

Date: January 23, 2014

From: Brisbane Baylands Community Advisory Group

To: City of Brisbane

Re: Brisbane Baylands Draft Environmental Impact Report

Following you will find a number of comments on the DEIR.

A subject has been provided for each comment, but many comments apply to a broader subject than the particular page or section of the DEIR which is cited. Just as the DEIR has been divided into sections somewhat arbitrarily, we have cited just one (or a few) of the many places in the DEIR to which each comment relates. The reviewer should consider the broad and general implications of each comment.

These comments were prepared by different individuals, each of whom has an unique perspective. Please give each comment a complete response, even if there is some duplication and redundancy.

I produced this document in one program and exported it as an old (.doc) Word document. It is possible this caused some problems that I did not catch; if so, please contact me. I can be reached at maryc@gutekanst.com or 415-468-1548 if any clarification would be helpful.

Thank you for your attention,

Mary Gutekanst
Chairperson
Brisbane Baylands Community Advisory Group

Unless otherwise noted, references to a document by Dr. G. Fred Lee are to the “Report on the Adequacy of the Investigation/Remediation of the Brisbane Baylands UPC Property Contamination Relative to Development of this Property” by Dr. G. Fred Lee and Dr. Anne Jones-Lee, dated November 1, 2010. Reference is also made to “Flawed Technology of Subtitle D Landfilling of Municipal Solid Waste,” by G. Fred Lee and Anne Jones-Lee, February 2013 and available at <http://www.gfredlee.com/Landfills/SubtitleDFlawedTechnPap.pdf>. Both of these documents are incorporated by reference.

Subject: Ability to locate reference materials, appendices, etc.

Comment 1: Here are quotes from members of the BBCAG: “I have not been able to find Appendix A-11.” “Appendix A-12 could not be located. Where is Appendix A-12? It is not in the Infrastructure Plan where there is an Appendix A. A reader should be able to find all the Appendices.” “Appendix A-13 cannot be located.”

All the Appendices should be able to be located. There should be a master Table of Contents that allows sections to be found. The material in all the Appendices should be placed with the DEIR because as a Planner pointed out, the DEIR and the Appendices, if kept separately tend to get separated and lost over time.

Comment 2: References to appendices have to be more specific. There are probably at least 50 instances of an Appendix A in the DEIR material, Specific Plan, Infrastructure Plan, etc. This ends up being extremely confusing for members of the public.

A master Table of Contents that can be searched is needed.

Reference documents need to be included in their entirety. The DEIR in several places quotes a document and then the appendix reproduces a couple of pages of that document. The public cannot evaluate the DEIR’s use of these documents if they are not able to read the full document.

Several referenced documents are not included in the DEIR material. Examples are two Kleinfelder reports (1987 and 1992). More attention needs to be given to including all relevant documents and making them available to the public.

Subject: Mitigation monitoring and reporting

Comment: The DEIR does not include any means to provide public reassurance that the mitigations have been done and that they work as planned.

The mitigation monitoring and reporting plan for the Baylands should require a very conservative schedule to catch problems that arise as soon as possible and the public should be made aware of the monitoring and its results in a lay person friendly way. There needs to be a body or agency that is charged with the enforcement of the mitigation monitoring and reporting plan. It must be independent of the property owner to avoid a conflict of interest and to assure that human health and the environment are aggressively protected. It could be a Mello-Roos District or another type of Hazard Mitigation District or it could take some other form. It must be staffed

with a professional environmental scientist(s) with administrative support. The staff could either be hired or contracted. The monitoring of the Chemicals of concern, other hazardous chemicals and priority polluting metals must be monitored as long as they are present. Dr. Lee stated that necessity in his report which is included in the DEIR Appendices. The idea that future residents or workers should be left unprotected is unreasonable. Their health and the quality of the future environment must be taken into account.

Subject: Project alternatives

Comment: Twelve million square feet is too large. Open space and open areas should total 49% of the land area instead of 34%. The result would be less pressure on everything and less need for water supply capacity, sewer capacity, more of the cleansing effects of wetlands which are important for environmental quality, less pressure to place buildings or sensitive receptors in contaminated areas.

Subject: Topography

Comment: The artificial topography proposed has the potential to create multiple problems. It may create runoff and erosion problems. It will create other connective problems with streets and perhaps utilities. How can it be sustainable to have to pump water and wastewater up and down hills?

I don't think the railroad tracks are moving so they will have to have a lined ditch and that may create a noise problem or a flooding problem. An impermeable ditch will make contaminants accumulate on the upland side of the train ditch.

There are aesthetic impacts. It may be that the elevation changes occur too closely together. The DEIR should provide an animated model of the proposed site topography for people to judge whether they are going to feel uncomfortable in the artificial topography.

Subject: 2-16, Section 2.9, Areas of Controversy and Issues to be Resolved

Comment: DEIR omits water and wastewater sources, delivery and removal, and excess water drainage and storage.

Subject: 3-7ff, Section 3.2.1 Site History

Comment: On the CD that accompanied paper copies of the DEIR, under Volume 3, on page 850 (following the 2012 Geosyntec Hazardous Materials Summary Report for the Landfill), are historic photos of the landfill.

Photo 3 purports to show phase 1 of Landfill in the 1920's, but the Landfill didn't begin until 1930 so what is this fill and where did it come from? This means that rail-yard where the tracks are located is underlain by a landfill of some kind and that it was being filled in the 1920's well after the 1906 earthquake. How far north is this photo? Is it San Francisco? An explanation of this contradiction is needed.

Subject: Terms used to describe different sections of the proposed project site

Comment: Prior to the DEIR and ongoing during the DEIR review, both UPC-Sunquest and the CA DTSC have used more than one name to describe the portion of the Rail-yard, OU1, that is located north of San Mateo County and it has complicated trying to understand what is being discussed.

This area should be consistently called by one name such as UPC OU. Note Geosyntec (2012 Hazardous Materials Summary Report, OU-1 and OU-2) chose not to do that following the example of DTSC which seems intent on creating confusion by using two different names to describe the same piece of land. I think it is regrettable that DTSC has done this. It was done to make it easier to follow groundwater pollution but it leads to widespread confusion and it should be repeated each time the different names are used what the purpose of overlapping nomenclature is.

Subject: Project description, open space and open areas

Comment: The DEIR should provide a coherent map that shows all the items mentioned as part of open space and open areas, along with landmarks.

Subject: 3-66, section 3.10, Water Supply

Comment: What will be done if the Oakdale/Modesto Irrigation Districts withhold some of the promised water during a drought? Will SF supply water? If sufficient water delivery failure occurs who will bear the cost of any consequences that follow?

Subject: 3-32,33, Proposed Land Use Plans for DSP and DSP-V

Comment: A solar farm is mentioned in the text but the map makes it hard to see where it is because the colors look similar (blue, grey, purple). Please include an additional map which shows just the proposed extent of the solar farm and of other renewable energy generation.

Subject: 4.A-36ff, Impact 4.A-4, Nighttime Lighting and Daytime Glare

Comment: DEIR does not give building heights as a significant source of glare.

Subject: Chapter 4, Section B, Air Quality, and F, Greenhouse Gas Emissions

Comment: The significant impacts of the developer submitted Specific Plan are so destructive and degrading to the health of the local human population that it is impossible to envision overriding considerations that could be cited to allow its construction. The air quality and traffic impact stress inducing changes to the Baylands area would alter and degrade the local environment.

The size of the project is entirely at odds with the plentiful open space and usually, clean air found in Brisbane. The air quality will suffer significantly as a result of the traffic caused by this project.

The cumulative impacts of other nearby projects and predicted general increases in traffic on Hwy 101 at the county line made by ABAG and MTC indicate that Air quality will be degraded for the people of Visitacion Valley, Little Hollywood, Daly City- Bayshore neighborhood and the people of Brisbane. This degradation will result in more illness and greater chance of death among the population in these areas. Air Resources Board Studies of people living along heavily traveled freeways in the southern central valley indicate greater chance of miscarriages for women living in proximity to those freeways. The residential neighborhoods proposed here place women in a similar situation with regard to freeway traffic and air quality impact. There are no overriding circumstances that justify this project's construction. Everything that is proposed here is readily available nearby in previously approved projects. Vacancy rates in existing office buildings and biotech facilities on the northern S.F. peninsula demonstrate the lack of overriding necessity to build those facilities.

Impact 4.B-5, for which the document states that no mitigation is required, is important because there are more significant receptors in this area than the average neighborhood. The residences near this project are already burdened by having 10 lanes of traffic near them as well as train tracks and a variety of small industrial uses. Bayshore Blvd, the largest non-freeway route north and south, is also nearby. These are all sources of air pollution. The closest residential neighborhood consists mostly of older homes, with a significant population of minorities, immigrants, the elderly and people with incomes that are less than the mean for San Francisco or northern San Mateo County. This demographic reality means that there are likely to be many older residents who bought their homes decades ago. The incidence of respiratory illness is higher in the elderly and in some immigrant populations. The lower income level and industrial businesses in the area are a predictor of asthma for children and adults in those households. It is cavalier of the preparers to make assumptions about the number of sensitive receptors in the area. Impacts : 4.B-2, 4.B-4, 4.B-9 will make their ability to breathe more difficult. The Air Quality and greenhouse gas emissions of this project when combined with existing and planned projects result in a cumulative impact that indicates the only healthy alternative is either no build or the renewable energy alternative.

