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1123 (*Laurel Heights II*)).

A subsequent EIR or a supplement to an EIR may be required in certain circumstances if an agency proposes a discretionary approval for a project after an EIR is certified. (Pub. Resources Code, § 21166; Guidelines, §§ 15162, subs. (a), (c), 15163.)⁴ An approval is discretionary if it requires the exercise of subjective judgment or deliberation by the agency with regard to the wisdom of or the manner of carrying out a project, as distinguished from a ministerial approval that involves little or no subjective judgment and involves only the application of fixed standards or objective measurements.⁵ (See Guidelines, §§ 15357, 15369; *Mountain Lion Foundation v. Fish & Game Com.*, *supra*, 16 Cal.4th at p. 117.)

⁴ “Once a project has been approved, the lead agency’s role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subsection (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.” (Guidelines, § 15162, subd. (c).)

⁵ “ ‘Approval’ means the decision by a public agency which commits the agency to a definite course of action in regard to a project intended to be carried out by any person. The exact date of approval of any project is a matter determined by each public agency according to its rules, regulations, and ordinances. Legislative action in regard to a project often constitutes approval.” (Guidelines, § 15352, subd. (a).)

The California Supreme Court has stated, “In the case of a certified EIR, which is a prerequisite for application of section 21166, section 21167.2 mandates that the EIR be conclusively presumed valid unless a lawsuit has been timely brought to contest the validity of the EIR. This presumption acts to preclude reopening of the CEQA process even if the initial EIR is discovered to have been fundamentally inaccurate and misleading in the description of a significant effect or the severity of its consequences. After certification, the interests of finality are favored over the policy of encouraging public comment.” (*Laurel Heights II, supra*, 6 Cal.4th at p. 1130.) “Section 21166 is intended to provide a balance against the burdens created by the environmental review process and to accord a reasonable measure of finality and certainty to the results achieved.” (*Bowman v. City of Petaluma* (1986) 185 Cal.App.3d 1065, 1074; accord, *Friends of Davis v. City of Davis* (2000) 83 Cal.App.4th 1004, 1018.)

A subsequent EIR is required only if (1) substantial changes proposed in the project require major revisions to the EIR due to new significant environmental effects or a substantial increase in the severity of effects identified in the EIR; (2) substantial changes in the circumstances surrounding the project require major revisions to the EIR for the same reasons; or (3) new information of substantial importance that was not known and with the exercise of reasonable diligence could not have been known when the EIR was certified shows that (i) the project will have a significant effect not discussed in the EIR, (ii) significant effects discussed in the EIR will be substantially more severe, (iii) a mitigation measure or alternative found to be infeasible will be feasible and would substantially reduce a significant effect, but the project proponents

have rejected the measure or alternative, or (iv) a mitigation measure or alternative considerably different from those discussed in the EIR would substantially reduce a significant effect, but the project proponents have rejected the measure or alternative. (Pub. Resources Code, § 21166; Guidelines, § 15162, subd. (a).) A new or more severe significant effect does not require the preparation of a subsequent EIR or a supplement to an EIR, however, if adopted mitigation measures will reduce the impact to a level of insignificance. (*River Valley Preservation Project v. Metropolitan Transit Development Bd.* (1995) 37 Cal.App.4th 154, 168 (*River Valley*); see *Laurel Heights II, supra*, 6 Cal.4th at p. 1130; 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2004) § 19.9, pp. 719-720; cf. Guidelines, § 15088.5, subd. (a)(2); but see *Mira Monte Homeowners Assn. v. County of Ventura* (1985) 165 Cal.App.3d 357, 364-365 (*Mira Monte*).)⁶

⁶ The California Supreme Court in *Laurel Heights II* stated that the conditions requiring the preparation of a subsequent or supplemental EIR under Public Resources Code section 21166 provided guidance for the interpretation of section 21092.1, which requires recirculation of an EIR prior to certification in some circumstances. The court stated that new information showing a new or more severe significant impact does not require the preparation of a subsequent or supplemental EIR if adopted mitigation measures will reduce the impact to a level of insignificance. (*Laurel Heights II, supra*, 6 Cal.4th at p. 1130.) *River Valley*, relying on *Laurel Heights II*, held that certain impacts did not require the preparation of a subsequent or supplemental EIR because adopted mitigation measures would reduce the impacts to an insignificant level. (*River Valley, supra*, 37 Cal.App.4th at pp. 168, 179.) Other opinions also have held that no subsequent or supplemental EIR was required because adopted mitigation measures would reduce the impacts to an insignificant level. (*Snarled Traffic Obstructs Progress v. City and County of San Francisco* (1999) 74 Cal.App.4th 793, 802; *Benton v. Board of Supervisors* (1991) 226 Cal.App.3d 1467, 1483; *Long Beach Sav. & Loan Assn. v. Long Beach Redevelopment Agency* (1986) 188 Cal.App.3d 249, 266-267.) In contrast, *Mira Monte* held that a substantial change in circumstances surrounding a project,

A supplement to the EIR may be prepared in lieu of a subsequent EIR if only minor changes or additions to the EIR are necessary to address the project changes, changed circumstances, or new information. (Guidelines, § 15163, subd. (a).) If a subsequent EIR or supplement to an EIR is prepared, the same notice and opportunity for public review of the document must be provided as is required for a draft EIR. (Guidelines, §§ 15162, subd. (d), 15163, subd. (c).) We review an agency's determination that the conditions requiring the preparation of a subsequent EIR or a supplement to an EIR are not present under the substantial evidence standard. (Guidelines, §§ 15162, subd. (a), 15164, subd. (e); *Santa Teresa Citizen Action Group v. City of San Jose* (2003) 114 Cal.App.4th 689, 703; *Friends of Davis v. City of Davis*, *supra*, 83 Cal.App.4th at p. 1018.)

An agency need not make an express finding that the conditions requiring a subsequent EIR or a supplement to an EIR are not present, although an express finding is preferred.⁷ An implied finding is sufficient provided that the agency considered the

discovered shortly before EIR certification, required the preparation of a subsequent or supplemental EIR despite the agency's finding that adopted mitigation measures would reduce the impacts to an insignificant level. (*Mira Monte*, *supra*, 165 Cal.App.3d at pp. 360-361, 364-365.) To the extent *Mira Monte* suggests that a subsequent or supplemental EIR is required after EIR certification despite the agency's finding that adopted mitigation measures will reduce the impacts to an insignificant level, the opinion is inconsistent with the foregoing authorities and we decline to follow it.

⁷ An express finding with a brief explanation would facilitate judicial review and therefore is preferred. "A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence." (Guidelines, § 15164, subd. (e).)

relevant facts and actually made a determination. (*Benton v. Board of Supervisors*, *supra*, 226 Cal.App.3d at p. 1483, 1483; *City of San Jose v. Great Oaks Water Co.* (1987) 192 Cal.App.3d 1005, 1017; see 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, *supra*, §§ 19.42, 19.43, pp. 751-752.)

“ ‘Significant effect on the environment’ means a substantial, or potentially substantial, adverse change in the environment.” (Pub. Resources Code, § 21068.) The Guidelines define “significant effect on the environment” in relevant part as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”⁸ (Guidelines, § 15382.)

“Substantial evidence” under CEQA “includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.” (Pub. Resources Code, § 21080, subd. (e)(1); see Guidelines, §§ 15384, subd. (b), 15064, subd. (f)(5).)

“Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the

⁸ “ ‘Environment’ means the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The ‘environment’ includes both natural and man-made conditions.” (Guidelines, § 15360; see Pub. Resources Code, § 21060.5.)

environment.” (Pub. Resources Code, § 21080, subd. (e)(2); accord, *id.* § 21082.2, subd. (c).)

2. *The City Council Decision on June 12, 2001, Was a Discretionary Approval*

The purpose of the city council’s directing the CLA to devise a process for further evaluation of particular environmental issues, oversee the further evaluation, and make recommendations concerning appropriate mitigation measures was to allow the city council to determine whether the project presented an unacceptable risk to public health and safety and whether further mitigation measures were necessary.

Councilmember Michael Feuer stated at the city council meeting on June 20, 2000, “what’s before us today is not a vote on whether to have the Mello-Roos bonds go forward. What’s before us today is a process by which to assure the safety of this site or by which we determine that it’s not a safe site. The jury is out. . . . It’s clear to me that there needs from everyone’s perspective to be further analysis of health and safety issues at this location.”

The CLA report stated, “the CLA was instructed to report back to the Planning and Land Use Management Committee and the City Council to resolve the policy issues relative to the safety of the site.” The CLA report stated that of the conditions evaluated only methane presented a potentially significant risk, and that the proposed methane mitigation system described in the report would reduce the risk to an acceptable level. The PLUM Committee report to the city council for the meeting on June 12, 2001, stated that the PLUM Committee “deferr[ed] to the findings of the CLA study” and

recommended that the city council “note and file” the CLA report. At the hearing on June 12, 2001, Councilmember Hal Bernson, a PLUM Committee member, stated, “I am satisfied that to our best efforts, the safety issue has been addressed and I would ask for an approval of the committee report.”

The city council on June 12, 2001, adopted the recommendations by the PLUM Committee to “note and file” the CLA report, direct the planning department to require the project mitigation monitor to oversee implementation of the mitigation measures described in the report, and direct other city departments to coordinate with the planning department regarding implementation of the new methane mitigation system. Although the CLA report and the further evaluation encompassed by the report were initiated under the aegis of a decision on Mello-Roos bonds, the record shows that the purpose and effect of the CLA process was to allow the city council to consider the information gleaned through a careful evaluation of environmental issues of concern to both the public and councilmembers and decide whether and how to proceed with the development. Moreover, the decision by the city council to “note and file” the CLA report and adopt the recommended methane mitigation measures effectively was a decision to both adopt the CLA’s findings stated in the report and modify the project by adopting the recommended mitigation measures. Playa Capital’s characterization of the city council’s decision on June 12, 2001, as approval of Mello-Roos financing is inaccurate. We conclude that the city council’s decision to adopt the mitigation measures and proceed with the project as modified by the mitigation measures involved the exercise of subjective judgment and was a discretionary approval.

We reject the argument by Playa Capital that the decision by the city council is not a discretionary approval because the Department of Building and Safety had already “approved” the methane mitigation system in its letter of January 31, 2001. The Department of Building and Safety was one of several public agencies whose recommendations the CLA considered in preparing its report, which was submitted to the city council for its approval. The approval by the city council is the operative approval because the city council was the final administrative decisionmaker. (Cf. Tahoe Vista Concerned Citizens v. County of Placer (2000) 81 Cal.App.4th 577, 594.)

3. *A Subsequent EIR or a Supplement to the EIR Is Not Required with Respect to Certain Purported New Information*

a. *Petitioners’ Specific Contentions*

Petitioners’ specific contentions with respect to the purported changes and new information giving rise to the need for a subsequent EIR or a supplement to the EIR are (i) a subsequent EIR or a supplement to the EIR is required to consider a new or more severe significant impact even if substantial evidence supports a determination that mitigation will reduce the impact to an insignificant level; (ii) the discovery of thermogenic gas on the project site was new information of substantial importance, and there is no substantial evidence that the methane mitigation measures are feasible or will be effective, (iii) the methane mitigation measures will require long-term dewatering, which may cause subsidence and expansion of an existing plume of groundwater contamination; and (iv) new information shows that “friction piles” under buildings will exacerbate the movement of methane, BTEX, and hydrogen sulfide to the surface, and

the sampling of BTEX and hydrogen sulfide performed on site was inadequate and unreliable, so there is no substantial evidence to support the conclusion that no new or more severe significant impacts will result.

b. *Thermogenic Gas*

A new or more severe significant environmental impact does not require the preparation of a subsequent EIR or a supplement to an EIR if adopted mitigation measures will reduce the impact to a level of insignificance (*River Valley, supra*, 37 Cal.App.4th at p. 168; see *Laurel Heights II, supra*, 6 Cal.4th at p. 1130; 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, *supra*, § 19.9, pp. 719-720; cf. Guidelines, § 15088.5, subd. (a)(2)), as stated *ante* in section 1 of the Discussion. Accordingly, we reject the argument that a subsequent EIR or a supplement to the EIR was required to consider potential significant impacts even if substantial evidence supports a determination that mitigation will reduce the impacts to an insignificant level. Assuming without deciding that the discovery of thermogenic gas was new information of substantial importance,⁹ we conclude that the city impliedly found that mitigation will reduce the methane impacts to an insignificant level and that substantial evidence supports that finding, as we shall explain.

The CLA reported that Camp Dresser & McGee Inc., an environmental consultant hired by Playa Capital, implemented a pilot program by installing more than

⁹ Thermogenic gas originates deep within the earth and is produced geologically in association with oil deposits. In contrast, biogenic gas originates closer to the surface and is produced biologically through decay of organic materials.

SEE - Failures cited by ETI - Still
(CO) Worked on 77
+ see - Ludlow Declaration
to see city attorney withhold the ETI - C

70 temporary vent wells designed for Level III methane remediation, and that the

program was successful. The CLA also reported that the city's Department of Building and Safety and its "peer reviewer," ETI, concluded that the proposed methane mitigation system "would adequately protect public safety." The CLA concluded that the mitigation measures "are adequate." The city impliedly adopted the CLA's findings stated in the CLA report, as stated *ante*, and therefore determined based on the CLA report and the matters discussed in the report that the mitigation measures will reduce the methane impacts to an insignificant level. We conclude that the CLA report and the evidence cited in the report and included in the administrative record, which we need not describe in detail, constitute substantial evidence supporting the conclusion that the mitigation measures are feasible and will reduce methane concentrations to an insignificant level. Thus, substantial evidence supports the city's finding that a subsequent EIR or a supplement to the EIR is not required with respect to the purported new information. Petitioners' discussion of the difficulties and uncertainties of methane mitigation fails to show an absence of substantial evidence to support the city's finding.

if implied

c. *Building Piles*

The 1993 EIR referred to "pile support" and "driven pile foundations" as mitigation measures for potential liquefaction, but did not discuss the potential for piles to exacerbate gas emissions. The CLA report also did not mention piles in discussing the potential risks from methane, BTEX, and hydrogen sulfide emissions. Comments to the draft report that were attached to the final report considered by the city council addressed the issue, however. A comment by a local resident stated, "While many

methane problems can be contained and mitigated under normal, stable ground conditions, the proposed Playa Vista Development would be built over unstable ground conditions requiring pilings. It is impossible to create the necessary containment and mitigation methane sealants under these conditions.” A comment by a coalition of environmental advocacy groups, including some of the petitioners in this proceeding, stated, “Why has the City allowed Playa Vista to proceed with massive housing construction in areas that have the highest gas leakage problems, including the insertion of over three thousand pilings and other structures into the ground which provide additional paths for these toxic gases to enter the buildings and endanger their occupants?”

The CLA stated in written responses to the comment, also attached to the final report, “Piles and stone columns and the impermeable membrane required as methane mitigation can be ‘sealed’ to accommodate methane mitigation systems. Stone columns and driven piles densify the soil surrounding them, decreasing soil porosity and permeability. In addition, other elements of the methane prevention system, such as vent pipes and gravel layers, will dilute and vent any methane gas, minimizing the amount of gas that can accumulate underneath the methane barrier.” The CLA stated further, “Several consultants have verified that the installation of piles and stone columns will not create a long term increase of gas migration from the aquifer.” Thus, the CLA concluded that the piles would not exacerbate emissions of methane and other gases.

The CLA also reported that an environmental consultant hired by Playa Capital, Geometric Consultant Inc. (Geometric), evaluated the health risks associated with BTEX and hydrogen sulfide on the site in July 2000 and concluded that the risks associated with the levels detected were insignificant. The CLA reported that the city and an environmental consultant hired by the city, Kleinfelder, had misgivings about the Geometric report and that Kleinfelder conducted a separate health risk assessment and reached the same conclusion based on “very conservative” assumptions. The CLA concluded that health risks from BTEX and hydrogen sulfide soil gas emissions on the project site are insignificant and that no further investigation or remediation is warranted.

Assuming without deciding that there was new information of substantial importance concerning the use of building piles and the potential to exacerbate the movement of gases to the surface, we conclude based on the foregoing that the city impliedly found, based on the CLA’s findings stated in response to comments, that the building piles will not exacerbate the movement of significant levels of methane, BTEX, and hydrogen sulfide to the surface and that no further investigation is warranted. The CLA report and the evidence cited in the report and included in the administrative record constitute substantial evidence supporting those conclusions. Thus, substantial evidence supports the city’s determination that a subsequent EIR or a supplement to the EIR is not required with respect to building piles.

4. *Groundwater Dewatering in Connection with the Methane Mitigation Measures Is a Potentially Substantial Project Change*

Correspondence from Sepich to the city's Department of Building and Safety in 1999 recommended "permanent groundwater dewatering systems at all basements" and stated, "permanent groundwater dewatering measures are also critical to insuring the proper operation of the methane mitigation systems" and "permanent groundwater dewatering measures are designed to keep the subslab methane vent piping clear." Although the document formally presenting the Playa Vista Methane Prevention, Detection and Monitoring Program proposed by Sepich in January 2001 and later adopted by the city did not discuss groundwater dewatering, correspondence from Sepich to the Department of Building of Safety in March and April 2001 stated that the methane mitigation system would include "a permanent subslab groundwater dewatering system" and "groundwater dewatering systems below all basement levels."¹⁰

The 1993 EIR and the conditions imposed by the city council upon approval of a tentative tract map in 1993 cautioned against dewatering in connection with a proposed sewer along Jefferson Boulevard and "long-term pumping" in connection with subterranean structures, noting the potential for subsidence and exacerbation of existing groundwater contamination. We conclude that the permanent groundwater dewatering contemplated in connection with the methane mitigation measures adopted by the city is

¹⁰

Dewatering refers to the removal of water.

*court has made²⁵ determination
[not up to city to redo]*

a *potentially* substantial project change because it could result in those new or substantially more severe significant impacts.¹¹

A subsequent EIR is required if the agency determines, based on substantial evidence in the administrative record, that “Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.” (Guidelines, § 15162, subd. (a)(1).) In light of the *possibility* that groundwater dewatering will result in new or substantially more severe significant impacts, the city council was required to determine whether new or substantially more severe significant impacts will result and will require major revisions to the EIR, before approving the project change. (*City of San Jose v. Great Oaks Water Co.*, *supra*, 192 Cal.App.3d at p. 1017; see 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, *supra*, § 19.29, pp. 735-736.)

5. *The City Did Not Determine Whether a Subsequent EIR or a Supplement to the EIR Was Required with Respect to Groundwater Dewatering, as Required*

The CLA report described the proposed methane mitigation system and concluded that the system was adequate and that there was no evidence that the

¹¹ The parties dispute whether the permanent groundwater dewatering includes dewatering both directly below the basement of each building and at the level of the so-called 50-foot aquifer, where level III mitigation is required, or only the former. The administrative record does not readily yield an answer to this question, and we need not resolve the dispute.

mitigation measures would increase the risk of subsidence. The CLA report did not mention groundwater dewatering, however, either in describing the proposed mitigation system or in the section discussing the potential for subsidence.¹² The representation at oral argument by counsel for Playa Capital that the CLA report and its appendices described in detail the methane mitigation system dewatering system is incorrect. A comment by a local resident to the draft report asked under the heading "Subsidence," "If the property is situated on a significant aquifer, and the water (and gas) are diverted, what will occur as a result?" The CLA stated in its written response to the comment, "Any dewatering of the aquifer will require a hydrogeologic report to assess and mitigate any potential for subsidence. The hydrogeologic study will ensure that groundwater withdrawal will be less than the recharge rate of the aquifer." Neither the comment nor the response expressly mentioned groundwater dewatering in connection with methane mitigation.

Never done

The record supports the conclusion that the city council impliedly adopted the CLA's findings stated in the CLA report and in responses to comments included in the final report, as stated *ante*. *The record does not support the conclusion, however, that the city council made implied findings with respect to matters not meaningfully discussed in the CLA report or in responses to comments.* The brief mention of groundwater dewatering in response to a comment is not a meaningful discussion of

¹² The document entitled Playa Vista Methane Prevention, Detection and Monitoring Program submitted by Sepich on January 30, 2001, also failed to mention groundwater dewatering, as stated *ante*.

groundwater dewatering in connection with the methane mitigation measures when neither the CLA report nor the comment, nor the response, expressly mentioned dewatering in connection with the methane mitigation measures or described either the dewatering contemplated in connection with those mitigation measures or the potentially significant impacts.¹³ We therefore conclude that the city did not determine whether a subsequent EIR or a supplement to the EIR was required with respect to groundwater dewatering, as required. The appropriate remedy in these circumstances is to order the city to make that determination and to vacate its approval of the methane mitigation measures until it makes the determination and complies with CEQA.¹⁴ (See Pub. Resources Code, § 21168.9, subd. (a); 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, *supra*, § 19.29, p. 736.)

¹³ We deny Playa Capital's request to augment the administrative record to include two reports by its consultant discussing the proposed dewatering. There is no indication that the reports, which were addressed to Playa Capital, were submitted to or considered by the CLA or city council, so the documents are not relevant to the city's council's decision on June 12, 2001. Moreover, Playa Capital cites no authority for this court to augment the administrative record on appeal. The augmentation request is essentially a request for this court to consider documents that are not part of the administrative record, without an explanation why it would be appropriate for us to do so.

¹⁴ We granted Playa Capital permission to lodge a declaration by its vice president. The declaration provides information pertaining to sales of parts of the development to other developers and sales of individual units to end users, and discusses the extent of dewatering. Playa Capital cites no authority for this court to consider evidence that was not before the city council and is not included in the administrative record. We therefore deny permission to file the document.

6. *Petitioners Are Excused from the Exhaustion of Administrative Remedies Requirement*

A party can sue to challenge a public agency's compliance with CEQA only if the party timely objected to the project approval on any ground and the grounds for noncompliance alleged in the lawsuit were presented to the public agency "by any person" during the public comment period or prior to the close of the public hearing on the project, if any. (Pub. Resources Code, § 21177, subs. (a), (b).) The requirement of exhaustion of administrative remedies affords the agency an opportunity to address the alleged ground for noncompliance, correct any deficiency, and avoid costly litigation or reduce the scope of litigation. (*Sierra Club v. San Joaquin Local Agency Formation Com.* (1999) 21 Cal.4th 489, 501; *Westlake Community Hosp. v Superior Court* (1976) 17 Cal.3d 465, 476.) The exhaustion requirement also facilitates the development of a complete factual record and allows the agency to apply its expertise, both of which can assist later judicial review, if necessary. (*Sierra Club, supra*, at p. 501.) The exhaustion requirement under CEQA does not apply to an alleged ground for noncompliance if the agency provided no public hearing or other opportunity for members of the public to object prior to the project approval, or if the agency failed to give the notice required by law. (Pub. Resources Code, § 21177, subd. (e); *Endangered Habitats League, Inc. v. State Water Resources Control Bd.* (1997) 63 Cal.App.4th 227, 238.) The exhaustion requirement is excused if the notice included an incomplete or misleading project description and the public had no meaningful opportunity to address the pertinent issues. (*McQueen v. Board of Directors* (1988) 202 Cal.App.3d 1136, 1150,

disapproved on another point in *Western States Petroleum Assn. v. Superior Court* (1995) 9 Cal.4th 559, 576 & fn. 6.)

The city council agenda for the meeting on June 12, 2001, stated that the city council would consider the CLA report and the PLUM Committee's report and recommendations based on the CLA report, and listed the PLUM Committee's recommendations. The PLUM Committee's report and recommendations, described *ante*, did not mention groundwater dewatering. The CLA report did not mention groundwater dewatering either in describing the proposed mitigation system or in discussing the potential for subsidence. The brief mention of dewatering in response to a comment did not adequately inform the public of the nature and extent of groundwater dewatering involved in the proposed mitigation measures. We conclude that the description of the proposed mitigation measures provided in the CLA report was incomplete and misleading in this respect. Moreover, there was no discussion of groundwater dewatering at the city council meeting on June 12, 2001. The public therefore had no meaningful opportunity to object to the city's failure to require a subsequent EIR or a supplement to the EIR with respect to groundwater dewatering. Petitioners therefore are excused from the exhaustion requirement on this issue.

Playa Capital contends the Department of Building and Safety approved the mitigation system, including groundwater dewatering below basement levels, and issued five building permits from November 2000 to January 2001.¹⁵ Petitioners

¹⁵ The permits actually were issued in November and December of 2000.

administratively appealed the permit approvals by petitioning the city's Board of Building and Safety Commissioners, and the commissioners denied the petitions in April 2001, but Petitioners did not challenge the commissioners' decision by petitioning the city council.¹⁶ Playa Capital contends Petitioners failed to exhaust their administrative remedy because they failed to challenge the commissioners' decision. We reject this argument. The city council decided in June 2000 that the city council would make the final administrative decision concerning the proposed methane mitigation system after considering the environmental issues addressed in the CLA report. That procedure was in place before the commissioners' decision, so there was no need for Petitioners to formally challenge the commissioners' decision in order to obtain review by the city council.

7. *The Petition Was Timely*

CEQA establishes different limitations periods depending on the nature of and circumstances surrounding the agency's decision. For example, a proceeding challenging a decision that a project will have no significant environmental impact must be commenced within 30 days after the filing and posting of a notice of determination, and a proceeding challenging a decision that a project is exempt from CEQA must be commenced within 35 days after the filing and posting of a notice of exemption.

¹⁶ The issues raised by Petitioners in the administrative appeals concerned whether the project adequately addressed potential sources of methane, including an adjacent Southern California Gas Company facility and abandoned oil wells, the potential earthquake hazard, subsidence, and the effectiveness of the methane mitigation system.

(Pub. Resources Code, § 21167, subds. (b), (d); Guidelines, § 15112, subd. (c)(1), (2).)

In other circumstances where no formal notice is given, the 180-day limitations period of Public Resources Code section 21167, subdivision (a), generally applies.

(Guidelines, § 15112, subd. (c)(5).)

Public Resources Code section 21167, subdivision (a), states that a 180-day limitations period applies to an action or proceeding challenging “an agency’s decision to carry out or approve the project” that may have a significant environmental impact if the agency failed to determine whether the project may have a significant environmental impact. (Pub. Resources Code, § 21167, subd. (a).)¹⁷ Guidelines section 15112, subdivision (c)(5)(A), states that if no more specific statute of limitations applies, the 180-day limitations period of section 21167, subdivision (a), applies to an agency’s decision to carry out or approve a project. Absent a more specific statute of limitations applicable to an agency’s decision whether a subsequent EIR or a supplement to an EIR is required, we construe “decision to carry out or approve the project” (Pub. Resources Code, § 21167, subd. (a)) to encompass a discretionary project approval after an EIR is certified (in the words of Guidelines section 15162, subdivision (c), a “further

¹⁷ “An action or proceeding alleging that a public agency is carrying out or has approved a project that may have a significant effect on the environment without having determined whether the project may have a significant effect on the environment shall be commenced within 180 days from the date of the public agency’s decision to carry out or approve the project, or, if a project is undertaken without a formal decision by the public agency, within 180 days from the date of commencement of the project.” (Pub. Resources Code, § 21167, subd. (a).)

discretionary approval”) and conclude that the 180-day limitations period of section 21167, subdivision (a), applies here.

The limitations period began to run at the earliest when the city council decided to adopt the mitigation measures and proceed with the project as modified. (See *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 939 [held that an action challenging the failure to prepare a subsequent EIR must be filed within 180 days after the plaintiff knew or reasonably should have known that the project under way differed substantially from the one described in the EIR].) That occurred on June 12, 2001. The city council’s decision on June 20, 2000, directing the CLA to evaluate the environmental impacts further was not a further discretionary approval because the city council at that time did not decide to adopt the mitigation measures and proceed with the project as modified, but only to study the issues further. In light of the city council’s decision that the CLA should oversee further evaluation of the environmental issues and report to the PLUM Committee, the determination by the Department of Building and Safety in January 2001 that the methane mitigation system was adequate was only advisory and was not a final administrative decision. (Cf. *Tahoe Vista Concerned Citizens v. County of Placer*, *supra*, 81 Cal.App.4th at p. 594.)

The notice of exemption filed and posted on June 27, 2001, pertained to the decision to issue Mello-Roos bonds, not the decision to amend the project by adopting the proposed methane mitigation measures. This is clear from both the project description in the notice of exemption and the reasons stated for the exemption.

Petitioners commenced this proceeding on Monday, December 10, 2001, 181 days after June 12, 2001. The petition was timely because the 180th day fell on the preceding Sunday. (Code Civ. Proc., § 12a, subd. (a); Gov. Code, § 6700, subd. (a).)

8. *Collateral Estoppel Does Not Apply*

Collateral estoppel or issue preclusion precludes the relitigation of an issue that was previously adjudicated if (1) the issue is identical to an issue decided in a prior proceeding; (2) the issue was actually litigated; (3) the issue was necessarily decided; (4) the decision in the prior proceeding is final and on the merits; and (5) the party against whom collateral estoppel is asserted was a party to the prior proceeding or in privity with a party to the prior proceeding. (*Lucido v. Superior Court* (1990) 51 Cal.3d 335, 341.) “The ‘identical issue’ requirement addresses whether ‘identical factual allegations’ are at stake in the two proceedings, not whether the ultimate issues or dispositions are the same. [Citation.]” (*Id.* at p. 342.)

The petitioners in *Grassroots Coalition v. City of Los Angeles (Playa Capital Company, LLC)*, *supra*, challenged the city’s failure to require a subsequent EIR for the project after the city council had directed the CLA to oversee the further investigation but before the CLA issued its report and before the city council accepted the findings and recommendations of the CLA report. The proceeding therefore did not involve a challenge to the further discretionary approval at issue here or an evaluation of the evidence presented in the CLA report. We conclude that the issue presented and decided in that case is not identical to the issue presented here. We therefore need not decide whether the other requirements for application of collateral estoppel are present.

DISPOSITION

The judgment is reversed with directions to the superior court to grant the petition and issue a peremptory writ of mandate ordering the city to vacate its approval of the methane mitigation measures, for the purpose of determining whether a subsequent EIR or a supplemental EIR is required with respect to groundwater dewatering, and proceed accordingly as required by CEQA. Petitioners shall recover their costs on appeal.

NOT TO BE PUBLISHED IN OFFICIAL REPORTS

CROSKEY, J.

WE CONCUR:

KLEIN, P.J.

ALDRICH, J.

ETINA, GRASSROOTS COALITION, et al., v. City of Los Angeles and Playa Capital Company (Playa Vista Phase One) 2005 Cal. App. Unpub. LEXIS 9697

TABLE OF ISSUES AND DISPOSITION

ISSUE¹	Grassroots Coalition Argued	Playa & City Attorney Argued	Court Decided in Favor for
<p>1 On June 12, 2001 did the City Council approve and adopt new methane mitigation measures (the PVMPDMP)² for the Playa Vista Phase One development and direct City Departments to implement and enforce these new mitigation measures?</p>	<p>Yes: City's "note and file" language was a subterfuge to avoid triggering CEQA review regarding Phase One's environmental, health and safety impacts.</p>	<p>No: City only "noted and filed" the CLA Report on June 12, 2001 only for purposes of for Mello-Roos bonds approvals. Therefore, no CEQA review triggered.</p>	<p>GRASSROOTS COALITION (Opinion, pages 7-8)</p>
<p>2 Did the City Council's June 12, 2001 approval and adoption of the CLA Report and the PVMPDMP only done for Mello-Roos bond purposes?</p>	<p>No</p>	<p>Yes</p>	<p>GRASSROOTS COALITION (Opinion, page 8)</p>

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¹ See "Contentions" page 4 and page 8 of Opinion

² *Playa Vista Methane Prevention, Detection and Monitoring Program (PVMPDMP)* "is graduated to correspond with the level of methane concentrations detected on site. The CLA report stated, 'All three levels would require a basic mitigation prevention system below the building, including a 12-inch gravel blanket, with pipes to ventilate gas from underneath the impermeable membrane, and methane detection alarm systems within the building. For Levels II and III, automatic ventilation systems triggered by elevated methane concentration levels beneath the impermeable membrane and continuous monitoring systems would . . . also be required. Additionally, Level III would require a subsurface venting system consisting of vent pipes drilled into the 50-foot gravel aquifer to extract methane gas, thereby alleviating the accumulation of methane within the aquifer and below the ground surface and also reducing the surface emissions of methane.'" (Opinion, p.3)

ISSUE	Grassroots Coalition Argued	Playa & City Attorney Argued	Court Decided in Favor for
3 Was the City Council's June 12, 2001 approval a discretionary act for CEQA purposes?	Yes	No	GRASSROOTS COALITION (Opinion, p.8)
4 Is there substantial evidence in the record to support the City Council's implied CEQA finding that the PVMPDMP would reduce Phase One's impacts on methane gas to a level of insignificance?	No	Yes	CITY and PLAYA (Opinion, pages 8-9)
5 Will the dewatering necessitated by the PVMPDMP potentially cause significant environmental effects so that City Council must decide whether an SEIR is required on that basis?	Yes: based on the Phase One EIR, the City placed a condition of approval on the Phase One development prohibiting permanent dewatering because studies showed that even short-term dewatering caused subsidence and toxic groundwater plume expansion at the site.	No	GRASSROOTS COALITION (Opinion, p. 10)
6 Did Grassroots Coalition exhaust their administrative remedies before suing the City under CEQA?	Yes, they worked in good faith with the City as much as possible to address all issues before suing.	No, they didn't do enough and case should be thrown out on those grounds	GRASSROOTS COALITION (Opinion, p.12)

However, the Court was not privy to information that is now available and proves that the methane mitigation measures' Level III mitigation is not feasible and is not operating. Thus, had this information been part of the administrative record, the Court presumably would have held in favor of Grassroots Coalition on this issue as well.

#2

	ISSUE	Grassroots Coalition Argued	Playa & City Attorney Argued	Court Decided in Favor for
7	Did Grassroots Coalition sue within the CEQA-mandated time period?	Yes	No, and case should be thrown out on those grounds	GRASSROOTS COALITION (Opinion, pages 12-13)
8	What does the City Council have to do now?	1) Vacate the Phase One methane mitigation approvals. 2) Comply with CEQA 3) Re-approve the methane mitigation system		GRASSROOTS COALITION (Opinion, pages 11 and 14) ⁴

⁴ Note that the Court stated, "The representation at oral argument by counsel for Playa Capital that the CLA report and its appendices described in detail the methane mitigation system dewatering system is incorrect" (Opinion p.10)



Last Updated 08/10/2001

**REGIONAL GEOCHEMICAL ASSESSMENT OF
METHANE, BTEX, CO2 and H2S GAS OCCURRENCES**

**PLAYA VISTA DEVELOPMENT
First and Second Phases
Los Angeles, California**

Prepared for:

**CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY**

July 10, 2001

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Figure 5. Backhoe excavations of Trench1, on the left, and Trench 2 on the right are shown when first installed on
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in order to look for gas bubbles.

Figure 6. Flux observation well FW-07, referred to as "Mr. Bubble", was installed on Dec. 2, 2001 with a 24 inch
bucket auger to a depth of about 10 feet. Close observation indicated that most of the bubbles were entering the well
from the sides of the borehole.

Figure 7. For longer term observation of the bubble activity, FW-07 was filled with coarse gravel to near the top of the
water and cased only in the upper portion with a 24 inch PVC casing. The casing insured that the EPA flux chamber
used for measurement could be inserted in a repeatable manner and also protected the flux well.

Figure 8. A typical large magnitude bubble stream from the Product 700 area, as commonly observed following a
major rainfall event that occurred on Feb. 15, 2001.

Figure 9. FW-09 was installed on Jan 20, 2001 at the location of one of the largest natural seeps observed following a
major rainfall event that occurred on Jan. 12, 2001. Initially found by Dr. Paul Witherspoon, this well was often
referred to as the "Paul" well.

Figure 10. A site inspection of the "Paul" well was made on Jan. 23, 2001 by LADBS personnel, from left to right,
Colin Kumabe, Precilla Ortiz and David Hsu.

Figure 11. A 40,000 pound CPT truck was used to install a series of gas vent test wells in the Product 700 area on Jan.
21, 2001

Figure 12. The 1 inch diameter CPT rods are pushed to refusal in the underlying Ballona gravels in order to determine
the depth to the "Top of Gravel"

Figure 13. A view of the hydraulic system inside the CPT truck, the drive rods are disconnected and the nitrogen
ation hose inserted.

