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Dear Legislator,

This communication is to support the request by the Playa Vista Grassroots Coalition for the California Joint Legislative Audit Committee (JLAC) to convene a hearing to investigate fundamental inaccuracies and omissions in the report of the Chief Legislative Analyst (CLA) to the City of Los Angeles.

If the Playa Vista Developers get their way, people may be living and working in the Playa Vista area with the smell of rotten eggs - that smell from our chemistry lab days when we concocted hydrogen sulfide. It is the smell that often wafts from old oil wells in places like Belmont and leaking sewers as in Pacific Palisades (LA Times April 19, 2001). In the past we have been very tolerant of this smell but hydrogen sulfide is a toxic gas that kills more people every year than any other gas and has maimed others as occurred with the leak at the Texaco oil refinery at Long Beach in 1992.

Despite questions raised by the EPA and other agencies, the Los Angeles City Council, recently approved a CLA report that states that it is safe to build homes on Ballona Wetlands and attempted to give Playa Capital Co. more than $165 million in Mello-Roos bonds. Explosions and fires from methane have been the main gas issue (among many issues) hindering the Playa Vista Development. However in the rush to judgment the council has almost entirely overlooked the risks of hydrogen sulfide, that everyone agrees is present in the area and for which mitigation is impossible.

At Ballona there have been numerous anecdotal reports of the detection of the odor (the smell of rotten eggs) by persons in the area. There are written reports of hydrogen sulfide in the water; work stoppages and an archeological investigation that had to be halted because of toxic levels of hydrogen sulfide on Ballona. On Dec 13th 1998 when a well bore was being placed 3 workers became ill because of the hydrogen sulfide. There are reports of extraordinarily high measurements of 500 and 2000 parts per million leaking from the S. Calif. Gas Co. wells. Remarkably the Los Angeles Chief Legislative Analyst report (March, 2001) excluded all of this information and concluded that: no further investigation [of hydrogen sulfide] or remediation [was] warranted .

How was it possible to come to this amazing conclusion?

The investigators examined 1199 sites 4 feet below the ground surface. The report stated that less than 1% of the soil gas samples contained hydrogen sulfide and did not typically warrant evaluation . In stark contrast, the section on Health Assessment , said that hydrogen sulfide was detected in more than 50% of the samples. Despite concerned citizens questions this amazing discrepancy was never explained. The maximum toxic level found was 41 parts per million and the average was 8 parts per billion. With amazing dexterity the investigators explained that the very toxic level of 41 parts per million was not a problem.

The most egregious of their assumptions was that hydrogen sulfide moves through the soil only by diffusion. This is not true for a gas that is under pressure and pushes its way to the surface. The model that was used assumes no major cracks in the floor and no cracks in the soil, conditions that are not likely to apply anywhere in Los Angeles during and after an earthquake. The report concluded that a toxic concentration of 41 parts per million at 4 feet below the ground surface resulted in less than 1 part per billion in the air of the building. This is extraordinary and self-deluding.

At the very least the residents and their children in Playa Vista are going to be living with the smell of rotten eggs intermittently. As starters, air pollution exposures that interfere with the quality of life can be considered adverse effects. There has been some debate about the level at which hydrogen sulfide can be detected by the nose but for many sensitive persons such as children with asthma, 7 parts per billion may be a major problem. I am even more disconcerted by the medical research showing that exposure to hydrogen sulfide at low levels may produce brain and other body damage. Dr. Kaye Kilburn from USC School of medicine, in a study that included the incident at the Long Beach Texaco refinery explosion in 1992, found that persons exposed to 1 part per million of hydrogen sulfide may develop brain damage (Environmental Epidemiology and Toxicology 1: 217-216 1999). Dr. Marvin Legator and his colleagues noted that even lower levels of hydrogen sulfide in the range of 10 to 700 parts per billion may produce a range of disorders (Archives of Environmental Health 56: 123-131 2001). These reports are becoming more frequent and difficult to ignore.

Of additional concern are reports that underground hydrogen sulfide can collect unexpectedly in buildings and other closed spaces and can be lethal. A recent example of this was seen at Rotorua, a geothermal tourist resort in New Zealand. Hydrogen sulfide caused the death of an Austrian actress who was found on the floor of a motel room in February 2000. Previously in 1987 two persons died in their sleep while on their honeymoon when hydrogen sulfide seeped through the floor of their motel at Rotorua. The CLA report says nothing about gases outside the building and in other closed spaces.

The medical literature contains stories of dramatic community responses triggered by low levels of hydrogen sulfide that have been characterized as epidemics of hysteria. In retrospect these were very natural responses to a very toxic gas and today's interpretation may be to trust your nose. Science teachers wisely no longer help students concoct hydrogen sulfide. That lab experience from the past illustrates a long history of lack of concern about low levels of hydrogen sulfide, an attitude that is slow to change. We should always be concerned when we notice that smell of rotten eggs.

There is clearly a significant risk from hydrogen sulfide at Ballona. The Playa Vista Developers with the acceding LA City Council have dealt with this risk essentially by trying to tell us that there is no hydrogen sulfide there. This is a problem that can only be dealt with by your oversight body the California Joint Legislative Audit Committee (JLAC)
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