The March 2012 Health Risk Assessment, relating to Air Quality, is outdated because it ignores the changes in wind patterns that are being caused by climate change. The British Government through its Met Office in Hadley, the Intergovernmental Panel on Climate Change and the North American Windpower industry magazine all acknowledge the importance of recognizing changing wind patterns and see the need to study the changes and use them to make responsible decisions about development.

The San Francisco Bay Area suffered a change in the prevailing winds in December 2013. The result of the change meant a degradation of our air quality causing more than 12 Spare the Air days that month.

The City of Brisbane, located south of Visitacion Valley and Little Hollywood, enjoys better air quality. It is a bit further from the freeway and benefits from the prevailing winds. New Wind patterns, like the ones we experienced in December will significantly degrade our air and it will bring the pollution from any Baylands project directly into our lungs. It will mean that our children will be more likely to suffer asthma and that our elderly will find it more difficult to breathe. Anyone suffering chronic respiratory illness will struggle. I am one of those people.

Health Risk Assessment of 3/29/12 did not include a project that has been proposed by Recology Inc in Brisbane. It proposes the addition of anaerobic digesters to its Brisbane facility and on land in the Baylands. There is a potential air pollution issue with this type of use.

The DEIR states that we are frequently affected by the winds coming through the San Bruno gap but that is not true. The gap impact area is located south of San Bruno Mountain. The gap has a great impact on the S.F. Airport not in Brisbane. This error indicates a lack of knowledge of the local area.

Residents of Brisbane consider the quality of our environment with its abundance of clean air, open space, beautiful views and the presence of wildlife essential to our lives here. This huge project threatens all of that and more.

The DEIR evaluation of the impact of air quality and greenhouse gas emissions is incomplete and more study is needed. I also believe that the BAAQMD air quality monitoring for Brisbane and southern San Francisco is grossly inadequate. Given the nature of the current local wind patterns made famous by Candlestick Park, how could a monitor located several miles away where the topography is quite different, possibly tell what is going on in this area?

Subject: 4.B-2, Climate and Meteorology: *“The nearest publicly operated meteorological monitoring facility to the Project Site ...[is at the airport]... through the San Bruno Gap and are therefore comparable in terms of ambient air quality.”*

Comment: The nearest station may not be the most accurate for local air quality comparison. Everyone in Brisbane has observed the fog conditions that are stronger south of the Brisbane border, that hover over the wetlands in San Bruno, to know that conditions are different out at the airport than the northern, San Francisco County end of the Baylands. If meteorological equipment is present on Radio Road, San Bruno Mountain, it might more closely reflect conditions in Brisbane.

Subject: 4.B-2, Criteria Air Pollutants/Ozone

Comment: This document identifies automobiles as the *“single largest source of ozone precursors”* while failing to note that industrial plant emissions (new and proposed), air transportation, office building heating and cooling, and landfill off-gassing are major contributors. Cumulative impacts associated with these hazards and this project have not been reviewed.

Subject: 4.B-7 thru 9, TACs, Table 4.B-3

Comment: While the DEIR adequately lists known stationary sources, a map of projected fall-out of particulate matter from these facilities (and US 101) would be beneficial.

The cited Cancer Risk figures are based on industrial uses with no adjacent residential use or sensitive receptors allowed. While the permits state the TAC constituents and levels anticipated by the polluter at the time of their application, it doesn't indicate overall compliance or trends.

The fact that the Diesel Risk Reduction Plan and subsequent CARB recommendations are considered “*advisory and should not be interpreted as defined ‘buffer zones...’*” raises the question of the ability for this document to evaluate planning policies and mitigation measures adequate to protect human health. Ignoring the planning opportunity is contrary to Brisbane’s General Plan Program 203a as well as Caltrans and school authorities who have established specific setback requirements, away from freeways and industrial dischargers for housing, schools, hospitals, etc. The transit-friendly, mixed-use planning for this area fails to acknowledge that traffic and existing toxic air contaminant dischargers will have multiplying impacts on the new, proposed densities and users.

Subject: 4.B-17 to 18, Impact Assessment Methodology

Comment: Methodologies and underlying assumptions are important. The Environmental Setting did not mention air conditions, such as “dust devils” and high winds that occur out on the Baylands, that circulate contaminated soils from areas that have not been capped or contained by any remediation program. It doesn’t mention that air-borne soils coming from the Northeast Ridge contain arsenic levels not suitable for residential uses even though they are not identified as a stationary source polluter because it is naturally occurring.

Subject: 4.B-17 to 18, Health Risks and Hazards

Comment: Communities near contaminated landfills should have Community Health Surveys and baseline studies done before the use of modeling of future health risks and hazards. Understated impacts, the myriad of impacts from unregulated chemicals, the gaps in regulatory leadership ALL means the public has greater health risks than calculated with these methods.

A mitigation measure to require a local dust monitoring program and control of dust through hydro-seed planting large un-vegetated areas should be considered.

Subject: 4.B-21, Mitigation Measure 4.B-1, Basic Controls, Item 1.

Comment: Soil piles and exposed Baylands ground surfaces need better dust control, both interim and long range. Occasional watering is not adequate. Tarping and tenting exposed ground, limiting the number of trips or times soil is moved (Impact 4.B-2, The Grading Plan) and requiring landscaping/hydroseeding programs would be beneficial mitigation measures not considered in this document.

Subject: 4.B-26 to 27, Conclusion, Mitigation Measures 4.B-2a and 4.B-2b

Comment: Air Quality impacts from construction, while significant, can be avoided 100% by the no project alternative. Disallowing earth-moving activities on windy days and requiring all earth-moving and infrastructure to be completed before any occupancy or new uses are permitted, are measures which would reduce exposure to particulates and associated public health risks.

Subject: 4.B-29 to 31, Impact 4.B-3 Toxic air exposure

Comment: There is no mention of modeling for accidental releases from pockets of volatile and lethal gasses present in the landfill. There also has been no consideration of air quality impacts from proposed increased rail usage, which might require submerged tunnels, a more massive project. It is truly counter-intuitive to believe all developments will have no significance on sensitive receptors being exposed to cancer risks.

Subject: 4.B-35, Impact 4.B-4

Comment: A mitigation measure that requires a TDM program for each site-specific development project creates a piecemealed solution. An alternative program would be to prohibit single-occupant car use, or prohibit uses that create a lot of vehicle trips.

Subject: 4.B-37 to 38, Mitigation Measure 4.B-4

Comment: Significant and unavoidable impacts? Job sharing, short workweeks, teleconferencing, and telecommuting are all employment strategies that can reduce greenhouse gas emissions or need to travel to work.

Installation of more than just solar water heaters should be considered. Passive solar orientation of buildings and natural air flow designs could also be part of a mitigation strategy.

Subject: 4.B-39 to 42, Impact 4.B-5, Substantial concentrations of TAC or PM2.5

Comment: Tables 4.B-15, -16, -17, -18 seem to treat the entire Baylands as one homogenous land where potential for exposure to toxic airborne particulates and vapors is considered insignificant. Without a proper mapping of the more dangerous areas, where the highest concentrations of particulate matter fallout from burners or where underground toxins are overlain with each other, without considering air quality impacts from US Highway 101, without considering accidental system failure(s) at Kinder Morgan or future proposed waste water treatment plants... this analysis is incomplete.

The Conclusion that "*each scenario would have a less-than- significant impact in relation to [exposing sensitive receptors to toxic air contaminants and cancer risks.] No mitigation is required,*" is dangerous. Each use and chance of exposure(s) to toxic air contaminants varies by area in and adjacent to the Baylands. An analysis of exposure to TAC's from unmitigated areas, from liquefaction from earthquake and underground fuel pipe rupture does not appear to have been done which renders the DEIR analysis incomplete.

Subject: 4.B-43, Impact 4.B-6

Comment: DEIR states persons would not be exposed to substantial levels of toxic air contaminants which may lead to adverse health as the result of project site development. What is the basis of this assumption and what monitoring will be used? BAAQMD figures represent a measurement approximation and not a testing method.

Subject: 4.B-44, Table 4.B-20

Comment: The cancer risk for the Kinder Morgan facility and flare is less than nearby gas stations or cleaners? Seriously? Since the Kinder Morgan release is a mélange of constituents of concern, something must be missing in this evaluation.

Subject: 4.B-47, Mitigation Measure 4.B-8 Recycled Water Plant

Comment: Why is the San Francisco Public Utilities Commission considered regulatory for a Brisbane plant?

There are no discussions of environmental impacts from proposed “caustic chemical scrubbers,” “thermal oxidizers,” and “exhaust stack and vents.”

A thermal oxidizer is a hazardous waste burner. Hazardous waste burners are not currently allowed in the Brisbane General Plan and the environmental impacts have not been adequately covered.