Figure 14. Making a connection by adding a rod inside the CPT truck

Figure 15. CDM Engineer Jay Accashian testing a TVW vent well on Jan. 21, 2001 for subsurface evidence of free gas
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Figure 16. Following a backhoe accident, the "Paul" well was still flowing as of Jan. 24, 2001. An attempt to clean out
the well using the 24 inch bucket auger caused the gas flow to be reduced to about 2 liters per minute.

Figure 17. On May 16, 2001, the "Paul" flux well FW-09 was still active, and remained active until destroyed by CDM
in June 2001.

Figure 18. CDM Engineer Jay Accashian holding an EPA flux chamber that was used to provide a series of gas flux
measurements on the site. These measurements began in early December under the direction of Dr. Chuck Schmidt.

Figure 19. The EPA flux chamber is placed on the ground and flushed with nitrogen at a rate of 5 liters/minute. The
concentration of gas entering the chamber through the bottom can then be accurately calculated.

Figure 20. The EPA flux chamber was placed directly over a live macroseep, which forms a visible bubble stream,
which can be seen inside the chamber. An active stream of bubbles such as this typically produces a flow rate of about
2 standard cubic feet per day.

Figure 21. The EPA flux chamber was used on Dec. 4, 2001 to calculate the gas venting flow rate across the water
interface in one of the trenches that was excavated and filled with a water seal for observation of gas bubbles.

Figure 22. An area of intense seepage observed in an area that was not surveyed by the soil gas survey lies within the
riparian wetlands corridor just north of Teal street. Multiple seeps photographed on May 16, 2001 can be seen spread
over a 20 by 30 foot area within an existing drainage ditch.

Figure 23. A close-up view of one of the more intense seeps shown in Figure 22, above. A free gas sample collected
from this seep on March 16, 2001 by volume displacement contained 94% methane and 3800 ppmv of ethane. The
methane and ethane stable carbon isotope values were -56.91 and -21.40 parts per mil.

Figure 24. Expanded view of methane contour map in the vicinity of a macroseep observed at infill sites 9943 and
9944. Although this anomaly is also shown on Plate 13, please note that the grid used for contouring the regional
Surfer map cannot properly display such close detail changes in magnitude with a grid spacing chosen for displaying

the more regional data shown in Plate 13.

Figure 25. Expanded view of methane contour map in the vicinity of a macroseep observed at infill sites 004A through 004Z near monitor well MMW-04.

Figure 26. Expanded view of ethane contour map in the vicinity of a macroseep observed at infill sites 004A through 004Z near monitor well MMW-04.

Figure 27. Expanded view of CO2 contour map in the vicinity of a macroseep observed at infill sites 004A through 004Z near monitor well MMW-04.

Figure 28. A very important macroseep was observed between sites 004Z and 004Q on February 14, 2001. This area was chosen for additional gridding because monitor well MMW-04 indicated that the Ballona gravel aquifer was very anomalous at this location, and the initial soil gas survey conducted on 100 foot centers had not encountered any significant anomalies in this area. This small macroseep was found by inspection during very close-spaced soil gas sampling that was conducted in the vicinity of monitor well MMW-04.

Figure 29. As photographed again on the following day, this small macroseep shown in Figure 24, above, did not appear to change in appearance, or flow rate. Monitor well MMW-04 had originally blown out for an hour when drilled, but neither it nor the vent test well TVW-35 installed near MMW-04 would vent gas from the gravel aquifer. A very close-spaced grid of soil gas samples was required to find these seeps.

Figure 30. A soil gas sample at site 004F had found a methane concentration of 98.6%, yet no visible macroseeps could be seen at this location. Macroseeps had been noted nearby as shown by Figures 28 and 29. To test this area a small 4' by 4' tent was constructed in order to determine whether or not there was any advective gas flow at this location. Walter Merschat is shown collecting an ambient air sample from under the tent.

Figure 31. Within 24 hours the tent constructed at site 004F had an ambient air methane concentration of 4.73% directly under the tent. The surface soils at this location appeared to have a very high clay content and did not exhibit any visible signs of advective gas flux. Five additional deep TVW vent test wells were attempted directly on this soil gas anomaly. None of them were able to find a gas pocket within the subsurface gravel deposits in spite of the fact that they were drilled in the very near vicinity of a macroseep. This indicates that deeper gases are advecting through the gravel 50 feet of sediments without forming a reservoir in the gravels.

Figure 32. Gas can be visibly seen venting on Jan. 25, 2001 when the CPT rods were uncoupled at deep venting well TVW-23, installed at soil gas site 211. A gas pressure of 20 psig was recorded when the rods were pulled up, opening the probe inlet and an open hole flow rate of 4 to 6 cubic feet per minute was measured and sustained for several hours through the CPT rods. In excellent correlation with the soil gas contour maps, this vent well and TVW-24 (near soil gas site 207) defined the two most prolific gas venting areas on the entire site.

Figure 33. TVW temporary methane vent wells installed by CDM Engineers. The objective was to locate and vent free gas pockets in the Ballona gravel aquifer. A detailed procedure is given in Appendix C. The blue color represents wells that vent gas (from any depth) and the green color represents wells that were unable to vent gas from any depth.

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Plate 8. CO2 Concentrations Contour Intervals 10, 7.5, 5.0 (%)

Plate 9. Toluene Concentrations Contour Intervals 0.50, 0.40, 0.30, 0.20, 0.10 (ppmv)

Plate 10. Total Xylenes Contour Intervals 0.50, 0.40, 0.30, 0.20, 0.15 (ppmv)

Plate 11. Summary of Playa Vista Methane Stable Carbon Isotope Analyses

collected in these surveys. Thus, bubbling seeps in streams are present on both the north and south sides of the Playa Vista soil gas anomalies. The results from Centinela and Ballona Creeks confirm that this has been going on for many years and are an indication that effective paths of migration have been established in the subsurface.

An extensive program of drilling and testing of vent wells and monitor wells was carried out within the upper 50 feet of sedimentary cover underlying these gas-charged areas in an effort to characterize the nature and source of these thermogenic gases. One of the most important layers investigated is the Ballona Gravel Aquifer, located at a depth of about 50 ft. This gravel bed contains accumulations of the same thermogenic gases, under essentially the same area as defined by the soil gas survey. In an attempt to measure flow rates and deplete these shallow gas accumulations, over 120 vent wells were installed (mostly in Tract 01) on the largest soil gas anomaly. This effort was essentially a failure because of the weakness and fluidity of these former Los Angeles River sediments, which were too easily disturbed by the drilling operations and the flow of gas, water and sediments towards the well screens, plugging the well screens and preventing the installation of effective vent wells, even when free gas was encountered. The gas pockets were also found to be too erratic to be predictable (for example, three vent wells were drilled within 10 ft of the actively venting macroseep at FW-09, with none of them able to produce gas). Other examples are cited in the text.

The origin of this natural gas is very likely from the Pico sands, that have been found to have gas shows in the interval from 500 ft to 3,000 ft in each of five exploratory wells drilled on Playa Vista property in the 1930's. One of these wells, the Universal City Syndicate Inc. LTD #1, had a blowout in 1930 while drilling at 1831 ft in the Pico Formation, and produced gas at an estimated rate of 5,000 MCF per day. This well was subsequently drilled to 5,960 ft and plugged as a dry hole in 1931. During re-abandonment operations, completed in June 2001, four gas samples were collected at depths ranging from 668 ft to 760 ft near the base of the fresh water zone. The composition of this gas was found to be very similar to that of the methane gas collected by the soil gas survey and from the monitor and vent wells. No significant gas shows were found below the base of the fresh water in this well during the final plugging and abandonment of this well, indicating that the Syndicate well is not the source of the gas.

It is significant that natural gas was discovered at depths of 1,500 ft to 4,700 ft, in the Pico and Repetto sands of the El Segundo field, which is on a similar structural trend only 4.5 miles southwest of Playa Vista. The analyses of two Pico gas samples from this field show that they are very similar to the thermogenic gases at Playa Vista. This field has produced about 23 billion cubic feet of gas, giving an indication of the possible magnitude of the gas accumulations that could, or may have existed beneath Playa Vista.

An independent assessment has been made of the geological and geophysical characteristics of the formations at Playa Vista in an effort to understand the nature of the structure and stratigraphy of the subsurface gas sources and the gas migration pathways. A high-resolution 2D seismic line, located along Jefferson Boulevard provides an image of the shallow subsurface down to a depth of about 2,000 ft. A 3D seismic survey was also carried out to image the deeper section, extending to about 8,000 ft.

A specific problem that required attention was the proposed existence of the Lincoln Boulevard Fault that was postulated to dip in a westerly direction down toward the gas storage reservoir (operated by Southern California Gas Company). A very careful review of the information from the 2D and 3D seismic surveys does not show any evidence that such a west-dipping fault exists. Corroborative evidence has also been obtained from an investigation of the composition of the gas in the storage reservoir, which proves that the Playa Vista gases are unrelated to the gases from the storage field. Thus it can be concluded that there is no postulated fault migration pathway for storage gases to migration from the storage reservoir located at a depth of about 6,200 ft and the Playa Vista site. Thus two independent methods provide collaborative evidence that the Lincoln Blvd. Fault, as postulated does not exist.

Unfortunately, the seismic data were not acquired in a manner and over a sufficient area to allow a definite conclusion drawn as to the exact nature of the subsurface structures beneath Playa Vista. As a result, there are essentially two interpretations of the subsurface geologic structure and the nature of the paths of gas migration, as outlined in

Assessment of Geological and Geophysical Characteristics of the Playa Vista Development Site and Integration with Geochemical Observations by Anderson, Becker and Witherspoon, 2001. One involves a slump model in which to 1,000 feet of strata have been disrupted during slumping of the valley wall that defines the southern boundary of the Ballona Creek floodplain. The surface along which slumping occurred cuts into the uppermost Pico sands. As a result of this truncation, the seal in the sand/shale sequences of this shallow section was breached, and a path for gas to migrate to the surface was provided. An alternative model involves interpreting the seismic data as reflecting a structure with a near-surface system of faulting/jointing that provides a mechanism for migration of gas from the middle and upper Pico sands. Drainage of gas from these sands would explain the very significant migration of gas at the surface of Playa Vista. Lineations observed in the surface gas anomalies may indicate fractures bounding major slump blocks that formed during gravity driven collapse of the valley wall into the deep valley. The main question to be answered is the depth, extent and origin of the fractures, however, neither model leads to a deep-seated "earthquake fault" that would cause structural damage.

Anomalous methane concentrations in the shallow sediments at Playa Vista, and the difficulties experienced in attempting to characterize the magnitude and nature of these gas accumulations present a significant and challenging problem. The presence of gas seeps requires building methane mitigation systems for any building constructed directly over the areas where anomalous concentrations of soil gas have been measured. In the interest of safety, no variances in these methane mitigation requirements should be allowed. Not only do these mitigation systems require extensive field-testing to determine their effectiveness in handling the gases venting naturally at Playa Vista before initial occupancy, in view of future seismic activity in the Los Angeles Basin, this effectiveness must be periodically reevaluated. The installation of real-time monitoring systems installed in the vent risers in the Playa Vista buildings could provide significant protection, provided that they are properly calibrated and demonstrated to be responding to the actual gas levels, which accumulate under the buildings foundations. This testing has not been done, and must be completed as part of the due diligence before occupancy.

ty conduits, utility vaults and sewers contained within the streets and public right-of-ways are also subject to explosive gas concentrations. The building mitigation systems offer no protection, nor mitigation for this area of concern. The design of these features should be such that risk of explosion is minimized. ETI has never received any information from Playa Vista regarding the handling of methane problems associated with the utilities and suggest that this area be given due consideration.

1.0 INTRODUCTION

1.1 Location

The proposed Playa Vista Development (Site) encompasses about 1,087 acres approximately 15 miles west of downtown Los Angeles (McLaren Environmental Engineering, May 8, 1987, ENSR, October 1997). The site is four miles south of the City of Santa Monica, 0.5 miles west of the City of Culver City, and approximately 1.5 miles north of Los Angeles International Airport. As shown by Figure 1, the Playa Vista Development is bounded by Marina del Rey on the north, Culver City on the east, Playa del Rey and Westchester Bluffs on the south, and Vista del Mar and Playa del Rey on the west. Playa Vista will be developed as an integrated, mixed-use, master-planned community composed of residential, commercial, recreational, and civic structures. Lincoln and Jefferson Boulevards are the major north-south and east-west traffic arteries, respectively, in the area.

The site has been subdivided into four planning areas, A, B, C, and D based upon the quadrants formed by the intersection of Ballona Channel and Lincoln Boulevard. These planning areas are shown in Figure 2. The proposed development of Playa Vista includes two major phases, as shown in Figure 2. Initially, only the western portion (Tracts 2, 03, 05, and 06) of the Phase 1 area was surveyed. Lot and product numbers used to refer to specific building construction areas for these Phase 1 tracts are shown in Figure 3 for reference. The eastern portion of Phase 1 (Tract 04) was only recently surveyed along with the Phase 2 areas as part of this regional soil gas survey.

7 Previous Work

Exploration Technologies, Inc. (ETI) of Houston, Texas was originally retained in May 1999 by the Los Angeles Department of Building and Safety (LADBS) and Playa Capital to serve as "Peer Reviewer" regarding subsurface methane gas issues in the proposed Playa Vista Development in Los Angeles, California. The initial scope of work was to review and comment on previous studies/reports concerning methane at the Playa Vista Development (PVD). Following a review of the available data, and a meeting with the Playa Vista consulting experts on September 15, 1999, it was readily apparent that previous studies were not adequate, nor thorough enough to fully assess the occurrence of methane gas at the PVD due to limited sampling and analyses. Methane gas concentrations in groundwater from three zones had been measured in five monitor wells that had been installed in Tract 03 by Sepich and Associates (Sepich Associates Inc., April 2, 1999). The data from this assessment was included in the report by Integrated Environmental Services, Inc. (IES, May 28, 1999). These wells confirmed the presence of large methane concentrations in the 50-foot gravel aquifer. However, the results did not provide definitive methane content, nor adequate information about the source of methane in the aquifer.

Based on ETI recommendations, a preliminary subsurface methane assessment (ETI letter report, November 29, 1999) was conducted during October and November, 1999 over Tract 03 in the proposed Playa Vista Development. The location of this first soil gas data set collected by ETI is shown in blue on Plate 1 for reference to the other ETI soil gas data sets. Measurable concentrations of ethane, propane, and butanes were confirmed for the first time from Playa Vista soil gas and ground water samples following protocols set by ETI. Concentrations for all of these light gas components were noted to increase in a southwest direction towards the University City Syndicate Inc. LTD #1 well, which at that time was considered as a possible source of thermogenic gas.

Geochemical results from the soil gas and monitor wells (dissolved gas in ground water, and free gas bubbles liberated from the ground water) indicated that the methane and other associated light hydrocarbon gases likely had a common, deep petrogenic source. Ethane, propane, iso-butane and normal-butane are never found associated with 100% biogenic methane gas (Coleman et al., 1977, Coleman, 1979, Coleman et al., 1981, 1988, Jones and Drozd, 1983, Jones et al., 2000, Jones and Agostino, 1998, Thompson, 1966). Thus, the presence of these four independent light gases indicated a definite thermogenic gas contribution, which clearly shifted toward the thermogenic end member to the southwest near the University City Syndicate Inc. LTD #1 well. Methane stable carbon isotopes analyses performed on free gas samples collected from each of the five monitor wells in Tract 03 also showed an increased thermogenic contribution of methane gas towards the southwest.

In contrast to earlier results reported by Playa Vista contractors, the light gas compositions of the free and dissolved gases obtained from the water wells were found to be nearly identical to those measured at four feet in the soil gas samples. Two previous soil gas data sets collected by CDM on September 21 and again on October 7, 1999 failed to report any ethane or propane, yet did report small quantities of butanes and pentanes (ETI letter report, November 29, 1999, CDM October 12, 1999 fax report). This compositional disagreement with the free gas in the 50-foot aquifer was the reason that ETI changed the soil gas protocol and collected an independent soil gas data set for evaluation of the 49104-03 area.

This initial ETI methane assessment conducted within Tract 03, involved sample collection of soil gas from the shallow subsurface and the collection of groundwater and free gas samples from a group of newly installed monitor wells screened in the 50-foot gravel aquifer. Following a review of this initial survey data, it was readily apparent that previous studies were inadequate for assessing the methane gas issue at the Playa Vista site due to limited and poorly done sampling and analyses.

Based on the results of this first survey within Tract 03, ETI designed and recommended a more regional assessment of the Phase 1 development area. This second, more thorough assessment was conducted between October 1999 to April

2000, and included the collection of 812 four-foot deep soil gas samples placed on a 100-foot grid spacing and 41 monitor wells, installed and sampled in the 50-foot deep Ballona gravel aquifer. Delays by Playa Vista and wet weather caused the monitor well portion of this second investigation to extend into early April of 2000. This second, more thorough assessment, directed and supervised by ETI, was successful in determining the nature, magnitude and distribution of methane gas in near surface soils, as well as in the 50-foot gravel aquifer located beneath the site in the Phase 1 area. This second ETI soil gas data set is highlighted in green on Plate 1.

ETI's second assessment report (Subsurface Geochemical Assessment of Methane Gas Occurrences, Playa Vista Development, First Phase Project, Los Angeles, California) for the City of Los Angeles, Department of Building and Safety (LADBS) was issued on April 17, 2000, immediately following the collection and analysis of the monitor well data. Soil gas samples for both of these two surveys were collected by Scientific Geochemical Services in Casper, Wyoming and the analytical laboratory work was done by Microseeps Laboratory in Pittsburgh, Pennsylvania. Sampling and analytical protocols are given in the appendices to these first two reports. All stable carbon isotopes analyses were done by Isotech Laboratories in Champaign, Illinois.

Geochemical results from the April 17, 2000 assessment show two main areas of high methane concentrations (above 70% methane) in the west half of Tract 01 and the south half of Tract 02. Anomalous levels of ethane, propane, and butanes are also coincident with these main two methane seepage areas, indicating the methane is related to deeper thermogenic sources. Areas of anomalous methane concentrations dissolved in groundwater and methane from free gas in the groundwater from the 50-foot gravel aquifer are nearly coincident with the anomalous areas where ethane, propane and butanes was found in the soil gases. The coincidence of anomalous soil gas and ground water data further confirms that the methane is from a thermogenic source, which must lie beneath the gravel aquifer.

Evaluation of available Pico gas well data reported in the April 17, 2000 report, indicated that the source of the anomalous thermogenic methane was most likely from shallow natural gas within the Upper Pliocene Pico Formation. The presence of gas in these shallow natural gas sands was established from available driller's logs, and by the fact that the University City Syndicate Inc. LTD #1 well blew out and produced 5 million cubic feet of gas per day while drilling at approximately 1830 feet. In addition, the El Segundo field, which lies on the same geologic trend as Playa del Rey, produced over 23 billion cubic feet of dry gas from the Pico sands (Cordova, 1963; Wright, 1991). The chemical and isotopic composition of the El Segundo dry gases lie very close to those observed in the Playa Vista gravel monitor wells (Dennis Coleman, 2000, private communication). Coleman's isotope data from these El Segundo samples are listed in Table 5 for comparison with the soil gas and monitor well data.

The Playa del Rey Oil Field, and now Southern California Gas Storage Field lies immediately to the west of Lincoln Blvd. (Barton, 1931, Hodges, 1944 and Riegle, 1953). In order to determine whether or not this gas storage field had contributed as a source, ETI had suggested that additional studies needed to be conducted (ETI 1st and 2nd Progress Reports, 1999). The most important study required was to sample and analyze several of the gas storage wells from the field for comparison with the Playa Vista seepage anomalies, and the second most important study was to conduct a soil gas survey over the storage field. Nine of the gas storage and observation wells were sampled on September 5, 2000 by CDM (observed and assisted by ETI) and analyzed by Isotech Laboratory. A comparison of this chemical and isotopic data with the surface macroseeps and with the gas data from the Ballona gravel monitor wells has demonstrated that the gas storage wells are isotopically and chemically different, and cannot be the source of the gases found in the surface macroseeps and in the Ballona gravel monitor wells.

1.3 Scope of Work

A regional soil gas survey was recommended in the first progress report issued on June 18, 1999, and was repeated in a subsequent report, including the April 17, 2000 report. This important objective was finally completed in January 2001. Including all of the data from the first two soil gas surveys completed in 1999-2000, a total of 1621 sites were used to construct a set of regional soil gas maps over the entire Phase 1 and Phase 2 areas of the planned 1087

acre Playa Vista Development. Soil gas samples for the regional data set were again collected at four-foot depths by Scientific Geochemical Services from Casper, Wyoming and analyzed by Microseeps Laboratory in Pittsburgh, Pennsylvania. Soil gas collection and laboratory analysis procedures are contained in Appendix A (see also ETI April, 17, 2000) for reference. Hydrogen sulfide (H₂S) was again measured in the field on soil gas samples using a Jerome 631-X instrument, manufactured by Arizona Instruments. Laboratory analyses of the light hydrocarbons, permanent gases, BTEX and H₂S are included in Tables 1, 2, 3 and 4 and individual component contour maps are shown in Plates 2 through 10. Concentrations of methane, ethane, propane, and butanes with detection limits of approximately 10 ppbv and BTEX at 70 ppbv are reported.

The additional regional soil gas sites collected by ETI are plotted in black on Plate 1, along with the soil gas data from the first two surveys. All soil gas sample sites for all three data sets were surveyed by Psomas & Associates. Although a 100-foot grid spacing was recommended by ETI, only the Phase 1 areas were sampled on this spacing, except in areas of recent surcharge or existing buildings. At the insistence of Playa Vista, the Phase 2 areas were sampled on a 300-foot grid spacing within Areas A, B, C, and D that had been sited for construction, and on a 500-foot grid spacing in the wetland portion of Area B. These variations in sample spacing are clearly shown on Plate 1. A high water table in the western part of the marshy area precluded sampling a large portion of this area. Additional detail on a 100-foot grid was later added between November 2000 and January 2001 around the sites in the Phase 2 areas where methane concentrations exceeded 1000 ppmv, and around some of the storage/observation wells of the Playa del Rey Gas Storage Field.

In addition to soil gases, free gas samples were collected from bubbling seeps located along Centinela Creek near the confluence with Ballona Channel and from the riparian wetlands corridor that lies just north of the south bluffs. These bubbling macroseeps are also plotted on Plate 1 with the soil gas data. Three individual seep samples, denoted as A, B and C, were collected from Centinela Creek by Walt Mersch (SGS) and Paul Witherspoon (LADBS Consultant) using an inverted funnel on October 20, 2000.

Another area of strong seepage where gas bubbles through water lies within the riparian wetlands corridor that runs east-west along Teal Street just north of the bluffs. A macroseep gas sample (denoted as seep 1, see Plate 1) was collected on March 16, 2001 just south of soil gas site 817 from this riparian wetlands corridor. Within the wetland corridor several additional macroseeps were observed. This wetland area was not sampled during the earlier Phase 1 soil gas surveys because the area was off-limits for surface access. Additional survey data should be gathered throughout this wetland corridor in order to properly complete this regional assessment. *

Data from these bubbling macroseeps was analyzed by Isotech Labs and has been compared with the previous isotope data collected and analyzed in 1993 by Global Geochemistry Labs. Seeps analyzed by Global Geochemistry were reported to have been collected near the confluence of the Centinela and Ballona channels, although no site location map exists for these samples collected by Global. Comparison of these two independent data sets shows that they are nearly identical in composition and suggests that the A, B, C seeps are probably the same seeps previously collected by Global.

Several additional bubbling seeps that have not been sampled were also noted along Centinela Creek during the October 20, 2000 reconnaissance. The locations of all of the seeps observed are shown on Plate 1. Because of accessibility, these other seeps were not sampled during this reconnaissance survey. Chemical and isotopic data should be collected from these additional seeps.

Advective gas flows were observed by means of visual observations made after flooding rains in the vicinity of most of the large magnitude soil gas anomalies. A series of shallow trenches and very shallow (5 to 10 foot deep) 24-inch diameter monitor wells were constructed in these areas for observation of the gas flux from these observation stations. More than 120 geoprobe Cone Penetrameter Tests (CPT boreholes) were installed in the vicinity of these active gas seeps by CDM working with LADBS consultant Dr. Gary Robbins in an attempt to vent the gas pockets contained

within the upper 50 feet of sediments, and in particular near the top of the Ballona gravels. Summary data from these boreholes are listed in Table 7. The methodology developed for this testing is given in Appendix C.

In an attempt to improve the placement of these vent and monitor wells, additional infill soil gas samples were collected within the main seepage area located in area 49104-01. The data was collected using the exact same soil gas collection methods using ETI's four foot soil gas probe, however, in order to expedite turnaround and decision making the data was run in the field using a MTI field-portable gas chromatograph. This instrument has the ability to detect only methane, ethane and carbon dioxide, with detection limits of 10 ppmv for methane and ethane and 0.01% for CO₂. This data was used only for defining the variation of gas seepage anomalies within the 01 area where the largest macroseeps exist. All data within the calibration range of this instrument (i.e. 10 PPMV to 100%) are essentially of the same quality as the laboratory data. However, below the detection limit of 10 PPMV the field-screening data is bottom truncated. A few of these samples were analyzed in a laboratory GC with lower-level detection limits to verify the quality of this data. None of the infill samples were field screened for H₂S because no H₂S was found to be associated with the deeper methane sources. H₂S is clearly derived from surficial sources, and although it is a nuisance, it is not a deep source gas. A total of 303 infill soil gas samples were collected. This data is listed in Table 8 and site locations are plotted in Plate 12. Contour maps for methane, ethane and carbon dioxide are plotted on Plates 13, 14 and 15.

2.0 RESULTS AND INTERPRETATIONS

2.1 Soil Gas Methane

The concentration of methane in soil gas (Table 1, Plate 2) is highly variable over the survey area. Values fall within the interval from background (<2 ppmv) to over 900,000 ppmv. The highest contour values shown on the methane map (Plate 2) are the upper explosive limit 150,000 ppmv (15%) and 25% of the lower explosive limit 12,500 ppmv (5%). These contour values distinguish areas where the concentration is above these two thresholds. These two thresholds are commonly used to define areas of greater concern, and were selected for this reason. However, it should be noted that these values are significantly below the highest values that lie between 25 to 98%. The lower values for contours on Plate 2 delineate the edges of the largest magnitude seeps. Such large contour cuts for methane emphasizes the large contrast with background areas, where no macroseeps even close to these thresholds have been found.

Large areas of seeps with anomalous methane concentrations (greater than 12,500 ppmv) are clustered in two main areas (Plate 2). One of these extends about 900 feet in the western part of Tract 49104-01. The second methane anomaly, which is more than 1000 feet long, is in the southern part of Tract 49104-02. The total area of anomalous methane concentrations (greater than 12,500 ppmv) covers only about 1.5% of the entire 1087 acre Playa Vista site. Smaller methane anomalies occur in the vicinity of, and north of these two large methane anomaly areas. Contoured anomalies appear to be controlled by some sort of subsurface geological influence that defines three principal directions, with azimuths of N 65 E, N 7 W, and N 62 W, suggesting some sort of subsurface geological control.

As shown by Plate 2, much lower methane concentrations were found in the Phase 2 (A, B and C) areas. Soil gas values within these three areas are more typical of normal soil gas concentrations, (Jones et al. 2000). Slightly lower threshold contour values on the second methane contour map (see Plate 2a) outline the much lower level soil gas anomalies observed within these three areas. On Plate 2a the areas of highest methane concentrations are truncated to only 10,000 ppmv (1%), which only slightly enlarges the most anomalous areas, again emphasizing the contrast between the background areas and these very large magnitudes associated with the areas containing the macroseeps. In order to show contrast within the background areas typical of areas A, B and C the contour values used were reduced to values ranging from 10 to only 2 ppmv. The lower contours used were 10, 8, 6, 4 and 2 ppmv. Both Plates 2 and 2a show the enormous contrast in magnitudes of normal soil gas concentrations measured in the background areas with that of the two main macroseep areas.

Soil gas concentrations within the 25% to 90% range at a depth of only four feet generally cannot be sustained without

advective gas flow from depth. Methane is too volatile to be sustained at these levels without a source. Advective gas flow has been confirmed within the vicinity of most of the large magnitude seeps by means of visual observations immediately after flooding rains, or in areas which are permanently water covered, or in water saturated areas that overlap the largest soil gas seeps.

Attention on the Product 700 area (see Figure 4) was initially focused by the observation of many bubbling macroseeps noted after heavy rains (Mike Reader personal communication, January, 2000). In order to evaluate this area of potential macroseeps under dry conditions, which prevailed when this work started, a series of shallow trenches (Figure 5) and very shallow (5 to 10 foot deep) 24-inch diameter monitor wells (Figure 6, 7) were constructed. Figure 4 shows the location of this construction area, along with the trench, flux and deep venting wells. The symbol T was used to denote a shallow trench and FW (flux well) was used to denote a 24-inch monitor well. Coarse gravel was placed within the 24-inch FW wells and a 24-inch PVC casing was used to cap these locations, which were installed in order to observe gas flux from some of the most anomalous soil gas areas. The trenches were dug only 36 inches deep using a backhoe and were then filled with water for gas bubble observations, since they did not penetrate the ground water table which was about 5 to 7 feet below surface in this area. The 24-inch FW wells did penetrate the ground water table adequately to allow observation for gas bubbles. Initial observations made before they were cased showed that the gases entered these flux wells more from the sides than from their bottoms, indicating that they did not intersect natural, vertical migration pathways, and would, in all likelihood stop venting when the shallow sands were depleted. They did, however, amply illustrate the tremendous gas charging of the shallow subsurface within the areas containing the larger methane concentrations.

Data from the analyses of gas samples collected by volume displacement on November 30, 2000 from the first two trench wells, T-1 and T-2 are listed in Table 5. As shown, methane ranges from 62.90% to 76.16%. These concentrations are in the same general range as the soil gases collected from four foot soil gas probes from this area. These trench samples were collected by volume displacement, with the venting gases displacing the water in the inverted bottles within seconds. Thus the bottles must contain 100% gas from the shallow sands, and could not have picked up any significant volume of air from the atmosphere during the sample collection. The presence of 23 to 36% air in these samples requires that the air had to be contained in the soil gas with the methane discharging from the shallow sands. The presence of air within such shallow gas filled sands would provide ideal conditions for oxidation of the hydrocarbon gases in-situ. The methane isotopes for these two samples are nearly identical at -59.30 and -59.28 parts per mil with respect to the PDB standard, and fit right in with the isotope values noted within the 50-foot Ballona gravel monitor wells. Thus, the methane contained in the gravel aquifer does not appear to have been further oxidized within this very shallow sand.

The ethane isotopes, on the other hand, are the heaviest values found on the site, out of over 80 individual analyses. The ethane from these two trenches have the very heaviest ethane isotope values found to date, of -17.94 to -13.62 parts per mil with respect to the PDB standard, suggesting very degraded (oxidized) ethane. In contrast, the ethane in the 50-foot deep Ballona gravel monitor wells is much lighter, although it is still fairly heavy when compared to typical reservoir values, which normally range from about -29 to -32 parts per mil. The monitor well gas has ethane isotopes ranging from about -18 to -21 parts per mil, and is also unusual. Such heavy ethane isotope values in the trench samples would suggest severe degradation, either very near the surface, or somewhere along the migration pathway taken by these gas seeps. Because of the large free gas discharge rates (liters per minute) from these two shallow trenches it would be impossible for the air to be a sampling artifact. This air must have naturally diffused into the shallow sediments where it mixed with the methane gas from depth, and was then discharged with the seepage gases when the surface cover was removed by digging and installing the trenches.

In October/November of 1999 very large magnitude soil gas anomalies were initially found at sites S77 and S78 within 49104-03. The methane and ethane concentrations and stable carbon isotopes of these gases were as follows:

Methane %	Ethane ppmv	Methane Delta C12/13 parts per mil	Ethane Delta C 12/13 parts per mil
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S77	70.66	2400	-58.74	-20.57
S78	56.32	2900	-52.46	-19.92

These concentrations and isotope values are fairly close to those observed in the gravel monitor well MMW77 that underlies these soil gas anomalies (see Plate 11 from the ETI April 17, 2000 report). The reported values in this well were:

Site	Methane %	Ethane ppmv	Methane Delta C12/13 parts per mil	Ethane Delta C 12/13 parts per mil
MMW77	89.02	3400	-59.95	-20.49

Both compositional and isotopically the larger soil gas sample (S77) is very similar to the dissolved gases in the gravel aquifer 50 feet below the surface. The CO2 soil gas values for these two samples are 5.56 and 16.65%, indicating an increased level of degradation for S78 over S77. This degradation appears in both the methane and ethane isotopes, but is clearly greater for S78.

In August 2000 a second survey was conducted over this same area following the installation of the concrete pilings for construction of the foundation of the Fountain Park Apartments (Concentration Of C1-C4 Gaseous Hydrocarbons, BTEX Aromatic Hydrocarbons, Carbon Dioxide And Hydrogen Sulfide In Soil Gas At Tract-03 Beneath Fountain Park Apartments Following Installation Of Concrete Pilings, March 14, 2001). The anomaly defined by these two sites (S77 and S78) was used as a test control area, during the August 2000 survey because it is located outside of the apartments, and therefore outside of the influence of the concrete piles. On resurvey, the 75% magnitudes had changed, values that had been as high as 75% now ranged only to 25%. Two of the largest magnitude sites found within this anomaly on the second survey were 5011 and 5018. The measured concentrations for these sites on resurvey were:

Site	Methane %	Ethane ppmv	Methane Delta C12/13 parts per mil	Ethane Delta C 12/13 parts per mil
5011	25.33	1100	-51.63	-16.83
5018	10.16	400	-45.09	-14.37

Because of somewhat drier conditions, this reduction in magnitude was suggested to be related to the reduction in moisture content increasing permeability of the near-surface vadose zone. In spite of this reduction in relative magnitude, the presence of advective flow at this location was later confirmed using the EPA flux chamber technology on March 16, 2001. Measured gas flux ranging as high as 9313 mg/cubic meter was reported (Sepich Associates, Soil Gas Investigation for 5457 S. Brisa St., March 29, 2001).

As with the trench samples, it is apparent that the gases at depth in the gravel aquifer are being altered by oxidation effects that occur whenever these gases migrate to the near-surface. These examples demonstrate that both the methane and ethane isotopes can be altered by biological degradation. It is possible that changes in these isotopes, which are related to exposure to oxygen sources, might be useful for separating gases that migrate directly from the gravel aquifer from those that have an appreciable residence time in the very near-surface where the degradation changes mainly occur. This would require very discrete and controlled samples collection from various depths.

In January of 2001 a very large rain occurred which flooded the surface, allowing the visual observation of numerous additional macroseeps, which could be located from their bubble trains. Over 140 stakes were placed in the southern portion of the Product 700 pit in an attempt to mark all of the individual bubble trains before the staking crew ran out of stakes. The largest magnitude natural macroseep (Figure 8, 9 and 10) found by this method within the Product 700 was gauged to vent about 9 liters/minute of free gas. Observation well FW-09 was installed at this location by digging a 24-inch 10-foot deep hole, which was cased with 24-inch PVC pipe and used as an additional flux observation station. Two free gas samples were collected from this well on January 24, 2000 and sent to Isotech Labs for chemical and isotopic analysis (see Table 5). In sharp contrast to the two trench samples, these free gas samples

were found to contain nearly 100% methane, 97.68% and 97.66%. The carbon dioxide levels are 0.72% and 0.67%, respectively, providing nearly 99% of the total gas when added to the methane. Ethane and propane are 0.34% and approximately 0.0046% (3400 and 46 ppmv). Ethane isotopes are -20.08 and -20.01 parts per mil with respect to the PDB standard. Comparison with the 50-foot Ballona gravel monitor wells shows that these gases are nearly identical to the gases contained within the aquifer at depth. Clearly these samples must represent direct vertical discharge from the Ballona gravel aquifer without any additional degradation related to residence within the upper 50 feet of sediments. This certainly suggests that the trench gas samples are likely degraded very near the surface.

Numerous geoprobe Cone Penetrameter Tests (CPT boreholes) were installed by CDM working with LADBS consultant Dr. Gary Robbins in an attempt to install vent wells in the 50-foot Ballona gravel aquifer. Figures 11, 12, 13, 14 and 15 illustrate the process which is described in detail in Appendix C. The first test performed was very successful. A CPT borehole was pushed to 66 feet below surface at TV-1 near soil gas site 207. When the probe rods were pulled up to 60 feet subsurface, the well discharged about one gallon of water and then flowed free gas at the rate of 10 liter/minute for 69 hours, until destroyed in an unsuccessful attempt to replace the CPT probe rods with a monitor well. Most of these attempts to install gas vent wells failed because the shallow silts at the top of the 50-foot gravels were too unconsolidated to remain open. The wells were clogged by unconsolidated clastic sediment and were invaded by water, which shut off the gas flow. Many unsuccessful attempts were made by CDM to solve the mechanical production problems, with 10 monitor wells installed and 122 CPT borehole attempts. Gas production was too sporadic and unpredictable to be effective. Free gas is generally present somewhere in the upper 50 feet of sediments within the areas having the largest methane soil gases. However, this free gas is not easily found, nor vented from these unconsolidated sediments. Gas could not even be successfully vented from the vicinity of some of the largest macroseep areas. For example, three of these potential vent wells were drilled within 10 feet of FW-09, on three sides, none of which were capable of venting gas from the gravel aquifer.

A backhoe accident during February knocked over the casing of flux well FW-09 and filled the hole with gravel. An attempt was made to dig out the gravel, which resulted in reducing the gas flow to about 2 liters/minute (Figure 16). As of May 16, 2000 this FW-09 observation well has continued to flow gas, unabated by the attempts to vent the gases from the 50-foot Ballona gravel aquifer (see Figure 17). This observation well, and many other tests (over 120 attempts were made to install vent wells in the gravel aquifer) have yielded similar results. These tests suggest that the gas contained within the 50-foot Ballona gravel aquifer provides a vertical pathway for the gas, but is not an intermediate source for the macroseep vents, at least not for the largest soil gas anomalies. The gravel serves as a transmission zone, but unfortunately does not appear to provide a significant intermediate reservoir that serves as a source for the four-foot deep near-surface soil gases. These observations suggest that the main gas source must lie below the Ballona gravels.

Numerous surface flux tests (Figures 18, 19, 20 and 21) were also conducted using an EPA flux chamber over portions of the methane anomaly in Tract 49104-01 by CDM (assisted by Dr. C. E. Schmidt) during the first quarter of 2001 (March 6, 2001 CDM letter report to David Nelson entitled "Methane Surface Flux Emissions for Product 700 Area, Lots 58 and 59 in Tract 49104-01"). Methane gas flux rates as high as 23,000 CFG/D were conservatively estimated to be present over a 44,000 square foot area within the Product 700 area, where the very largest magnitude seeps have been found. These observations, together with the observed elevated methane soil gas concentrations shown by Plates 2 and 2a clearly classify the largest, and most anomalous methane contours as surface methane gas macroseeps.

2.2 Soil Gas Ethane, Propane, and Butanes

The presence of detectable concentrations of methane homologs (ethane, propane, iso-butane, and normal-butane) illustrated on Plates 3, 4, 5, and 6, respectively, have similar distributions as methane, proving that a major portion of the methane is from a thermogenic origin. Distinctive compositional ratios for ethane/propane and iso-butane/normal-butane confirm that the four foot deep soil gases are directly related to deeper gases measured in the 50-foot Ballona gravel aquifer monitor wells. An iso/normal butane ratio greater than one generally indicates an immature source (such

as the Pico sands), however this ratio has also been shown to increase during oxidation of these hydrocarbons (Coleman et al. 1981, James, 1983, 1984 and 1990). Additional deeper gas source information from the abandoned wells are required to determine the controls on these ratios.

As with methane, contour intervals were chosen in order to emphasize the larger macroseeps in Plates 3 to 6. Lower values were selected for ethane and propane so that the much lower concentrations within these background areas are defined. This is required to properly illustrate the gas concentrations typical of areas A, B and C. (Plates, 3a and 4a, are contoured in ppbv). Soil gas data measured at four feet provides a very cost-effective method for finding macroseeps over such a large regional area, however, soil gas cannot be used exclusively for evaluation. As shown (ETI April 17, 2000 report), the four foot soil gas data does aid significantly in defining appropriate locations for the deeper monitor wells, however, monitor wells are also essential for proper due diligence in order to evaluate the Ballona gravels for their gas content. If no significant gas is found in either the soil gas or the monitor wells, then the area can be declared as completely safe from charging by deeper gas sources. The requirement for monitor wells is particularly important in this case because of the wide regional soil gas spacing used to survey these three areas. With this spacing anomalies can be missed, and will at best be poorly defined. When monitor wells are used with soil gas, then these two independent data sets can provide a reasonably good compromise for properly defining subsurface gas anomalies, and even for suggesting their potential migration pathways.

Anomalies from these lower contour intervals shown on Plates 2a, 3a and 4a were used to pick locations for the 50-foot deep Ballona gravel monitor wells that are recommended for due diligence in completing this regional assessment. At a minimum, five monitor well locations have been selected for area A, B and C at soil gas sites 6002, 6041, 7058, 8008 and 8022. These five sites were selected because they have low grade soil gas anomalies in methane, ethane and propane. A very important distinction is to note that the methane, ethane, and propane magnitudes, and the methane/ethane and ethane/propane ratios for these selected sites all exhibit oil-type rather than gas-type signatures, in sharp contrast with the much larger methane anomalies located east of Lincoln. These are (in ppbv):

Site	Methane	Ethane	Propane	C1/C2	C2/C3
6002	4000	570	230	7.02	2.48
6041	4100	520	230	7.89	2.26
7058	7000	2140	1700	3.27	1.26
8008	5300	400	170	13.25	2.35
8022	5400	590	270	9.15	2.19

Methane/ethane and ethane/propane ratios for the macroseeps in area 49104-01 are significantly gassier, typically ranging upwards of 250 for C1/C2 and 65 for C2/C3. Two of the largest magnitude seeps from sites 207 and 211 (both of which had blowouts during the installation of the monitor wells) are listed below in (ppmv): Methane/ethane and ethane/propane ratios for the macroseeps in area 49104-01 are significantly gassier, typically ranging upwards of 250 for C1/C2 and 65 for C2/C3. Two of the largest magnitude seeps from sites 207 and 211 (both of which had blowouts during the installation of the monitor wells) are listed below in (ppmv):

Site	Methane	Ethane	Propane	C1/C2	C2/C3
207	798800	3234	49	247	66
211	891543	3188	43	280	74

Although magnitudes can change rapidly, the compositions of soil gas and monitor well data are much more stable, allowing the definition of groups of data having common compositions that can then be related to a specific source.

Empirical compositional classifications derived from previous soil gas surveys conducted over producing fields have been established (Jones & Drozd, 1983). Typical ratios for soil gas or produced gases for different types of hydrocarbon deposits are:

Methane/Ethane Ratio	Ethane/Propane Ratio	Composition
> 100	> 5.0	Dry Gas

20 - 100	3.5 - 5.0	Gas
10 - 20	2.5 - 3.5	Oil and Gas/Intermediate
5 - 10	2.0 - 2.5	Oil
< 5	< 2.0	Heavy Oil/Degraded

Comparison of the above low-grade soil gas anomalies with these general empirical classifications clearly shows that the low level microseeps typical of these three areas are related to oilier sources, as might be expected for soil gas data collected directly over an oil field.

If the proposed monitor wells agree with the soil gas samples and show that there is no appreciable gas contained in the gravel aquifer in the A, B and C Phase 2 areas, then there would be no need for methane mitigation for buildings constructed within these areas. However, regardless of the lack of subsurface gas sources within these areas, no building should be constructed over any of the active or abandoned gas storage wells or the gas storage field. DOGGR regulations should be followed in these areas.

2.3 Soil Gas Hydrogen Sulfide

Hydrogen sulfide in detectable concentrations (Table 3, Plate 7) in the near-surface soils are very localized in areal extent with respect to the entire Playa Vista Development. Concentrations ranged from non-detect to 41 ppmv. Anomalous areas of hydrogen sulfide, with the greatest areal extent, are generally coincident with the western methane anomaly in Tract 49104-01 described above. Only 12 samples exceed 1 ppmv in concentration, and all but one of these samples lie within area 49104-01 where the largest macroseeps occur. The second largest anomaly of 27 ppmv does occur in association with a methane level of 5.33 % at site 9349 in area 49104-04. Ethane and propane anomalies are also present in the vicinity of this site, but are not coincident with the methane and hydrogen sulfide at this location. A finer grid spacing of soil gas should be applied in order to better define this hydrogen sulfide anomaly, followed by drilling at least one monitor well for sampling of the Ballona aquifer. Two existing monitor wells, C-23 and C-28 should also be sampled from this general area for background control.

Although hydrogen sulfide has often been observed within archeological trenches, an evaluation of the many boring logs drilled and sampled on this site have shown that hydrogen sulfide does not occur systematically in the boreholes, and almost always within natural or shallow fill, such as La Brea sediments. The main source of the hydrogen sulfide appears to be from shallow recent swamp deposits and perhaps from the fill brought to the site from the La Brea area during the Hughes operations. It is very significant to note that the observations of H2S in the soil gas collected near the surface always occurs with significant methane anomalies. The H2S that was observed during the blowouts from installing boreholes or monitor wells was from isolated subsurface pockets of gas that was effectively trapped in the shallow subsurface. When the borehole or monitor well opened this isolated pocket the gases discharged quickly. Long term venting from the same monitor wells that recorded blowouts did not continue to discharge additional H2S. Apparently the H2S was then diluted by additional gas from deeper depths, which did continue to flow.

During the installation and monitoring of the methane vent wells, CDM and ETI/LADBS consultants inspected every vent well for H2S odors. In no cases were H2S odors detected in any long term vent wells, in spite of the fact that significant levels of methane gas was being vented from these same wells. The most important observation made with respect to hydrogen sulfide, is that it has not been detected in near-surface soils, except in the areas of advective methane seeps. Thus, outside of high-volume methane discharge areas, no hydrogen sulfide anomalies have been found in the near-surface soil gas.

Within the current density of sampling, it appears that all of the major methane and H2S discharge areas have been reasonably well defined. Closer-detailed sampling within the main methane anomaly areas has demonstrated that there are very localized gas vents that can range from inches to 10's of feet in dimension, however, such vents are not usually isolated, with no other vents nearby. To improve due diligence ETI has requested that 50-foot centers be used to resurvey underneath planned building footprints before the foundation is laid. This is very important within areas

having numerous advective vents, because this higher density soil gas data can aid in defining the areas requiring additional vent risers. However, in background areas this is probably not necessary. A combination of soil gas and monitor well data can determine the likelihood of finding any advective vents. If neither is anomalous, then it is reasonably safe to conclude that the assessment surveys are adequate.

Another safeguard for insuring that the current soil gas grids have effectively found most of the dangerous vents is to measure all of the biogenic gases that are generated by subsurface contamination. As described, below, carbon dioxide provides another potential safety factor for helping to define areas containing significant subsurface contamination.

2.4 Soil Gas Carbon Dioxide

Although carbon dioxide is generated by the biodegradation of all types of organic materials and must be used with caution in soil gas investigations, the presence of a concentrated petroleum source such as gasoline, diesel, kerosene, or even methane can cause a concentrated buildup of carbon dioxide in the subsurface. The average concentration of carbon dioxide in ambient air is only 0.03 percent. Biodegradation of typical soil organic matter generally yields carbon dioxide concentrations between 0.2 to 3-5 percent. Higher concentrations of carbon dioxide measured in various soil vapor samples collected in the vicinity of subsurface petroleum contamination often yields values as high as 5 to 30 percent, an indication that biodegradation is significantly enhanced. Such an enhancement of CO₂ is almost always found within an area containing a significant contaminant plume.

Bacteria consume hydrocarbons and generate carbon dioxide under aerobic conditions and methane under anaerobic conditions. Carbon dioxide and methane generated by this process are commonly the largest magnitude components in the soil gas mixture. In general, the longer the hydrocarbon source is present in the subsurface environment, the larger are the concentrations of these biogenically produced gases. Carbon dioxide also has the advantage that it is generated at the edges of the contamination because that is where the proper mixture of oxygen and organic contamination can be found. Within the heart of the contamination, the generation of carbon dioxide can be significantly reduced because of a lack of available oxygen. Thus an area containing high methane and low CO₂ is likely at the heart of a macroseep and an area containing moderate methane with large CO₂ is probably near the edge of a contaminate plume. In contrast, areas containing neither methane nor CO₂ is a true background area. Given this relationship, it can be very useful to measure these two biogenic gases (methane and carbon dioxide) and to use their contrasting behavior to help define the location of the more significant contaminant plumes.

Carbon dioxide (CO₂) concentrations at PVD (Table 4, Plate 8) range from background levels of less than 3% to greater than 30%. These results indicate that significant aerobic degradation is occurring at specific locations on this site. The generation of CO₂ by this process is very rapid and can occur only where there is sufficient oxygen to support the consumption of the hydrocarbon contaminant source. Generally, as noted above, the areas of anomalous CO₂ occur as halos around the areas of advective methane seeps (methane anomalies) where oxidation consumes the available oxygen. Within an advective seep the hydrocarbon source may use up the available oxygen, causing the generation of CO₂ to cease. Thus areas of low CO₂ concentrations that are coincident with anomalous methane concentrations can define the seepage areas containing the most rapid rates of advection, and conversely areas where the methane and CO₂ are both anomalous may indicate more moderate vertical migration rates where the methane flux is in balance with the diffusion influx of oxygen from the air. Areas where both methane and CO₂ are near background would confirm areas where there is no hydrocarbon seepage (i.e., true background).

The map of CO₂ values shown by Plate 8 was generated in order to use these relationships for due diligence in interpreting this regional soil gas data. In order to avoid mapping background variations the CO₂ contour values were set at 5, 7.5 and 10%. With these contour values, areas A, B and C have almost no CO₂ anomalies. Most high values, greater than 15 to 20%, particularly those that occupy more than one adjacent site, occur mainly within the main methane seepage areas in Tract 49104-01. The highest value of 32.43% occurs at site 9774 and is confirmed by low magnitude, more oily light hydrocarbons. At this site the C₂/C₃ ratio is less than one (0.95) and the C₁/C₂ ratio is

nearly 10,000 (9286), suggestive of some minor oily contamination. The majority of the largest magnitude CO₂ sites (those greater than 15 to 25%) appear to occur near the edges of the main advective seeps. For example, sites 275, 267, 242 and 233 coincide with the southwestern edge of the highest methane anomaly centered on Product 700. Sites 203, 267, 253, 242 and 233 define the western extent of this big methane anomaly. Sites 188 and 193 contain an anomaly that sits right in a low area (hole) on the eastern edge of the methane anomaly.

Sites 207 and 211, which lie right in the heart of the Tract 49104-01 methane anomaly are typical of the largest soil gas seeps. A comparison with the monitor well data from these same two sites shows that the concentrations at four feet are comparable to those measured at 50 feet below surface, suggesting the presence of advective flow from the sources in the Ballona gravel aquifer at depth to the surface. Bubbling seeps, as discussed above in Section 2.1 under Soil Gas Methane provide visible evidence of this active migration. Methane values near 100% (80 and 89%) and CO₂ values ranging from 0.5 to 1% (0.82 and 0.66%) for gas at these two sites support the interpretation of gas moving through the upper 50 feet of sediments without dilution or alteration.

In contrast to the very largest flux sites, there are many places where a moderate methane anomaly exists that is coincident with a CO₂ anomaly. These sites, such as, (734, 735) and (802, 803, 804, 805) and (811, 812, 813, 814), just to point out three specific cases, show locations where it is likely that the CO₂ is generated directly from the center of the methane seep (which is the food source). This would indicate that the flux of methane in these areas is slow enough to allow oxygen from the air to diffuse into the upper meter of soil and be used to generate these coincident methane/CO₂ anomalies. Examination of Plates 2 and 8 show that there are many such coincident anomalies.

No close detail sampling has been done on the eastern methane anomaly that occurs in Tract 49104-02 (Plate 2) of Phase 1. This large anomaly has a definite east-west orientation, and extends from the Phase 1, Tract 49104-02 area area D of Phase 2. This Phase 2 area must be evaluated simultaneously with the western portion of the anomaly which lies within the Phase 1 area. Both the soil gas and the monitor wells from this anomaly exhibit a slightly oilier signature than the main 01 anomaly. This change in composition as compared to the monitor wells in area 49104-01 is very minor, much like the changes shown by the Centinela Creek macroseep bubbles. In both cases these changes are probably reflecting separate Pico reservoirs at depth. Low CO₂ with high methane on the western portion of this anomaly suggests some advective flow, whereas the eastern portion (in area D) has large CO₂, accompanied by moderately large methane, suggesting a lower methane flux rate, with considerably more oxidation occurring near the surface.

Where both methane (and it's homologs, ethane, propane and butanes) are absent and there is no CO₂, one may be fairly confident that there is no organic contamination in the soil at that location. CO₂ is always generated by shallow diagenesis because the bacterial filter is everywhere and oxygen is always present in shallow vadose zone soils and ground water near the edges of any subsurface contaminant plume. Large CO₂ magnitudes always signify the presence of shallow oxidation of an organic contaminant. The tendency for CO₂ to occur in larger concentrations near the edge of the oxidizing organic matter provides an advantage when coupled with direct detection of the organic contaminant, such as methane in this case. Adding CO₂ analyses increases the likelihood of finding the subsurface contaminant plume. Thus the CO₂ is very valuable, particularly when the soil gas grid has been undersampled as much as it has by using 300 foot centers within areas A, C and portions of area D of Phase 2. Area B is so under sampled that no assurances regarding the detection of gas anomalies can be made. However, a nearly complete lack of large CO₂ or methane anomalies within areas A and C suggests that no major contaminated areas have been missed in those portions that have been surveyed, in spite of the wide spacing used for the soil gas survey.

Soil Gas BTEX (benzene, toluene, ethylbenzene and xylenes)

Concentrations of benzene, toluene and total xylenes (Table 2) are illustrated in Plates 9 and 10, respectively. There is, effectively, no benzene present in the vadose zone soil gases. Toluene concentrations range from non-detect to 6.4

mv while total xylenes concentrations range from non-detect to 6.7 ppmv. Toluene and total xylenes in detectable concentrations in the near-surface soils are very localized in areal extent with respect to the entire Playa Vista development. As with hydrogen sulfide, anomalous areas of toluene and total xylenes, with the greatest areal extent, are generally coincident with methane anomalies in Tract 01 and Tract 02 described above. Toluene and total xylenes are generally not detected in near-surface soils except in the areas of advective methane seeps. The probable source of the toluene and total xylenes is from volatilization of the fill brought to the site from the La Brea area during the Hughes operations. The anomalous areas of toluene and total xylenes coincide with areas in which zones of the La Brea fill were described in borings. Water samples from the 50-foot gravel aquifer (MW 1 through MW 5) were collected by CDM from the monitor wells in Tract 03 and analyzed for BTEX. As shown by Table 6, the BTEX levels were below detection limits. Toluene and total xylenes are not detected at the surface, however, except in areas of advective methane flow.

It is interesting to note that the largest toluene and xylene anomalies appear to be associated with the eastern methane anomaly (sites 921 to 914) and with the more central methane anomalies (sites centered near 735, 813 and 803). These groups of methane anomalies are the oiliest (they have the largest ethanes, propanes and butanes). Additional sampling and testing of the existing monitor wells needs to be done, plus the installation of several additional new monitor wells. Proposed locations for the new wells are at soil gas sites 970, 9006, 9726, 9845, 9848, 9830, 9787, 9050 and 9739.

Formal requests for the installation, sampling and analysis of these additional monitor wells was made to Playa Vista through LADBS on January 24, 2000 when these regional maps were formally presented during a joint technical meeting of the Playa Vista and ETI/LADBS consultants. Final interpretation of this soil gas data and this new monitor well data needs to be completed and this report rewritten whenever data from these new, additional monitor wells is available. Due diligence on this regional assessment report will not be done until this final task is completed.

2.6 Centinela Creek Bubbling Seep Isotope Results

Gas seeps containing ethane collected and analyzed in 1993 from the general area of the confluence of the Ballona and Centinela Creeks (Global Geochemistry, 1994, ETI, June 18, 1999 1st Progress Report). This data established the presence of advective flow macroseeps, which contained some ethane. These seeps have methane isotopic values that are very similar to those found and reported in the surface soil gases, and 50-foot Ballona gravel monitor wells by ETI in the April 17, 2000 report. A second reconnaissance along Centinela Creek, conducted on October 20, 2000 by Paul Witherspoon and Walt Merschat from SGS identified several bubbling seeps. These were noted and are mapped on Plate 1.

Three, free gas macroseeps were sampled from Centinela Creek at the area where the Global seeps were reported to have been collected. These three samples, denoted as A, B and C are plotted on Plate 12 along with the original Global macroseep samples and with the Ballona gravel monitor well data. Nine samples from the Southern California gas storage field (CDM, Sept. 5, 2000) and two gas samples from the El Segundo nonassociated, dry gas field are also plotted on Plate 12 for comparison with the Centinela Creek and Ballona gravel well samples. The two sets of Centinela Creek samples are similar. This Centinela Creek data establishes the compositional stability of this set of macroseeps and also confirms the presence of a significant pressure drive and volume required to keep these seeps active over at least seven years. The slightly different isotopic compositions of these samples from the Ballona gravel monitor wells supports the interpretation of deep "Pico" sources, which would be similar to one another, but would differ slightly from sand to sand because of source and migration dependent variations within the various Pico reservoirs.

The presence of these seeps also extends the area of known thermogenic seepage north, from the regional area surveyed to at least the confluence between Centinela and Ballona Creeks.

2.7 Riparian Wetlands Corridor Bubbling Seep Isotope Results

Other specific area of intense seepage has been found within the Riparian wetlands corridor just south of soil gas site 817 near Teal Street (Figure 22, 23). A free gas sample was collected by volume displacement directly from one of these bubbling macroseeps on March 16, 2001 and sent to Isotech Labs for analysis. This data is listed in Table 5 and plotted on Plate 11. The methane concentration was 94.93%, the CO₂ was 1.90%, typical of the CO₂ values measured in the Ballona gravel aquifer in monitor wells 803 and 813, which were 1.97 and 1.54%. The ethane and propane were 3800 and 130 ppmv. The methane isotope of -56.91 parts per thousand fits right in with the main group of monitor wells from this area. Monitor well 803 and 813 are more than 200 feet away from the important group of seeps. Interpretation of the gravel aquifer gases suggests that the gap between the eastern and western methane anomalies in this area was caused by under-sampling related to the fact that access to this area was restricted. A new monitor well should be installed at this location to check for ventable gas and to allow proper interpretation of both the soil gas and the associated Ballona gravel aquifer anomaly.

Visual observations made on March 16, 2000 along this wetland corridor also reveal several macroseep areas that have never been sampled. In fact, as noted above, this wetland area was not sampled during the earlier Phase 1 soil gas surveys because the area was off-limits for surface access. Additional survey data must be gathered throughout this wetland corridor in order to properly complete this regional assessment. There is no question that this under-sampled wetland corridor does contain significant subsurface methane potential, which has not been properly assessed.

Gases from these bubbling macroseeps have nearly the same composition as the soil gases and the gases from the Ballona gravel monitor wells. This strong similarity suggests a common origin for these thermogenic gases. The presence of bubbling macroseeps associated with the largest soil gas and monitor well anomalies also confirms the presence of advective, pressure driven gas seepage over both land and water covered areas. The chemical and isotopic compositions of these gases collected from soil, bubbling macroseeps, and gas-charged aquifers clearly belong to a family of dry nonassociated gases, which are not connected to the deep Playa del Rey oil field, or to the Southern California Gas Storage Field. Direct comparison with the nonassociated dry gas produced from the Pico Formation on strike to the south from the El Segundo Oil field strongly suggests that these gases have probably been derived from similar deep sources, such as the Pico sands at depth. The seepage gases would have migrated from these Pico reservoirs that lie beneath the Playa Vista site. Gas shows from the driller's logs from the abandoned exploration wells suggests that these gases likely originate from between 500 to 3000 feet below surface.

2.8 Infill Detail Soil Gas in Tract 49104-01

As noted above in section 2.1 under Soil Gas Methane, the attempts to find and vent gas pockets within the top of the Ballona gravels was not successful. The observations regarding the numerous advective gas seeps demonstrated the very high spatial variability of the gas vents. In order to improve the placement of vent and monitor wells additional infill soil gas samples were collected within the main seepage area located in area 49104-01. Data collection used ETI's four foot soil gas probe, and followed the same procedure as the regional data. However, in order to expedite turnaround and decision making most of the data was analyzed in the field using a MTI field-portable gas chromatograph. This instrument has the ability to detect only methane, ethane and carbon dioxide, with detection limits of 10 ppmv for methane and ethane and 0.01% for CO₂. This data was used for better defining the local variation of gas seepage anomalies within the 01 area, where the largest macroseeps exist. All data within the calibration range of this instrument (i.e. 10 PPMV to 100%) are of the same quality as the laboratory data. However, below the detection limit of 10 PPMV the field-screening data is bottom truncated. A few of these samples were analyzed in a laboratory GC with lower-level detection limits to verify the quality of this data. None of these samples were field screened for H₂S.

Contour maps for these three components are very similar to the regional maps, with two very important distinctions,

One is that higher density sampling always reduces the areal size of the contoured anomalies because soil gas macroseeps are usually very limited in size. The second major distinction is the fact that this smaller estimate in the size of soil gas anomalies is usually accompanied by the presence of more individual (smaller sized) anomalies, resulting in increasing spatial variance. This is a very important concept because soil gas anomalies don't have to occupy a large aerial extent in order to provide a significant gas source under a building.

The best method for measuring the actual flux into the atmosphere would be to construct a large flux chamber that would cover the entire area of interest. This, of course is not practical, although the foundations of the buildings will become large flux chambers. The best alternative is to recognize that the earth also serves as a large flux chamber. When advective flow exists (driven by pressure), gas migrates toward the surface, enters the vadose zone and fills the permeable pathways with gas. A breakthrough into the atmosphere provides a pressure relief that acts to reduce lateral flow. Finding these breakthrough points is nearly impossible using EPA flux chambers because of the very small size of both the seeps and the chambers. The soil gas, on the other hand, offers a practical approach for finding these natural flux sites. This is because a natural equilibrium will be formed in which the gas flux from depth and the gas flux into the atmosphere must eventually balance. During this process a soil gas anomaly will form, taking its shape from the permeability of the adjacent sediments. Thus the sediments act as a choke, allowing leakage whenever the pressure is large enough, but also providing a near-surface reservoir in the soil pore space that will always retain some of the migrating gas. When in balance with the atmosphere, the soil gas will have a concentration that must be the same as the gas that leaked into the atmosphere at the exit point of the seep. If the pressure is reduced below atmospheric then the soil gas can, and will become diluted with air if the earth gases are not recharged from depth. Thus sites having large atmospheric flux have to be associated with soil gas sites which also have large, essentially equivalent concentrations at the exit point of the seep into the atmosphere. Lateral migration, both by advection and diffusion, will always occur within the near vicinity of the vertical pathway, building a soil gas anomaly. This lateral gas migration creates a soil gas anomaly with a stable "flux footprint" and concentration which can be contoured in order to vector the direction from background toward the largest soil gas concentrations where the "flux pipes" must be located. By definition, then, these large magnitude soil gas sites must be the sources that control any advective seepage.

The application of a limited number of EPA flux chamber measurements without any guidance from the soil gas is a serious concern. Data from such a survey would have no value for predicting dangerous building sites, but could be misconstrued if used inadequately and incorrectly. The regional survey was conducted using 100 foot centers, which works very well for defining the main areas of concern. This spacing is, however, inadequate for placement of flux chambers. The reduction to 50 foot centers, with occasional infill, appears to provide a much better estimate of the actual size and shape of the individual soil gas anomalies, or "flux footprints". The success of this approach for locating "flux pipes" is demonstrated by the following two examples where an infill grid of 50 feet, coupled with a few additional offsets directed by the soil gas results has established the presence of two new active flux areas.

One significant new "flux pipe" was found in the Product 600 area. An expanded detail, contour map for methane is shown in Figure 24, where methane concentrations greater than 80% were found approximately 10 feet apart. Sites 9943A and 9943B had measured concentrations of 80.8 and 82.4%. In contrast, the largest values surrounding these two big macroseep sites have concentrations, which are generally less than 2000 ppmv (0.2%), and just 10 feet to the east of this large anomaly lies site 153, where only 80.9 ppmv (0.0081%) was measured. During the placement of an infill grid, site 9943 was placed halfway between sites 153 (80.9 ppmv) and 154 (612.5 ppmv). The value of 2040 ppmv measured at site 9943 was larger than either of the two original sites, but clearly did not find the macroseep in this area; however, previous observations by Walter Merschat (ETI's field party chief) had noted free gas bubbling up to the surface in this general area. The extra infill sample (9943A) added halfway between sites 9943 and site 153 and a concentration of 807,870 ppmv, confirming the existence of a large magnitude soil gas anomaly, or "flux footprint" in this area.

A second offset sample at site 9943B provided additional confirmation, and indicated that the soil gas anomaly

associated with this macroseep occupies an area at least 10 feet in width. Sites 9943C and 9943D were added to further fine the northern and western edges. When placed into the regional map (as shown by Figure 24 and Plate 13) it is evident that additional samples should have been placed to the northeast, toward sites 9952C and 9940. A potential northeast - southwest alignment is suggested by this soil gas data.

The presence of two large magnitude soil gas anomalies located only 10 feet apart, when taken in context with the other anomalous samples shown on Plate 13 indicates a very high potential for significant seepage under this Product 600 construction area. It is important to note that these sites would probably never have been collected close enough for this confirmation without the visual observation of bubbles that had been noted earlier (Walt Merschat, personal communication). Of even more significance, however, is the fact that this "flux footprint" confirms the presence of adequate conditions for vertical migration directly from the underlying gravel aquifer, also confirming the existence of the previously observed "flux pipe". This large macroseep also confirms that the gravel aquifer is a potential source, and must be given serious consideration when evaluating any building sites that are located above the gas-charged portions of the aquifer.

Another excellent example of a very well-defined macroseep was found by adding a grid of samples near MMW-04. This monitor well had blown out for over an hour when it was first drilled and had also contained very anomalous free and dissolved gas concentrations in the water samples initially collected (ETI April 17, 2000 report). As shown by Plate 11 in the ETI April 17, 2000 report, contouring the data from the monitor wells appeared to define a possible area where deep gas might be entering the gravel aquifer from below. It was puzzling then that the initial soil gas contour maps (see Plate 2) did not show a large soil gas anomaly vertically over this very anomalous area of the gravel aquifer, as the data from this well would suggest. Only site 201 had noted the possible presence of an anomaly in this general area. In order to evaluate the potential for this gravel aquifer anomaly to be a gas source, an infill grid was placed between site 201 and monitor well MMW-04. Initially sites 004A through 004I were collected within the boundaries defined by sites 180, 181, 200 and 201, and only sites 004C and 004F showed appreciable values of 75.7% and 98.6%. Based on these initial infill results the remaining grid sites were added, up to 004Z.

In order to properly display this anomaly, an expanded view of this infill grid using a scale of 20 feet to the inch has been included in Figures 25, 26 and 27 for the methane, ethane and carbon dioxide. This infill grid provides one of the most important and well defined anomalies mapped by these soil gas surveys. Sites 004P, 004K and 004Z found very large concentrations of 75.8%, 97.8% and 100%, respectively, the largest soil gas concentrations measured anywhere on the site. The importance of these sites cannot be overemphasized. These anomalies showed that there is vertical seepage very close to MMW-04. Previous discussion and interpretations had suggested that the offset to the east of the very largest soil gas anomalies (shown by Plates 2 and 11 from the ETI April 17, 2000 report) might represent lateral migration from the gravel aquifer (near MMW-04), eastward towards sites soil gas 207 and possibly even to site 211. This anomaly shows that vertical migration does occur at this location (site 004Z), and also at site 9943A and B (discussed above). Both of these new macroseep areas defined by close-detail sampling have demonstrated that vertical soil gas anomalies are associated with the free and dissolved gas anomalies in the gravel aquifer, which had been previously defined by the monitor wells (such as, MMW-04 and MMW-153, which directly underlie these two macroseeps).

This 004Z anomaly was also found in an area that was too high in relative elevation to flood, significantly reducing the chances of visually seeing bubbling macroseeps in this area. Once defined by the soil gases, further examination of the area around this site did, however, result in the location of several very small macroseeps located between 004Z and 004Q, near the eastern edge of the anomaly where surface conditions allowed visual observation of the gas bubbles (Figures 28, 29). These small macroseeps were photographed and viewed over several days when conditions were just right enough to allow favorable detection.

Although, no visible seepage could be observed at site 004F, a small 4 foot by 4 foot plastic tent was placed over this site and sealed on its edges by burial in the soil (see Figure 30). The soil conditions appeared to be too damp and tight

to allow free gas bubbles to appear at the surface at site 004F, however this site did have a soil gas concentration of 6% methane at four feet below surface. Ambient air samples were taken under the tent over the next two days in order to establish whether or not there was any positive flux at this site. Within 24 hours the tent had ballooned up, and a concentration of 4.73% methane had developed under the tent (see Figure 31). Thus even though the venting was not visible, these measurements indicated that it was occurring and would have been overlooked if the detection of visible bubbles was the only method of detection used to find the "flux pipes".

This macroseep anomaly has also provided an opportunity to illustrate the range of concentrations within the anomaly and the enormous contrast between the anomaly and the adjacent background samples. The very largest methane magnitudes within the anomaly were contoured using intervals ranging from 90% (red) to 70% (yellow). The transition to background is shown using intervals from 10% (green) to only 1% (blue). General observations made over the site where other macroseeps had been noted had suggested that whenever soil gas concentrations exceeded the 1 to 25% range (10,000 to 250,000 ppmv) that visible macroseeps were likely to be found. Ethane also shows just how rapidly the magnitudes change at the edges of the macroseep area (see Figure 26).

Subsequent testing for ventable gas from the underlying gravel aquifer was unsuccessful at this site. Five TVW CPT vent boreholes were attempted at this location, three found no gas (TVW-35, TVW-75 and TVW-94), and two found only a small amount. TVW-93 was tested all the way from the top of gravel at 54.5 feet bgs (below ground surface) to the surface and found a minor gas pocket at 24.2 feet bgs. TVW-104 never found a point of refusal and was pushed to 82 feet bgs. As shown in Table 9, trace gas was recorded as present from 62 to 82 feet bgs. Clearly there is no gas pocket in the 50-foot deep gravel aquifer at this location, yet gas is venting at the surface. Five test wells, sampled from the gravel to the surface for free gas pockets within this soil gas anomaly provides conclusive evidence that deeper gas is venting straight through the Ballona gravels, and through the upper 50 feet of sedimentary cover at this location.

These two examples demonstrated that, while the presence of free gas bubbles could help in finding macroseeps, there could be no assurance that this method would be sufficient for insuring that all of the macroseep areas had been found and mapped. Tight clayey soils could also be the source of advective gas vents that were essentially invisible to this useful, but crude method of detection. Thus while mapping the presence of bubbles is conclusive evidence of advective flow, a lack of bubbles cannot be used to assume that advective flow is not occurring. Soil gas and monitor well data is essential for mapping the "flux footprints". Due diligence cannot be achieved by any other approach.

As noted earlier, numerous surface flux tests were conducted using an EPA flux chamber over portions of the methane anomaly in Tract 49104-01 by CDM during the first quarter of 2001 (March 6, 2001 CDM letter report to David Nelson entitled "Methane Surface Flux Emissions for Product 700 Area, Lots 58 and 59 in Tract 49104-01"). Plate 16 shows the EPA chamber locations and the calculated flux values posted on top of the infill detailed methane map (Plate 13). A derivation of the flux equation and the flux data is given in Appendix D. The calculated flux values, which range from 0.000182 to 2.367 are in cubic feet of gas per square foot per day. As expected, the higher flux values do correlate regionally with the underlying soil gas data. For example, the larger values of 2 cubic feet/square foot/day occur over macroseeps (see Figure 20) located in the Product 700 area where the largest and most extensive soil gas anomalies also occur, and only background flux values occur over areas where the soil gas is uniformly low. However, because the flux chamber covers such a restricted surface area, it is possible for a single flux chamber measurement to fail at finding an advective seep, where the surface exit point may be very restrictive in size and is not marked by visible bubbles. Soil gas has the capability to approximately locate a gas venting site without actually sampling right in the vent hole. A flux chamber, on the other hand, has to exactly locate the vent hole in order to make an accurate flux measurement associated with an advective seep.