There are no documents to support the conclusion that “*objectionable odors would be less than significant for Project Site development,*” as seasonal algae blooms and impacts to the Lagoon aren’t recognized as objectionable odor conditions.

Subject: 4.B-52, Conclusion with Mitigation

Comment: The significant and unavoidable air quality impacts from the proposed developments are not acceptable. The NO PROJECT ALTERNATIVE is the preferable alternative.

Subject: 4.C, Biological Resources

Comment 1: This section of the DEIR does not reflect the extent to which the habitat of birds and aquatic species would be changed under the various scenarios. There is barely any mention of migratory birds, although the baylands is on the Pacific flyway.

Probably the biggest single change will be the overall reduction in freshwater wetlands compared to the recent past. The landowner’s grading activities, along with the continued uses of the area for storage of dirt, gravel, rock, and other substances, have filled in large areas of wetland. Interim remedial measures have contributed even more to degradation and shrinking of wetland areas.

The surveys cited in the DEIR to identify wetlands were all performed when the wetlands had substantially dried, even though seasonal freshwater wetlands are used by migrating birds. The baseline for wetlands cited on 4.C-12 uses a survey conducted in July 2003, when the size of wetlands had already been reduced enormously. There is no recognition in the DEIR of the serious reduction in usable wetlands that would result from implementation of the various scenarios.

The DEIR needs to consult aerial surveys over the last 20 years, and require mitigation to expand rainy season wetlands as well as year-round freshwater wetlands.

In addition, the DEIR needs to take into account sea level rise in relation to wetlands. Wetlands have to be designed so that wetlands in general, fresh water wetlands, marsh areas, and tidelands

are not reduced in area or in function as sea level rises. This subject is not raised at all in the DEIR and must be included.

Comment 2: Burns & McDonnell in 2004 (Geosyntec, 2012 HMSR OU1 and OU2, p. 35) “identified 27 potential wetland areas, one tidally influenced drainage area (the IDC), and one tidal water body (Guadeloupe Lagoon) within the Brisbane Baylands boundaries.”

Any project on this land should contain numerous wetlands to reflect the actual character of this tideland. Suggestions were made by Dangermond Assoc. who consulted with City of Brisbane on open space on the Baylands. It would benefit the health of the environment.

Subject: 4.C, Biological Resources

Comment: Resident bird species in the lagoon nest and raise their young on and adjacent to the mud-flats in the northwest corner of the lagoon. A buffer zone around this sensitive area needs to be kept off-limits during and after construction. Improvements to vegetation need to be accomplished outside of nesting and migrating seasons. Dogs and other household pets must be banned from the lagoon area and buffer zone, and from areas close to other wetlands.

Subject: 4.C, Biological Resources

Comment: Noise and vibration impacts to sensitive species are not adequately discussed. Many species that do not live underwater will be affected.

Subject: 4.C-10,11, Tidal Marsh and Tidal Wetland Drainage

Comment: What are the square footage and dimensions of the tidal marsh?

Subject: 4.C-35ff, Impact 4.C-1

Comment: The lagoon is considered U.S. waters. What coordination will take place between project development and federal government?

Subject: 4.C-46, Mitigation measure 4.C-1, “...*implementation of an on-going maintenance plan to ensure no reduction in water and environmental quality*”

Comment 1: Such an on-going maintenance plan needs to include sampling water quality and sediment at regular intervals. The DEIR does not establish a baseline for water quality in the lagoon, for possible contamination of aquatic life in the lagoon, or for potential exposure to toxins in the lagoon sediment. Since some plans call for increased activity in the vicinity of the lagoon, including activities that could stir up sediment that could be harmful to aquatic life, birds, and humans, the lagoon water and its sediment must be adequately characterized, and the potential for bioaccumulation of toxins in birds and aquatic species analyzed. The Sequoia Audubon Society recommends water monitoring include studies of winter benthic conditions to include counts of shellfish and other bottom life that serve as food for birds and other species.

Comment 2: The Lagoon which is partially underlain by refuse from the Landfill, has not been studied for a possible effect of Landfill contamination on benthic organisms. The understanding of the degree of contamination and the harm being done to the Bay waters cannot be calculated unless more testing is done on the water and the benthic organisms in the Lagoon waters. The DEIR is incomplete because the studies have not been done. The only studies were on the soil of the Lagoon bottom.

Subject: 4.E, Geology, Soils and Seismicity

Comment 1: The DEIR states that the Baylands will be subject to strong shaking and goes on to say that most of the City of Brisbane will be subject to strong shaking but that is misleading in its implications that the geologic circumstances are the same. The maps provided by the USGS and CGS indicate otherwise. The appendices of the DEIR state that San Bruno Mountain, where the majority of developed Brisbane is located is underlain by sandstone and shale. The Baylands sit atop large deposits of bay mud, both young and old. The mud, the un-engineered fill and municipal waste, in the case of the landfill, will amplify the impact of seismic waves and potentially cause more damage. It seems strange that there is no mention in the DEIR of the well known characteristic of mud's amplification of seismic waves. Mexico City is located in a lake bottom and suffers from that amplification. The map of San Francisco properties, which suffered more damage in the 1989 Loma Prieta quake, overlays exactly with the covered creeks and those built on fill over mud.

The San Andreas faultline is located 5 miles west of the Baylands. The City College fault extends half way across the Baylands from the west. It is an inactive fault. In Jan 2013, a USGS geophysicist acknowledged that a study by Hiroyuki Noda of the Institute on Earth Evolution Yokohama, Japan and Nadir Lappets of the California Institute of Technology, Pasadena, CA that the Northern section of the San Andreas fault could credibly produce a 9.0M (richter) earthquake is a warning message. In 2008, when the Geosyntec report was written, the maximum credible earthquake was thought to be 8.0 (They say 7.9). The significance of this change is that a 9.0 is an earthquake ten times more powerful than an 8.0 and the building code does not adequately protect structures from significant damage or destruction in such a great quake especially when constructed on top of mud. The City College Fault could be activated by a great quake of 8.0-9.0M emanating from the San Andreas which would place a source of seismic energy that much closer. The report mentions that the City College fault was not activated by the 1906 7.9 quake but that occurrence does not address the impacts of a possible quake of significantly greater energy with an epicenter 70-80 miles closer than Loma Prieta.

The Geosyntec 2008 report states that the elevated land forms created by surcharging the land create unsupported faces of dirt. The surcharging simply compresses and compacts the dirt from above. Shaping and landscaping these unsupported faces of surcharged dirt does not inhibit the ground spreading that occurs in earthquakes and any building sitting on land (underlain by mud) with unsupported faces would be subject to significant damage unless it were also sitting on piles driven into bedrock. The Specific Plan places numerous buildings atop landforms that have unsupported dirt faces that are 20 or 30 feet high in some places. If non-pile supported structures were torn apart by the ground spreading, it could result in catastrophic loss of life.

The infrastructure and utilities will be at great risk in an 8.0-9.0M earthquake. The risk to the utilities is mentioned in the DEIR but since the maximum credible quake is more than 10 times

greater than was evaluated, the conclusion is not useful and the analysis is incomplete. The plan is to leave metal contamination (arsenic, lead, nickel) under roadways or parking lots. Those roadways and the sidewalks bracketing them will be in pieces after a great quake potentially exposing the public to the heavy metals and hydrocarbons. Additional study and analysis is needed to understand how buildings (whether on piles or not), infrastructure and utilities will be impacted by a ten times larger earthquake. A study and understanding are needed of what will be the impact on the rail lines, trains, gasoline/aviation pipelines, gasoline storage tanks on or adjacent to the Baylands of a quake that is much stronger than they were designed for. This project places thousands of people in greater risk.

The DEIR under-represents the risk of loss of life and property damage due to a seismic event. Further investigation and analysis is needed to represent the actual risk.

The DEIR appendices state that extensive excavation could cause alterations to the groundwater flow regimen and ground water recharge. Comment: This kind of alteration could also be caused by a major earthquake. The result of this type of alteration would mean that monitoring wells might no longer function and remediation efforts could not be judged effective or not. A mitigation is needed for this possibility. A system must be devised that would allow for a rapid replacement of monitoring wells to determine if chemicals of concern and heavy metals were moving toward the Bay. In the past, circumstances have occurred related to remediation injection techniques that altered the artesian effects that are present beneath the site. Since some of the remediation effectiveness is predicated on the current regime and recharge, it won't be as effective as planned. Mitigation is required. The hazard applies to all areas of the Baylands.

Comment 2: The applicant's Infrastructure Plan, p. 10, under site grading, records a net increase of 700,000 cubic yards of material accumulated on the landfill since 2007 when the aerial topographic survey was done. This information originates in the Infrastructure Plan that was done in early 2011.

Much more material has accumulated in the 2-1/2 years since the Plan was written. Current information is needed to understand current conditions. A new aerial topographical map is needed. The mitigation measures must be applied to the conditions that exist when the mitigation measures are taken otherwise there is no reason to believe they will be effective. The analysis that was used to create them no longer applies. It should be redone since this deficit means the DEIR is incomplete.

Comment 3: In regard to recommendation in Geosyntec Landfill report (2012, Hazardous Materials Summary Report) about using deep or shallow building foundations, it seems clear that the recommendations in this landfill report do not take into account the seismic risks of either a richter 8M or 9M earthquake on the nearby San Andreas Fault. Seismic issues are not mentioned at all. Maximum credible earthquake has been predicted as possible.

A 1977 J.V. Lowney & Assoc. report regarding geotechnical issues concluded that commercial and industrial development was possible. The level of knowledge of geology/hydrology of the Baylands and of Seismology has changed and the standards in geotechnical engineering have changed significantly since 1977. A conclusion made 36 years ago should not be relied on today. The information on earthquake risk is outdated and new analysis is needed to include the

advances mentioned above as well as the more detailed information regarding bay mud, the behavior of unengineered fill and of waste in earthquakes. There is information in the Infrastructure report appendices about the behavior of buildings under stress on the landfill but it isn't clear what those analyses used as the basis for their conclusions. Did it include calculations for a larger earthquake and any geotechnical studies more recent than 1977? They should be less than 5 years old and critical changes in predictions should be included, if they are available.

Subject: 4E-1: *“At the time of closure of the landfill in 1967, a soil cap was placed over the landfill and additional clean soil has also been placed over much of the site....”* Also 4E-8, *“...the landfill operator placed a clean soil layer over the waste....”* and 4G-19, *“A clean soil layer....”*

Comment: It is not accurate to use the word “clean” here. Most of the soil and other materials that have been placed over the landfill and other areas was never tested for contaminants. Testing of fill began only recently and that testing is just sniffer tests, not analysis for toxic contaminants.

Subject: 4E-11ff, and figure 4E-3, discussion of Bay Mud, Groundwater, sediments, aquifers, etc., and 4E-35, 36, discussion of geotechnical investigations, and sections 4E and 4G in general.

Comment: The DEIR is misleadingly definitive about the underlying geology of the site. The underlying geology is not well understood, and the various water-bearing units are nowhere near as uniform nor as distinct as suggested in various parts of the DEIR.

It is especially important that construction does not result in increased contamination of groundwater or the bay, and for this reason it is important to be very clear that the geology and hydrogeology of the site are only partially understood, and more investigation will be needed in order to safeguard the water-bearing units from increased contamination.

A report by MACTEC (now AMEC) dated May 24, 2010 (Groundwater Monitoring Report, First Quarter 2010, Appendix B, p. 1-1) contains these observations about the Schlage OU: “A correct understanding of the Site’s hydrogeologic framework is critical to the successful design, assessment and performance of the [remediation] program. To date, the previously established definitions of water-bearing zones have been unable to explain completely the contaminant distributions and other hydrogeologic observations.... Recent field activities... indicate a reassessment of the Site’s hydrogeologic conceptual model is now necessary.... the existing definition of water bearing zones do not adequately represent the Site hydrogeologic condition.... [the report] presents an alternative hydrogeologic model ... that explains historic groundwater observations and better predicts fate and transport.”

It would be useful for the DEIR to reproduce MACTEC/AMEC’s cross-sections of the Schlage OU area to demonstrate how much the underlying hydrogeology varies across a relatively small portion of the site.

MACTEC/AMEC also decided to use a different terminology (see report quoted above, p. 2-1), i.e., Young Bay Margin Deposit, Colma Formation, Old Bay Margin Deposit, Merced Formation, Franciscan Formation bedrock. That is, the terms “A zone” and “B zone” were discarded because they were not sufficiently descriptive of the water-bearing layers.

Another issue occurs in connection with the term “aquifer.” At one point it is asserted that there are no “well-defined” aquifers beneath the site (4.G-24), yet again and again a water-bearing unit is identified as an upper aquifer or lower aquifer. If by “well-defined aquifers” you mean aquifers whose extent and contents are well understood, this is an accurate statement, but if you mean there are no water-bearing layers composed of stone, silt, gravel, etc., then it is wrong.

Figure 4E-3 uses the Burns and McDonnell (2002) stratigraphy, and it is used throughout sections 4E and 4G (esp. 4G-19, 20), but it is at best a general guideline and not a functional description. The first paragraph on 4G-20 under “Overview of Project Site Hydrogeology” confuses the matter even more by citing upper and lower water-bearing units separated by Young Bay Margin Deposits. At least in the Schlage OU portion of the Baylands, this is not the case.

While the DEIR does make it clear that soil borings will be necessary to establish adequate foundations for building, it is not clear from the narrative that additional investigation is necessary to establish how and where there is communication between the various water-bearing units.

In the section on “Use of Previous Geotechnical Investigations,” the DEIR states that “...geologic hazards ... have been well studied and documented in numerous geotechnical investigations...” and “As a result of these previous geotechnical studies, much is known about the underlying conditions including thicknesses of fills, Bay Mud and landfill waste.”

This may be true in the Schlage OU portion of the site, and it may be true in areas where there have been recent borings, but the subsurface layers are not uniform in thickness or depth, witness the cross-sections developed by MACTEC/AMEC for the Schlage OU (see the report referenced above).

Previous investigations also were done before the recent addition of very large amounts of material on top of the landfill and other areas, changing the thickness of underlying layers, and contributing even more to differences across the site. Geosyntec (Preliminary Geotechnical Report, 2008) expects bay mud consolidation, and such consolidation will certainly be uneven.

It is entirely possible that water-bearing formations across the site communicate in one or several places, as they do in the northwest corner of the site. Since testing of underground water shows features of bay water, it is likely that all or most of the water-bearing formations communicate with the lagoon and/or bay.

Additional study will be necessary to develop a functional understanding of the geology and hydrogeology of the site.

Subject: 4.E-23,24, settlement

Comment: Landfill Settlement Evaluation Program should monitor yearly the actual settlement to verify it against the predicted settlement to assure that the model was appropriate and the results of the comparison should be published on a Baylands Prediction Reconciliation and Confirmation Website paid for by the developer and landowner and verified by an oversight agency to be created for the Baylands and the appropriate regulators. It would be real evidence to the

public that the developer had been held accountable by the City of Brisbane and the State and County regulators. The DEIR does not include any means to provide public reassurance that the mitigations have been done and that they work as planned.

Subject: 4E-24, 25, characterization of soils

Comment: Will sea level rise have an impact on shrink-swell behavior on or near the site? What additional hazards could be encountered with a 10 foot rise in sea level, and what changes might be necessary to avoid them?

If the amount of moisture in the soil affects the severity and rate of corrosion, then what measures need to be taken to anticipate sea level rise?

Subject: 4.E-36,37, Impact 4.E-1

Comment: DEIR states there are no known earthquake faults with the project site and the proposed development will not expose people or structures to substantial adverse effects, etc.

The project is on landfill and mud as are the SF and Berkeley marinas. No fault line runs through either location but both were severely damaged in a recent 7.0 earthquake. The 7.0 quake was listed by Berkeley as 9.0 on their marina. The city of SF experienced conflagration fires in their marina, a lack of water delivery with subsequent fireboat use to stop the fires. DEIR should state mitigation IS required.

In addition, the pipeline traversing the bay to move petroleum into the tank farm definitely does fall into a quake zone, and these pipelines could cause quite a problem for the baylands.

Subject: 4.E-38, Impact 4.E-2: “...*strong groundshaking could potentially compromise the stability of the final landfill cap....*”

Comment: How would the landfill cap be checked for damage or deterioration? What would signify a breach? Who would be qualified to determine whether a breach occurred?

Subject: 4.E-38, Mitigation measure 4.E-2a, requiring a site-specific geotechnical report

Comment: Please add more detail on what would be required for a site-specific geotechnical report. How many borings would be required, i.e., borings will be required at what intervals? How deep would they have to go? How far outside the building footprint should borings be required? What measures would have to be taken to ensure that cross-contamination of water-bearing layers does not result from the process of boring or driving piles or other foundation work?

Subject: 4.E-41,42, Impact 4.E-4, discussion of landslides

Comment: The DEIR cites a Treadwell & Rollo report from 2008 that “...concluded that the placement of engineered fill may cause underlying Bay Mud to fail.” Exactly what does “failure” mean in this context? For many years, consultants for the landowner have argued that Bay Mud

is a relatively impermeable layer that prevents contamination in the fill from reaching the underlying water-bearing layers. How would a failure of the Bay Mud layer impact groundwater quality? What can be done to prevent cross-contamination?

Subject: 4.E-45: *“Young and Old Bay Mud are generally to slightly over-consolidated....”*

Comment: What does over-consolidated mean? Does it mean they would be subject to swelling when in contact with liquid? What are the implications of over-consolidation?

Subject: 4.E-45, discussion of wick drains and deep dynamic compaction

Comment: The use of wick drains is assumed in estimates of settlement at the landfill. However, wick drains may increase the chances of cross-contamination in the underlying layers. Please discuss the possible negative effects of wick drains and clarify whether or not the DEIR recommends their use.