These examples demonstrates the ability of soil gas sampling to approximately locate areas which must be searched for advective vents before accurate and real flux measurements can be made. The flux chamber was designed to measure diffusive flux and does not accurately measure, nor easily locate advective flux sites. In order to achieve useable flux

results without having a very large number of individual flux stations, it is imperative that the flux chamber measurements be guided by a soil gas survey to vector in the potential location for the flux measurements.

2.9 Ballona Gravel Structural Maps

As noted above, the point of refusal, or so-called depth to the "Top of Gravel" was recorded during the many attempts to find subsurface gas pockets using the CPT method. Detailed testing procedures are given in Appendix C, and information on specific TVW boreholes are listed in Table 9. Over 120 CPT boreholes were pushed to refusal in the Ballona gravels using a Cone truck by CDM and 53 additional attempts were made by ECI. It was hoped that the finer sediments capping the 50-foot gravels would provide a seal, allowing free gas pockets to accumulate just below this interface. Both hand contoured and computer contoured maps were generated from this data in order to determine the potential correlations with the soil gas anomalies and any ventable gas pockets defined by these extensive CPT push-probe projects.

An initial set of field work maps were generated by Walter Merschat during several work sessions that were held at Playa Vista during January/February 2001 between the Playa Vista Consultants and the LADBS/ETI Consultants. These maps have been reproduced as scanned pdf files and have not been digitized (Walter Merschat "Top of Gravel" work products, February 2001). CDM provided a color scheme for their CPT borehole venting attempts, with blue used for TVW wells that would vent gas and green for wells that did not vent any gas. As shown, by Figure 33, most of the TVW wells were not capable of venting gas. Only two main areas were responsible for most of the vented gas. Wells TVW-23 (Figure 32) and TVW-24 are the principal CPT holes that define these two main areas. An examination of the depth to the "top of gravel" shows that the areas where wells could be vented occurred mainly within an intermediate depth, which was not at the top of the gravel. Merschat's maps were generated with some slight geological/ geochemical bias related to the strong east-west lineations expressed by the geochemical soil gas maps.

A second attempt to correlate this data was made by Dr. David Becker, who prepared a set of computer-generated maps for this report. Three maps were generated, one with the ECI data, one with the CDM data and a third using both data sets. The CPT trucks used by these two separate efforts were slightly different in that the ECI data used an instrumented cone capable of creating an electric log of the sediment type as the probe was pushed and the CDM probe did not use the instrumented probe. Without the instrumented cone, the CDM probe could be pushed slightly deeper before refusal, so there is some bias between the two data sets. Plates 17, 18 and 19 are the CDM, ECI and ECI/CDM data sets, respectively. All of these very important data sets have been produced so that the reader of this report can view the available information. In the opinion of the authors, there is no correlation between the "top of gravel" and the locations of ventable gas.

3.0 SUMMARY AND CONCLUSIONS

A regional soil gas survey, consisting of 1621 sites sampled at four-foot depths, was constructed by compiling data from all of the previous three soil gas surveys that were conducted from October 1999 to January 2001. As shown by Plate 1, this includes both the Phase 1 and Phase 2 areas of the planned 1087 acre Playa Vista Development in Los Angeles, California. The purpose of the soil gas survey is to provide baseline data that reveals the areal distribution and concentration of methane gas in the near subsurface directly underlying the areas of planned construction. The survey also reveals the presence of methane homologs (ethane, propane, or butanes) derived from deep thermogenic source(s). Concern about the possible presence of toxic gases prompted additional analyses to determine the concentrations of BTEX and H₂S in the soil gases.

Methane concentrations over the survey area are highly variable and range from background (<2 ppmv) to over 12,500 ppmv (90%). Anomalous methane concentrations (greater than 12,500 ppmv) are clustered within two main areas that were identified during a previous survey conducted in 1999 and reported in the ETI April 17, 2000 report. The most significant area of anomalous methane concentrations is more than 900 feet long and occurs in the western

part of Tract 49104-01. The second highest methane anomaly, more than 1000 feet long, occurs in the southern part of tract 49104-02. Based on the regional soil gas data, the total area of anomalous methane concentrations (greater than 5,500 ppmv) underlies only about 1.5% of the 1087 acre Playa Vista site. Other methane anomalies, of smaller areal extent, occur both between and north of the two largest methane anomaly areas. The anomalous methane seeps also appear to define elongate linear anomalies that trend N 65 E, N 7 W, and N 62 W, suggesting subsurface structural or fracture control. Ethane, propane and butanes occur within each of the major methane anomalies, establishing the presence of a thermogenic source.

During rainy periods, or within wet areas, bubbling macroseeps have been observed within most of the areas containing the largest methane soil gas concentrations. Seepage also occurs east of Lincoln within the riparian wetlands corridor that runs east-west just north of the bluffs. Visual observations along this wetland corridor have revealed the presence of several macroseeps that were not sampled by the soil gas survey because of restricted access. One bubbling macroseep collected from this area was found to have nearly the same compositions as the soil gases and the dissolved gases in the 50-foot gravel monitor wells, indicating a common origin for these thermogenic gases. This macroseep fills a gap in the soil gas data, and strongly suggests the need for collecting additional geochemical data within this wetland corridor in order to properly complete the assessment of seepage throughout the planned development site.

Bubbling macroseeps near soil gas and monitor well anomalies indicates advective, pressure driven methane seepage. Chemical and isotopic compositions of soil gas, bubbling macroseeps, and gas-charged aquifers clearly define a family of dry nonassociated gases that are definitely not connected to the deeper Playa del Rey oil field, or to the Southern California Gas Storage Field. Comparison of Playa Vista site gas compositions, with the nonassociated dry gases produced from the Pico Formation in the El Segundo Gas Field, on strike southeast of Playa Vista, shows strong similarity. It is probable that the Playa Vista gas is also derived from the Pico Formation.

Gas collected from macroseeps in Centinela Creek extends the area of thermogenic gas seepage north from the surveyed area to at least the confluence between Centinela and Ballona Creeks. Samples collected more than seven years earlier from this same area show strong similarity to those collected recently. The fact that these same seeps are still active demonstrates the long-term stability of the advective methane gas flow in this area. It is also significant that these Centinela Creek seeps are very similar, but slightly different from the main seepage area located within 49104-01. Small localized, but systematic changes in the chemical and isotopic compositions of close-spaced, but different Pico reservoirs at depth would be created by the source and/or migration factors that control the trapping and formation of specific gas reservoirs. Biogenic changes would generally be more random and less stable. Such systematic and stable changes, strongly supports the interpretation that the source of the seeps are close, but distinctly different traps formed in the Pico sands at depth.

This soil gas data shows that no large areas of methane leakage have been found within areas A and B, which are located over and adjacent to the Southern California Gas Storage Field. Closer spaced infill detail samples placed within the areas containing the gas storage wells also did not find any large magnitude soil gas anomalies. In addition, the chemical and isotopic compositions of the soil gases in these two areas have an oilier composition than either the soil gases or the deeper gases from the 50-foot gravel aquifer mapped east of Lincoln. These latter gases are similar to the known Pico production gases, and are very different from the original oil field gases, or from the gases currently stored within the gas storage field. A direct comparison of the storage gas samples (nine new samples were provided for this comparison) with those from the soil gases and monitor well gases on the Playa Vista site demonstrate that the gas storage field is not the source of any of the gas seepage reported on the Playa Vista Development site.

Area C was also found to be devoid of large methane anomalies, and contains only background level soil gas concentrations. This area contains two abandoned wells (Del Rey #1 and #2) that must be properly reabandoned. Provided that no significant gas is found in the 50-foot gravel aquifer within any these three areas, and the Del Rey wells are properly reabandoned, then there should be no objection to development of all three of these areas. No

construction is recommended directly over the gas storage field, and if the dissolved methane concentrations are low enough in the 50-foot gravel aquifer within these three areas, then it may be worthwhile to consider waiving the installation of methane mitigation and monitoring systems for all the portions of these three areas that are far removed from any existing wells.

The areal distribution of the toxic gases, hydrogen sulfide and BTEX, have been shown to be restricted to areas where advective methane seepage occurs. The sources for these gases appears to be from shallow, organic rich soils, which may have been supplemented by La Brea fill brought in by Howard Hughes operations during early construction activities on the site. The mechanism for these gases to migrate to the surface appears to be aided by the advective methane seepage. Even with methane as a carrier gas, the levels are low, and should be readily diluted to below concentrations of concern by the methane mitigation systems required within the areas of advective gas flow. These toxic gases do not appear to migrate to the surface without a methane gas carrier and do not require consideration outside the areas of high methane seepages.

Some portions of the Playa Vista site should be considered as a high potential methane zone due to the documented areas of high-volume surface macroseeps of methane gas.

These results provide the basis (methane concentrations) for establishing a matrix table (designed by a methane engineer) with three levels of methane mitigation for prevention, detection, and monitoring of methane gas. These methane system requirements are to be implemented in areas of planned construction at Playa Vista. Results from this subsurface geochemical assessment may contribute important guidelines for improving the Los Angeles Methane Gas Code.

The presence of significant gas seepage requires building methane mitigation systems for any building constructed directly over the areas where anomalous concentrations of soil gas have been measured. In the interest of safety, no variances in these methane mitigation requirements should be allowed. These mitigation systems require extensive testing to determine their effectiveness in handling the gases venting naturally at Playa Vista before initial occupancy. The effectiveness of these mitigation systems must be periodically reevaluated in view of future seismic activity in the Los Angeles Basin. It should be noted that a small earthquake (magnitude 3.3) did occur on September 16, 2001 on the north edge of the site, on-strike with the Charnock Fault (Preliminary Earthquake Report). A larger magnitude earthquake at this location could easily cause the gas flux on the site to increase significantly.

The installation of real-time monitoring systems installed in the vent risers in the Playa Vista buildings could provide significant protection, provided that they are properly calibrated and demonstrated to be responding to the actual gas levels, which accumulate under the buildings foundations. This testing has not been done, and must be completed as part of the due diligence before occupancy

4.0 RECOMMENDATIONS

1) As with the April 17, 2000 report, this additional regional soil gas data set collected within areas A, B and C in the Phase 2 area should be supplemented and confirmed by collection and analysis of the associated dissolved gases contained in the Ballona gravel aquifer. Using the soil gas anomalies as a guide, a minimum of 18 additional monitor well locations have been selected to supplement the original 42 already installed. Installation of these wells should follow the same procedures used in the ETI April 17, 2000 report, with both free gases and dissolved gases collected and analyzed as described in Appendix B of the ETI April 17, 2000 report. All monitor wells (both the original 41 and the 18 proposed new wells) should be sampled at one time in order to generate a uniform aquifer data base for evaluation of the free and dissolved gas content in the Ballona gravel aquifer.

2) Agreed to by Playa Vista and LADBS, 100 foot grid spacing soil gas surveys shall be conducted over all Phase 1 and Phase 2 sites before construction may proceed.

3) If soil gas concentrations exceed 12,500 ppmv, then an additional soil gas survey shall be conducted over the

planned building foundation using no less than 50 foot centers. Flux chamber measurements should not be used without adequate guidance by gridded soil gas surveys.

Buildings should not be constructed over the Playa del Rey Gas Storage Facility in Areas A and B. For maximum safety the areas directly over the gas storage field should be reconfigured as open space.

5) The Del Rey 1 and Del Rey 2 abandoned wells in Area C should be reabandoned to current DOGGR standards if this area is to be developed.

6) Based upon the results of the regional soil gas survey under current grid spacing, and favorable results from the additional proposed wells discussed in (1) above, it does not appear that methane concentrations are high enough to warrant methane mitigation and monitoring for planned construction in Areas A, B, and C of Phase 2 provided that the above recommendations are adhered to.

7) The methane mitigation systems proposed for these buildings must be thoroughly tested to insure that their performance meets the specifications. Gas samples must be collected from the sampling ports located both above and below the membrane and analyzed in a laboratory for their methane through butane contents. Simultaneous sample collection must be performed in the vent risers in order to determine how closely the vent monitoring system meets the requirements of monitoring the gas concentrations under the slab and in reducing the methane gas concentrations below the membrane to below 3.75%. If these testing and reporting procedures are not followed, then a hazardous condition could result.

5.0 REFERENCES

Anderson, T. H., Becker, D. F., and Witherspoon, P. A., 2001, Assessment of Geological and Geophysical Characteristics of the Playa Vista Development Site and Integration with Geochemical Observations, July 2, prepared LADBS.

Barton, C.L., 1931, A Report on the Playa Del Rey Oil Field, in Summary of Operations, California Oil Fields, State of Calif. Div. Of Oil and Gas, San Francisco, Calif. V. 17, n. 2, p. 5-15.

Biddle, K.T., 1991, The Los Angeles Basin: An Overview, in Active Margins Basins; ed., Kevin T. Biddle, AAPG Memoir 52, p. 5-24.

Camp Dresser & McKee, April 30, 1999, Safety/Risk of Upset Technical Report for Playa Vista - Second Phase Project, 108 p.

Camp Dresser & McKee, October 12, 1999, Preliminary Area D Soil Gas Lab Results faxed to Playa Vista Distribution - from Tony Skidmore.

Camp Dresser & McKee, September 5, 2000, Sampling and Analysis of Gas from the Southern California Gas Company Playa del Rey Gas Storage Field, 5 p., tables, figures, plates.

Camp Dresser & McKee, March 6, 2001 letter report to David Nelson entitled "Methane Surface Flux Emissions for Product 700 Area, Lots 58 and 59 in Tract 49104-01"

Coleman, D.D., Meents, W.F., Liu, C. and Keogh, R.A., 1977. Isotopic Identification of Leakage Gas from Underground Storage Reservoirs, Illinois State Geol. Survey, Illinois Petroleum, 111.

Coleman, D.D., 1979. The Origin of Drift-gas Deposits as Determined by Radiocarbon Dating of Methane. In: R. Berger and H.E. Seuss (Editors), Radiocarbon Dating, Proceedings of the Ninth International Radiocarbon Dating Conference, 1976. University of California Press, Berkley, pp. 365-387.

Coleman, D.D., J.B. Risatti, and M. Schoell (1981), "Fractionation of Carbon and Hydrogen Isotopes by Methane-oxidizing Bacteria." *Geochimica et Cosmochimica Acta*, v. 45, p. 1033-1037.

Coleman, D.D., C.L. Liu, and K.M. Riley (1988) "Microbial Methane in the Glacial Deposits and Shallow Paleozoic Rocks of Illinois." In: *Origins of Methane in the Earth*, M. Schoell (Editor), *Chemical Geology*, v. 71, p. 23-40.

Coleman, D.D., 2000, Private communication, isotopic analyses of two gas samples from Pico gas sands at El Segundo Field, Los Angeles, CA.

Cordova, Simon, 1963, El Segundo Oil Field, State of Calif. Div. Of Oil and Gas, San Francisco, Calif. V. 49, n. 2, p. 45-52, plates, tables.

Davis and Namson, November 1999, Playa del Rey Field Open File Report, 1 Location Map, 3 Structure Contour Maps, 3 Cross Sections, No Text, Prepared for Playa Capital.

Davis and Namson, November 16, 2000, An Evaluation of the Subsurface Structure of the Playa Vista Project Site and Adjacent Area, Los Angeles, California, 56 p., figures, plates.

ENSR Consulting and Engineering, October 1997, Data Review and Limited Phase 2 Subsurface Site Assessment at Playa Vista Property, 64 p.

Exploration Technologies, Inc., November 29, 1999, Preliminary Comments Regarding Methane Gas Concerns for the Playa Vista Project Tract 49104-03 and Conditions to be Met for Issuance of a Building Permit, 4 p., 3 plates, appendices.

Exploration Technologies, Inc., April 17, 2000, Subsurface Geochemical Assessment of Methane Gas Occurrences, Playa Vista Development, First Phase Project, Los Angeles, California, 29 p., 7 figures, 6 tables, 12 plates, appendices.

Exploration Technologies, Inc., March 14, 2001, Concentration Of C1-C4 Gaseous Hydrocarbons, BTEX Aromatic Hydrocarbons, Carbon Dioxide And Hydrogen Sulfide In Soil Gas At Tract-03 Beneath Fountain Park Apartments Following Installation Of Concrete Pilings.

Global Geochemistry Corp., January 20, 1994, Comparison of Chemical Properties of Gases Collected in Bubbles Emerging from Centinela and Ballona Creeks, Marina del Rey, California, 4 p., tables, graph.

Group Delta Consultants, Inc. February 5, 1999, Geotechnical Recommendations Increment 1, Area De, Playa Vista Development, 13255 Jefferson Boulevard, Los Angeles, CA, 24 p.

Hodges, F.C., 1944, Gas Storage and Recent Developments in the Playa Del Rey Oil Field, in Summary of Operations, California Oil Fields, State of Calif. Div. Of Oil and Gas, San Francisco, Calif. V. 30, n. 2, p. 3-10.

Integrated Environmental Services, Inc., May 28, 1999, Responses to Methane Gas Concerns - Playa Vista 61 p.

James, A.T., 1983, Correlation of natural gas by use of carbon isotopic distribution between hydrocarbon components. *AAPG Bulletin*, 67-1176-1191.

James, A.T., 1990, Correlation of reservoired gases using the carbon isotopic composition of wet gas component. *AAPG Bulletin*, 74-1441-1448.

James, A.T., and B.J. Burns, 1984, Microbial alteration of subsurface natural gas accumulations. *AAPG Bulletin*, 68,

957-960.

Jones, V.T., and Drozd, R.J., 1983, Predictions of Oil and Gas Potential by Near-Surface Geochemistry: A.A.P.G., Bull., Vol. 67, No. 6, p. 932-952.

Jones, V. T. and Burtell S. G., 1996. Hydrocarbon flux variations in natural and anthropogenic seeps, in D. Schumacher & M.A. Abrams, eds., Hydrocarbon migration and its near-surface expression: AAPG Memoir 66, p. 203-221.

Jones, V.T. and Agostino, P. N., 1998, Case Studies of Anaerobic Methane Generation at a Variety of Hydrocarbon Fuel Contaminated Sites. Presented at the National Ground Water Association, 1998, Houston, Texas

Jones, V.T., Matthews, M.D., and Richers, D., 2000, Light Hydrocarbons in Petroleum and Natural Gas Exploration. Handbook of Exploration Geochemistry: Gas Geochemistry. Vol. 7., Chapter 5, Elsevier Science Publishers.

Mersch, Walter, 2001, Top of Gravel work products, February, pdf format only.

Map 1

Map 2

Map 3

Map 4

Map 5

Map 6

Map 7

Map 8

Map 9

Map 10

Map 11

Map 12

Map 13

McLaren Environmental Engineering, May 8, 1987, Site Investigation and Evaluation of Remedial Measures Report, Howard Hughes Property Plant Site, Los Angeles, California, 398 p.

Preliminary Earthquake Report, September 16, 2001, event ID # ci09564425, reviewed by a USGS seismologist, Southern Ca. Seismic Network, Caltech Seismological Laboratory.

Riegle, J.R., 1953, Gas Storage in the Playa Del Rey Oil Field, in Summary of Operations, California Oil Fields, State of Calif. Div. Of Oil and Gas, San Francisco, Calif. V. 39, n. 2, p. 17-33.

Sepich Associates, Inc., April 2, 1999, Methane Recommendations Relating to Issuance of Mass Grading Permit at Proposed Playa Vista Project, Los Angeles, CA, 7 p.

Sepich Associates, Inc., January 30, 2001, Playa Vista Methane Prevention, Detection, and Monitoring Program, 6 p. 1 table, 1 plate.

Slosson, James E., 1971, Engineering Geology Review of the February 9, 1971 Earthquake-San Fernando - Sylmar area, Journal of Petroleum Engineers of AIME, SPE paper number 3457.

Tompson, K.F.M., 1966. Postulated Generation of Bacterial Methane from Seepage Petroleum in Sea Floor Sediments of the Gulf of Mexico, in D. Schumacher and M.A. Abrams, eds., Hydrocarbon migration and its near

surface expression: AAPG Memoir 66, pl. 331-334.

ight, T.L., 1991, Structural Geology and Tectonic Evolution of the Los Angeles Basin, California, in Active Margins Basins; ed., Kevin T. Biddle, AAPG Memoir 52, p. 35-134 .

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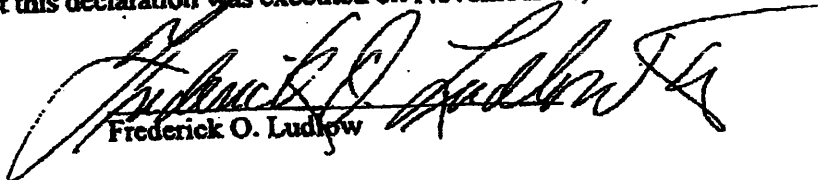
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DECLARATION OF FREDERICK O. LUDLOW II

I, Frederick O. Ludlow II declare:

1. In 2002, I was the Assistant Chief Counsel of the California State Lands Commission ("Commission"), with my office in the Commission's Sacramento headquarters. As such, I have first-hand knowledge of all matters referred to herein and if called upon to testify thereto, could and would do so truthfully.
2. In early 2002 I was asked by Paul Mount, Chief of the Commission's Mineral Resources Management Division, to review a California Public Records Act request from the Grass Roots Coalition ("Coalition"). The Coalition had requested all information in the Commission's possession regarding Playa Vista that the Commission had obtained from Exploration Technologies, Inc. ("ETI"). ETI served as a consultant to the City of Los Angeles for the development of Playa Vista.
3. Upon investigating the Coalition request I learned that in response to a request from the Commission's Minerals Management staff, the City of Los Angeles had authorized ETI to send the Commission Playa Vista information ETI had prepared for the City. This information was sent to the Commission's staff by ETI in January of 2002 on a CD-ROM disk
4. In early May 2002 I spoke by telephone with a representative of the City of Los Angeles Department of Building and Safety who, upon learning of the Coalition's request, objected to the release of the information contained on the disk. I then emailed Dr. Victor Jones, President of ETI, and asked him if in his opinion the information on the disk was the property of his company or of the City. He replied that in his opinion the information contained on the disk was the property of the City. Shortly thereafter I spoke by phone with a Deputy City Attorney whose name I cannot remember. She asked me not to release the Playa Vista information to the Coalition and then followed up with a letter explaining the reasons for the City's objections.
5. In September of 2002, the Commission, pursuant to the Coalition's Public Records Act request, sent a copy of the Playa Vista disk prepared by ETI to, the Coalition.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration was executed on November 30, 2006 at Elk Grove, California.


Frederick O. Ludlow

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the site to increase significantly.

The installation of real-time monitoring systems installed in the vent risers in the Playa Vista buildings could provide significant protection, provided that they are properly calibrated and demonstrated to be responding to the actual gas levels, which accumulate under the buildings foundations. This testing has not been done, and must be completed as part of the due diligence before occupancy

4.0 RECOMMENDATIONS

- 1) As with the April 17, 2000 report, this additional regional soil gas data set collected within areas A, B and C in the Phase 2 area should be supplemented and confirmed by collection and analysis of the associated dissolved gases contained in the Ballona gravel aquifer. Using the soil gas anomalies as a guide, a minimum of 18 additional monitor well locations have been selected to supplement the original 42 already installed. Installation of these wells should follow the same procedures used in the ETI April 17, 2000 report, with both free gases and dissolved gases collected and analyzed as described in Appendix B of the ETI April 17, 2000 report. All monitor wells (both the original 41 and the 18 proposed new wells) should be sampled at one time in order to generate a uniform aquifer data base for evaluation of the free and dissolved gas content in the Ballona gravel aquifer.
- 2) As agreed to by Playa Vista and LADBS, 100 foot grid spacing soil gas surveys shall be conducted over all Phase 1 or Phase 2 sites before construction may proceed.
- 3) If soil gas concentrations exceed 12,500 ppmv, then an additional soil gas survey shall be conducted over the planned building foundation using no less than 50 foot centers. Flux chamber measurements should not be used without adequate guidance by gridded soil gas surveys.
- 4) Buildings should not be constructed over the Playa del Rey Gas Storage Facility in Areas A and B. For maximum safety the areas directly over the gas storage field should be reconfigured as open space.
- 5) The Del Rey 1 and Del Rey 2 abandoned wells in Area C should be reabandoned to current DOGGR standards if this area is to be developed.
- 6) Based upon the results of the regional soil gas survey under current grid spacing, and favorable results from the additional proposed wells discussed in (1) above, it does not appear that methane concentrations are high enough to warrant methane mitigation and monitoring for planned construction in Areas A, B, and C of Phase 2 provided that the above recommendations are adhered to.
- 7) The methane mitigation systems proposed for these buildings must be thoroughly tested to insure that their performance meets the specifications. Gas samples must be collected from the sampling ports located both above and below the membrane and analyzed in a laboratory for their methane through butane contents. Simultaneous sample collection must be performed in the vent risers in order to determine how closely the vent monitoring system meets the requirements of monitoring the gas concentrations under the slab and in reducing the methane gas concentrations below the membrane to below 3.75%. If these testing and reporting procedures are not followed, then a hazardous

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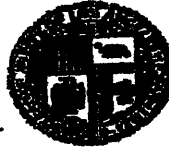
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CITY OF LOS ANGELES CALIFORNIA



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ANDREW A. ADELMAN, P.E.
GENERAL MANAGER

RAYMOND CHAN
EXECUTIVE OFFICER

RE: 50'
vent wells
NO DATA

PR05-4996

September 23, 2005

Patricia McPherson
Grassroots Coalition
3749 Greenwood Ave.
Los Angeles, CA 90066

Re: **Public Records Act Request, Dated July 25, 2005, for Documents Related to the Playa Vista Project**

Dear Ms. McPherson:

This letter is in response to your Public Records Act request, dated July 25, 2005, and addressed to myself, Custodian of Records, Los Angeles Department of Building and Safety (LADBS).

First Portion of Your Letter

The first portion of your letter requested that you be allowed to view and/or copy the following reports dated 2000 through August 2005: (Each portion of your request has been restated verbatim in italics below, followed by LADBS' response.)

1. *Phase I design of the required mitigation and monitoring system for the 50-foot gravel aquifer beneath the Fountain Park Apartments. (This requirement is stated in a June 9, 2000 LADBS letter LOG NO. 29469 SOILS/GEOLOGY FILE - 2)*

There are no documents responsive to this portion of your request.

2. *Test and design of the required mitigation and monitoring system for the 50-foot gravel aquifer within Phase I of the Playa Vista Development. (This requirement is stated in a June 9, 2000 LADBS letter LOG NO. 29469 SOILS/GEOLOGY FILE - 2)*

There are no documents responsive to this portion of your request.

#6

3. *Please provide any and all updated information (from 2000 to August 2005) regarding the mitigation and monitoring of the 50' aquifer. Please include any and all files containing e-mails, memos, or other interdepartmental communications regarding the PV MPDP including but not limited to the mitigation and monitoring of the 50' aquifer.*

There are no documents responsive to your request regarding the 50' aquifer.

LADBS has previously provided a listing of available documents for use at the public counters to retrieve the information requested. Furthermore, the required annual reports certifying that the methane mitigation systems are working as designed have been previously provided.

Annual reports show no 50' mitigation

4. *Map locations for any/all 50-vent wells in Phase I. Provide any and all data, including monitoring data collected from the 50-vent wells.*

LADBS does not maintain a master map indicating the location of each 50-vent well. The 50-vent well is part of the methane mitigation system for individual buildings within the Level III area.

Pursuant to the Public Records Act, attached to this reply is an index of documents residing in LADBS' document imaging system (Internet Document Imaging System, IDIS) for each property address you provided. Plans can be located under the Plan Maintenance document type. Plans can be viewed by you or your staff Monday through Friday, from 7:30 a.m. to 4:30 p.m., except Wednesdays, at the following two LADBS locations (the Records Counters are closed on Wednesday until 9:00 a.m.):

Los Angeles District Office (Metro)
201 N. Figueroa St., First Floor
Los Angeles, CA 90012

Van Nuys District Office
6282 Van Nuys Bl., Room 251
Van Nuys, CA 91401

State Health and Safety Code Section 19581 prohibits you from reproducing in any form building plans, architectural blueprints, and schematics without written permission from the current owner and the licensed professional that signed them. However, you may view these documents at either the Metro or Van Nuys offices.

5. *Provide any/all monitoring information, data, reports or gas levels within the 50' aquifer in Phase I.*

There are no documents responsive to this portion of your request.

6. *Provide any/all data of maintenance reports by any and all companies performing said maintenance of the 50' vent wells and 50' vent well monitoring data.*

There are no documents responsive to this portion of your request.

7. *Provide any/all 24/7 online monitoring (of gas levels within the 50' aquifer) that was and is to be provided as an early warning system. Provide website location and any/all decoding information that may exist to read and understand the website.*

There is no online monitoring required of the 50-foot aquifer. The requirement for gas level monitoring applies to the below building slab methane gas data. Website data is accessible to LADBS, LAFD, and the property owners or Homeowners Association.

A compact disk of the available data, as of September 9, 2005, will be made available to you to view and copy Monday through Friday after 7:30 a.m. in the office of the Custodian of Records. Our office closes at 4:30 p.m. Please contact the Custodian of Records staff at (213) 482-6770 to schedule a date and time to view and copy this disk.

The charge for copying a compact disk is \$10.50. Charges for copying public records are in accordance with California Public Records Act Sections 6253(b), 6253.9(a)(2), and 6253.9(b); Los Angeles Municipal Code Section 98.0405, and Los Angeles Administrative Code Sections 12.40 and 19.44.

8. *Provide identity of the City Council directed methane mitigation monitor.*

- a. *Provide any/all reports, communications (e-mail, memos, phone logs) between the methane mitigation monitor and any/all City personnel, agency personnel and Playa Vista entities.*

The City Council did not name a methane mitigation monitor; however, the Council received and filed the Report on the Playa Vista Development Project Site of June 1, 2001 from the CLA that per recommendations #2 and #3 identifies the Director of Planning as the overall coordinator of the implementation of CEQA mitigation measures.

LADBS has previously provided you the written annual reports of 2004 and 2005 that were given to the City Planning Department.

not included

Second Portion of Your Letter

The second portion of your letter requested that you be allowed to view and/or copy the following documents, dated from 2001 through August 2005, for 252 addresses that you attached which are located within the Playa Vista Project: (Each portion of your request has been restated verbatim in italics below, followed by LADBS' response.)

1. *Any and all annual reports that supply any and all data required in the PV MPDP. Please include but not limit information of all subslab portal testing. Please provide any and all laboratory information of the analysis of the subslab portal data that reveals the actual gas levels under each building.*

All levels + not include 50' vent wells

All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

2. Provide any and all vent riser data that is logged in any format.

All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

3. Provide any and all post occupancy membrane integrity testing data. Please include the identity of the methane specialist of record for each building area.

All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

4. Provide any/all active methane system information including but not limited to the active turbine designs and systems.

All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

5. Provide any/all methane alarm reports for all building areas. Please provide all reports from 2001 through August 2005.

LADBS does not maintain methane alarm reports. Please contact the Los Angeles Fire Department for documents responsive to this portion of your request.

There are no documents being withheld as exempt under the Public Records Act pertaining to this request. Please feel free to contact me at 213-482-6762 if I can be of further assistance.

Sincerely,

Teresa M. Abraham

Teresa M. Abraham
Office of the Custodian of Records

attachment

(LVPRA Public Records Request PR05-4996 2nd Response wpd)

*Annual Report
only has TACT info
- only level 1 -*

Dear Councilman Rosendahl,

Grassroots Coalition represents constituents in your district and as a constituent, myself, I would like to share with you, in a meeting ASAP, the following safety issues of Playa Vista. The rest of the Playa Vista site has similar problems that I am prepared to go over with you ASAP. As preparation for the 'tour' with DTSC and LARWQCB that I have discussed with your staff, I think it important that you are aware of the following:

1. The Chief Legislative Analyst's Report (CLA Report) created specific requirements of gas mitigation at Playa Vista. (Playa Vista Methane Prevention, Detection and Monitoring Program-PVMPDMP)

- Requirements have not been fulfilled.

2. LA Building & Safety permits for the Fountain Park Apartments, at Playa Vista, required gas mitigation of the 50' aquifer. (50' vent well installation and monitoring)

-The 50' aquifer has not been mitigated at Fountain Park Apartments.

3. The use of California Debt Limit Allocation (CDLAC) bond money to build the Fountain Park Apartments was predicated upon the CLA Report's gas mitigation requirements' fulfillment.

-Bond requirements- the 50' vent wells, have not been installed for gas mitigation or monitored as an early warning system.

Evidence:

a. Time specific permits required the installation and monitoring of 50' vent wells at Fountain Park. The 50' vent wells have not been installed. Public Record Act requests reveal there is no data regarding the critical 50' vent wells.

b. The only City required gas mitigation report, the 'Annual Methane Report' has been tampered with and falsified. Two sets of the same time dated report reveal falsification of the report signed by the City.

The 'Annual Methane Report' fails to include any data regarding the higher level (Level 2 & 3) gas mitigation systems. The Annual Methane Report by Taft Electrical, only reports on the Level 1 (lowest gas level) gas mitigation system.

c. Public Record Act requests reveal that the most critical and necessary gas mitigation requirement, the 50' vent wells (that mitigate and monitor the 50' aquifer) have no data that show they function or exist.

I have prepared maps and data to clearly and quickly layout the safety problems as requested by John Crosse.

Sincerely,

Patricia McPherson, Grassroots Coalition

COUNCIL ACTION TO NOTE & FILE CLA Report

J. MICHAEL CAREY
City Clerk

FRANK T. MARTINEZ
Executive Officer

When making inquiries
relative to this matter
refer to File No.

99-0385-54

CITY OF LOS ANGELES
CALIFORNIA



RICHARD J. RIORDAN
MAYOR

Office of the
CITY CLERK
Council and Public Services
Room 615, City Hall
Los Angeles, CA 90012
Council File Information - (213) 485-5703
General Information - (213) 485-5705
Fax: (213) 947-0636
Fax: (213) 485-8944

HELEN GINSBURG
Chief, Council and Public Services Division

CD 6

June 13, 2001

1 (SEE IN FILES)

JUN 28 2001

CITY

Honorable Richard Riordan, Mayor
Planning Commission
Director of Planning
Bureau of Engineering,
Development Services Division
Department of Transportation,
Traffic/Planning Sections
Department of Building & Safety,
c/o Zoning Coordinator

Department of Water and Power
City Attorney
Chief Legislative Analyst
City Engineer

(SEE ATTACHED LIST)

2005 Appeal Court
Rejects as "note + field"
Rules CLA Report/Dir./PWA
ARE APPROVED by Council
SEE
2005
Appeal Brief

RE: CITY'S INVESTIGATION OF POTENTIAL ISSUES OF CONCERN FOR COMMUNITY FACILITIES DISTRICT NO. 4, PLAYA VISTA DEVELOPMENT PROJECT

At the meeting of the Council held June 12, 2001, the following action was taken:

- Attached report adopted
- Attached motion (-) adopted.....
- Attached resolution (-) adopted.....
- Mayor concurred.....
- FORTHWITH.....
- Ordinance adopted.....
- Ordinance number.....
- Effective date.....
- Publication date.....
- Motion adopted to approve committee report recommendations..... X

J. Michael Carey

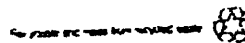
City Clerk

CRM

stenc/950385

ff [Signature]

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER



8

TO THE COUNCIL OF THE
CITY OF LOS ANGELES

FILE NO. 99-0385-84

Your **PLANNING AND LAND USE MANAGEMENT** Committee
reports as follows:

Public Comments YES NO
XX ---

PLANNING AND LAND USE MANAGEMENT COMMITTEE REPORT relative to the City's investigation of potential issues of concern for Community Facilities District No. 4 Playa Vista Development Project.