Could deep dynamic compaction cause a failure in the Bay Mud layer(s)? Could compaction of all kinds cause a failure in the Bay Mud layers? Please analyze the possibility that compaction will result in pushing fill/waste/Bay Mud/sand laterally rather than or in addition to shrinking these substances in area.

Subject: 4.G, Hazards and Hazardous Materials

Comment: How will the site be monitored for toxic releases throughout the various building stages? With what frequency will testing occur? Who will be the reviewing authority? Who will pay for and hold the insurance to cover any lawsuit brought against the development for toxic liability?

How does the current drought affect movement of the toxic plumes? The Bay Area is currently in a moderate drought which is projected to continue for a very long period of time. Projected moisture in Bay Area soil content is expected to decrease. Bay waters will rise and soil moisture will decrease. What does that mean to any remediation and tracking practice? What does that mean to the stability of structures built on less than solid ground?

Subject: Hazards and Hazardous Materials, Groundwater

Comment: The detailed groundwater pathways and depths in the landfill and OU-2 have not been studied as much as OU-1 groundwater. The DEIR Appendix speculated that might have been because development was, at one time, planned to begin in that area. There have been more than 90 studies of OU-1 and fewer than 47 each on the Landfill and OU-2. It speaks of a general lack of knowledge of how groundwater flows on OU-2 and the Landfill.

There are toxic contaminants in the groundwater. The filled ground is subject to subsidence. The DEIR appendix says that extensive excavation may very well affect the pathways of the groundwater thereby undermining remediation attempts. Earthquakes could do the same thing. It is essential to protect public health and the environment that we have a clear detailed understanding of the groundwater pathways in all three sections of the Baylands. The DEIR is incom-

plete because it does not contain that information and there is no monitoring and mitigation included which would provide for the swift repair of this likely problem that is present one way or another across the entire site.

Subject: 4.G-1, Introduction: “...scenarios were independently reviewed by CDM Smith on behalf of the City and determined to be adequate for the purposes of CEQA analysis.”

Comment: This is an incorrect analysis of the CDM Smith report. The report is analyzed by Dr. G.F. Lee where many deficiencies are noted. Areas which are not adequate include human health and ecological risk as “[the] level of investigation does not preclude the possibility that there are unrecognized, unmonitored hazardous chemicals that pose a risk to public health and environmental quality at the site.” (pg 22) And “CDM did not address the adequacy of the stormwater runoff monitoring from this area.”

Subject: 4.G-2, “Remedial action” or “remediation”

Comment 1: While the document refers to state and local laws for clean-up and monitoring toxins, it fails to assess whether these laws are adequate. Dr. Lee addresses some of the issues involved as follows:

“This limited monitoring program [BMP for SWPP] highlights the grossly inadequate federal and state requirements for stormwater runoff monitoring programs for landfill areas.” (pp. 29-30)

“The environmental pollution by PBDEs [Polybrominated diphenyl ethers] is but one example of the significant deficiencies in conventional water quality monitoring for detecting the wide range of hazardous chemicals that are in wastes and in their leachates.” (p. 16)

“... [T]he current approach for developing water quality criteria does not consider even known additive and synergistic properties of mixtures of chemicals; the toxicity of a mixture of such chemicals is greater than the sum of the toxicity caused by each chemical alone.” (p. 18)

Comment 2: DEIR fails to state both source research and Codes proving adequacy of laws under similar project conditions.

Subject: 4.G-3; “Exposure to some chemical substances may harm internal organs or systems in the body, ranging from temporary effects to permanent disability or death.”

Comment 1: Conditions purported from exposure to toxic substances found on the Brisbane Baylands include endocrine disruption, infertility, neurological development disorders, chronic diseases and more.

Underplaying the multiple toxins and multiple chances of exposure (inhalation, absorption, ingestion) render this DEIR insufficient.

Comment 2: What percentage of illness has been calculated as acceptable and if this estimate is not stated in DEIR why is it omitted?

Subject: 4.G-4,6, Harding Lawson fill assessment, railyard

Comment: In 1982, a study was done that found SVOC's in 24 shallow wells and one deep boring in an area that covered part of OU-1 and part of OU2. It also found chromium, mercury and bis(2-ethylhexyl)phthalate. The results of this study have not been included in recent studies. There should be follow up on these results and a master study to reconcile all of the results of the OU-2 studies in order to comprehend this land and its contamination better.

Subject: 4.G-7: Geosyntec 2012: *"With the exception of 3 semi-volatile organic compounds ... chemical constituents detected were found at low levels which should not be of environmental concern."*

Comment 1: Why was the practice of vertical placement (holes) used to validate VOC testing with no accompanying horizontal tracking per testing event? Since horizontal flow of the leachate shows VOC contamination, what justification is used to determine that only vertical placement testing is necessary and superior without continual horizontal flow tracking?

Comment 2: In 1987, Kleinfelder (p.71) found semi-volatile organic compounds, phenanthrene, pyrene and chrysene in the soil. Why haven't there been tests for these specific chemicals at the sites where they were found in the past or at sites that would be consistent with groundwater movement near the location where they were found?

The absence of effort to check for these contaminants means that the subsequent characterization of the Landfill is incomplete. The priority pollutant metals that were found: antimony, arsenic, beryllium cadmium, chromium, copper, iron (soil samples only), lead, mercury nickel, selenium, silver, thallium and zinc. Tests should be again in the same location and in locations at the same depth that are downstream according to the groundwater flow to confirm if the metals are in the same location. The retesting should occur in all three landfill areas. The lack of retesting means that the understanding of metal contamination is incomplete.

Subject: 4.G-10, Water Quality Solid Waste Assessment 1992: *"the report also concluded that the refuse layer of the landfill did not appear to be tidally influenced and that contamination at the site would not be classified as hazardous waste under California regulations."*

Comment 1: Lack of tidal influence from this assessment is contradicted in the Hydrology section and this assessment is limited to the few wells and few chemicals tested.

Dr. G.F. Lee states that "[i]t should never be assumed that leachate from landfills (even 'non-hazardous' municipal solid waste landfills) or other complex mixtures of wastes, represents no threat to human health or the environment on the basis of the reporting that all chemicals measured in the characterization of a waste are below detection limits or below current regulatory limits."

Comment 2: The soil and subsoil of the landfill's project site are not adequately characterized by testing a few wells and a few chemicals. Project analysis has been based on vertical testing. Horizontal testing should be implemented to detect tidal influence and communication with bay waters.

Subject: 4.G-9, Air Quality Solid Waste Assessment-1990: *“The analytical results indicated that air contaminants apparently were not emitted from the landfill into the ambient atmosphere at levels that would be likely to pose a potential threat to public health or safety or the threat to the environment.”*

Comment: It is incorrect to assume that a few-day readings leads to “no threat to the public.” The methane system works by keeping a vacuum on the volatile vapors. The system shuts down, the methane and toxic gas vapors escape into the atmosphere. A mitigation system greater than a few-foot clay cap needs to be required.

Subject: 4.G-13, Soil Conditions Summary - 2005, *“Metals were detected in shallow soils in all of the 51 locations sampled across the entirety of OU-1.... the metals are widespread because the area was filled with rubble and debris in the early 1900s.”*

Comment: This report is supposed to be in Appendix A-11, but Appendix A-11 includes only the first page of a report plus some tables. Why was the portion of the report that was cited not included in the appendix?

Subject: 4.G-13, Wetland Mitigation Plan-2004: *“Proposed maintenance activities focused on promoting wetland habitat establishment... The wetland mitigation plan was not implemented and federal permits have since lapsed.”*

Comment: The wetland studies were minimal at best. They did not include upland areas that support the wetlands that were measured. This is an unmitigated impact of an interim measure. The City of Brisbane has a General Plan ordinance that allows for mitigation for the loss of wetlands in excess of 1:1. This has had a significant impact on wildlife and should be mitigated.

Subject: 4.G-16, Leachate Management Plans 2002-2008: *“The primary method for long-term leachate management at the Brisbane Landfill is to reduce leachate generation through the construction of a low-permeability final cover. Construction of the final cover will reduce leachate generation by approximately 90 percent.”*

Comment 1: This statement is incorrect. When groundwater passes through the landfill, leachate is generated. Preventing it from infiltration from above “is pointless” per Dr. G.F.Lee.

Comment 2: What is the life of the cover and what research shows this time-frame use under project conditions? What steps will be taken to monitor integrity of cover and how will cover be replaced? In sections or in entirety at one time? How will this be paid for? Also, the need for such cover advises leachate and pollution WILL continue to be a problem during the life of the project. How is this conveyed in the DEIR?

Subject: 4.G-17, Landfill Groundwater, Surface-Water and Leachate Monitoring, 2002-Present: *“the Young Bay Mud that separates the shallow and deep groundwater zones, along with the upward hydraulic gradient prevents contamination of the deep groundwater zones.”*

Comment 1: This may be true in many places, however the cuts into bedrock along Icehouse Hill and potential other places indicate this isn't an 100% effective barrier. There are toxins that have migrated to the lower aquitard.

Comment 2: Where does the DEIR give the age of "Young Bay Mud" as opposed to the original Bay Mud existing before overlay of biodegradable waste from the 1906 SF earthquake?