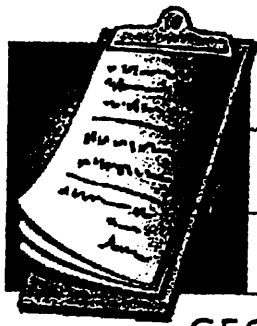
Recommendations for Council action:

1. NOTE and FILE the report "City Investigation of Potential Issues of Concerns for Community Facilities Districts No. 4 Playa Vista Development Project," prepared by the Chief Legislative Analyst (CLA).
2. DIRECT and AUTHORIZE the Director of Planning Department to require the California Environmental Quality Act CEQA mitigation monitor currently overseeing the implementation of CEQA mitigation measures at the Playa Vista Development site to also oversee implementation of methane mitigation measure by all agencies and entitles constructing facilities or utilities at the site.
3. DIRECT the Bureau of Engineering, Department of Water and Power, Department of Building and Safety, the City Attorney's Office, and other City Departments as appropriate to coordinate with the Planning Department regarding methane mitigation measure implementation, including taking enforcement actions as appropriate.
4. DIRECT the CLA to report to Council relative to the qualifications of the various consultants and contract agencies which contributed to the CLA's study, the extent to which collected data and studies can be substantiated, and whether said consultants and contract agencies are willing to guarantee their findings.

Fiscal Impact Statements: None submitted by the CLA. A financial analysis of this report was not completed by the Office of Administrative and Research Services.

SUMMARY:

In a June 1, 2001 report to the Planning and Land Use Management Committee (attached to Council File), the CLA provides information relative to a variety of potential risk factors at the Playa Vista Development site, so that Council can decide whether the City should provide Mello-Roos financing for some of the infrastructure and ecological components of the Playa Vista Development Project (CF# 99-0385-S2).



Tracking CEQA Mitigation Measures Under AB 3180

CEQA TECHNICAL ADVICE SERIES

STATE OF CALIFORNIA
Pete Wilson, Governor



GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
1400 Tenth Street
Sacramento, CA 95814
(916) 445-0613

Lee Grissom, Director, Office of Planning and Research
Robert Cervantes, Chief, Planning Unit
Antero Rivasplata, Chief, State Clearinghouse

Third Edition, March 1996

Acknowledgements

This edition of Tracking CEQA Mitigation Measures would not be possible without the contributions of the following individuals. I'd like to thank them for taking the time from their own busy schedules to review the draft of this document and to offer their constructive suggestions. I greatly appreciate their generosity in sharing their expertise.

Ron Bass, Jones and Stokes Associates
Dr. Al Beck, Eco/Plan International
Terry Farris, Planner
Al Herson, Jones and Stokes Associates
Barbara Sahn, San Francisco Department of City Planning

#19

Christine Sproul, Office of the California Attorney General, Land Law Section

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Introduction

Newton's Law provides that for every action there is an equal and opposite reaction. CEQA on the other hand provides that whenever a proposed project will result in potential significant adverse environmental impacts, measures must be taken which will limit or avoid that impact. These may include conditions of approval, revisions to the project, and, less frequently, approving an alternative project with fewer impacts. Where such measures are imposed, there must be a program for monitoring or reporting on the project's compliance with those measures.

Section 21081.6 of the Public Resources Code requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a mitigated negative declaration or an environmental impact report (EIR). The monitoring or reporting program must ensure implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified in the mitigated negative declaration or EIR.

The Office of Planning and Research (OPR) has written this advisory publication to offer local governments basic information and practical advice about how they may comply with the mitigation monitoring and reporting program requirements. It is supplementary to, and not an amendment or revision of, the California Environmental Quality Act Guidelines. Accordingly, this publication represents the informal guidance of OPR regarding compliance with Section 21081.6, but is not a regulation. This is part of OPR's public education and training program for planners, developers, and others.

The following suggestions are not the only methods of implementing Section 21081.6. The examples that follow are illustrative and not limiting. Agencies can develop their own programs to meet the variety of projects and unique circumstances which they encounter.

The third edition of Tracking CEQA Mitigation Measures Under AB 3180 is based upon the law as it existed on January 1, 1996. Readers should refer to the most recent CEQA statute to ensure that they are meeting all current requirements. Code citations in this document are to the Public Resources Code,

unless otherwise noted.

A Brief History of AB 3180

Despite CEQA's emphasis on mitigation, until 1988 the Act did not require that agencies take actions to ensure that required mitigation measures and project revisions were indeed being implemented. When reports of gross disregard for mitigation requirements reached the State Legislature in that year, it responded by enacting AB 3180 (Cortese). Section 21081.6 of the Public Resources Code, added by this bill, provides that whenever a mitigated negative declaration is adopted or a public agency is responsible for mitigation pursuant to an EIR, the agency must adopt a program for monitoring or reporting on project compliance with the adopted mitigation. The legislation was signed into law by Governor Deukmejian in September of 1988 (Chapter 1232, Statutes 1988) and took effect on January 1, 1989.

OPR published the first edition of Tracking Mitigation Measures in early 1989 to provide guidance to local agencies in complying with the requirements of Section 21081.6. Expert publications and the efforts of U.C. Extension instructors have continued this education. As a result, by 1993, approximately 75% of cities and counties had enacted measures to comply with AB 3180. This edition of Tracking Mitigation Measures updates the advice offered by its predecessor.

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Bibliography

Bass, Ronald and Albert Herson, *Successful CEQA Compliance: A Step-by-Step Approach*, 1993 edition, Solano Press, Point Arena, California, 1993

Farris, Terry, "The Story of Assembly Bill 3180: Mitigation Monitoring in California," Masters thesis, California State Polytechnic University, Pomona, 1989

Farris, Terry, unpublished mitigation monitoring survey, 1993

"Mitigation Monitoring Programs," Dominic Roques, *Environmental Monitor*, Fall 1993

Remy, Michael H., Tina A. Thomas, et al., *Guide to the Environmental Quality Act*, 1993 edition, Solano Press, Point Arena, California, 1993

Programs Required by Section 21081.6

Section 21081.6 establishes two distinct requirements for agencies involved in the CEQA process. Subdivisions (a) and (b) of the section relate to mitigation monitoring and reporting, and the obligation to mitigate significant effects where possible. Subdivision (c), which was amended into the code by AB 375 of 1992, is almost a non-sequitur. Its subject is the responsibility of responsible and trustee agencies during consultation on a negative declaration or EIR.

Pursuant to subdivision (a), whenever a public agency either: (1) adopts a mitigated negative declaration, or (2) completes an EIR and makes a finding pursuant to Section 21081(a) of the Public Resources Code taking responsibility for mitigation identified in the EIR, the agency must adopt a program of monitoring or reporting which will ensure that mitigation measures are complied with during implementation of the project. When changes have been incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by the project, that agency, if so requested by the lead or responsible agency, must prepare and submit a proposed reporting or monitoring program for the changes.

A project which is exempt from CEQA, or for which a simple (i.e., not mitigated) negative declaration has been prepared requires no AB 3180 program. In addition, no program is required for projects which are disapproved by the agency. Nor is a program required to address those mitigation measures which the agency has found to be either the responsibility of another agency or infeasible, pursuant to subdivisions (b) and (c) of Section 21081.

Besides ensuring implementation of mitigation measures, as required by statute, a monitoring or reporting program may provide feedback to staff and decisionmakers regarding the effectiveness of mitigating actions. Such experiential information can be used by staff and decisionmakers to shape future mitigation measures.

Subdivision (b) of Section 21081.6 requires that mitigation measures be "fully enforceable through permit conditions, agreements, or other measures." Incorporating the mitigation measures into the conditions of approval applied to the project meets this requirement. Where the project consists of a general plan (or other type of policy plan), a regulation, or a public project, the mitigation measures can be incorporated into the policies of the plan, the regulations themselves, or the design of the project to meet the enforceability requirement.

Subdivision (c) creates a requirement for responsible and trustee agencies which have identified a significant impact during consultation on a negative declaration or EIR. This requirement is not directly related to mitigation monitoring or reporting programs, nor is it limited to those situations which require mitigation monitoring or reporting. We will discuss it only briefly before moving on.

Pursuant to subdivision (c), when a responsible or trustee agency suggests mitigation measures to address a significant impact which that agency has identified during consultation, it must either provide the lead agency with "complete and detailed performance objectives" (i.e., standards by which to meet specific objectives of the responsible or trustee agency) for those measures or refer the lead agency to readily available guidelines which would be the functional equivalent of such objectives. The mitigation measures suggested by a responsible or trustee agency are limited to those within the statutory authority of that agency (Section 21080.4). In effect, a responsible or trustee agency is required to limit its requests for mitigation measures to those subjects over which it has regulatory powers and to provide the lead agency with sufficient information to allow the lead agency to effectively fashion such measures.

The requirements of subdivision (c) impact the lead agency's mitigation monitoring or reporting program to the extent that the lead agency imposes such measures on the project. It does not alter the lead agency's responsibility for determining, on the basis of the evidence before it, whether a significant effect exists and how it may be mitigated. When the lead agency does not adopt those measures, it need not address them in a monitoring or reporting program.

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Next: [Mitigation Monitoring or Reporting Programs](#)

STATE OF CALIFORNIA
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814
916-322-2318

Mitigation Monitoring or Reporting Programs

CEQA requires that each public agency adopt objectives, criteria, and specific procedures to administer its responsibilities under the Act and the CEQA Guidelines (Section 21082). Accordingly, local agencies should revise their adopted CEQA guidelines and procedures as necessary to include the requirements of Section 21081.6.

The task of designing monitoring and reporting programs is the responsibility of the public agency which is approving the project. Although a public agency may delegate this work, the agency cannot escape its responsibility for ensuring the adequacy of the program.

Each city and county may adopt programs which match their unique circumstances. The contents and complexity of the programs may be expected to vary based on the characteristics of the project being approved, the environmental effects being mitigated, and the nature of the mitigation measures themselves. Further, the public agency may choose whether its program will monitor mitigation, report on mitigation, or both.

The statute does not define the terms "reporting" or "monitoring," leaving this to the interpretation of the affected agency. Later in this section, we will offer simple definitions for discussion purposes. In practice, however, there is no clear distinction between monitoring and reporting, and the program best suited to ensuring compliance with mitigation measures will generally involve elements of both. For example, reporting requires the agency to monitor mitigation at some point in time. Likewise, a monitoring program can include regular reports to the decisionmaking body.

Mitigation Measures

Since the purpose of a monitoring or reporting program is to ensure the implementation of mitigation measures, a quick look at mitigation measures will be the first item in our discussion. Mitigation measures are the specific requirements which will minimize, avoid, rectify, reduce, eliminate, or compensate for significant environmental effects. See Section 15370 of the CEQA Guidelines for a full definition.

A monitoring and reporting program's effectiveness depends in large part upon the quality of the mitigation measures themselves. Poorly drafted measures are not only difficult to implement, they are difficult to report on and monitor.

Here are some suggestions for preparing mitigation measures:

(1) **Certainty:** Avoid using the words "may" or "should" when the intent is to direct some required action. "Will" or "shall" are much better. Avoid measures that are conditioned on feasibility (i.e., required "where feasible") rather than applied directly or at a specified stage in the project.

Measures should be written in clear declaratory language. Specify what is required to be done, how is to be done, when it must be done, and who is responsible for ensuring its completion.

(2) **Performance:** Include specific minimum, measurable performance standards in all quantitative measures, and if possible, contingency plans if the performance standards are not met.

(3) **Authority:** CEQA does not provide independent authority to carry out mitigation (Section

21004). Measures which are not based on some other authority (i.e., zoning code, tree preservation ordinance, development agreement, impact fee ordinance, subdivision ordinance, etc.) are unenforceable. Monitoring or reporting on their implementation would clearly be problematic.

(4) Continuity and Consistency: To the extent possible, integrate measures with existing policy and regulatory systems, and inspection or review schedules. Where the mitigation measures are regulatory in nature, for example, design them as conditions of approval within the context of the zoning, subdivision, or other ordinances. Further, mitigation measures must take applicable general plan and specific plan policies into account and not conflict with those policies.

(5) Feasibility: Above all, measures must be feasible to undertake and complete. Avoid the trap of imposing mitigation measures that are based upon future activities of uncertain outcome. For example, the court in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296 overturned the county's negative declaration for a motel project because the county required a study of potential sewage disposal methods rather than actions which would mitigate sewage impacts. A measure that did not mitigate the impact could not be the basis for a finding that impacts were mitigated.

Although infeasibility becomes obvious as the agency attempts to monitor or report on implementation, by that time it is too late. Early in the process of developing mitigation measures, the EIR or negative declaration preparer should consider how implementation of each measure is to be reported on or monitored. This offers a convenient feasibility test.

Reporting

For purposes of simplification, "reporting" may be defined as a written review of mitigation activities that is presented to the approving body by either staff or the project developer. A report may be required at various stages during project implementation and upon completion of the project.

Reporting without detailed monitoring is suited to projects which have readily measurable or quantitative mitigation measures or which already involve regular review. For example, the annual report on general plan status required under Government Code Section 65400 may serve as the reporting program for a city or county general plan as long as it meets the requirements of Section 21081.6. Reporting is also suited to simple projects where a means of reviewing project compliance already exists, such as issuance of building permits and related inspections.

A program for reporting on the implementation of mitigation measures should contain at least the following components:

- (1) A list of the mitigation measures being reported on.
- (2) Standards for determining compliance with each mitigation measure and the related condition of approval.
- (3) A schedule for making one or more reports to the approving agency regarding the level of compliance of the project with the required mitigation measures and related conditions of approval. The program may set out the stages of the project at which each mitigation measure must be implemented (*Christward Ministry v. County of San Diego* (1993) 13 Cal.App.4th 31, 49).

- (4) A statement which identifies the person or agency, public or private, responsible for reviewing the project and for preparing and making the report to the agency.

These components may be combined in a checklist, matrix, or other representation of the required mitigation measures or revisions, any related conditions of approval, the persons or agencies responsible for ensuring their completion, and the responsible person's or agency representative's affirmation of completion. In some cases, where mitigation will occur in stages during the project, or a mitigation measure contains more than one part, preparing a checklist for each mitigation measure may be an effective approach.

Monitoring

"Monitoring" can be described as a continuous, ongoing process of project oversight. Monitoring, rather than simply reporting, is suited to projects with complex mitigation measures, such as wetlands restoration or archeological protection, which may exceed the expertise of the local agency to oversee, which are expected to be implemented over a period of time, or which require careful implementation to assure compliance.

A program for monitoring the implementation of mitigation measures should contain at least the following components:

- (1) A list of the mitigation measures or revisions and related conditions of approval which have been adopted for the project by the agency.
- (2) A schedule for regularly checking on the project's compliance with the mitigation measures or project revisions and related conditions of approval, including progress toward meeting specified standards, if any. The program may set out the stages of the project at which each mitigation measure must be implemented (*Christward Ministry v. County of San Diego* (1993) 13 Cal.App.4th 31, 49).
- (3) A means of recording compliance at the time of each check.
- (4) A statement assigning responsibility for monitoring implementation of the mitigation measures and related conditions of approval to specific persons or agencies, public or private.
- (5) If monitoring duties are contracted to private individuals or firms, provisions for ensuring that monitoring reflects the independent judgment of the public agency. Such provisions might include requiring the submittal of regular progress reports to the agency, establishing a mechanism for appealing actions of the contractor to the agency for decision, or selection of the contractor by the agency (as opposed to solely by the applicant). Regardless of whether monitoring is performed by the agency or a contractor, the agency retains the ultimate legal responsibility for satisfying the requirements of section 21081.6.
- (6) Provisions for funding monitoring activities, including the imposition of fees.
- (7) Provisions for responding to a failure to comply with any required mitigation measure (including conditions of approval). This might include "stop work" authority, permit revocation proceedings, or civil enforcement procedures. This can also include administrative appeal procedures.

Some agencies prepare a separate worksheet describing each mitigation measure and its monitoring requirements. These worksheets are provided to the monitors.

General Approaches to Reporting and Monitoring

Following are two basic approaches which an agency might use:

(1) **Jurisdictional Framework:** A standard mitigation monitoring and reporting ordinance or guidelines adopted by the jurisdiction may establish the basis for individually tailored programs. This framework would express the relative roles of involved agencies, staff, and project proponents; establish administrative procedures; lay out a standardized format for reporting or monitoring programs; establish general timetables; and provide or identify enforcement mechanisms. It may also include standard methods of reporting or monitoring for common mitigation measures.

Standardizing the framework for monitoring or reporting programs promotes consistency and thoroughness in reporting or monitoring activities.

(2) **Project Specific:** Develop a new, specially tailored program for each project which triggers Section 21081.6. Such a program may be imposed under the regulatory authority of the agency. Compliance could be required as a condition of project approval or, if a framework ordinance is in place, by reference to that ordinance.

This may be the best way to approach large and complicated development projects which will have special monitoring requirements. It is useful where a standardized program alone may be inadequate to such a situation. This approach may also make sense for small cities and counties which adopt EIRs or mitigated negative declarations infrequently.

Regardless of the method chosen, a draft AB 3180 program should be made available to decisionmakers prior to the formal adoption of either a mitigated negative declaration or the EIR-related findings in Section 21081 (a).

Although not required to do so, some agencies choose to circulate the draft program during consultation on the draft environmental document. This allows public and agency comments on the effectiveness of both mitigation measures and the associated monitoring or reporting program. When circulating a draft, the agency should specify that the program is not final and is subject to change prior to adoption.

Ultimately, the agency must enact a program which reflects the mitigation or project revisions adopted as part of the mitigated negative declaration or subject to findings under Section 21081 (a), regardless of what might have been in the draft documents. If mitigation measures are revised, added or dropped prior to approval of the project, the adopted AB 3180 program must reflect those changes.

Program Administration

Project monitors, whether agency staff or contract personnel, should be given clear written guidance regarding the mitigation measures to be monitored and reported on. This is particularly important in those cases, such as where a large private project is involved, the applicant will perform the actual monitoring. Further, when compliance is achieved, there should be a clear "sign off" by the appropriate agency to ensure that this compliance is documented.

TRACKING COMPLIANCE

Worksheets offer a convenient means of tracking compliance. Worksheets can be used to express: (1) impact being mitigated; (2) mitigation measure for that impact; (3) implementor; (4) monitor; (5) monitoring requirements; (6) frequency of monitoring or reporting; (7) standards for completion or compliance; and (8) verification of compliance. Some agencies also include a checklist to summarize the monitoring or reporting record.

When the program is a relatively simple one, a checklist rather than a worksheet may suffice to guide inspections, record findings, and certify compliance.

Implementation

In order to maximize efficiency in implementing a monitoring or reporting program, the agency should make every effort to integrate the requirements of the program with its current land use regulations and inspection procedures. This applies whether the program is comprehensive or project specific. As a general rule, the more that mitigation monitoring or reporting programs can utilize existing procedures and requirements, the easier those programs may be to implement. The more that such programs work outside usual procedures, the more expensive and time consuming they may be to implement.

This is not intended to say that a program should monitor or report on zoning or other regulations that are not mitigation measures. While working within the existing regulatory system, the program's scope is limited to mitigation measures resulting from the project's mitigated negative declaration or EIR.

Enforcement

CEQA does not create new authority for agencies to carry out or enforce mitigation measures. Agencies must rely upon the authority conferred by other laws. In the case of a city or county, this would include local zoning, subdivision, and related land use regulations. Typically, enforcement procedures are enacted by ordinance and provide for administrative dispute resolution .

OPR recommends that if a jurisdiction-wide AB 3180 program is adopted, that it contain, or reference other existing regulations which would enforce compliance with the mitigation measures. A jurisdiction-wide program that includes enforcement regulations must be adopted by ordinance in order to be effective. In the absence of a jurisdiction-wide AB 3180 ordinance, individual mitigation monitoring or reporting programs should reference those existing regulations, such as the zoning ordinance, that will provide enforcement.

Cost Recovery

Section 21089 authorizes the lead agency to "charge and collect a reasonable fee from any person proposing a project subject to [CEQA] in order to recover the estimated costs incurred for procedures necessary to comply with [CEQA] on the project." This express authority allows the lead agency to levy fees to cover the costs of mitigation monitoring or reporting programs. The fee is limited to the estimated cost of the program, including the agency's administrative costs. Fees may be used to cover the cost of agency staff, as well as the cost of hiring special monitors or consultants, if needed.

Fees for complex AB 3180 programs, such as those involving long-term monitoring or continuous observation over time, are often charged on the basis of time and work. Flat fees are usually charged when the AB 3180 program involves routine inspections and reporting. In practice, hourly fees and flat fees charged on a sliding scale based on project type or size are equally popular among cities and counties.

Responsible and Trustee Agencies

Lead and responsible agencies may adopt different AB 3180 programs for the same project. This is because the agencies often do not adopt the same set of mitigation measures. In general, when a lead agency approves a project for which an EIR was prepared, it adopts feasible mitigation measures for those portions of the project which it controls or regulates. In turn, the responsible agency adopts only the mitigation measures pertinent to its statutory authority. Under ideal circumstances the programs of the lead and responsible agencies, when taken together, should monitor or report upon all of the adopted mitigation measures and project revisions.

Section 21081.6 does not require agencies to duplicate monitoring programs. Agencies can avoid potential duplication by coordinating their relative roles during the consultation process.

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[Next: Common Questions Regarding Section 21081.6](#)

STATE OF CALIFORNIA
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814
916-322-2318

Common Questions Regarding Section 21081.6

A number of issues commonly arise in complying with Section 21081.6. In many instances, there may be a variety of ways to resolve a particular concern; the following discussion is intended to stimulate thinking rather than to represent the only solutions. Here are some responses to commonly asked questions .

Question:

What does Section 21081.6 require when an EIR for an earlier project is recertified (or certified with an addendum) and applied to a subsequent project, avoiding the need to prepare a new EIR? What is the requirement when a program EIR is used as the basis for a subsequent EIR, or a later project EIR is tiered on the earlier EIR for a plan, program, or ordinance?

Answer:

The monitoring or reporting requirements of Section 21081.6 apply whenever the lead agency makes findings under Section 21081 (a) relative to the mitigation measures or alternatives being required of the project. An AB 3180 program must be adopted which addresses each mitigation measure or project change for which a finding is made. Similarly, if a project is analyzed pursuant to a program EIR or involves tiering, an AB 3180 program would be required for each mitigation measure or project change subject to findings under Section 21081 (a) or required under a mitigated Negative Declaration.

Question:

What happens when an agency has a lack of trained personnel to monitor required mitigation measures?

Answer:

This does not reduce the agency's responsibility to adopt and carry out an AB 3180 program. Outside consultants may be retained to provide assistance. The cost of the consultant may be borne by the agency or charged to the project proponent.

Question:

What is the project planner's role in monitoring/reporting?

Answer:

This is left to the discretion of the involved agency. However, the relative roles of personnel should be spelled out in either an individual or jurisdiction-wide program.

Question:

What happens when the developer and the agency personnel assigned to monitor a project have differences of opinion over mitigation or monitoring requirements?

Answer:

Monitoring personnel must be given sufficient authority to ensure that the mandated mitigation is being implemented. A jurisdictional framework can establish methods of resolving disputes such as administrative appeal.

Question:

Have courts added any specific requirements for reporting or monitoring programs beyond those established by statute?

Answer:

No. In the two cases to date (*Christward Ministry v. County of San Diego* (1993) 13 Cal.App.4th 31 and *Rio Vista Farm Bureau v. County of Solano* (1992) 5 Cal.App.4th 351), the courts have not expanded the requirements beyond those explicit in statute.

Question:

Must a mitigation monitoring or reporting program address conditions of approval that are neither mitigation measures for significant effects nor revisions to the project required pursuant to the environmental document?

Answer:

No. An AB 3180 program must address mitigation measures and project revisions required pursuant to the CEQA document. A program is not required to address those conditions of approval that are not related to mitigation. The agency may monitor these other conditions at its own discretion.

Question:

Must a draft AB 3180 program be circulated with the draft mitigated negative declaration or draft EIR?

Answer:

Nothing in CEQA requires the mitigation monitoring program to be circulated with or included in the EIR (*Christward Ministry v. County of San Diego* (1993) 13 Cal.App.4th 31, 49). Some agencies do circulate drafts in conjunction with a draft EIR. The comments received on the program can be used to fine tune the program prior to adoption. Whether an agency must respond to such comments in the final EIR is unknown. Certainly a case might be made that no response is necessary where the draft program is not an integral part of, but is merely circulated with, the draft EIR. Where the program has been incorporated into the draft EIR, there may be a need to respond to comments on the draft program.

Question:

How does AB 3180 apply to actions such as adoption of a general plan or rezoning where there are no conditions of approval, and mitigation is provided by policies or regulations that are incorporated into the general plan or zoning?

Answer:

In the case of a general plan, mitigation measures should be integrated directly into the plan's policies (Section 21081.6(b)). The AB 3180 program can build upon the annual general plan status report required of each planning agency under Government Code Section 65400. It may not be necessary to monitor or report on site-specific mitigation measures, except to the extent of being included in the policies and standards of the plan and considered in future land use decisions (*Rio Vista Farm Bureau v. County of Solano* (1992) 5 Cal.App.4th 351, 380).

If some of the mitigation measures for the plan are based on the subsequent adoption of new ordinances or regulations rather than being implemented by general plan policies, progress in enacting those regulations can be monitored or reported on by establishing a timetable for regular status reports to the city council or board of supervisors.

A program of regularly scheduled status reports might also be suitable for monitoring or reporting on the mitigation measures applied to a specific plan or rezoning. Recognize that where the specific plan or rezoning is associated with other actions such as a planned unit development or subdivision, i.e., actions with a finer level of detail than a plan or rezone, status reports may be only one portion of the overall AB 3180 program.

The lead agency is not allowed to delay adoption of a program until a subsequent discretionary permit is required. Section 21081.6 clearly mandates adoption of the monitoring or reporting program when the lead agency approves a project. Adoption of a program cannot be put off, nor may the program ignore qualifying mitigation measures or required project revisions.

Question:

Should the monitoring or reporting program be adopted as a condition of project approval?

Answer:

This depends upon the type of project and the existing regulatory scheme. In some cases, such as where the program is based on a framework ordinance, adopting the program as a condition of approval may be redundant. In other instances, such as where a project specific program is being imposed, it may make sense to require compliance with the program as a condition of project approval.

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Next: [Examples of AB 3180 Comprehensive Programs](#)

STATE OF CALIFORNIA
Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814
916-322-2318

Marianne Brown

April 2, 2007

S. Gail Goldberg, AICP
Director of Planning
Los Angeles Department of City Planning
200 North Spring Street, Room 525
Los Angeles, California 90012-4801

[REDACTED]
is also on the
City of LA Westside
Planning Commission
SEE - comments
regarding Melhane
PM

Dear Director Goldberg,

This is the Ven-Mar Neighborhood Association's Response to your request (02/07/07) to submit written comments regarding "The Village" at Playa Vista, Playa Capital, LLC's Second Annual Report (12/01/06) of its compliance with the Development Agreement for Phase II development of PV between the City of LA and Playa Capital, LLC.

After reading the Development Agreement of 02/02/05 and the three-page Annual Report from Playa Vista, signed off by J. Marc Huffinan, V.P. of Entitlements at Playa Vista, we -- as members of Ven-Mar, a neighborhood which is impacted by PV development -- have a number of areas of concern. One such concern is that the builder, Playa Capital, LLC appears to be the one reviewing its *own* progress in compliance with the Agreement. These are some questions we need answered:

1. How can we community residents be confident that PV, LLC is being objective in its very cursory reports -- considering its self-interest in this project? For example, what other outside/objective means are being used by your Department, the Department of Transportation, the Department of Building and Safety, the Fire Department, and any other relevant city departments, to determine compliance?
2. Were attachments submitted with the Report which give detailed information on the very cursory descriptions in their three-page report? We are specifically concerned about such topics as: the Playa Vista Educational Trust, Additional Transportation Improvements in the Del Rey Community, and the Mar Vista Neighborhood Traffic Management Plan. For example, how much money was given to each of the programs listed in the PV Educational Trust section? And whereas funding for schools are clearly for "educational" purposes, *why* are "youth programs" such as Westchester Family YMCA, Venice Marina Lions, LAPD Pacific Area Boosters, Boy Scout Troop 927, Westchester Lariats considered "educational" programs?
3. Why is methane monitoring and venting at Playa Vista not reported on in this annual report?

Traffic Impact

In order to get Phase 2 approved Playa Vista, LLC had to show through a traffic planning model how the increased traffic could be absorbed by neighborhood streets, including those running through Mar Vista and Venice. To our dismay, we have been informed

that PV, LLC secretly used in its traffic planning computer model 3 collector streets – Inglewood Boulevard, Beethoven Avenue, and Walgrove Avenue to absorb this increased traffic. These residential collector streets were not designed to handle as many cars as PV generates. For example, Walgrove is designed to carry about 200-300 cars/hour maximum. Traffic monitoring devices owned by the Mar Vista Community Council have registered traffic on Walgrove upwards to 1400 cars/hour at peak times currently. Beethoven Avenue is not supposed to have more than 400 cars/hour. Currently at peak hours there are 1,000 cars/hour. Further development at PV and the Marina area will only lead to even more unacceptable loads on our collector streets. (In addition, Centinela Boulevard is a major traffic artery and alternate to the freeway; it has also experienced a steady increase in traffic as development in the SM and PV areas surges)

Of course, we are aware that the surge in condominium building and related development in the Marina area have contributed significantly to this traffic increase – as well as the city of Santa Monica's business growth and Culver City's building of Costco on Washington Boulevard. Clearly, both the Departments of Planning and Transportation now need to be much more proactive during the PV development phases and find ways to create incentives for PV and other builders and business interests to adequately pay for the infrastructure improvements needed.

The quick and short of it is that this increase in traffic is unacceptable, and the one time \$150,000 provided by PV is insufficient to mitigate the increase in traffic as Phase 2 moves forward. In fact, a local traffic expert estimates that when Phase 2 is completed the currently deplorable traffic load in our area will be tripled!

Methane Monitoring and Venting

We have examined the files in the Department of Planning regarding methane gas monitoring and venting at the PV site. What we have found are contracts with companies to primarily monitor any escaping gas. Although a venting program was required under the Environmental Impact Report, there is very little evidence that such a plan exists. It is our understanding that there was an agreement between the City and PV to establish an outside, objective Taskforce to look at methane management at the PV site? Has a Taskforce been formed and, if so, what are there findings?

We note that the actual reports of PV monitoring and venting activities are not kept at Planning but instead are kept at the Fire Department and at the Department of Building and Safety – in two different locations in the City. This makes it very cumbersome for community residents, and we suspect for you in Planning, to monitor Playa Vista's compliance or non-compliance with respect to methane gas protections for residents and the surrounding community. This is very disturbing. We recommend that even the Department of Planning, keep copies of all records regarding PV compliance with EIR-mandates and other such requirements.

SEE Rosendahl's
comments to
the Meth. Task
Force.

Only 1 meeting has
occurred (1 meeting 2007) even
LADBS is still non-responsive
to questions posed ~~by~~ by the public +
data posed by public.

Lastly, we would like to know what it would take to open up the Playa Vista Development Agreement for Phase II again so that some of these issues can be responsibly addressed by this multi-billion dollar, 1,100 acre development?

Thank you for encouraging this input and thanks also to Meredith T. Elguira in the Department of Planning's Playa Vista/Airport Unit in assisting us in finding relevant reports/materials on the Playa Vista development.

Sincerely,

**Marianne P. Brown, Coordinator
On behalf of the
Ven-Mar Neighborhood Association (VMNA)**

PS: The VMNA runs from East to West from Centinela to Lincoln Avenues and North to South from the border with the City of Santa Monica to Washington Boulevard.

From: "Rushmore Cervantes" <Rushmore.Cervantes@lacity.org>
Subject: **Re: Fwd: PRA response and PV Report**
Date: October 1, 2007 9:53:37 AM PDT
To: "patriciamcpherson" <patriciamcpherson@earthlink.net>
Cc: "Rob Wilcox" <rob.wilcox@lacity.org>
Status: U
From: <Rushmore.Cervantes@lacity.org>
Received: from noehlo.host ([127.0.0.1]) by mx-jacana.atl.sa.earthlink.net (EarthLink SMTP Server) with SMTP id 1iCoBf5QY3NI34e1; Mon, 1 Oct 2007 12:58:29 -0400 (EDT)
Received: from cwmsmtppsp.lacity.org ([161.149.240.178]) by mx-jacana.atl.sa.earthlink.net (EarthLink SMTP Server) with SMTP id 1iCoBe27J3NI34e0 for <patriciamcpherson@earthlink.net>; Mon, 1 Oct 2007 12:58:28 -0400 (EDT)
Received: from unknown (HELO CWGWWDGW2.CI.LA.CA.US) ([161.149.252.210]) by cwmsmtppsp.lacity.org with ESMTP; 01 Oct 2007 09:54:46 -0700
Received: from GATEWAYS-MTA by CWGWWDGW2.CI.LA.CA.US with Novell_GroupWise; Mon, 01 Oct 2007 09:54:44 -0700
X-IP: 161.149.252.210
X-Envelope-Id: 1
X-Source: E=Sophos;i="4.21,217,1188802800"; d="scan'208,217"; a="89975526"
X-Message-Id: <4700C3A0.CEA2.0086.0@lacity.org>
X-Mailer: Novell GroupWise Internet Agent 7.0.2 HP
X-Original-To: <f7580ba9b9f1b4ca55184cb8440710a0@earthlink.net> <46FCD52F.C284.00BB.0@lacity.org>
X-Reply-To: <46FCD52F.C284.00BB.0@lacity.org>
X-Forwarded: 1.0
Content-Type: multipart/alternative; boundary="=_Part092F4201.0_="

X-Int-Received: spv=0;
X-Envelope: 0
X-Envelope: sbv=0; sbr=0; sbf=00; sbw=000;

Ms. McPherson,

In response to your inquiry dated September 15th, the Controller's Office will provide you any documents in our possession regarding the Playa Vista - Phase I Residential Development Project (Project) review, requested under the Public Records Act.

However the Controller will not respond to any further questions regarding the report, the Project or court rulings regarding the Project. The Controller stands behind the findings in the report.
Thank you.

>> From: patriciamcpherson <patriciamcpherson@earthlink.net>
>> Date: September 15, 2007 4:08:19 PM PDT
>> To: Rob Wilcox <rob.wilcox@lacity.org>
>> Subject: PRA response and PV Report

//

>> Mime-Version: 1.0 (Apple Message framework v624)

>> Content-Transfer-Encoding: 7bit

>> Message-Id:

<0197964b5fa9f354ea9302fa273272e0@earthlink.net>

>> Content-Type: text/plain; charset=US-ASCII; format=flowed

>>

>> Dear Rob,

>>

>> Thankyou, I received the response materials to my PRA of Sept,
5 2007

>> from your offices.

>>

>>

>> Could you please respond to a few questions that pertain to the

>> Controller's Office Report on Playa Vista and your response to

my

>> PRA?

>> Since, you do have the 2005 Appellate Court ruling in ETINA v

City of

>> LA and Playa Capital LLC (which you have sent me a 2nd copy)

which

>> states on Page 8 LEXIS:

>>

>> "Moreover, the decision by the city council to 'note and file' the

>> CLA report and adopt the recommended methane mitigation

measures

>> effectively was a decision to both adopt the CLA's findings stated

in

>> the report and modify the project by adopting the recommended

>> mitigation measures.We conclude that the city council's

>> decision to adopt the mitigation measures and proceed with the

>> project as modified by the mitigation measures involved the

exercise

>> of subjective judgment and was a discretionary approval.
>> We reject the argument by Playa Capital that the decision by the city council was not a discretionary approval because the Department of Building & Safety had already 'approved' the methane mitigation system in its letter of Jan. 31, 2001. The Department of Building and Safety was one of several public agencies whose recommendations the CLA considered in preparing its report, which was submitted to the city council for its approval. The approval by the city council is the operative approval because the city council was the final administrative decisionmaker."

>>

>>

>> PG. 6 n5 "'Approval' means the decision by a public agency which commits the agency to a definite course of action in regard to a project intended to be carried out by any person...."

>>

>>

>> could you please respond to the following:

>>

>> -This ruling contradicts the city's position that the 2001 CLA Report (Directives and PVMPDMP) was simply a note and file but was instead

>> APPROVED by the City Council and adopted for implementation. Does

>> the Controller's office acknowledge that the Appeal Court stated

>> that the "note and file" was indeed an APPROVAL of the 2001
CLA
>> Report/Directives/PVMPDMP by the city council?
>>
>> -Your response of Sept. 12, 2007 states, "The reference in our
report
>> to the guidelines established by the Chief Legislative Analyst
(CLA)
>> for methane mitigation at Playa Vista-Phase 1, is consistent with
the
>> terminology used by other parties relative to the project. For
>> example, see enclosed copy of DBS memo dated Oct. 19, 2001,
which was
>> previously provided as workpaper reference C-20-1."
>>
>> Has anyone from your office reviewed the Ordinance 91.7104.3.8
- the
>> the June 2001 CLA Report/Directives and Playa Vista Methane
>> Prevention Detection and Monitoring Program? You are
providing
>> memos as reference to the term "guidelines" for the Ordinance
>> 91.7104.3.8. Considering the Controller's office is utilizing the
>> term "guidelines" for mitigation measures that are Ordinance
>> measures, how does the Controller's office define the term
>> "guideline" as it applies to an Ordinance and in particular,
>> Ordinance 91.7104.3.8?
>>
>> The Controller's Playa Vista Report - only mentions one
Ordinance
>> number and that Ordinance number applies to the Citywide
Methane
>> Mitigation Measures and not the methane mitigation measures

for Playa

>> Vista Phase 1 which are under Ordinance 91.7104.3.8. Can you
>> explain why the Report utilizes and discusses the Citywide
Methane

>> Mitigation Ordinance rather than the Phase 1 Ordinance
91.7104.3.8

>> within the LA City Municipal Code?

>>

>> The Ordinance 91.7104.3.8 was written into the Municipal Code
during

>> a time frame that the City and Playa Capital were arguing, in
court,

>> that the 2001 CLA Report/Directives/PVMPDMP were "approved
by the

>> LADBS". The current language of the Ordinance still reflects this

>> incorrect statement. The 2005 Court of Appeal ruling cited above

>> reveals that the Court decided against the City's and Playa
Capital's

>> claim and thereafter established that the Ordinance was
approved by

>> the city council.

>>

>> If your office has not reviewed the 2005 Appeal Court decision,

>> please do. As we read the ruling, it establishes, contrary to DBS

>> memos, that the 2001 CLA Report/Directives/PVMPDMP are
requirements

>> and not "guidelines". The ruling goes into some detail regarding

>> requirements and roles that shall be performed. We believe it
helps

>> to clarify what the city and its departments are required to do.

>>

>> Thank you for your help in these matters,

>> Patricia McPherson, Grassroots Coalition/ ETINA

>>

>>

>>

>>

>>

Rushmore D. Cervantes
Chief Deputy Controller
Office of the Controller
200 N. Main Street, Suite 300

91.7104.3.8. Buildings Located in the First Phase Playa Vista Project. The First Phase Playa Vista project, as approved by the City on September 21, 1993 and December 8, 1995, shall comply with the methane mitigation program as required by the Department pursuant to the Methane Prevention, Detection and Monitoring Program approved by the Department on January 31, 2001, in lieu of the requirements of this division.

91.7104.4. Paved Areas. Paved areas that are over 5,000 square feet in area and within 15 feet of the exterior wall of a commercial, industrial, institutional or residential building, shall be vented in accordance with the Methane Mitigation Standards.

EXCEPTION: Paved areas located in the Methane Buffer Zone and which qualify for Site Design Levels I, II or III.

SEC. 91.7105. EXISTING BUILDINGS.

Additions, alterations, repairs, changes of use or changes of occupancy to existing buildings shall comply with the methane mitigation requirements of Sections 91.7104.1 and 91.7104.2, when required by Divisions 34, 81 or 82 of this Code.

Approved methane mitigation systems in existing buildings shall be maintained in accordance with Section 91.7106.

SEC. 91.7106. TESTING, MAINTENANCE AND SERVICE OF GAS-DETECTION AND MECHANICAL VENTILATION SYSTEMS.

All gas detection and mechanical ventilation systems shall be maintained and serviced in proper working condition and meet all requirements of the Electrical and Mechanical Code. The testing, maintenance and service procedure for each gas-detection and mechanical ventilation systems shall be performed in accordance with the manufacturer's current written instructions and the following:

A. Fire Department. The manufacturer's instructions shall be approved by the Fire Department. Testing and servicing of each system shall be performed by a person certified by the Fire Department.

B. Notification Placard. A permanent notification placard shall be posted and maintained at the front entrance of a building that is constructed with an Impervious Membrane, except in residential buildings. The placard shall indicate the presence of an Impervious Membrane.

SEC. 91.7107. EMERGENCY PROCEDURES.

With the exception of single-family dwellings, buildings required by this division to have a gas-detection system or sub-slab vent system shall, subject to Department approval, have established emergency procedures that include, but are not limited to, the following:

A. Assignment of a responsible person as designated by the director to work with the Fire Department in the development, establishment, implementation and maintenance of an emergency plan.

B. Conspicuous posting of the Fire Department's telephone number in areas designated by the Fire Department.

C. Conspicuous posting of emergency procedures approved by the Fire Department.

SEC. 91.7108. APPLICATION OF METHANE SEEPAGE REGULATIONS TO LOCATIONS OR AREAS OUTSIDE THE METHANE ZONE AND METHANE BUFFER ZONE BOUNDARIES.

Upon a determination by the Department of Building and Safety that a hazard may exist from methane in a geographical location or in an area outside the boundaries established in Section 91.7103 of this Code, the Department of Building and Safety and the Fire Department may enforce any or all of the requirements of Division 91 of this Code as required to preclude potential fire or explosion from methane concentration.

SEC. 91.7109. ADDITIONAL REMEDIAL MEASURES.

91.7109.1. General Remedial Measures. In the event the concentration of methane gas in any building located in a Methane Zone or Methane Buffer Zone reaches or exceeds

LA Municipal Code

#12

01/15/2007) Hazel Harris - PUBLIC RECORD ACT REQUEST

From: patriciamcpherson <patriciamcpherson@earthlink.net>
To: <ladsbs.custodianofrecords@lacity.org>
Date: 10/12/2007 5:01 PM
Subject: PUBLIC RECORD ACT REQUEST

ATTN Root
485 5237

TO: PLANNING DEPARTMENT
LA CITY FIRE DEPARTMENT
LA CITY BUILDING AND SAFETY

FROM: GRASSROOTS COALITION, Patricia McPherson

RE: PUBLIC RECORD ACT REQUEST (Gov. Code 6250-et seq.)

Please provide for viewing and/or copying any and all records regardless of form, including but not limited to letters, memoranda, telephone log entries, message receipts, notations of conversations, meeting notes, e-mail messages or other magnetic media, fax, reports, questionnaires, drafts, interdepartmental communications relating to the development of one or more training / testing program(s) regarding methane

- Please include any and all materials/ data bases -regardless of form or format- used to create a methane training/ testing program.
- Please include any and all documentation of the source of the materials, data used to create a methane training/ testing program.
- Please include any and all names and titles of City personnel involved in the creation of a methane training/ testing program.
- Please include any and all education background, training and field experience, resume of any and all City personnel that participated in any way with a methane testing/ training program.
- Please provide the names and titles of person(s) who prepared the test for Methane Deputy Inspectors.
- Please provide the resume/ field experience/ educational background in methane mitigation systems of person(s) that prepared the test for Methane Deputy Inspectors.
- Please provide " " " " " "

or are preparing the training program for Methane Deputy Inspectors.

- Please provide a copy of the test for qualifying as a Certified Methane Deputy Inspector.
- Please provide a copy of the training protocol for a Methane Deputy Inspector. Please provide the same for a Certified Methane Deputy Inspector

Thank you for your help with this request.
Grassroots Coalition, Patricia McPherson

LAFD
Provides
no
protocol,
curriculum,
for
training,
testing
for
LAOBS

#13 LAFD

BOARD OF FIRE COMMISSIONERS

GENETHIA HUDLEY-HAYES
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CASIMIRO U. TOLENTINO
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CITY OF LOS ANGELES

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ANTONIO R. VILLARAIGOSA
MAYOR

FIRE DEPARTMENT

DOUGLAS L. BARRY
FIRE CHIEF

200 NORTH MAIN STREET
LOS ANGELES, CA 90012

(213) 578-3800
fax: (213) 878-3815

www.lafd.org

October 30, 2007

Grassroots Coalition, Patricia McPherson
11924 W. Washington Blvd.
Los Angeles, CA 90066
FAX (310) 397-7965

Ms. McPherson,

This letter is in response to your CPRA dated October 12, 2007. Per the Office of the Fire Marshal, Deputy Chief Jimmy Hill our department does not have any of the records that are being requested in your letter. The Fire Department does not have personnel that are Methane Deputy Inspectors or a Certified Methane Deputy Inspector.

If you should have any further questions feel free to contact the Arson/Counter Terrorism Section at 213-485-6095.

Sincerely,

A handwritten signature in black ink, appearing to read "John P. Miller".

John P. Miller, Battalion Chief
Custodian of Records

13 LAFD

From: patriciamcpherson <patriciamcpherson@earthlink.net>
Subject: **public record act request**
Date: October 12, 2007 11:49:03 AM PDT
To: Teresa Abraham <Teresa.Abraham@LACity.org>
Cc: Hazel Harris <hazel.harris@lacity.org>
Content-Transfer-Encoding: 1.0 (Apple Message framework v624)
Content-Type: text/plain; charset=US-ASCII; format=flowed
Message-ID: <69ddf997a2ad6f9ad1bbaa134c71c5@earthlink.net>
Content-Disposition: inline; encoding: 7bit

TO: Custodian of Records, LADBS
FROM: Grassroots Coalition, Patricia McPherson 310 397 5779

RE: PUBLIC RECORD ACT REQUEST

-Please provide for review and copying any and all Deputy Inspector and Controlled Activity (including but not limited to Continuous Inspection) Inspector REGISTRATION , CERTIFICATIONS for the person(s) certified as Deputy Methane Inspectors , Controlled Activity -Methane Inspectors. Please provide the CERTIFICATIONS, RENEWAL OF CERTIFICATIONS of person(s) qualified by the City of LA (LADBS) as herein requested for the time frame of:
from 2000 through to the present.

- Please provide the same CERTIFICATION(S), REGISTRATION(S) of person(s) as requested above for METHANE INSPECTOR(S) that adhere to the requirements of any and/or part of and, any /or all of the City of LA Municipal Code under 1701.3 Duties and Responsibilities of the Registered Deputy Inspector, Special Inspections including but not limited to 1701.1 , 1701.2 Registered Deputy Inspector, 1701.17, 1701.17.1, 1701.17.2, 1701.3, 1701.17.3(Fees).

-Please include but not limit the request for Methane Inspector Certifications, Registrations for those person(s) examined and tested in 2007 - including but not limited to Methane Specialists personnel (and/or Methane Specialists subcontracted personnel).

Thank you for your help with this request,

Patricia McPherson, Grassroots Coalition

LADBS HAS NOT COMPLIED
with its ordinances regarding
certifications, registration
for methane deputy inspector.
Even now the newest certification
process cited in DBS' PRA response
ONLY includes methane Barriers
+ not the whole
system.
#13
DBS

**BOARD OF
BUILDING AND SAFETY
COMMISSIONERS**

**MARSHA L. BROWN
PRESIDENT**

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**CITY OF LOS ANGELES
CALIFORNIA**



**ANTONIO R. VILLARAIGOSA
MAYOR**

**DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012**

**ANDREW A. ADELMAN, P.E.
GENERAL MANAGER**

**RAYMOND CHAN
EXECUTIVE OFFICER**

November 5, 2007

**PR07-6244
PR07-6247**

Patricia McPherson
Grassroots Coalition
3749 Greenwood Ave.
Los Angeles, CA 90066

Re: Public Records Act Requests, dated October 12, 2007, for Various Records
Pertaining to Methane Inspection and Training

Dear Ms. McPherson:

This letter is in response to your Public Records Act Requests, dated October 12, 2007, wherein you requested various Los Angeles Department of Building and Safety (LADBS) records pertaining to methane inspectors and methane training.

In my first response, I indicated that "unusual circumstances" exist with respect to this request and that a determination concerning your request would be made on or before November 5, 2007. The research associated with this request has been completed.

← Recently the Department developed the classification of Deputy Methane Barrier Inspector. Candidates are tested and certified as are any other deputies in accordance with Chapter 17 of the Los Angeles Building Code. Under this program, only certified Deputy Methane Barrier Inspectors can inspect the installation and testing of methane barriers in the City of Los Angeles. Prior to that, LADBS accepted Request for Modifications on a job by job basis to allow an individual certified by a methane barrier manufacturer to inspect the installation and testing of the methane barrier for that job. LADBS maintains the Request for Modifications described above by property address and therefore is unable to conduct a search for records by modification type. Please confirm if you would like LADBS to perform research associated with a specific property address.

Fail
2007

OBS

We have located approximately 1351 pages of documents that may be responsive to your request. These documents will be made available to you to view and copy Monday through Friday from 7:30 a.m. to 4:30 p.m. in the office of the Custodian of Records. Please contact the Custodian of Records staff at (213) 482-6770 to schedule a time to view and copy these documents.

The charge for copying public records is \$1.00 per request (file or media type) and \$0.10 per page for pages of 8.5x14 inches or less, and \$1.00 per page for pages of 11x17 inches. Documents printed from microfilm (IDIS) are \$1.50 per page. Charges for copying records are in accordance with California Public Records Act Sections 6253(b), 6253.9(a)(2), and 6253.9(b); Los Angeles Municipal Code Section 98.0405, and Los Angeles Administrative Code Sections 12.40 and 19.44.

If I can be of further assistance please feel free to contact me at (213) 482-6766.

Sincerely,



Teresa Abraham
Custodian of Records

(C:\0 TEMP\PR07-5244 & 5247.wpd)

DBS

TO: CITY OF LOS ANGELES,
GOVERNMENT AND AUDIT COMMITTEE;
CITY CONTROLLER, LAURA CHICK
ATTN. ROB WILCOX

JULY 18, 2007

FROM: GRASSROOTS COALITION, PATRICIA MCPHERSON
11924 W WASHINGTON BLVD
LA, CA 90066

Grassroots Coalition (GC) has reviewed the “working papers” provided by Controller Chick’s Office and submits the comments herein. GC also concurs with the comments made by KNBC to the Controller’s Office regarding the Playa Vista audit.

GC submits the KNBC comments and the following comments to the City of Los Angeles’ Government and Audit Committee as a GRIEVANCE filing. GC requests responses to all comments- point by point made by KNBC and GC. GC further requests that GC and these comments be included in any and all City Hearings regarding the Playa Vista audit.

“Objective- To answer the overarching question—Have development activities at Playa Vista appropriately complied with established City regulations made specifically to ensure public safety in regards to methane gas mitigation. “...(audit papers A-5)

It is clear from the working papers of the audit that there is NO ENSURANCE OF PUBLIC SAFETY IN REGARDS TO METHANE GAS MITIGATION. The Controller herself has stated publicly in interviews done by KNBC that she could not vouch for the safety of the site and that the records of the site are mush.

“Scope of Audit: The audit will include all City related oversight activities related to development activities at Playa Vista Phase 1 during the period January 2001 through fieldwork completion.” (audit papers A-8-1,2)

The working papers do not include all City related oversight activities related to development activities a Playa Vista Phase 1... Please review comments made by KNBC regarding this matter. Additionally, the Controller’s Office failed to include LA City financing department oversight of the Playa Vista Project- in particular LA City documentation for any and all bonds utilized for Playa Vista and the attending disclosures made to utilize the bonds. For instance, the audit papers reveal virtually no information regarding the critically necessary 50’ vent wells and their ability to perform properly. The bond documents’ disclosures rely upon properly performing 50’ vent wells that would act as both a detection device-as an early warning system and, to vent the aquifer gases to prevent build-up of gases under the

#14

structures. No attention was given in the audit concerning the financial departments oversight to ensure that the disclosures are truthful.

LADBS Testimony

Grassroots Coalition Public Record Act requested and received “working papers” of the Controller’s Audit of Playa Vista. After lengthy review of the documents Grassroots’ c Working Papers at C-3-1 is an Inter-Departmental Correspondence dated 2/26/07 from LADBS, Chief Engineer Nicolino Delli Quadri to the Controller’s Office.

LADBS’ - Mr. Delli Quadri, according to his resume, obtained through Public Record Act Requests, has no methane mitigation expertise to provide any authoritative statements regarding the “Physical Project Attributes That Add to Occupant Safety” . Mr. Delli Quadri oversteps his expertise in this letter to the Controller’s Office when he provides statements of his opinion regarding methane hazards. Eg. “Low methane soil gas pressure was found at the Capri II site, representing a reduced risk that gases may suddenly rush into the homes.”

Mr. Delli Quadri provides no authoritative or scientific data for substantiation of his opinion. The Capri II site is located in an area designated as a highest level- Tier 3- for oilfield gas exposure. Thus, his “reduced risk” hypothesis is made contrary to the designation of the site as a highest level gas danger and the hypothesis is made with no scientific support.

Mr. Delli Quadri, while “confirming” (p.2) that, “ The engineer of record’s (Geokinetics)certification that ‘the gas mitigation improvements are functioning as intended and the house(s) can be safely occupied.’ LADBS allowed occupancy of the buildings only after all the methane mitigation system components were installed and inspected.”

What Mr. Delli Quadri omits from his letter to the Controller is the fact that LAFD oversight was discontinued- contrary to the city council approved 2001 CLA Report and Directives and the city ordinance 91.7104.3.8. Mr. Delli Quadri also omits that of the Capri II homes tested by Inspector Ng, there were numerous failures and dangerous installation problems cited by Inspector Ng. (Audit papers B4 –Oct. 31, 2006 Summary of Meeting)

Mr. Delli Quadri also oversteps his expertise in #4, p. 2, “A thickened floor slab with post-tensioned steel reinforcement, designed to close cracks in concrete, provides an additional barrier between the building interior and any possible methane gas intrusion.”

Mr. Delli Quadri cites no scientific authority for validity of this claim. It is alarming that an unsubstantiated claim such as this is made because 1) gases have been observed and documented migrating through concrete at sites of Playa Vista by KNBC, Grassroots Coalition and the developer’s own consulting firm Group Delta and, 2) Follow-up documentation of LADBS response to requests for studies to confirm these observations

have yielded a mischaracterization on the part of LADBS. LADBS, in a response to a Playa Vista consultant and at least one development owner, stated that the “annual report” by Taft would be the basis for a response to this issue. LADBS misrepresented Taft’s limited role at the Playa Vista site- that being to only report on the detection devices of the vent system and various connected blowers etc. (not the 50’ vent well system). LADBS knows that Taft does not perform gas testing emanating through the soils or concrete for its “annual report” and since LADBS requires a license for any gas testing done in this manner (Municipal Code 98.0503- Testing Agency For Methane (Laboratory and Field Testing), According to LADBS’ Public Record Act response for licenses for 98.0503, Taft does not have such a license. LADBS response to companies with such a license yields only one company with this license-GeoScience Analytical.

Mr. Delli Quadre provides what appears to be a slight of hand version of the truth that underplays the gas dangers when he states to the Controller’s Office, “To date LAFD records do not indicate a single incident of an alarm resulting from an identified methane gas intrusion into a building that was constructed and approved with a methane mitigation system.”

Mr. Delli Quadre cites no evidence to validate this conclusory statement. Records obtained by Grassroots through Public Record Act requests to LADBS and LAFD paint a different picture of what is occurring at Playa Vista. For instance, a Kleinfelder report dated June 30, 2003 states on page 4 of 6 that:
“-It was confirmed that methane concentrations at or above 15% LEL triggered a low alarm. The central station was alerted and the building ventilation was activated.”
“-It was confirmed that methane concentrations at or above 25% LEL triggered a high alarm. The central station was alerted, the building horn/strobes was activated, and the building ventilation was activated.”
“-The system alarm registered the occurrence of 3 alarm conditions in the building sensors during the previous 12 months; 2 low alarms and 1 high alarm. No explanation for alarm conditions (actual or false positives) was provided.”

It has been the experience of Grassroots Coalition during visits to Playa Vista during gas alarm incidents, that the LAFD fire trucks that arrive on-scene do not carry gas detection equipment. In fact, during the first Public Methane Gas Task Force Meeting in early 2007 the LAFD representative confirmed that LAFD has no data or information to confirm the methane alarms have been triggered through actual methane intrusion or false positives.

A further note regarding Mr. Delli Quadre- during a fairly recent meeting between himself and Grassroots Coalition representatives, including myself, he stated that Capri 1 homes was tested for gas by Exploration Technologies Inc. –the city’s peer reviewer- in 2001. He stated that in 2001 only low volumes of gas were discovered therefore, today there is no need for the detection devices and there are no detection devices at Capri I. (The Capri I site was part of the audit review)

Mr. Delli Quadre's conclusion regarding the lack of need for detection devices at Capri I contradicts LADBS' own acknowledgement that gas can be highly migratory and transient, thus with the potential for change through time.

Granted LADBS has stated that it has no expertise in the environmental aspects of gas migration (12/3/'99 LADBS-Andrew Adelman letter to Councilman Pacheco- Chair of Housing/ Community Redev. Comm.) and gas mitigation measures (audit testimonies by LADBS) but, LADBS has acknowledged that, " gas can be highly migratory and transient"(Jan. 19, 1999 DBS letter to Playa Capital- Methane Ctrl File-7). Furthermore, Kleinfelder, one of the lead consulting companies employed by Playa Capital, has made similar acknowledgements in a report regarding soil gas conditions and detection devices at Playa Vista. In a methane detection system report dated June 30, 2003 pertaining to Fountain Park Apartments- Kleinfelder states on pg. 5 of 6 under "Limitations" that, " This report should be used only within a reasonable time from its issuance. Land use, site conditions (both on-site and off-site) or other factors may change over time, and additional work may be required with the passage of time."

Inspector Ng's testimony before the auditors (audit B-Memo of TC Conversations) cites his discussion of the "characteristics of methane gas and the fact that it is migratory meaning that it has the capability to move from location to location, including a level 1 area, such as Lee Court Homes 1." (Capri Court Homes 1)

Given these acknowledgements that serve as warnings of potential changes in gas levels and given that the CLA Report and the Playa Vista Phase I Ordinance- 91.7104.3.8 require ALL BUILDINGS in Phase 1 to have gas detection devices, it would appear that LADBS is not only stepping outside its legal boundaries as a 'ministerial' department (having jurisdiction to enforce pre-existing local and state laws) but that LADBS is stepping outside any common sense.

LA BUILDING CODE Sec. 98.0403.1 POWERS OF THE DEPARTMENT AND THE BOARD (audit papers C-32)

50' Vent Wells-

"Further, LADBS agrees with ETI's position that 'Building in Level III areas is contingent upon a functional subsurface venting system....' This subsurface venting system is currently in the progressive research and design stages being conducted by Playa Capital consultants in consultation with ETI." Jan. 31, 2001 LADBS letter, Attachment 11 of the 2001 CLA Report.

Mr. Delli Quadri is on record, before the City Council during the 2004 Citywide Methane Code Hearing, as having stated that the 50' vent wells do not work in a high water table because they clog and fill with silt and water. (The Playa Vista site is well known for its high water table and daily tidal flux movements.) Grassroots provided the testimony to KNBC after having Public Record Requested the video tape of the hearing from the city.

The KNBC series Burning Questions contains the portion of the hearing wherein Mr. Delli Quadri makes this statement to the Council in response to Councilwoman Miscikowski's queries regarding the 50' vent well performance at Playa Vista.

Since the 2004 Citywide Methane Code Hearing (and contrary to the testimony given by Delli Quadri at this hearing), the city attorneys – in briefs on the ETINA v City of LA and the city departments and Playa Capital paid consultants- in the new 2007 CLA Report (recently approved by the City Council) state that the 50' vent wells work as planned to provide the safety as promised in the 2001 CLA Report. However, as evidenced by the audit, there is no performance data, no testing data and, no complete set of data for any Playa Vista Phase 1 site as required by the 2001 CLA Report.

According to a Councilman Rosendahl staffer, during a recent tour given by the head of Playa Vista construction, to Assemblypersons Price's and Liu's staffers (within whose districts lies Playa Vista) and staff from Councilman Rosendahl's Office (the Councilman whose district contains Playa Vista) - Playa Vista's head of construction acknowledged that the 50' vent wells of Phase 1 do not work.

It is also important to note that within the audit "workpapers" but not mentioned, was the Exploration Technologies Inc. report- Still Workin On It (audit working papers C-30) the report acknowledges the failure of the pilot vent well system- (the 50' deep well system) The City's and Playa Capital's legal representation have continually stated that the 'pilot vent well system was successful". Indeed, it is the City's and Playa Capital's legal briefs that state the success regarding the pilot vent well system that provides the basis for the Appellate Court's determination in ETINA v City of LA, Playa Capital LLC – "The CLA reported that Camp Dresser & McGee Inc., an environmental consultant hired by Playa Capital, implemented a pilot program by installing more than 70 temporary vent wells designed for Level III methane remediation, and that the program was successful.' And, "Petitioners' discussion of the difficulties and uncertainties of methane mitigation fails to show an absence of substantial evidence to support the city's finding." (pgs.21-22)

The ETI summary entitled Still Workin On It was not a part of the SEIR record because despite attempts by plaintiffs to utilize its findings, the City and Playa Capital fought to keep it out of the record on the grounds that it was created post the record's legal time frame to include it. Thus, the Appellate Court (no court) ever reviewed ETI's –Still Workin On It which clearly states the failure of the (experimental) pilot vent well system as well as problems with other parts of the methane mitigation system .

This is important not only because the critical and experimental 50' deep vent wells haven't perform as planned but also because the City and Playa Capital continue to state that the 50' vent wells and indeed all of the methane mitigation systems are above scrutiny by the CLA or a SEIR because the Appellate Court impliedly found that the methane mitigation systems worked according to the City's language to that effect

regarding the pilot vent well system.

Grassroots Coalition has Public Record Act requested the performance data for the 50' vent wells along with numerous other questions pertaining to the 50' vent wells and received the response from LADBS that there is no data responsive to the Grassroots' request.

The Playa Vista site was allowed to move ahead due to the conclusion that the "mitigation measures were adequate for the Playa Vista Development site", (Executive Summary- 2001 CLA Report) and because of this conclusion bonds were released and utilized under authorization and approval by the City Council. The findings of the audit along with the variously sourced acknowledgements of lack of data and failure of the 50' vent well system and other required systems, clearly reveal that a full investigation into the safety of the methane mitigation systems, performed independently and outside of both Playa Capital and City influence is warranted.

Deputy Inspector Protocol-

The audit on page 5, bullet 1 states, " DBS inspectors must ensure that systems have been installed according to the stated building plans; however, we noted that DBS relied on non-City engineers, consultants and Deputy Inspectors to assure that the systems were operational. We also noted that the City has no certification program for Deputy Methane Inspectors; instead, DBS required the manufacturers of the methane systems to certify the deputy methane inspectors."

The auditors findings on this topic, placed side by side with the audit's Spreadsheets which contain incomplete data or lack of data reveal that it is impossible to provide the audit's conclusory assurance that, " Based on our review, we found that the required inspections, testing and approvals related to the installation of methane mitigation systems were performed for multi-family dwellings"(pg. 2) or any other dwellings or commercial structures. Therefore any assurance of safety provided by the Phase I site methane mitigation measures having been implemented, tested or operational is not factually based.

Furthermore, DBS acted contrary to City Codes when it allowed Deputy Inspectors to not be in compliance with long standing Deputy Inspector protocol.

While the auditors state that there is no certification program for Deputy Methane Inspectors, what the Controller's Office omits is that the City does have City Code requirements for Special Inspections (1701.1) and, 1701.2 Registered Deputy Inspector wherein, " A committee appointed by the superintendent of building shall examine each applicant as to his or her experience and training for performing the duties of an inspector of the type for which application has been made." And, 1701.3 Duties and Responsibilities of the Registered Deputy Inspector.

Certificate of “Registration” protocol (1701.17.1) for Controlled Activity Inspection Authority(1701.17) and “Duties” 1701.17.2 which are set forth also under Deputy Inspectors (1701.2 Registration & 1701.3 Duties) under the California Building Code and the City of Los Angeles Building Code.

“1701.17.3 Fees. The procedures for the examination, registration and renewal of authority as a controlled activity inspector shall be the same as specified for deputy inspectors under Section 1701.3 of this code.”

Clearly, state and city codes provide for registration, examination and other requirements set forth for structural welding inspectors, concrete inspectors, reinforced masonry inspectors and soils/grading inspectors. LADBS’ failure to extend these long standing code principles and requirements of knowledge regarding the type of work to be inspected- to methane inspectors, makes no sense and may be in violation of –at least- the spirit and intention of City and State Building Codes

Please respond to all comments, point by point, made by both GC and KNBC.

Sincerely,
Grassroots Coalition, Patricia McPherson



OFFICE OF
CONTROLLER

LAURA N. CHICK
CONTROLLER

200 N. MAIN STREET
ROOM 300
LOS ANGELES 90012
(213) 978-7200

DATE: July 25, 2007

TO: Frank Snepp, KNBC

FROM: Laura N. Chick, City Controller

SUBJECT: REVIEW OF PLAYA VISTA

My review of the City's oversight responsibilities for the Playa Vista Phase I Residential Development Project found serious issues that must be addressed by the City Departments involved and by the Mayor and City Council.

My report found significant problems including inadequate guidelines, lack of co-ordination, unclear responsibilities and shoddy record keeping. I have called for immediate action to address these serious issues.

It is unfortunate that a sentence in the report, "...nothing came to our attention to indicate that required inspections relating to methane mitigation, or the project as a whole, were not performed," has been used to negate the deep flaws that we found in the City's oversight of the project.

Again, I repeat, I regret that sentence, and if I could go backwards, I would not include it in the report. It was a negative assurance which was not a finding of fact. Those who misuse this sentence to vindicate their own point of view, have moved beyond the critical findings and recommendations of this report.

#15





BILL ROSENDAHL

City of Los Angeles
Councilman, Eleventh District

February 22, 2007

Hon. Ed Reyes, Chair
Planning and Land Use Committee
200 N. Spring Street, Room 410
Los Angeles, CA 90012

Re: File 05-2696 – Report from CLA relative to compliance with a writ of mandate in Environmentalism Through Inspiration and Non-Violent Action (ETINA), et al. v. City of Los Angeles, Playa Vista Capital Company, LLC, et al., LASC Case No. BS073182.

Dear Councilmember Reyes:

On January 11, 2006, when we considered this matter in Council, I urged preparation of a Subsequent EIR or Supplemental EIR under CEQA to comply with the Court's Writ of Mandate. Instead, the Council directed the CLA to conduct a peer review process with two public hearings. Today, you consider the resulting CLA report.

Over the past year, I have made every effort to work constructively with the CLA, the City Attorney, department staff, my constituents and other interested parties, to make the peer review process more open, transparent and thorough. Unfortunately, the structure of the peer review process was inherently flawed; its scope of review was too narrow, too technical, and too legalistic.

The City of Los Angeles and Playa Vista residents need absolute assurance that all questions of public health and safety have been adequately resolved. These are the concerns that I understood to underlie the Court's decision against our City. After reviewing the CLA report and ETINA's reply letter to Council, I feel the peer review process failed to do that.

Therefore, I reiterate my support for conducting a Subsequent EIR or Supplemental EIR under CEQA. This is the best way to determine with finality the impact of dewatering on the methane mitigation system at Playa Vista, and to comply with CEQA as ordered by the Court.

Respectfully,

BILL ROSENDAHL
Councilmember, 11th District

cc: Hon. Jose Huizar
Hon. Jack Weiss

Westchester Office
7166 W. Manchester Boulevard
Westchester, CA 90045
(310) 568-8772
(310) 410-3946 Fax

City Hall
200 N. Spring Street, Room 415
Los Angeles, CA 90012
(213) 473-7011
(213) 473-6926 Fax

West Los Angeles Office
1645 Corinth Avenue, Room 201
Los Angeles, CA 90025
(310) 575-8461
(310) 575-8305 Fax

#16



OFFICE OF
CONTROLLER

LAURA N. CHICK
CONTROLLER

200 N. MAIN STREET, RM 300
LOS ANGELES 90012
(213) 878-7200
www.lacity.org/ctr

August 7, 2007

S. Gail Goldberg, Director of Planning
City Planning Department
Room 525, City Hall
200 N. Main Street
Los Angeles, CA 90012

*Status of
Response to
Chick*

**Subject: EVALUATION OF JOINT RESPONSE TO CONTROLLER'S REVIEW OF
THE CITY'S OVERSIGHT OF PLAYA VISTA - PHASE I DEVELOPMENT**

My Audit Division evaluated your response, prepared jointly with the Department of Building and Safety and Fire Department and dated July 30, 2007, to the report entitled "City's Oversight of Playa Vista Phase I Development." I accept some of the planned actions. Your response, however, does not recognize the seriousness of the issues identified and urgency needed to resolve them and affect change prior to the start of Phase II. Please see the evaluation of each response listed below.

Recommendations

1. *Mayor and City Council should direct participating Departments to establish an agreed-upon set of guidelines which clearly define methane mitigation requirements for both multi-family and single-family homes in Playa Vista Phase II.*

Your response indicates that you will update previously established written agreements to better delineate responsibilities and clearly define methane mitigation requirements for both multi-family and single-family homes.

The clarity of the guidelines and respective departmental responsibilities are critical to the overall success of the Playa Vista project. I strongly encourage you to use this opportunity to learn from the ambiguity and differences of opinion that surrounded Playa Vista Phase I guidelines, and proactively establish clearly defined requirements and

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oversight protocols for all remaining development at Playa Vista. In addition, while your departments should appropriately take the lead on this issue, it is imperative that the Council and Mayor formally adopt such guidelines and protocols.

- 2. Ensure that guidelines do not conflict with any City ordinances, administrative codes or laws.*

Your response indicates that you will re-examine the methane guidelines to ensure there are no conflicts with any City ordinances, administrative codes or laws, which is appropriate. This recommendation, however, was made to address the new, revised guidelines that I believe are necessary to clarify City oversight responsibilities at Playa Vista.

- 3. Request that the City Council adopt the guidelines.*

Your response indicates that Council codified the current citywide methane mitigation guidelines on February 4, 2004. This implies that Phase II would be subject to only this citywide ordinance, rather than any additional or revised guidelines as advised in Recommendation 1 of the report.

The Playa Vista Phase II EIR states that methane mitigation systems for each building will be based on *either* the Village at Playa Vista Building Methane Guidelines or the current City Methane Ordinance. At the initiation of the project, there should be a definitive agreement as to which of these guidelines, including additional clarification or specifications for this project, are to be used, along with concurrence by participating Departments and approval by the City Council and Mayor.

- 4. The Mayor and City Council should designate a City Department which has the responsibility, expertise and authority to lead the Playa Vista Phase II project.*

Your response indicates that the Phase II EIR requires a Mitigation, Monitoring and Reporting Program (MMRP) that specifies the applicable project enforcement and monitoring agencies. You also state that an annual evaluation by the Department of Planning is required to determine compliance with the terms and conditions of the Phase II EIR.

These actions were also in place during Playa Vista Phase I. Your response does not indicate how you intend to correct the deficiencies identified during the review. Our review noted that the Planning Department's role as CEQA monitor lacked authority to hold approval of certificates of occupancy, or enforce compliance. Absent strong leadership over a project of this magnitude, varying inter-departmental interpretations of guidelines cannot be effectively resolved. I reiterate the need for the Mayor and Council to designate and provide necessary authority to a City department to ensure compliance with the guidelines.

S. Gail Goldberg
August 7, 2007
Page 3 of 4

- 5. Mayor and Council should more clearly define the roles, responsibilities and jurisdictional authority of DBS and LAFD regarding the standards pertaining to the installation, inspection and testing of methane systems for all structures at Playa Vista.*

Your response indicates that DBS and LAFD are establishing clear written agreements for reviewing, approving and inspecting methane systems as well as defining roles, responsibilities and jurisdictional authority, which is appropriate.

Such inter-departmental procedural agreements must be based on clearly defined requirements that have been approved by the Mayor and Council, which was not the case for Phase I.

- 6. DBS and LAFD management should require more formalized methane training for all staff with oversight responsibilities over inspection and approval of methane systems, and develop a certification program for Deputy Inspectors and others who perform methane-related inspections and testing on behalf of the City.*

Your response indicates that LAFD is implementing a methane acceptance testing certification program and that all active systems will be acceptance tested by LAFD inspectors or certified testers.