Subject: 4.G-18, Risk-Based Cleanup Levels:

Comment: *"testing for hexavalent chromium had not been conducted at this location." ... "clean-up levels recommended by MACTEC for the constituents of concern..."*

Subject: The Hazardous Materials Summary (Geosyntec 2012) indicates that the constituents of concern for the railyard include barium, hexavalent chromium, copper, zinc, nickel, and others. This information applies to a very specific area to the north and should not be considered appropriate for the Baylands.

Subject: 4.G-18, *"clean-up levels recommended by MACTEC for the constituents of concern in soil at OUI" [UPC.]*

Comment: These are primarily Industrial/Commercial use levels and are not reflective of the goals of protecting the environment, human health and groundwater as required through the Clean Water Act to meet primary and secondary drinking water goals.

<http://water.epa.gov/drink/contaminants/index.cfm#List>

While the landowners and regulators are accepting that there is no future use for the groundwater, and therefore no reason to clean up to a higher standard, they fail to identify ANY groundwater as presently being clean. Additionally, future technologies may resolve the contamination issues. It is irresponsible to not consider higher cleanup standards.

Too few chemicals of concern are listed.

MCL levels change over time and should be acknowledged here. For example, Cal EPA has just completed the public comment period review for the change in MCL's for Hexavalent Chromium.

A mitigation measure to utilize the highest safety standard or the Precautionary Principle in absence of regulation(s) should be required. The safest health-risk standards may be state, federal, local, or from international regulations, such as Europe's REACH laws, not the minimums suggested in the DEIR.

Subject: 4.G-18, Preliminary Fill Soil Import Criteria - 2011: *"Guidance was developed by Geosyntec to screen fill materials accepted as Brisbane Landfill cover soil."*

Comment: Please correct all references to a clean soil layer on the landfill. In fact, as noted here, there was no recommended procedure to screen deposits on the landfill prior to 2011. The DEIR should also describe the "guidance" developed by Geosyntec, i.e., describe exactly what

screening was recommended. Do they use a gas detector that reads petroleum hydrocarbons? What is an acceptable reading? Does screening include other substances? What are the acceptable readings for those substances?

Has Geosyntec's recommendation been accepted? What, if any, confirmation is available that screening was and continues to be performed? What evidence is there that the criteria is being followed?

Subject: 4.G-19ff, Overview of Project Site Geology

Comments: Par 2 repeats an inaccurate characterization, "*A clean soil layer ... overlies the waste.*" There is no evidence to support calling the soil layer clean. See comment above.

Par 3: "*Underlying the landfill and former railyard. Non-engineered fill ... consists of a heterogeneous mixture of clay, silt, coarse sand, and gravel with fragments of brick, stone, and wood from the 1906 San Francisco earthquake rubble.*"

This is an inadequate characterization of the deposits. The landfill received wastes from industrial and shipyard uses, as well as household and office wastes. It is likely that the fill underlying the railyard contained a wide range of substances, including hazardous chemicals.

Par 4: "waste" is not properly characterized. It includes medical wastes, chemicals, tires, heavy equipment, and materials contaminated by radiation from medical and shipyard sources.

Par 5ff and p. 4G-20: The terminology used in the DEIR is not consistent, and very confusing. On page 4G-19 the terms "bay margin deposits" and "bay mud" are both used, but it is unclear if they are referring to the same layer.

MACTEC/AMEC use for the Schlage OU the terms Fill, Young Bay Margin Deposit, Colma Formation, Old Bay Margin Deposit, Merced Formation, Franciscan Formation bedrock. Figure 4E-3 uses the Burns and McDonnell (2002) stratigraphy, and it is used in sections 4E and 4G. The first paragraph on p. 4G-20 under "Overview of Project Site Hydrogeology" is taken directly from the 2012 Geosyntec report, and is in direct conflict with Figure 4E-3, which shows the B water bearing zone beneath the Old Bay Mud layer. Apparently "shallow water bearing zone" sometimes means fill zone, and sometimes Colma Formation, and while these two zones communicate, at least on the northwestern edge of the site, they are also separated in other areas by Young Bay Margin Deposits.

Whatever terminology is used needs to distinguish between the fill zone and Colma Formation. It is impossible to understand the hydrology of the site if several sets of terminology are intermingled.

Subject: 4.G-20, Project Site Hydrology, 2nd paragraph: "*The influence of tidal cycles on water levels in shallow and deep groundwater wells was studied by Kleinfelder in 1987 and 1991.*" "*The study concluded that...the deep groundwater basin, at least in the vicinity of the tested well, appeared to have some discharge to San Francisco Bay.*" Yet Geosyntec's summary is that

“it appears that tidal influence is not likely a significant contributor to recharge of leachate in the landfill.”

Comment 1: It does not mention what constituents were measured and if measured, what protection level(s) were considered. Leachate entering the Bay has a different list of constituents of concern than those for human health. Fish and amphibians are impacted by unionized ammonium and salts. Humans are impacted by heavy metals and endocrine disrupting chlorinated solvents. Other studies state that chlorides ARE a problem with groundwater quality on the Baylands. The presence of chlorides is directly related to Bay salts from infiltration of sea water, a point which shouldn't be missed.

Tidal action HAS been noticed in the wells near Kinder Morgan Tank Farm, so this is an inaccurate assessment of the hydrology of the area and should be required to be tested by zone or quadrant to be clear, not using generalized conclusions.

Comment 2: What Federal or State agency states from independent research that tidal influence is relative only to a water basin?

Comment 3: This entire paragraph is a direct quote from Geosyntec's 2012 Summary, except for the use of the word "basin" after "groundwater." The sentence quoted above contains several qualifiers, "it appears" and "not likely ... significant....". Even so, it is misleading to repeat the contention (even if it only "appears" and "is not likely") that Bay water is not entering the fill area. Further study is required to determine the extent of Bay infiltration, and to assess the impacts of sea level rise on Bay infiltration.

There is no conclusive evidence that landfill leachate is not or will not be recharged from Bay waters. The Kleinfelder studies are over 20 years old, and are based on samples from one well ("The study concluded that ... groundwater, at least in the vicinity of the tested well....").

Contradicting this statement, Dr. G. Fred Lee's review concludes: "Since apparently at least a portion of the wastes in the Brisbane landfill are below the water table, even effective prevention of infiltration of moisture through the cover will not stop leachate generation."

Geosyntec's February 2010 report is also contradictory: *"Shallow groundwater flow in the vicinity of Brisbane Landfill is likely controlled by the location of two nearby surface water bodies: San Francisco Bay to the east of the site and Guadalupe Lagoon south of the site. Additionally, it appears that the Interior Drainage Channel (IDC), which crosses the landfill in the east-west direction, also influences shallow (Zone A) groundwater flow. Therefore, beneath the landfill, shallow groundwater appears to be recharged from the west and north and flows towards the IDC, Guadalupe Lagoon and San Francisco Bay, with a local component of westward flow along portions at the west boundary."*

Leachate recharge from the Bay is an important issue. The landowner's consultants project that leachate management will not be an issue after a landfill cap is installed. In fact, leachate will need to be monitored and managed for as long as the contamination exists.

Comment 4: How is it possible that the flow of Upper groundwater Zone A is influenced (as states in the report) by both the IDC and SF Bay but the report says that the waste is not immersed in water. Have the leachate wells been evaluated for the presence of sea water? The question must be answered to dismiss the possibility that the landfill isn't polluting bay waters. The 1992 Kleinfelder water quality SWAT concluded that the refuse layer did not appear to be tidally influenced but their basis did not address the movement of the tide at the depth of the waste only layers below .

Subject: 4.G-20

Comment: Note the 1992 "Site Cleanup Requirement" (Endangerment Order No.92-141) only required 13 groundwater wells and did not include Bunker "C" in its review but mostly fuels from the Brisbane Terminal (tank farm.) Furthermore, there is a prohibition (A.3) in the order that "*activities associated with subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.*" Yet there is evidence that the testing has caused migration of toxic compounds between aquitards.

Subject: 4.G-21: "*Operable Unit 2.... contains Bunker C fuel oil and heavy metals...*" "*both Bunker C oil and lead have low solubility and mobility...*"

Comment: These are inaccurate, misleading statements. OU2 has an area contaminated by VOC's and multiple contaminant concentrations referred to as the "South Disposal Area" which is not mentioned here. There are also never-studied areas along Industrial Way, which were known to have chrome-6 and acids from former tannery operations. (Not properly characterized in the Project Description.) Studies of residual contamination from the former Stauffer Chemical Plant and other Industrial Way properties need to be done before any generic claims about OU2 contamination are acceptable.

Claims that Bunker "C" oil and lead do not migrate are erroneous. Bunker C is only less mobile in colder temperatures. Most studies on the Baylands indicate that the contaminated soils are warmer than air temperatures when tested. This is due to energy/heat transfers during chemical decomposition. Therefore, the cooler conditions, which would slow movement are not correct for Bunker C oil to "*have low solubility and mobility.*" Additionally, CPEO observed an active leak in May 2006 as previously cited. A mitigation measure for this would be the removal of the Bunker C, not to allow it to remain buried or be considered benign.