During the Phase I review, LAFD indicated that certified testers would conduct maintenance testing subsequent to the initial acceptance of a newly installed mitigation system by LAFD, and that only an LAFD inspector could conduct the initial acceptance test. Your action plan must clarify your intent to certify all acceptance testers, to ensure the City's oversight responsibility for acceptance testing will not be eliminated.

Your response indicates that formal training will be provided for DBS inspection staff by LAFD. DBS inspectors should also obtain necessary training from other methane experts, including engineers with experience designing and installing passive methane mitigation systems.

You also indicate that DBS will establish a Deputy Inspector program to monitor the installation of the methane membrane barrier, which is appropriate.

- 7. DBS management should improve internal record-keeping procedures to ensure the approval of open permits prior to the issuance of certificates of occupancy.*

Your response indicates that the process of implementing a similar recommendation from a prior audit have been on-going, which is appropriate.

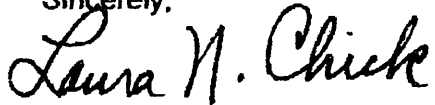
Many of the recommendations were also addressed to the Mayor and City Council. Due to the significance of the Playa Vista project, and my concern that City agencies

S. Gail Goldberg
August 7, 2007
Page 4 of 4

must have clear lines of authority and better coordinate their actions to ensure proper oversight, I strongly encourage you to work with elected officials to ensure timely adoption of these important actions by the City's governing body.

My staff may follow up in the future on the status of these recommendations. If you have any questions or comments, please contact Farid Saffar, Director of Auditing, at (213) 978-7392.

Sincerely,



LAURA N. CHICK
City Controller

cc: Sally Choi, Deputy Mayor, Office of Mayor Antonio Villaraigosa
✓ Jane Ellison Usher, President, City Planning Commission
Andrew A. Adelman, General Manager, Department of Building and Safety
Douglas L. Barry, Interim Fire Chief, Los Angeles Fire Department

*Liability / Holden
begin*

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CITY COUNCIL OF THE
CITY OF LOS ANGELES, CALIFORNIA

ALEX PADILLA, COUNCIL PRESIDENT

*POST June 12, 2001
CLA APPROVAL
By City Council*

REPORTER'S TRANSCRIPT OF PROCEEDINGS

AS TO SELECTED AGENDA ITEM: #26

Tuesday, July 10, 2001

*Holden cites city liability
for City's Mello Roos
(infrastructure property)
property owned by
City at Playa Vista.*

NEWLANDER & NEWLANDER

1138 WILSHIRE BOULEVARD, SUITE 200

LOS ANGELES, CALIFORNIA 90017

TELEPHONE: (213) 482-1522

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C

Ms Pfann

liable for that. However, what happened before the Mello-Roos bond financing was approved was that an extensive study that was conducted under the supervision of the CLA, which did studies into the safety of the project, and the project has been approved by the Department of Building and Safety as being a safe location to live on. And so it's --

Although we can't predict the future, we can't guaranty what will happen, it's the opinion of the City staff that it is safe to live and construct buildings provided the mitigation measures described in that report were imposed.

COUNCILMAN HOLDEN: All right. The --

COUNCILMAN PADILLA: Mr. Holden.

COUNCILMAN HOLDEN: -- from the committee has been made that this should be received and filed. I just wanted to make a record that, notwithstanding the recommendation of the committee, this still could be a problem for the City of Los Angeles in terms of lawsuits.

For the first time you've informed the Council that we would be responsible or liable for the property that we own --

(End Tape Side A; Start Tape Side B.)

COUNCILMAN HOLDEN: -- structure. The argument can be made that some of the methane gas migrated from

1 that area which was not mitigated into their own
2 property, which caused them some problems. And the
3 lawsuits will go on and continue.

4 Also I mentioned that the developer could be
5 well -- well out of business, defunct at that time -- and
6 I've seen that happen from time to time -- and we're the
only deep pocket left, and they can come back and sue us.
What you've done in a hurry to go on to approve this
project -- and you've done it over and over again
continuously -- I've got to tell you, Ms. Galanter, we'll
be long gone, but the taxpayers are going to have to pay
no matter how severe the problem that they claim that
they're going to have for the people who live in that
project. You can receive and file. That's all you can
do. You can't redo anything you've done that's harm

COUNCILMAN PADILLA: Thank you very much. The
chair recognizes Ms. Galanter.

She passes. The item is now before us.

Clerk, please open the role. Close the role.

Tabulate the vote.

THE CLERK: 13 ayes.

COUNCILMAN PADILLA: That item is received and
filed. Next item, please.

(Proceedings on this agenda item concluded.)

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File Number

02-1508

Last Changed Date

8/21/2003

Title

PLAYA VISTA PROJECT / COMMUNITY FACILITIES DISTRICT NO. FOUR

Initiated By

City Administrative Officer 0670-00024-0001

Subject

Transmittal from City Administrative Officer relative to resolution and other actions necessary to levy special taxes in Fiscal Year 2002-2003 for the Playa Vista Project - Community Facilities District No. Four (4).
REFER TO COUNCIL FILE 99-0385

Council District

11

Date Received

7/12/2002

File History

7-12-02 - For ref

7-15-02 - Ref to Budget and Finance Committee

7-16-02 - File to Budget and Finance Committee Clerk

7-19-02 - File to Pacheco for signature per Budget and Finance Committee Clerk

7-24-02 - Budget and Finance Committee report ADOPTED to:

1. PRESENT and ADOPT the ORDINANCE establishing the Special Tax amounts to be levied on parcels within the City of Los Angeles Community Facilities District No. Four (4) (Playa Vista-Phase I) for Fiscal Year 2002-2003.

2. ADOPT the accompanying RESOLUTION approving the execution and delivery of an infrastructure Funding Agreement and a Fiscal Agent Agreement, and AUTHORIZING the issuance of a Promissory Note and other matters related thereto.

3. APPOINT State Street Bank as the Fiscal Agent and AUTHORIZE the City Administrative Officer (CAO) to negotiate and execute the necessary agreement - Resolution ADOPTED - Findings ADOPTED (see attached motion) - Ordinance OVER ONE WEEK TO July 31, 2002

7-24-02 - Verbal Motion - Garcetti Mover 2002 / Miscikowski - ADOPTED - HEREBY MOVE that Council make the following Finding in connection with the Budget and Finance Committee report (Item No. 5, Council File 02-1508) relative to levy of special taxes for the Playa Vista Project - Community Facilities District No. Four (4):

FIND that this action is exempt under State California Environmental Quality Act guidelines 15378(a) and 15352 and Public Resources Section 21065

7-31-02 - Ordinance ADOPTED establishing the Special Tax amounts to be levied on parcels within the City of Los Angeles Community Facilities District No. Four (4) (Playa Vista-Phase I) for Fiscal Year 2002-2003

8-2-02 - File to Mayor for signature

8-9-02 - File to Calendar Clerk

8-15-02 - File to Budget and Finance Committee Clerk OK

8-16-02 - File in files

11-13-02 - For ref - Transmittal from the City Administrative Officer 0670-00024-0001 relative to adoption of an ordinance creating a special fund for the deposit of Special Tax Revenues collected from Communities Facilities District No. 4.

11-15-02 - Ref to Budget and Finance Committee

11-15-02 - File to Budget and Finance Committee Clerk

11-19-02 - Verbal Motion - Perry Mover 2002 / Zine - ADOPTED - HEREBY MOVE that Council ADOPT the recommendation as submitted by the City Administrative Officer on today's Council agenda (Item No. 20; Council File 02-1508), and waived by the Budget and Finance Committee, relative to the creation of a Special Fund for the deposit of special tax revenues collected from Community Facilities District No. 4, as follows, SUBJECT TO THE APPROVAL OF THE MAYOR:

PRESENT and ADOPT the accompanying ORDINANCE amending Section 5.115.8.1 of the Los Angeles Administrative Code to create a special fund for the receipt of special tax proceeds for Community Facilities District No. 4 (Playa Vista - Phase 1) - Ordinance over one week to November 26, 2002.

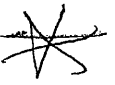
11-26-02 - Ordinance ADOPTED amending Section 5.115.8.1 of the Los Angeles Administrative Code to create a special fund for the receipt of Special Tax Proceeds for Community Facilities District No. 4 (Playa Vista - Phase 1).

11-26-02 - File to the Mayor for signature FORTHWITH

11-27-02 - File to Calendar Clerk

12-4-02 - File in files

2-27-03 - For ref - Transmittal from City Administrative Officer 0670-00024-0001 relative to Resolution and the Preliminary Official Statement which is the disclosure document for the Mello-Roos bonds to be issued on behalf of Playa Vista Community Facilities District No. 4, as well as related consultant contracts.



2-27-03 - Ref to Budget and Finance Committee

2-28-03 - File to Budget and Finance Committee Clerk

3-5-03 - Verbal Motion - Pacheco Mover 2003 / Weiss - ADOPTED - HEREBY MOVE that Council ADOPT the following recommendations of the City Administrative Officer (Item No. 39, Council File 02-1508) relative to Playa Vista Project Community Facilities District (CFD) No. 4, SUBJECT TO THE APPROVAL OF THE MAYOR:

1. FIND that this action is Categorically Exempt from California Environmental Quality Act (CEQA) under the City of Los Angeles Guidelines, Article II, Section 2 (l), which applies to any activity such as the approval of contracts, allocation of funds, etc., for which the underlying project has been previously evaluated for environmental significance and processed in accordance with the City's California Environmental Quality Act (CEQA) Guidelines.

cont'd
CIA
*

2. ADOPT the accompanying RESOLUTION approving the content and distribution of the Preliminary Official Statement for the City of Los Angeles Community Facilities District (CFD) No. 4 (Playa Vista - Phase I).

3. AUTHORIZE the replacement of Universal Appraisal Consultants with Mason and Mason Real Estate Appraisers and Consultants, for appraisal review services for the entire Playa Vista Project, Community Facilities District (CFD) No. 4, Community Facilities District (CFD) No. 5, Community Facilities District (CFD) No. 6, and AUTHORIZE the City Administrative Officer (CAO) to negotiate and execute the necessary agreements.

4. AUTHORIZE the replacement of The Chapman Company with Backstrom McCarley Berry & Co., LLC, as the City's Co-Financial Advisor for Community Facilities District No. 4, and AUTHORIZE the City Administrative Officer to negotiate and execute the necessary agreements.

5. AUTHORIZE the replacement of State Street Bank with US Bank National Association as the Trustee for Community Facilities District No. 4, and AUTHORIZE the City Administrative Officer to negotiate and execute the necessary agreements - (Budget and Finance Committee waived consideration of the above matter).

3-6-03 - File to the Mayor FORTHWITH

3-10-03 - Mayor's message concurred in action of March 5, 2003

3-11-03 - File to Calendar Clerk

3-12-03 - File to Budget and Finance Committee Clerk OK

3-12-03 - File in files

7-8-03 - For ref - Transmittal from City Attorney R03-0317 relative to Ordinance establishing the special tax levy on parcels in Community Facilities District No. 4 (Playa Vista - Phase 1) for Fiscal Year 2003-2004.

7-9-03 - Ref to Budget and Finance Committee

7-9-03 - File to Budget and Finance Committee Clerk

7-30-03 - Budget and Finance Committee report ADOPTED to PRESENT and ADOPT the accompanying Ordinance establishing the special tax amounts to be levied on parcels within Community Facilities District No. 4 (Playa Vista - Phase 1) for Fiscal Year 2003-2004 - Ordinance ADOPTED

8-5-03 - File to Mayor for signature

8-15-03 - File to Calendar Clerk

8-20-03 - File to Budget and Finance Committee Clerk OK

8-21-03 - File in files

ORD

174739 (Adopted 7-31-02; Effective 9-14-02)

174987 (Adopted 11-26-02; Effective 12-30-02)

175400 (Adopted 7-30-03; Effective 9-24-03)

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January 31, 2001

Mr. David Hsu
Chief, Grading Section
City of Los Angeles
Dept. of Building and Safety
201 North Figueroa Street
Los Angeles, CA 90012-2827

Dear David:

We have reviewed the proposed plan for the methane prevention, detection and monitoring systems from Methane Specialist and CDM, as defined in their report of January 30th, 2001 and outlined by their matrix table "METHANE SYSTEM REQUIREMENTS," and find that the proposed systems meet our recommendations, provided that the systems meet, or exceed all detail specifications as required by Department of Building and Safety.

One of the proposed methane prevention systems, the subsurface venting for the Level III areas which overlay the methane soil gas anomalies, is currently in the research and design stages. The subsurface venting system, which primarily targets the 50-foot gravel aquifer, provides a necessary level of protection, supplementing the building systems, for development of the Level III areas. Building in Level III areas is contingent upon a functional subsurface venting system to the satisfaction of the Department of Building and Safety in consultation with the peer review team.

If you have any questions or require additional information, please contact me.

Sincerely,
Exploration Technologies, Inc.

Victor T. Jones, III, Ph.D.
Peer Reviewer for LADBS
President, Exploration Technologies, Inc.

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BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

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DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

ANDREW A. ADELMAN
GENERAL MANAGER
WALTER R. KRUKOW
EXECUTIVE OFFICER

January 31, 2001

ATTACHMENT 11

Mr. David Nelson
Senior Vice President
Playa Capital Company
12555 West Jefferson Boulevard, #300
Los Angeles, California 90066

<u>CURRENT REFERENCE REPORT/LETTERS</u>	<u>REPORT NO.</u>	<u>DATES(S) OF DOCUMENT</u>	<u>PREPARED BY</u>
Review Letter	-	1/31/01	ETI
Methane Report	-	1/30/01	Methane Specialists

The referenced review letter and methane report concerning an evaluation of the methane found at the Playa Vista site soil have been received by the Grading Section of the Department of Building and Safety. The purpose of the methane report was to provide recommendations for methane mitigation and monitoring at the Playa Vista site. The conclusions and data of the report were reviewed by the Peer Reviewer, Exploration Technologies Inc., who concluded that the proposed systems meet their recommendations, provided that the systems meet or exceed all detailed specifications as required by LADBS.

LADBS reviewed and agrees with ETI's conclusion that the proposed methane prevention, detection and monitoring systems for the Playa Vista project are adequate for safe development.

Further, LADBS agrees with ETI's position that "Building in Level III areas is contingent upon a functional subsurface venting system...." This subsurface venting system is currently in the progressive research and design stages being conducted by Playa Capital consultants in consultation with ETI.

DAVID HSU
Chief of Grading Section

(213) 977-6329

cc: Exploration Technologies, Inc.
Methane Specialists

D



State with OKD ()

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ANGELES AUTHORIZING THE ISSUANCE OF NOT TO EXCEED \$135,000,000 AGGREGATE PRINCIPAL AMOUNT OF CITY OF LOS ANGELES COMMUNITY FACILITIES DISTRICT NO. 4 (PLAYA VISTA-PHASE 1) SPECIAL TAX BONDS, SERIES 2000, APPROVING THE EXECUTION AND DELIVERY OF AN INDENTURE, AN INFRASTRUCTURE FUNDING AGREEMENT, A BOND PURCHASE AGREEMENT AND A CONTINUING DISCLOSURE AGREEMENT AND THE PREPARATION OF AN OFFICIAL STATEMENT AND OTHER MATTERS RELATED THERETO

WHEREAS, the City Council (the "City Council") of The City of Los Angeles (the "City") has formed the City of Los Angeles Community Facilities District No. 4 (Playa Vista-Phase 1) (the "Community Facilities District") under the provisions of the Mello-Roos Community Facilities District Act of 1982 (the "Act");

WHEREAS, the City Council, as the legislative body of the Community Facilities District, is authorized under the Act to levy special taxes on property within the Community Facilities District (the "Special Taxes") to pay for the costs of certain facilities (the "Facilities") and to authorize the issuance of bonds secured by the Special Taxes under the Act;

WHEREAS, in order to provide funds to finance the Facilities, the Community Facilities District desires to authorize the issuance of City of Los Angeles Community Facilities District No. 4 (Playa Vista-Phase 1) Special Tax Bonds, Series 2000 (the "Playa Vista-Phase 1 Bonds"), in the aggregate principal amount of not to exceed \$135,000,000;

WHEREAS, in order to provide for the authentication and delivery of the Playa Vista-Phase 1 Bonds, to establish and declare the terms and conditions upon which the Playa Vista-Phase 1 Bonds are to be issued and secured and to secure the payment of the principal thereof, premium, if any, and interest thereon, the Community Facilities District proposes to enter into an Indenture with State Street Bank and Trust Company of California, N.A., as trustee (the "Trustee") (such Indenture, in the form presented to this meeting, with such changes, insertions and omissions as are made pursuant to this Resolution, being referred to herein as the "Indenture");

WHEREAS, Playa Capital Company, L.L.C. (the "Developer") proposes to construct, or cause to be constructed, certain of the Facilities, and the Community Facilities District proposes to purchase such Facilities from the Developer pursuant to an Infrastructure Funding Agreement by and among the Community Facilities District, the City and the Developer (such Infrastructure Funding Agreement, in the form presented to this meeting, with such changes, insertions and omissions as are made pursuant to this Resolution, being referred to herein as the "Infrastructure Agreement");

(new soil contamination + water contamination has been recently discovered across the site which contradicts these BOND documents)

SEE MARKED SECTIONS

INSIDE

PVIAR-004756

(marked sections are contradicted by either CAUSD

OR new contamination issues found

50' vent wells for monitoring + mitigating

Water Act, thereby enabling the development of approximately 12.50 acres of land that cannot be developed currently. See "RISK FACTORS - Section 404 Permit - Failure to Complete Interim Stormwater Management Facilities."

Any money remaining in the Deemed Escrow Bonds Account of the Redemption Fund on the Business Day immediately preceding the Escrow Redemption Date will be transferred to the Redemption Account and applied to redeem Series 2000 Bonds on the Escrow Redemption Date. The Escrow Redemption Date is initially _____. (However, the Indenture permits the Escrow Redemption Date to be extended upon the satisfaction of certain conditions.) Thus, if and to the extent that the Developer has failed to satisfy the conditions precedent to the transfer of money from the Escrow Fund to the Improvement Fund prior to the Escrow Redemption Date, the amount then on deposit in the Deemed Escrow Bonds Account will never again be available for transfer to the Improvement Fund, and such amount will never be available for the acquisition or construction of Facilities.

Hazardous Substances; Groundwater and Soil Contamination

The value of the property within the District may be adversely affected by the presence, or even by the alleged presence, of hazardous substances. In general, the owner of a parcel may be required by law to remedy conditions of the parcel relating to releases or threatened releases of hazardous substances. The federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, sometimes referred to as "CERCLA" or the "Superfund Act," is the most well-known and widely applicable of these laws, but other federal, State and local provisions pertain to hazardous substances as well. Under many of these laws, the owner of property is obligated to investigate and remediate a hazardous substance on the property whether or not the owner had anything to do with the generation or disposal of the hazardous substance.

An investigation of the Playa Vista site was conducted by the Environmental Protection Agency (the "EPA") under CERCLA guidelines in the late 1980s, and the EPA determined that the site did not meet listing criteria. However, in light of the mid-1990s changes to CERCLA guidelines, which place additional emphasis on surface water runoff to sensitive receptors such as wetlands areas, the EPA is re-evaluating whether the Playa Vista site is a candidate for listing under the new, more stringent, guidelines.

The quality of the groundwater underlying Playa Vista was studied and reported upon in the environmental impact report which was certified in connection with the approval of development entitlements for Phase I of the Playa Vista project (the "Phase I EIR"). Groundwater contamination, consisting of volatile organic compounds, petroleum, hydrocarbons, metal and other contaminants, was detected beneath four areas of the historic aircraft manufacturing and testing facilities within the Playa Vista project. One of these areas, which is less than one acre in size, and a small portion of a second area are within the boundaries of the District. These groundwater plumes are relatively limited in lateral extent. The Developer believes that all known sources of groundwater contamination within the District have been removed. A groundwater treatment facility was developed to remediate the groundwater and has been in operation for approximately six years. The California Regional Water Quality Control Board, Los Angeles Region (the "Regional Board"), is overseeing this groundwater remediation effort. This oversight has been in effect for more than twelve years and was formalized in a cleanup and abatement order issued in December, 1998. This order provides a list of tasks to be completed and a time schedule for their completion. In a December 30, 1999 letter to the City, the Regional Board stated that the Developer has been in

E

50' monitoring + mitigating
gravel aquifer. The presence of methane is not unusual; it exists in many areas of Los Angeles and other coastal cities.

Methane gas is lighter than air, and, when mixed with oxygen in certain ratios, it is explosive. Possible concerns arising from the presence of methane and other gases and hazardous materials were discussed in the Phase I EIR. However, opponents to the development of Playa Vista have recently alleged that the concerns with respect to the gases were not adequately addressed. In response to those allegations, the Developer engaged a geotechnical consultant to further address the potential presence of these gases and the City engaged Exploration Technologies, Inc. of Houston, Texas ("ETI") to undertake an independent peer review of the Developer's consultant's work.

ETI has submitted two reports. The first, dated November 29, 1999, addresses the potential hazards associated with the site of the proposed Fountain Park Apartments from methane, hydrogen sulfide, and benzene, toluene, ethylbenzene, and xylene ("BTEX"). That report concluded in part:

Although there is a methane hazard in Tract 49104-03, the methane source in the shallow sediments appears to be indirectly sourced from the 50 foot gravel aquifer. This aquifer, because of the distance from the potential sub-surface sources to the buildings, can serve as a partial methane monitoring and mitigation system for the shallow gas. The distribution of gas in the aquifer and in the building remediation systems can easily be continuously monitored so that building can be permitted on Tract 49104-03.

This report noted that the hydrogen sulfide concentrations on this property were "low in magnitude and appear typical of shallow marsh deposits." Finally, this report stated that analyses for BTEX in the groundwater and soil gas were performed, and were found to be below detection levels at all sites and to have no local sources in Tract 49104-03. The City's Department of Building and Safety and its Department of Public Works' Bureau of Engineering have reviewed this report and the City's Department of Building and Safety concluded that the impact of methane gas on construction of the Fountain Park Apartments Phase I and the Visitor's Center can be addressed by implementing the methane mitigation and monitoring system required by the City's Department of Building and Safety for these buildings. The Developer's plan for a methane mitigation and monitoring system for the Fountain Park Apartments Phase I and the Visitors' Center has been reviewed and approved by the City's Fire Department. The City's Bureau of Engineering concluded that:

Hydrogen sulfide levels measured were low and common to marshlands, and some of the BTEX compounds were detected only at trace levels. Trace amounts of BTEX which may be present in untested portions of the tract will be adequately mitigated with the methane system required by the Department of Building and Safety.

ETI's second report is dated April 17, 2000 and addresses the potential hazards associated with the remainder of the District. In connection with this report, ETI designed and supervised the collection and analysis of two shallow soil vapor surveys consisting of 812 sites placed on a 100 foot staggered grid over Phase I of the Playa Vista project. The soil gas samples were collected by Scientific Geochemical Services of Casper, Wyoming and analyzed by Microseeps of Pittsburgh, Pennsylvania. Using the soil gas data as a guide, 32 monitor wells were installed by Camp, Dresser and McKee and sampled for their free and dissolved gases. Gas analysis for these samples was also

50' monitoring + mitigating

conducted by Microseeps. Isotech Labs of Champaign, Illinois analyzed the free gases found in the groundwater in connection with this study.

The report states that soil gas and groundwater data define two main areas of methane gas anomalies. One in Tract No. 49104-01 and the other in the southern part of Tract No. 49104-02. The report concludes that the source of this methane gas is most likely natural gas sands located from approximately 500 feet to approximately 3,400 feet beneath the surface. The report suggests that this gas migrates from a subsurface fault referred to in the report as the "Lincoln Boulevard Fault" and that this fault should be considered as a "potentially active low potential fault." The report notes that a future earthquake with an epicenter close to the Playa Vista project could potentially cause a rapid flux of very large volumes of methane gas to the surface along the Lincoln Boulevard Fault plane. The report therefore recommends that there should be mitigation of the gravel aquifer which is located approximately 35 to 50 feet below the surface of the two tracts mentioned above and that a monitor well system should be required to continuously measure methane gas concentrations in that aquifer.

The report also recommends that methane mitigation systems should be required for all buildings within the District and that the design of the methane mitigation systems should follow the same specifications as have been previously approved for the Fountain Park Apartments.

Finally, the report notes that there are generally very low levels of BTEX contained within the soil gas collected over the survey area and they "do not appear to represent a hazard to construction."

The City's Department of Building and Safety and its Department of Public Works' Bureau of Engineering have reviewed this report and have concluded that systems to monitor and mitigate the methane in the area can be devised and implemented so as to permit development in the District.

The Developer's methane mitigation and monitoring system for the proposed Fountain Park Apartments Phase I and the Visitor's Center includes an impermeable barrier between the foundation/garage walls and the surrounding soil, a collection and venting system, and methane sensors in the garage structure. The Developer believes that this system is designed to address a "worst case" situation. The Developer has further indicated that it does not believe such an extensive system will be required in each of the residential and commercial buildings in the remainder of the District. Nevertheless, the estimated costs for methane mitigation throughout the District which the Developer provided to the Appraiser are based upon the assumption that the "worst case" system will be required. Evaluation of the property within the District reported in the Appraisal assumes that these cost estimates are reasonable. The Developer expects that methane mitigation and monitoring system that ETI recommends for the aquifer which underlies portions of the District will not cost more than \$150,000.

Natural Gas Storage

Southern California Gas Company (the "Gas Company") operates an underground natural gas reservoir located approximately one mile beneath portions of the Playa Vista project approximately two-tenths of a mile outside the western boundary of the District. This gas reservoir is not located under any proposed residential or commercial development within the District. The reservoir has a capacity of approximately 2.6 billion cubic feet of natural gas. Natural gas piped from Texas and other locations is compressed at the Gas Company's facility and is cooled and

compressed again prior to injection into the porous sandstone reservoir. When recovery of the stored gas is required, it is withdrawn from the reservoir. Although the natural gas is presently stored at depths of approximately 6,200 feet, the Gas Company has an easement that would allow it to store the gas between the depths of 500 feet and 7,000 feet. The Gas Company has easements for roads, pipelines and wells on portions of the Playa Vista project outside of the District. Numerous pipelines are located in these easements including those for high pressure gas, oil production, fuel gas, low pressure gas and others.

A group of residents of the Playa del Rey Bluffs area has complained of gas odors during the venting of gas from wells in that area; and, based upon press reports, the Developer believes that a lawsuit was filed against the Gas Company regarding alleged toxic fumes from the Gas Company's operations. The Developer is not involved in this lawsuit in any way. Gas Company officials have reported that the venting was reduced by two-thirds as of October, 1990 and by five-sixths by the end of 1991. This situation was discussed in the Phase I EIR. The Developer does not expect the property within the District to be subject to any direct or indirect impact of the Gas Company's natural gas storage operations however, there can be no assurance that future activities of the Gas Company might not adversely affect the property within the District.

Threatened and Endangered Species

During recent years, there has been an increase in activity at the State and federal level related to the possible listing of certain plant and animal species found in Southern California as threatened or endangered species. The existence of such species or their habitat has limited, or prevented altogether, land development in certain portions of the region. Opponents to the development of the Playa Vista project invoked the federal Endangered Species Act, including the potential impact of the development on the California Brown Pelican, in their challenge to the issuance of the Section 404 Permit (*California Brown Pelican, et al. v. United States Army Corps of Engineers, et al.*, which is discussed above under the heading "Opposition to Development of Playa Vista — Recent and Pending Litigation."). However, at the present time, the land within the District is not known by the City or the Developer to be inhabited by any plant or animal species that either the United States Fish and Wildlife Service or the California Fish and Game Commission has listed or has proposed for addition to the list of threatened or endangered species.

The United States Fish and Wildlife Service has concluded that the three protected species that are known to be occasionally present in the vicinity of the project (the California Least Tern, the California Brown Pelican and the Peregrin Falcon) will not be adversely affected by Phase I of the Playa Vista project. Species are proposed to be added to the lists of threatened and endangered species on a regular basis. Any action by either the State or the federal government to protect species located on or adjacent to the land within the District could negatively affect the Developer's ability to develop the land within the District for the purposes, within the time frame, and at the cost currently projected by the Developer.

Geologic, Topographic and Climatic Considerations

The value of the land within the District may be adversely affected in the future by a variety of additional factors, particularly those which may affect infrastructure and other public improvements and private improvements to such land and the continued habitability and enjoyment of such private improvements. Such additional factors include, without limitation, geologic conditions such as earthquakes, topographic conditions such as earth movements, landslides and

the sale of land within the District following a delinquency in the payment of the applicable Special Tax. The District has no obligation to pay debt service on the Series 2000 Bonds in the event of insufficient Net Special Tax Revenues except to the extent that money is available for such purpose in the Reserve Fund. The District's only obligation with respect to delinquent Special Taxes is to pursue judicial foreclosure proceedings under the circumstances described in the Indenture. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS - Special Taxes - Covenant for Superior Court Foreclosure."

Uncertainties in Land Development - General

There are no completed buildings within the District, and all of the land that is subject to the Special Tax is owned by the Developer and a wholly-owned subsidiary of the Developer. If the Developer is unable to develop the land as planned, the expected diversity of ownership of such land will not materialize, and the availability of sufficient Net Special Tax Revenues with which to pay debt service on the Series 2000 Bonds will continue to be dependent upon the willingness and ability of the Developer to pay the Special Taxes applicable to its property when due. A continued concentration of ownership would increase the potential negative impact of a bankruptcy or other financial difficulty that might be experienced by the Developer. Since land without completed buildings is generally less valuable than land containing completed buildings, the vacant land provides less security for the Series 2000 Bonds should it be necessary for the District to foreclose on such land as a result of the non-payment of the applicable Special Tax. In short, the successful development of the land within the District is important to the ultimate security for, and the payment of principal of and interest on, the Series 2000 Bonds.

There are many reasons why a project might not be developed in the manner and within the time frame and budget originally planned. For example, the project might be adversely affected by opposition to the project; economic conditions; an inability of the developer of such project to obtain financing; fluctuations in the local real estate market; fluctuations in interest rates; unexpected increases in development costs; changes in federal, state or local governmental policies relating to the ownership and development of real estate; and the appearance of previously unknown environmental considerations or a material change in known environmental considerations. Some of these reasons are discussed below as individual risk factors.

Opposition to Development of Playa Vista - General

One specific reason that a land development project might be prevented from being developed as planned is on-going opposition to the project. Such opposition, which might take a variety of forms from public protests to the filing of litigation, can have the effect of delaying development activities and/or making them more expensive than originally planned and can even result in completely preventing development.

In the case of Playa Vista, individuals and groups opposed to the development of the project regularly appear before, and present their opposition to, the legislative and administrative bodies considering any aspect, direct or indirect, of the proposed development. These individuals and groups are frequently represented by counsel. One such opposition group is a plaintiff in four of the lawsuits currently pending against the Playa Vista Project. That group's counsel presented a lengthy letter to the City Council of the City opposing the formation of the District and the authorization of the Bonds. This letter, dated August 13, 1999, and re-sent to the City Council on December 8, 1999, included assertions that (a) the formation of the District and the authorization of the Bonds would

city authorized bonds

conflict with the purpose and intent of the Act especially as implemented by the City's policies concerning community facilities district financings, (b) the Bonds would place a significant burden on the public, (c) the projects which could be financed with the Bonds violate federal, state or local environmental requirements, and (d) unfairly and contrary to applicable statutes, the proceeds derived from the sale of the Bonds would pay for measures which the Developer had already agreed to complete or to finance. Contrary arguments were offered by the Developer and its counsel; and, after a lengthy public hearing on December 8, 1999, the City Council voted unanimously to proceed with the formation of the District and the authorization of the Bonds. Notwithstanding the City Council's approval, opponents of the project have continued to appear before the City Council arguing that the City Council should not take additional actions in order to implement its previous decision. Nevertheless, prior to the date hereof, the City Council has taken all steps necessary in order to form the District and to authorize the sale and issuance of the Series 2000 Bonds.

In several instances, opponents of the Playa Vista project have filed actions in federal or state court challenging approvals relating to the development of the Playa Vista project. Recent judicial challenges and those still pending are discussed below.

Opposition to Development of Playa Vista - Recent and Pending Litigation

Opponents of the Playa Vista project have filed ten actions challenging various approvals relating to the project. Five of those actions are still pending and are discussed at the end of this section. The other five actions, all of which have been concluded, are briefly summarized as follows:

In *Save Ballona Wetlands, et al. v. City of Los Angeles, et al.*, which was filed in Superior Court in Los Angeles County in 1993, the plaintiffs challenged the City's approvals of Phase I of the Playa Vista project under the California Environmental Quality Act ("CEQA"). In 1994, Judge David Rothman ruled against the plaintiffs and upheld the approvals.

In *Earth Trust Foundation, et al. v. the City of Los Angeles, et al.*, which was filed in Superior Court in Los Angeles County in 1996, the plaintiffs challenged an Addendum to the 1993 Phase I Environmental Impact Report and a Mitigated Negative Declaration, each relating to portions of Phase I of the Playa Vista project located outside of the District, under CEQA. In 1996, Judge David Horowitz ruled against the plaintiffs and upheld the approvals. Judge Horowitz's decision was affirmed by the California District Court of Appeal in 1997.

In *California Brown Pelican, et al. v. the United States Army Corps of Engineers, et al.*, which was filed in the United States District Court for the Central District of California in 1998, the plaintiffs alleged that the Corps of Engineers had violated Section 7 of the Endangered Species Act by failing to consult with the United States Fish and Wildlife Service prior to issuing a Section 404 Permit for Phase I of the Playa Vista project. The issuance of the Section 404 Permit is the subject matter of a pending action discussed below (*Wetlands Action Network, et al. v. United States Army Corps of Engineers, et al.*). In light of his decision with respect to the Section 404 Permit litigation, Judge Ronald S. W. Lew granted the defendants' motion to dismiss the action for lack of subject matter jurisdiction finding that the plaintiffs' claims were moot given the court's decision in the Section 404 Permit litigation. (In late January of 1998, the plaintiffs had been

The Appraisal is also contingent upon the funding of certain traffic mitigation costs (approximately \$10.7 million) through the State Transportation Improvement Program and the funding of certain reclaimed water and electrical power improvements (approximately \$4.9 million) through an agreement with the City of Los Angeles Department of Water and Power. Another contingency of the Appraisal that the cost estimates for the remediation of certain environmental concerns (such as underground storage tanks, groundwater and soil), as set forth in the Appraisal, are reasonable. See, "RISK FACTORS - Hazardous Substances; Groundwater and Soil Contamination."

The Appraisal notes that the potential development of 245 dwelling units that are expected to be constructed on approximately 12.49 acres of developable land may be delayed as a result of the need for a Section 404 Permit or interim stormwater management facilities. See "RISK FACTORS - Section 404 Permit - Failure to Complete Interim Stormwater Management Facilities." As a result thereof, the land absorption used by the Appraiser assumes that the development of the 245 dwelling units in question is unlikely to occur prior to 2005.

The Appraisal also observes that:

The Playa Vista project has been subject to, and will probably continue to be subject to, numerous law suits from various environmental groups. The intent of these lawsuits is to delay or entirely stop development on portions of, or all of the Playa Vista project. Most of these lawsuits have decided in Playa Vista's favor. One lawsuit, currently being decided in the Ninth Circuit of the Federal Appeals Court [sic], could impact the 404 permit for 16.1 acres of wetlands included in the proposed freshwater marsh. This marsh is a major component of the project's stormwater drainage system. Based on the outcome of previous cases, and the [Developer's] back-up plans for an interim drainage system, if necessary, it is unlikely that the entire project could be stopped. It is possible that portions of the project could be delayed. *The appraisers realize that until all litigation is decided, there is uncertainty regarding the development of Playa Vista. The appraisers reserve the right to revise our analysis if a negative disposition of any pending or future lawsuit occurs. The analysis and values included herein assume construction of the interim drainage system without delay. [Emphasis in original.]*

See, "RISK FACTORS - Opposition to Development of Playa Vista - General," "RISK FACTORS - Opposition to Development of Playa Vista - Recent and Pending Litigation," and "RISK FACTORS - Section 404 Permit - Failure to Complete Interim Stormwater Management Facilities."

The Appraisal notes that opponents to the development of the Playa Vista project have reintroduced concerns about methane and toxic substances and that, in response thereto, the City has undertaken an independent "peer review" of information relating to these topics that had been furnished by consultants to the Developer and others. The results of the peer review process confirmed the presence of methane throughout the District, found low level concentrations of hydrogen sulfide near the surface and found trace amounts of benzene, toluene, ethylbenzene and xylene. The City has concluded that, in the case of Fountain Park Apartments, the Developer's proposed methane mitigation and monitoring system is adequate to address these issues. In the case of the other structures that may be constructed within the District, the City has concluded that adequate methane mitigation and monitoring systems can be specified in connection with the

50' aquifer
monitoring +
mitigating

monitoring + mitigating

issuance of building permits. The development costs that the Developer provided to the Appraiser assume that the Fountain Park Apartments type methane mitigation and monitoring system would be used in all buildings throughout the District, although the Developer does not believe that such an expensive system will be required for all such buildings. The City has also concluded that a system for monitoring and mitigating methane in a gravel aquifer located approximately 35 to 50 feet below the surface of a portion of the District can be devised and implemented. Although the cost of such a system was not included in the Appraisal, the Developer estimates that such cost will not exceed \$150,000. The Appraisal assumes that the presence of methane will not have a negative impact on the development of the land within the District. See, "RISK FACTORS - Methane."

In addition to the contingencies discussed above and the other assumptions and limiting conditions specifically listed in the Appraisal, the value reported in the Appraisal is based upon certain assumptions about the growth of the Los Angeles area, the demand for housing in the area, the ability of the Playa Vista project to capture a portion of that demand, the rate at which land values will increase in the future, interest rates, and other variables which are impossible to predict with certainty. In the event that any of the contingencies, assumptions and limiting conditions are not actually realized, the value of the property within the District may be less than the amount reported in the Appraisal. In any case, there can be no assurance that any portion of the property within the District would actually sell for the price indicated by the Appraisal.

The Appraiser has specifically consented to the inclusion of the Appraisal in this Official Statement. Nevertheless, the Appraisal contains the following statement:

The acceptance of and/or use of this appraisal report by the client or any third party constitutes acceptance of the following conditions:

The liability of Harris Realty Appraisal and the appraisers responsible for this report is limited to the client only and to the fee actually received by the appraisers. Further, there is no accountability, obligation or liability to any third-party. If the appraisal report is placed in the hands of anyone other than the client for whom this report was prepared, the client shall make such party and/or parties aware of all limiting conditions and assumptions of this assignment and related discussions. Any party who uses or relies upon any information in this report, without the preparer's written consent, does so at his own risk.

Direct and Overlapping Debt. Contained within the boundaries of the District are numerous overlapping local agencies providing governmental services. Some of these local agencies have outstanding bonds, and/or the authority to issue bonds, payable from taxes or assessments. The existing and authorized indebtedness payable from taxes and assessments that may be levied upon the property within the District is shown in the table below. In addition to current debt, new community facilities districts and/or special assessment districts could be formed in the future encompassing all or a portion of the property within the District; and, such districts or the agencies that formed them could issue more bonds and levy additional special taxes or assessments.

August 8, 2005

The following documents provide an urgent message to reevaluate the safety for residents and potential future residents of the Playa Vista site.

- The November 18, 2004 California Public Utilities/ Consumer Protection and Safety Division report titled COMPLAINT CASE FACTS AND FINDINGS (PLAYA DEL REY STORAGE FIELD) states:
There is a greater than 50% chance of Playa del Rey (PDR) Sempra Energy (SOCALGAS) Storage Reservoir gas leaking into the Playa Vista site. It is the Safety Branch's opinion that leakage should be of major concern.

The Public Utilities Commission (PUC) report contradicts the findings of the City of Los Angeles's Chief Legislative Analyst's (CLA) Report.

- The PLAYA VISTA RISK ANALYSIS TASK FORCE found that:
"Building & Safety stated that the source of the contamination is important because, if it is the reservoir, the gas is under much more pressure, and the design of the mitigation measures must take that into account."

The City of Los Angeles has not taken into account the potential for SOCALGAS reservoir gas leakage because:

- On Jan. 31, 2001 the Department of Building & Safety stated,
"According to the report (CLA Report), the 'combined geochemical and geophysical information proves beyond a reasonable doubt that the methane gas seepage observed on the Playa Vista site does not come from the Southern California Gas Storage Field.' The Department of Building and Safety accepts this conclusion."

**Complaint Case Facts and Findings
(Playa Del Rey Storage Field)**

By

Consumer Protection and Safety Division

August 20, 2002

Revised on November 18, 2004

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I. Introduction

This report presents some of the data that Consumer Protection and Safety Division (CPSD) has gathered from the investigation of the Complaint Case (C.00-05-010) proceedings. On May 11, 2000, three residents of Playa Del Rey area filed similar complaints against SoCalGas, C.00-05-010, C.00-05-011 and C.00-05-012, respectively. In addition, Grassroots Coalition and several other residents of Playa del Rey (PDR) and Marina del Rey joined the complaints. Although the complaints were filed separately and individually, they shared a common concern that SoCalGas is operating its Playa Del Rey gas storage facility unsafely, in a manner hazardous to the health and safety of nearby homeowners. Specifically, the complainants alleged the storage reservoir was leaking, resulting in dangerous toxic pollution from venting and leaking gas, atmospheric contamination, noxious odors, and a leaking abandoned well. Each complainant asked the CPUC to conduct an investigation of the SoCalGas Storage facilities in Playa Del Rey.

SoCalGas filed a motion to dismiss these cases or consolidate the cases. Although the Commission denied the motion to dismiss the cases, but the motion to consolidate was granted and the three complaints were consolidated under Rule 55 of the Commission's Rules of Practice and Procedure. These three cases are now treated as one case under C.00-05-010.

CPSD investigations focused on all the allegations. During the course of these investigations, CPSD conducted laboratory analysis (Isotopic Analysis) of field samples from leaking abandoned well. CPSD also requested and reviewed large volume of data from SoCalGas and Grassroots Coalition. After review of all available data provided to CPSD, the findings were used to determine the merit of the allegations and consequently resolved some of the allegations. The remaining unresolved allegations have been classified into two issues: (1) Any evidence of PDR storage gas and/ or Thermogenic gas within SoCalGas mineral rights migrating to the surface, (2) Any evidence that the PDR Gas Treatment and/ or PDR Gas Storage facilities are contributing to local

residents' exposure to carcinogenic toxins. This report focuses on some of the data CPSD has collected, implications of our findings to date, and recommendations for resolving the two remaining allegations.

II. Discussions of Facts and Findings

One must remember that the following facts and findings do not definitively explain or answer the allegations. However, this information, individually or cumulatively, indicate that there might be potential problems that warrant further investigation. The type of investigation or study scope must consider the available data, along with how to integrate that data into a full reservoir study and a Health Risk Assessment (HRA) that provides definitive results that lead to resolution of the two outstanding allegations. It is important to note facts and findings presented below do not indicate any wrong doing on the part of SoCalGas. Instead, they simply reflect the existence of potential hazards compounded by lack of definitive test results or data gaps. The following facts are discussed below:

- (a) Evidence of three types of natural gas in PDR
- (b) 133 PPM Helium in a natural gas sample from a bar hole near Big Ben well
- (c) 22 PPM Helium from a shallow probe by John Sepich & Assoc.,
- (d) Greater than 800 PPM Helium from groundwater samples
- (e) ETI report indicated Thermogenic gas components detected in shallow subsurface geologic units and H₂S detected in soil gas samples
- (f) Previous reservoir inventory analysis
- (g) 50,000 PPM gas detected at Troxel Well and known migration loss to well
- (h) Potential problems with validity of some SoCalGas data.

A. Three types of natural gas in PDR

There is evidence of surface detection of three types of natural gas in PDR namely: Biogenic gas, Native PDR Thermogenic gas and Storage Reservoir

Thermogenic gas. Biogenic gas is commonly known as Swamp gas. Its chemical and physical characteristics are mostly Methane gas, formed by bacteria action in shallow surface. It has *no* Helium, Ethane, Butane or other heavier hydrocarbon. Biogenic gas is non jurisdictional. In contrast, Native PDR Thermogenic gas (native PDR gas) and Storage Reservoir Thermogenic gas (Storage gas) are formed by decomposition of prehistoric fossils under high temperature and pressure in deep and intermediate geological zones. Thermogenic gases have, Methane, Ethane, Helium and other hydrocarbons. Both native thermogenic and storage reservoir thermogenic gases have some identical physical and chemical characteristics contain varying amounts of Helium, Ethane, Methane and other hydrocarbons. Unfortunately, these identical characteristics make it difficult to differentiate Native PDR gas from Storage Reservoir gas. However, experts like Dr. Arehart (Department of Geological Sciences, University of Nevada) have discovered some subtle differences such as the difference in Helium content and the age of the Helium. There are evidence from various gas sample tests and isotopic analysis that show each of these three gases emanating to the ground surface at various locations at one time or another. The presence of Ethane, Methane, Helium and other hydrocarbons are one of the key considerations in determining if a sample is Biogenic or Thermogenic. Once it is determined that a sample is Thermogenic, then the Helium and the concentration present in that sample determines if it's Native PDR gas (1-15 PPM Helium) or Storage Reservoir gas (15-450 PPM Helium). However, commingling of these gases, alteration of physical and chemical properties by some external factors, and filtration of some gas constituents (possibly by groundwater or aquifer) obscure the minor differences and complicates the chemical speciation. *Please see Appendix # A*

B. 133 PPM Helium from bar hole samples near Big Ben Well

SoCalGas internal office memorandum, dated November 20, 1991 revealed that gas samples collected from bar-holes around Big Ben Well contained 30,000 PPM to 620,000 PPM natural gas and these samples contained 133 PPM to 188 PPM

Helium. A close examination of the memo revealed that three samples were collected on 1/11/91, at bar-holes # 12, 13 & 14. Isotopic analysis of these samples indicated with high probability the signature of Storage Reservoir gas (meaning that the gas migrated from Storage Reservoir). In addition, the memo did not indicate any more sampling at these bar-holes or subsequent remedial action. On 8/23/91 and subsequent dates, samples were collected from bar-hole H instead of bar-holes 12, 13 & 14. The isotopic analyses of the new samples did not reveal the storage gas signature and subsequent discussion on the memo ignored the initial sample data, its significance and if there was any remedial action. *Please see Appendix # B*

C. 22 PPM Helium from a shallow probe sample by John Sepich and Associate.

Isotech Laboratory performed an isotopic analysis of a gas sample submitted by Sepich & Associates on 3/25/99. Sepich and Associates was working for Playa Vista developers (developers of residential and business properties around the PDR.Storage field. The isotopic analysis report indicates the gas sample was collected from Playa Vista Project Area-D. The analysis report also revealed presence of Ethane and 22 PPM Helium in the gas sample. The significance of this isotopic analysis report is the presence Storage Reservoir gas or Native PDR gas signature and the location where the gas sample was collected (Area - D of Playa Vista Project). My opinion is that the probability of Storage Reservoir gas sample from PDR area containing Ethane and 22 PPM Helium is greater than 50 percent (>50%). Furthermore, the location where the sample was collected should be of major concern. *Please see Appendix # C*

D. 100 PPM-1000 PPM Helium from groundwater samples collected and analyzed by Exploration Technologies, Inc (ETI)

City of Los Angeles Building and Safety Department retained ETI to conduct test, analyze and provide advice on Playa Vista project. Groundwater samples were collected in 2000 from Playa Vista Project Area, and dissolved

gases were extracted and analyzed by ETI in addition to other scientific sampling and testing. Several groundwater samples revealed presence of high Helium concentrations and methane dissolved in the groundwater. The origin of this Helium in the groundwater is not clear. However, some people have postulated that the groundwater absorbs or strips the Helium from the Storage Reservoir gas or Native PDR gas as it migrates through the aquifer to the ground surface. Hence, Thermogenic gas is detected in soil-gas without Helium. Although, this postulation seems plausible, I have not seen any scientific paper on this absorption theory and the kinetics. *Please see Appendix # D*

E. Dr Victor Jones of ETI detected Thermogenic gas components at the surface and detected H₂S in soil gas during his investigation in 2000.

ETI conducted an extensive soil gas investigation in Playa Vista area for the City of Los Angeles in 2000. The isotopic analysis report of the samples collected revealed presence of Methane, Ethane, Helium, H₂S, Toluene and other volatile organic compounds (voc). The presence of numerous Thermogenic gas components in the shallow soil gas samples analyzed indicates a deeper source for this gas.

F. Previous Reservoir Inventory Verification Analysis by SCG indicated gas migration loss (8/22/80)

A Reservoir Inventory Verification Analysis conducted by Theodoros Georgakopoulos on August 22, 1980, for SoCalGas indicated gas migration loss. The migration pathways to the Townsite area (separate geologic zone) is unknown. The report estimated storage reservoir gas loss between January 1961 and December 1979 to be 0.10 B.c.f. Subsequent reports estimated the gas loss to have decreased. *Please see Appendix # F*

G. Presence of Methane gas around Troxel Well.

As part of Energy Division (ED) initial preliminary investigation, ED retained MHA, who subcontracted Giroux & Associates to conduct site investigations at the Troxel and Lor Mar well site locations in 2001. These recent studies found very high methane concentrations (greater than 50,000 ppm) at the Troxel site and low methane concentrations (1 to 6 ppm) at the Lor Mar site.

Although high methane levels at Troxel dissipated over time, low methane levels persisted through the end of the 32 days study period. This indicates a possible source of methane at this location. Methane concentrations also fluctuated during the study period, indicating that external factors (atmospheric pressure, tidal influences, gas storage reservoir operations) may be affecting data measurements. However, a soil gas survey study requested by the Commission and conducted by SoCalGas' consultant, TRC concluded that there were no measurable concentrations of volatile or combustible compounds encountered in the soil gas. Also, the study detected presence of Hydrogen Sulfide and the source was unknown. But recent sampling by Energy Division's CEQA team reported measurable concentrations volatile hydrocarbons.

H. Validity of SoCalGas Data.

Data collected by SoCalGas may be flawed. Procedures used by SoCalGas to collect gas samples at the Troxel did not follow standard gas collection and sample handling procedures established by Federal Environmental Protection Agency and other trade associations. A plastic sheet was used to accumulate enough gas to collect samples for analysis. Samples were collected in plastic bottles. Since plastic is permeable to many gases, and may also absorb some hydrocarbon based gases, test results would not fully characterize gas emitted from the well.

Although bar hole testing is acceptable for Department of Oil Gas & Geothermal Resources leak detection requirement, it does not follow standard procedures established

for soil gas investigations. Soil is disturbed and compacted when the bar is driven into the ground. This could interfere with movement of some soil gas. Therefore, low levels of methane may not be detected and concentrations reported may not be valid.

III. Recommendations

A review of the aforementioned facts and findings suggest the existence of a potential safety hazard. Since the available geological data does not definitively support or disprove the existence of safety hazard in and around the storage reservoir, further investigation and study is needed. It is important and recommended that CPSD conduct (1) comprehensive reservoir study and (2) Health Risk Assessment (HRA) (HRA that is not limited to 'for sale lots' and integrate some of the data gathered from the CEQA study). The basis for this recommendation are in response to allegations of hazards to public health and Safety, potential ratepayer liability, lack of definitive results from available data and mandate from General Order 58-A, section 22. We recommend a reservoir study that will include but not limited to:

- 1) Construction of a 3-dimensional geologic computer model (Earth Vision or equivalent) using existing data (wells records, soil gas investigations, geo-technical borings, geophysical data, environmental borings, site contamination data, groundwater data, etc) to fully integrate and visually display geologic data (strata and discontinuities) and other subsurface information (gas and groundwater locations) at the storage field.
- 2) Drill a minimum of three shallow well observation wells to describe the stratigraphic conditions (visual and geophysical logging) in geologic deposits above 1000 feet elevation in order to define potential gas storage zones and migration pathways, and to collect gas samples from depths below biogenic sources.
- 3) Collect and analyze (isotopic and chemical analysis) the gas in geologic deposits from these wells, focusing on depths below

minus 500 feet elevation (below sea level), in order to determine the origin and genesis of the gas.

- 4) Integrate the results from items 1, 2 and 3 above to develop a logical, defensible subsurface model that explains the surface and subsurface gas detections and the potential pathways for gas to reach the surface environment.
- 5) Retain an expert to perform Helium Ratio Analysis.

PLAYA VISTA RISK ANALYSIS TASK FORCE
Summary of the June 9, 2000 Meeting and Additional Questions

Three Categories of Analysis:

- Structural Safety Assessment
- Health Safety Assessment
- Earthquake Risk Assessment

Structural Safety Assessment:

- Drilling east of Lincoln is complete.
- Additional drilling is required west of Lincoln to determine whether the source of the gas contamination is the Gas Company reservoir.
- B&S stated that the source of the contamination is important because, if it is the reservoir, the gas is under much more pressure, and the design of the mitigation measures must take that into account.
- By Friday, June 16th, B&S, working in cooperation with BOE, will be prepared to present to the task force a drilling plan for the area west of Lincoln.
- By Friday, June 16th, B&S will present to CLA a detailed request for information from the Gas Company. The CLA will take the lead in securing this information from the Gas Company.
- The results of the additional drilling, along with the information from the Gas Company, will allow for a determination as to whether the reservoir is, in fact, the source of the contamination.
- "Pump-and-treat" testing will also occur as it is a mitigation measure which has already been identified, and its success may impact other mitigation measures.
- A "pump-and-treat" system is currently employed at the old Hughes Aircraft site at the eastern edge of the development. By June 16th, BOE will obtain the details on the system (from the RWQCB7) so that its applicability to the remaining property can be determined.
- According to the technical experts at the meeting, the above is a comprehensive listing of the additional information required in order to make a final determination as to the extent and source of the contamination.

Health Risk Assessment:

- No additional drilling is required. The information obtained from the prior drilling is sufficient.
- The health risk assessment will require testing of the above-ground gases.
- By Friday, June 16th, Planning (Con Howe) will contact the consultant that worked for the LAUSD on the Belmont project to ensure that the appropriate state and/or federal regulatory agencies are involved in the process.
- The City's industrial hygienist will consult with the task force on the Health Risk

1 RICHARD I. FINE, SBN #055259
RICHARD I. FINE & ASSOCIATES
2 468 North Camden Drive, Suite 200
Beverly Hills, California 90210
3 Telephone: (310) 277-5833
Facsimile: (310) 277-1543

4 Attorneys for Grassroots Coalition and
5 Daniel Cohen and with permission of
John Davis

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By A. Caballero
MAR 28 2007

6
7 SUPERIOR COURT OF THE STATE OF CALIFORNIA
SUPERIOR COURT
8 FOR THE COUNTY OF LOS ANGELES

9 CENTRAL DISTRICT

10 ENVIRONMENTALISM THROUGH)
INSPIRATION AND NON VIOLENT)
11 ACTION ("ETINA"), a California non-profit)
corporation, GRASSROOTS COALITION, a)
12 California non-profit corporation, SPIRIT OF)
THE SAGE COUNCIL, a non-profit)
13 unincorporated association, JOHN DAVIS and)
DANIEL COHEN,

14 Petitioners,

15 v.

16 CITY OF LOS ANGELES, a Municipal)
17 Corporation, THE CITY COUNCIL OF LOS)
ANGELES, DOES 1-10,

18 Respondents.

19 PLAYA CAPITAL COMPANY, LLC, a)
20 Delaware limited liability company, et al.

21 Real Parties in Interest)
22)
23)

CASE NO. BS 073182

Hon. George H. Wu

SUPPLEMENTAL OBJECTION TO
SUPPLEMENTAL RETURN TO
PEREMPTORY WRIT OF MANDATE AND
PROPOSED ORDER DISCHARGING WRIT
OF MANDATE; DEMAND THAT
FEBRUARY 27, 2007, MARCH 31, 2006
AND JANUARY 11, 2006 VOTES OF CITY
COUNCIL AND ACTIONS OF CITY
ATTORNEY BE ORDERED VOID FOR
VIOLATION OF THE POLITICAL
REFORM ACT GOVERNMENT CODE §
87100, ET SEQ.; DECLARATIONS OF
PATRICIA MCPHERSON, PAUL HERZOG
AND DANIEL COHEN

CCP §§

Date: April 11, 2007

Time: 8:30 a.m.

Place: Dept. 33

Includes declarations of
John Davis and Bernard Enderes

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ENDS

DECLARATION OF BERNARD ENDRES

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I, Bernard Endres, declare as follows:

1. I am a self-employed engineer and scientific consultant, and I have been employed in this capacity for the past 25 years.

2. I hold Bachelors, Masters and Ph.D. degrees in engineering and mathematics, and I have worked professionally in these fields for the past 45 years.

3. Since the year 1985 I have specialized in two areas of engineering analysis and scientific research. Area 1 has involved gas migration from oilfields and underground gas storage project, including the environmental hazards created thereby in urban environments. Area 2 has involved the study of subsidence caused by water and fluid production from aquifers and oilfields.

4. Since 1992, and continuing to the present, I have performed detailed studies of the gas migration and subsidence hazards in the Playa Del Rey area of the City of Los Angeles, including in the immediate vicinity of the Playa Vista Real Estate Project. The study results have been reported to the City of Los Angeles in both engineering report form and by briefings presented to high level personnel affiliated with the City of Los Angeles Department of Building and Safety ("LADBS").

5. I was instrumental in convincing the LADBS of the need to investigate the gas migration hazards existing at the Playa Vista Real Estate Project, through the use of deep soil gas probes. LADBS, in response, undertook these investigations before Grading Permits were issued for the initial construction work that took place at the Playa Vista Real Estate Project.

6. The LADBS employed the services of Exploration Technologies, Inc. (ETI) of Houston, Texas, under the direction of Dr. Victor Jones, to serve as scientific consultants to the

1 City of Los Angeles regarding the gas migration hazards. ETI undertook an extensive study of
2 the Playa Vista soil gas conditions using both shallow and deep soil gas probes. These studies
3 identified very hazardous soil gas conditions extending to the most severe levels discovered at
4 depths of approximately 50 feet below ground level.

5 7. These studies confirmed my earlier scientific findings, based on hydrology
6 studies, that the true gas migration hazards at this location were centrally associated with the
7 "50 Foot Gravel" or Ballona Aquifer, that had been extensively researched by Dr. Polland,
8 when he worked as a hydrologist for the State of California. Dr. Polland called the primary
9 area of concern the "50 Foot Gravel," because beginning at an approximate depth of 50 feet
10 below the ground surface, a highly permeable sand and gravel zone begins, and extends to a
11 depth of several hundred feet. This zone was created over geologic time by the flow of the
12 original path of the Los Angeles Riverbed. This riverbed flowed in a down-dip direction
13 toward the Pacific Ocean in an approximately east-to-west direction.
14

15
16 8. This sand and gravel zone directly overlies the Playa Del Rey Oilfield, that was
17 converted to a very large underground gas storage operation beginning in 1942. Billions of
18 cubic feet of natural gas are routinely imported from gas supplies located largely in Texas and
19 Oklahoma. This gas is pumped into the old oilfield under very high pressures using surface
20 located compressors.

21
22 9. Beginning in the 1920's and 1930's hundreds of oilwells were drilled into the
23 Playa Del Rey Oilfield in pursuit of oil and gas production. Many of these wells intercept the
24 gas storage zones that are operated under high pressure, with the pressure selected to maximize
25 storage capacity, but not to minimize the gas leaks that occur along the old wellbores, largely in
26 the permeable zones located between the drill holes and the old steel casings of the oilwells.
27

1 10. These old wellbores intercept the "50 Foot Gravel" zone, that is described
2 above. When the upward leaking gases reach the "50 Foot Gravel" they spread out
3 lethargically over large areas by migrating up-dip (viz., in an easterly direction), directly along
4 the alignment of the old Los Angeles Riverbed. Much of the gas is trapped in localized gas
5 collector zones that concentrate pressurized gas pockets as numerous undulation areas formed
6 between an upper sand and gravel zone and a clay layer extending to a depth of approximately
7 50 feet, and located at the interface of the "50 Foot Gravel," as described above.
8

9 11. The above described "gas pockets" were extensively investigated by ETI, on
10 behalf of the City of Los Angeles, and recommendations were prepared by Dr. Victor Jones of
11 ETI regarding implementing necessary mitigation measures. In summary, he advised the City
12 of Los Angeles LADBS that the Playa Vista Real Estate Project could not be built safely unless
13 the 50 Foot Gravel zones were degassed. Dr. Victor Jones proposed an extensive water
14 "Pump-and-Treat" procedure that would have allowed both the venting of the free gas, as well
15 as the degassing of the dissolved gas contained within the "50 Foot Gravel." This was in
16 recognition of the scientific reality that the degassing could not be performed using merely
17 passive vent pipes extended from the surface into the shallow gas zones.
18

19 12. The gas migration, hydrology conditions, and mitigation measures were found –
20 through extensive investigation – to closely parallel the gas conditions existing below the
21 explosion site of the Ross Department Store in the Fairfax area of Los Angeles in 1985. That
22 explosion was caused by a build-up of gas pressure from leaking oilfield gases from the Salt
23 Lake Oilfield into a gas pocket located approximately 50 feet below ground surface, directly
24 below the explosion site and the continuing surface burning of gas thereafter. The "Anthony
25 Vent Well" was drilled into the gas pocket relieving the gas pressure, and eventually allowing
26 the flames to be extinguished by the City of Los Angeles Fire Department.
27
28

1 13. This 1985 incident led the City of Los Angeles to form a large Task Force to
2 investigate the cause of the explosion, and develop mitigation measures to prevent a
3 reoccurrence. This Task Force developed the detailed design and construction features of the
4 "Anthony Vent Well," that upon construction allowed the immediate gas hazards to be
5 mitigated.

6 14. In 1989 there was a near repeat of the gas hazard conditions that had caused the
7 1985 explosion and gas fires. The City of Los Angeles discovered that the Anthony Vent Well
8 had become clogged by the infiltration of water and scale build-up in the perforations used at
9 the base of the vent well located at a depth of approximately 50 feet. These problems led to the
10 formation of a second Task Force by the City of Los Angeles. The study results identified the
11 extreme criticality of not allowing the water table to rise above the vent pipe perforations
12 located at an approximate depth of 50 feet. Also, it was found critical not to allow scale
13 build-up to occur within the perforations at this depth, largely caused by microbial activity
14 occurring within the water and gas bubble interface at this depth.

15 15. For the foregoing reasons, and because extensive research has been performed
16 on these detailed gas migration hazards and topics, since the 1985 explosion, today the
17 problems have been well documented in the scientific literature. Detailed discussions of these
18 topics are set forth in a textbook on Gas Migration that I co-authored.

19 16. The above findings and research confirm that degassing of the high-pressure gas
20 pockets existing in the "50 Foot Gravel" at Playa Vista cannot be accomplished by way of
21 drilling passive vent wells into these areas. In particular, the perforations used at the base of
22 the vent wells will become clogged with water intrusion and scale build-up in the same manner
23 that the Anthony Vent Well clogged in the 1989 time period, and nearly caused a repeat
24 explosion of the 1985 Ross Department Store explosion.

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17. It is necessary to perform extensive dewatering, as determined by Dr. Victor Jones of ETI, to perform adequate degassing of the 50-Foot Gravel. This dewatering must be evaluated in the context that the subject area at Playa Del Rey, including Playa Vista, has been categorized by the United States Geological Survey as a highly subsidence-prone area.

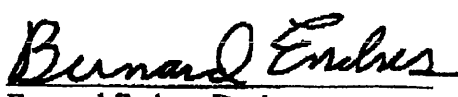
18. Official studies performed by the State of California have detailed the extent of the subsidence that has already occurred in this subsidence-prone area. These studies have attributed the largest component of this subsidence to groundwater extraction in the Playa Del Rey area. However, large quantities of fluids that are being continually produced from the Playa Del Rey Oilfield are also a significant commingling contribution of the overall subsidence problem recognized by the United States Geological Survey, in their extensive surveying of the area.

19. I have relied upon additional survey data generated by the Los Angeles County Survey Teams, who maintain permanent and ongoing survey markers throughout the Playa Del Rey area. My results have been reported to the City of Los Angeles LADBS, with emphasis upon the ongoing subsidence in the area of the Playa Vista site.

20. These results reveal that any amount of dewatering performed as part of the Playa Vista development will have a near-immediate impact upon the ongoing subsidence that has been ongoing as described above.

I declare under penalty of perjury that the foregoing is true and correct, and if called upon to testify would so competently testify to the foregoing.

DATED: March 28, 2007


Bernard Endres, Declarant

1 RICHARD I. FINE, SBN #055259
RICHARD I. FINE & ASSOCIATES
2 468 North Camden Drive, Suite 200
Beverly Hills, California 90210
3 Telephone: (310) 277-5833
Facsimile: (310) 277-1543
4

5 Attorneys for Grassroots Coalition and
Daniel Cohen and with permission of
John Davis
6

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Los Angeles Superior Court

APR 06 2007
John A. Clarke, Executive Officer/Clerk
By A E LA FLEUR-CLAYTON, Deputy

7 SUPERIOR COURT OF THE STATE OF CALIFORNIA
8 FOR THE COUNTY OF LOS ANGELES
9 CENTRAL DISTRICT

10 ENVIRONMENTALISM THROUGH)
INSPIRATION AND NON VIOLENT)
11 ACTION ("ETINA"), a California non-profit)
corporation, GRASSROOTS COALITION, a)
12 California non-profit corporation, SPIRIT OF)
THE SAGE COUNCIL, a non-profit)
13 unincorporated association, JOHN DAVIS and)
DANIEL COHEN,)

14 Petitioners,

15 v.

16 CITY OF LOS ANGELES, a Municipal)
17 Corporation, THE CITY COUNCIL OF LOS)
ANGELES, DOES 1-10,)

18 Respondents.
19

20 PLAYA CAPITAL COMPANY, LLC, a
Delaware limited liability company, et al.

21 Real Parties in Interest
22)
23)
24)
25)
26)
27)

CASE NO. BS 073182
Hon. George H. Wu

REPLY IN SUPPORT OF SUPPLEMENTAL
OBJECTION TO SUPPLEMENTAL
RETURN TO PEREMPTORY WRIT OF
MANDATE AND PROPOSED ORDER
DISCHARGING WRIT OF MANDATE;
DEMAND THAT FEBRUARY 27, 2007,
MARCH 31, 2006 AND JANUARY 11, 2006
VOTES OF CITY COUNCIL AND ACTIONS
OF CITY ATTORNEY BE ORDERED VOID
FOR VIOLATION OF THE POLITICAL
REFORM ACT GOVERNMENT CODE §
87100, ET SEQ.; DECLARATION OF
ALFRED Q. BABAYANS; RESPONSE TO
JOINT EVIDENTIARY OBJECTIONS
Declaration of John Davis
C.P. §§

Date: April 11, 2007
Time: 8:30 a.m.
Place: Dept. 33



DECLARATION OF ALFRED O. BABAYANS

I, Alfred O. Babayans, declare as follows:

1. I have personal knowledge of the facts set forth herein, and if I were called as a witness I would competently testify to the same.

2. I am a Registered Professional Mechanical Engineer (P.E.) with the State of California (License No. M 25865). I hold a Masters degree in Mechanical Engineering/ Chemical Engineering from the California State University at Northridge.

3. For nineteen (19) years I was employed in the City of Los Angeles Department of Building and Safety (LADBS), in which I was responsible for performing plan checks regarding Building Code compliance and in establishing design requirements for the mechanical and plumbing systems within structures being permitted and approved by the City.

4. Beginning on or about 1985 I was assigned responsibility for overseeing Building Code compliance with the City of Los Angeles Methane Ordinance that had been adopted by the City following the Ross department store explosion and ensuing methane fires that occurred in the Salt Lake Oilfield (Fairfax) area of the City.

5. I was later assigned similar responsibilities regarding Building Code compliance with the Methane Ordinance that was adopted by the City to deal with the high methane levels and explosive oilfield gas conditions discovered at the Playa Vista area of the City, and located over the old Playa Del Rey Oilfield.

6. I frequently voiced strenuous objections to my superiors within the LADBS regarding the permitting and approval process that was being employed by the City regarding the Playa Vista building site. These review procedures were substantially relaxed, and made much less demanding upon the Playa Vista building site, versus the permitting procedures

1 employed in the Fairfax area. It was expressly stated by my superiors within the LADBS that
2 special accommodations had to be made for the building at Playa Vista in order to favor the
3 building contractors, and limit the cost implications of the methane mitigation systems. I was
4 appalled by these procedures.

5
6 7. I personally became aware that gas mitigation systems were allowed to be
7 installed at Playa Vista, by the City, without first going through a blueprint review and design
8 verification with the methane ordinance requirements. This violated the practices employed by
9 the City that required that the blueprints be first approved by the permitting department of
10 LADBS, before construction could proceed.

11
12 8. I was the Metro, Chief of Mechanical Plan Check during the time period that the
13 Playa Vista methane mitigation system approval process was taking place. I have personal
14 knowledge that the blueprint approval phase was often violated, as described above.

15
16 9. The methane mitigation systems that were allowed to be installed by the City at
17 Playa Vista failed to comply with appropriate design requirements to assure safe operation over
18 the range of anticipated operating conditions. The most dangerous features that were allowed
19 to be installed by the City at Playa Vista, largely as cost cutting measures are described in the
20 following paragraphs.

21
22 10. A so-called Dual System was used in which subsurface perforated gas collection
23 pipes were simultaneously used to also collect water – that was seeping into these gas
24 collection pipes – and drained to a sump area. This design practice is extremely dangerous
25 because of the high probability that the perforated gas collection pipes will fill with water,
26 especially during heavy rains, and completely defeat the passively designed gas mitigation
27 system.
28

1 11. The above-described defective design features employed at the Playa Vista site
2 also prevent – on an ongoing basis – the ability to detect and determine if the methane
3 mitigation system is actually venting gas to the atmosphere, as required to protect the building
4 structures from explosion and fires. This is the central flaw of the passive mitigation system
5 that was allowed to be installed at Playa Vista, against my strenuous objections based upon my
6 experience gained in evaluating similar gas hazards in the Fairfax area, as described above.
7 This passive system was allowed to be used by the City, solely as a cost saving benefit to the
8 builder, as opposed to an active system that would allow validation of the ongoing
9 requirements of venting.
10

11 12. I have reviewed various Declarations that have been prepared by LADBS
12 employees, who I formerly worked with, that purport to claim that the gas mitigation system at
13 Playa Vista works as intended. Based upon my personal knowledge of the defects existing in
14 this system, these Declarations by current employees of the City are only self-serving
15 conclusionary opinions, not base upon the actual limitations of the system as installed.
16

17 13. The serious design defects that exist in the methane mitigation system installed
18 at the Playa Vista site were deliberately and intentionally allowed to be used by LADBS
19 officials in order to favor cost cutting measures advanced by the building developers. This
20 violated the established practices and procedures of the LADBS, in providing protection to the
21 public in assuring safe building practices. As a result of these violations, there is an ever
22 present risk of fires and explosions at the Playa Vista site.
23

24 14. In my efforts to correct the above-described wrongful conduct taking place
25 within the LADBS, I was severely sanctioned and reprimanded by my superiors within the
26 LADBS.
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15. In preparing this Declaration, I am still hopeful that steps can be taken to correct the extremely dangerous oilfield gas migration conditions existing at Playa Vista. During my tenure with the LADBS, I now realize that the soil gas measurement results generated by Exploration Technologies, Inc. (ETI) and Dr. Victor Jones, were withheld from me by superiors within the LADBS. Now that I am aware of the extremely high near-surface soil gas conditions that were measured by ETI, my opinions stated above regarding the defects existing in the methane mitigation system at Playa Vista take on even added importance. I believe these gas measurement data were deliberately withheld from me by my superiors within the LADBS.

16. As previously stated, I was involved with the permitting procedures adopted in the wake of the Ross department store explosion in the Fairfax area. Although the Fairfax area was deemed by the City to be a dangerous area as a result of the gas migration hazards, the gas levels that I am now aware of at Playa Vista are much higher.

17. During my tenure within the LADBS, my superiors routinely insisted that the requirements for Playa Vista be made less restrictive (as opposed to what I believed they should have been more restrictive). If I had been aware of the true gas levels measured at Playa Vista I would have been even more insistent upon imposing more demanding requirements upon the Playa Vista gas mitigation, versus the LADBS requirements imposed upon the Fairfax area.

I declare under penalty of perjury under the laws of the State of California, that the foregoing is true and correct. Executed on April 6, 2007 in the City of Los Angeles.



Alfred O. Babayans, Declarant