Lead is a detected constituent in Brisbane Baylands leachate (particularly in the seeps along Visitation Creek), therefore it travels in the groundwater. The presence of Bunker C oil and lead is a risk to the public's health and the quality of groundwater, which ultimately impacts shellfish, fish, and the food chain. It needs to be properly noted and addressed.

Subject: 4.G-21: "*1932 to 1967, when the area was operated as the Brisbane Landfill.*"

Comment: That is not the correct name of the operation. Brisbane did not exist until the 1960's.

Subject: 4.G-21: "*methane gas emissions... burned periodically in a flare.*"

Comment: Reports state that when the methane system shuts down from mechanical failures, methane and other toxic gases are released through the unclosed landfill surface. Constant vacuum pressure is required to prevent those releases. This statement is misleading because it makes it appear that the system is more effective than it is. The methane system is an interim measure, it should be noted as such. Whether it needs to be, or is considered to be improved in the future, needs to be disclosed.

Subject: 4.G-21: *“Following cessation of landfill operations, the landfill was buried with a soil cover approximately 20-30 feet deep to prevent future human contact with contamination.”*

Comment: The landfill cover has not prevented future human contact with contamination, and it is inaccurate to say so. The depth of the landfill cover is a moving target and it is misleading to say that the landfill was covered with a specific depth of soil at some indeterminate time in the last 45+ years.

Subject: 4.G-22, VOCs, Bunker C Fuel: *“VOCs are numerous, varied, and ubiquitous.”*

Comment: Ubiquitous? Is this a condition of the Baylands or commentary on 21st Century life? Which VOC's? Where? In what quantities? This needs to be better described to be more effective for a planning tool.

The summarizations in the Geosyntec 2012 Hazardous Materials Summary Reports for the Landfill and Railyard are scattered and random. They mix tests and theories done in the northern section with those done further south. These two appendix materials are inadequate to be helpful for planning purposes (to be discussed later.)

“...residue used for Bunker C fuel may contain various undesirable impurities including 2 percent water and one-half percent mineral soil.”

How is water “undesirable” and why is it singled out? Is this a boilerplate response? The impurities from Bunker C are numerous. Ones that should be noted are sulfur, (sulfuric acid,) cadmium, arsenic, lead, zinc, polychlorinated biphenyls, PAHs, and halogens. Multiple toxins are present in Bunker C, glossing over the fact is not helpful. Proposed plans are to leave these hazardous constituents in place, an accurate understanding of them is paramount.

Subject: 4.G-23, Brisbane Landfill, Paragraph 3: *The total volume of waste disposed at the landfill has been estimated to be ...73 percent was produced by residential and commercial activities, with inert fill accounting for approximately 25 percent, and the remaining 2 percent assumed to be liquid waste (Geosyntec 2012.)”*

Comment: This is an inaccurate assessment with respect to the 01-041 Cleanup and Abatement Order. The statement in paragraph 5 more correctly lists the contents, which is also what the Cal EPA RWQCB clean-up order states. They are *“domestic, industrial, and shipyard waste; construction rubble and sewage...”*

Subject: 4.G-23, Brisbane Landfill, Paragraph 3: *“The depth of the waste layer is estimated to range from 20 to 30 feet.” “...the area was subsequently buried with a 20- to 30- foot cover of soil to prevent future direct human contact with refuse.”*

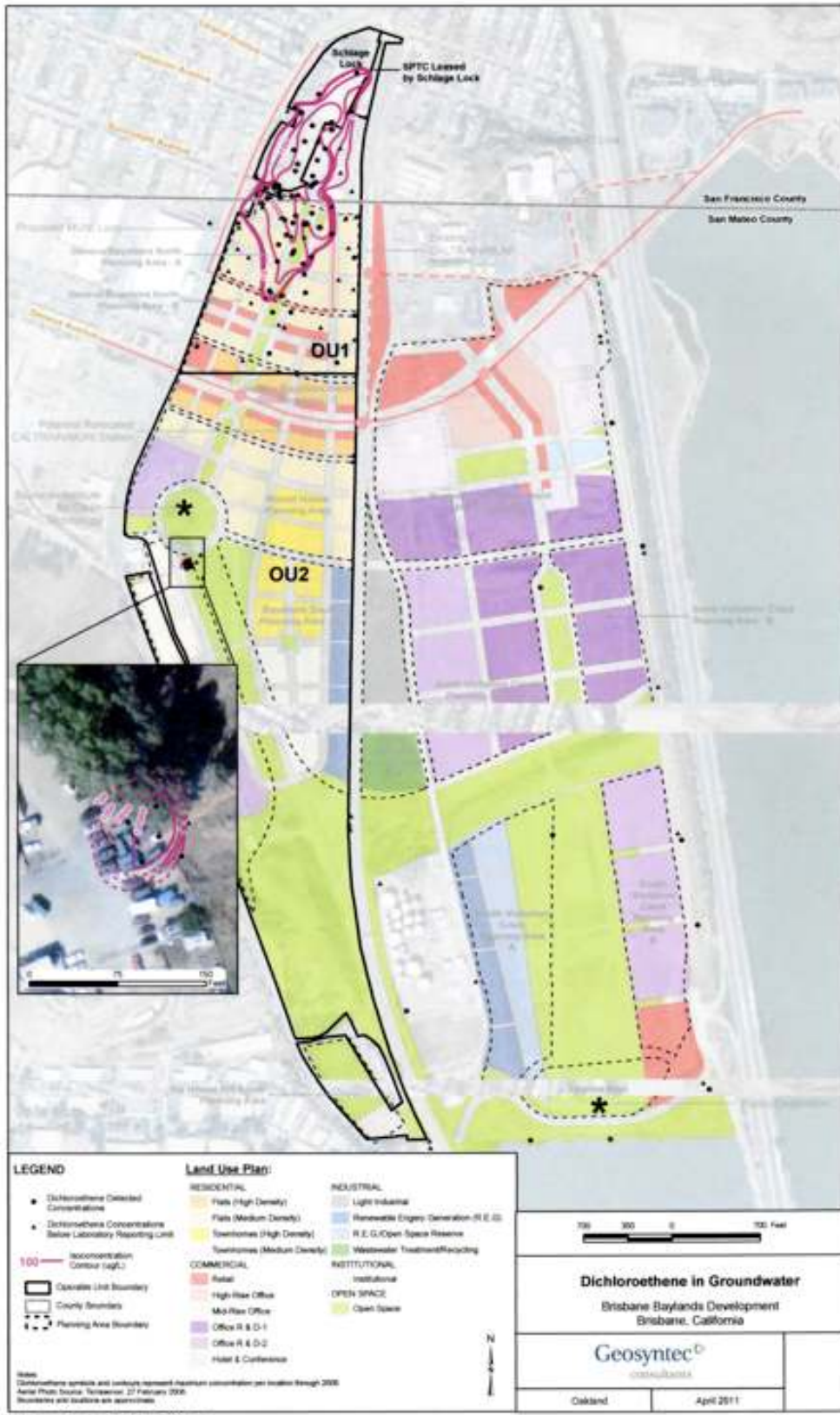
Comment: This is incorrect. Near the lagoon, the waste layer is thinner and hardly has 20 feet of soil cover. Again, accurate information is needed, not Geosyntec's version of reality.

Subject: 4.G-24, Soil/groundwater contamination from Brisbane Landfill

Comment: Geosyntec's April 2011 figures (reproduced below) indicate that there are 9 locations on the Landfill where dichloroethene is found in concentration and an additional 7 locations on the Landfill where it is found in amounts below the reporting limit. Vinyl chloride was also detected.

It appears nothing will be done to closely monitor or mitigate the presence of these toxic contaminants. This area is slated for extensive excavation. It is subject to great movement in an earthquake and there must be a method to detect whether the groundwater pathways have moved after an earthquake. There is no provision for this likelihood in the DEIR. It is incomplete without it.





Subject: 4.G-24: "... *there are no well-defined aquifers underlying the site.*"

Comment: This statement is inaccurate. Groundwater remediation at the Schlage site has produced a fairly detailed hydrologic model that includes Colma and Merced Formation aquifers. The DEIR contradicts itself, as there are numerous references to deep and shallow aquifers just in this section (see, for example, p. 4G-31, 4G-48-49).

If by "well-defined aquifers" you mean aquifers whose extent and contents are well understood, this is an accurate statement, but if you mean there are no water-bearing layers composed of stone, silt, gravel, etc., then it is wrong.

Subject: 4.G-24, Table 4.G-1

Comment: This table is meaningless. Averages over a few wells in 350 acres done only two times in the same year? Was this a dry or wet year? Were they done on a full moon? The groundwater wells appear to be shallow, because of tidal interaction, not the upward pressure as noted in footnote 14.

Subject: 4.G-25, Figure 4.G-2a, Shallow Groundwater Contours

Comment: The map of groundwater contours is inaccurate. Visitation Creek is omitted and should reflect flows toward it or change of depth of shallow groundwater around it. Reports of the Kinder Morgan area state there are changes of direction around the farm. Incorrect, inaccurate maps must be removed from this document.

Subject: 4.G-25 to 29, Figure 4.G-2b, Figure 4.G-3, Figure 4.G-5

Comment: Explain the purpose of these maps (pgs 25 – 29.)

Pg 4.G-24 mentions the Young and Old Bay muds but the maps don't state that is what they are.

The maps don't tell depth, constituents tested, how often tested, or location of the tire piles referenced in this chapter, which may change direction of groundwater. Kinder Morgan tests show different groundwater flow and may related to fractured bedrock below. Maps, which give a visual and 3-dimensional history of the underlying conditions, would be extremely helpful.

Subject: 4.G-30, 1st paragraph

Comment: The DEIR states three reasons to be concerned about current operations on the landfill, but no mitigation measures to improve these conditions are mentioned.

They suggest damage from the testing wells and reasons to discontinue the landfilling operation:

- 1.) "*Tidal influences or leakage between water-bearing zones may be the cause for this condition*"
- 2.) "*An upward gradient occurs naturally in association with groundwater discharge at the Bay margin. In addition, the upward gradient is significantly increased due to the weight of the landfill materials consolidating the underlying Bay Mud,*" and

- 3.) *“the elevation of the groundwater surface is higher than that of the overlying shallow groundwater.”*

No mitigation measure to discontinue this practice? No mitigation measure to seal the break between the aquifers? No mitigation measure to reduce the volume impact from the landfilling (surcharging) operation?

Subject: 4.G-31, 1st paragraph: *“This suggests that no new releases are occurring.”*

Comment: Since this list is so limited, it only suggests that the limited constituents tested are being tested. Each day arsenic, barium, cadmium, selenium, lead, mercury, nickel, tin, antimony and other toxic elements and compounds leak into the Bay from the seeps. Nothing new? Refer to Dr. Lee’s assessment of the regulatory process. It is only because of lack of regulations that nothing new has been noted.

Subject: 4.G-31, Leachate Generation

Comment 1: Geosyntec has mischaracterized the leachate wells and leachate seep collection system along the lagoon. *“In general, the 2010 sampling indicated a slight leachate buildup.”* And *“Results from the summer 2010 monitoring event indicated that no leachate seeps were observed; therefore, the leachate seep collection and transmission system is operating as designed, and no exposure to human or environmental receptors is occurring....”*

This is blatantly incorrect. Leachate seeps are only observable at a negative tide. What time of day and what were the local tide conditions during this summertime (dry season) observation? The seeps continue to leak along the lagoon, they just aren’t gushing as before. (Documents provided to RWQCB by Dana Dillworth.) The technique has improved the seeps along the lagoon, but not discontinued them.

Secondly, the leachate system mentioned was one of two proposed. A second system is proposed to be installed along Visitacion Creek, but has not been. Therefore, the assertion that no sensitive receptors are exposed any longer to the constituents of concern is an inaccurate assessment.

Comment 2: The conclusion that no exposure is occurring is not warranted. First, it is likely that subsurface seeps exist in the lagoon and east of Highway 101. Second, seeps exist and are flowing to the Bay through Visitacion Creek (also referred to as the Interior Drainage Channel). Finally, one monitoring event conducted during the summer is not enough to make the conclusion of “no exposure.”

Subject: 4.G-31, 3rd paragraph: *“thus cleanup levels ultimately approved by the Regional Water Quality Control Board may not reflect drinking water standards.”*

Comment: As stated earlier, the City of Brisbane is the lead agency. The City of Brisbane and its voting residents ultimately will be approving the cleanup levels. The City and its citizens have the power to require higher standards or greater mitigation measures than the lowest possible. The City will *“ultimately approve”* the cleanup levels.

Subject: 4.G-32 and 33, Table 4.G-2 and Table 4.G-3

Comment: While the DEIR notes how many of the listed substances don't have MCL's, it fails to tell how many substances have not been tested or exactly which "*chemical compounds [are] not included in this table.*" Refer to G.F. Lee's report regarding exposure to untested, unknown substances.

Secondly, there is no discussion of cumulative impacts of exposure to multiple toxins.

Subject: 4.G-33, 2nd paragraph": "*The landfill gas control system has been in place since at least 2002...*"

Comment 1: The Waste Discharge Requirements and Abatement Order 01-041 states that the LFG system was installed "*between 1990 and 1991...which consisted of perimeter horizontal headers with vertical extraction wells and horizontal 'finger' wells encircling Sunquest's portion of the site.*" (pg 4, item 15 of 01-041)

This is important information. It speaks to the age and the technological limitation of what the LFG system can do. It is not all-inclusive of the landfill portion, because it wasn't installed in areas in the north (the Van Arsdale and Recology operations,) and is limited by the times the system shuts down.

Comment 2: Please provide documentation of the landfill areas in which methane gas is and was detected.

Subject: 4.G-33: "*LFG control facilities at the former Brisbane Landfill were operating satisfactorily.*"

Comment: It is incorrect to leave the impression that the interim methane system is adequate. Refer to comments about off-gassing during mechanical shutdowns.

What would be beneficial is discussion of the location of the burner and what toxic, hazardous substances the public is exposed to and for what duration of time. Discussion as to whether there might be other systems needed, or improved existing systems and their scale is required and beneficial.

Subject: 4.G-34: "*although other subsequent uses may have also contributed.*"

Comment: Proper characterization of the site is important and those "*subsequent uses*" include a Stauffer Chemical Company, which produced herbicides and elemental phosphorus during that period and a Frey's Tannery. Other areas include jet fuel leaks (PCE) along the lagoon and a sewerage plant (bacteria) which were cited for releases and overflows. This omitted information would help determine what contaminants should be tested and remediated. Near the Stauffer Chemical plant, they only tested for Bunker C and VOC's. Lack of this information could put the public at risk due to unrecognized hazards.

Subject: 4.G-35 to -47, Figures 4.G-6a through -6m

Comment: These maps are barely useful. They are limited to OU-1 and OU-2, which occupies less than one-fourth of the page. (Issue of scale.)

Transparencies, which could be overlain with each other would give a greater impression of the presence of the toxic compounds. The heavy metals could be combined in one figure with different colors as well as the chloroethenes could be combined in one figure since they are related by-products of degradation of the chemicals.

Subject: 4.G-47, Current TCE Concentrations in Groundwater

Comment: This figure is misleading. It shows only one chemical of concern and does not reflect what MCL standard is being used. It doesn't mention what wells have been abandoned over time or reasons for not testing, such as consistently high, no need to keep testing. It also doesn't mention that very little testing is being done on the OU-2 section.

Testing has been done primarily under DTSC requirements for remediation of the Schlage Lock site. The BBCAG has problems with the way that the elimination of testing wells occurs. Only ONE test in February 2011 or 2012, registering non-detect or below MCLs for soil gas, does not speak to the dynamics of an evolving chemical morass. It is dangerous to leave the impression that all is well. It only means that it has tested low on one occasion.

See

http://www.envirostor.dtsc.ca.gov/public/final_documents2.asp?global_id=38340157&doc_id=60334140 The actual document was posted on 9/13/2013.

Subject: 4.G-47

Comment: Since this section talks about “ *a machine shop, a powerhouse, a coach repair shop, a lumber shed, a storage shed, loading platforms,...* ” An historical map of these locations should be provided. In particular, the chemical storage shed(s) (lye shed) that are marked in the old records of the railyard.

Subject: 4.G-48, Soil/Groundwater Contamination in OU-1

Comment: Paragraph 1 is garbled and unclear.

Subject: 4.G-48: “*Since 2008, groundwater monitoring...samples collected from all wells have been analyzed for... methyl tert-butyl ether (MTBE).*”

Comment: Is this true of OU-1? Kinder Morgan asserts that presence of MTBE on their property comes from outside or upstream sources. Is this confirmed by this statement or is the statement erroneous?

Subject: 4.G-49: “*Existing groundwater conditions indicate that conditions in the groundwater plume are favorable for application of a remediation technology known as enhanced reductive dechlorination.*”

Comment: Adding chemicals through ERD didn't work, it in fact increased the contamination levels because it was thought to have killed off the naturally occurring chemical-eating bacteria. EVO technique, Emulsified Vegetable Oil did a better job because it stimulated the natural bacteria into reproducing and precipitated breakdown of some of the chemicals of concern. Evidence of Vinyl Chloride is evidence of the degradation of TCE.

Subject: 4.G-49 to -50, Completed Environmental Remediation Investigations: *"Details on the nature and extent of the remaining contamination at this location [San Francisco] ... showed remaining concentrations of metals and limited detections of VOC's in the soil (BFK, 2011.)"*

Comment: This is an incorrect assessment, even less so in 2011. There is an area that they call persistent and unresponsive to treatment.

Subject: 4.G-50, Table 4.G-4: *"TPH mostly Bunker C Oil (Aug. 2006)"* and the BTEX tests

Comment: Is this for OU-1 or OU-2? Please disclose the location of the wells and reference to appropriate maps.

Subject: 4.G-50: *"The groundwater extraction and treatment system has been kept in operational condition and on a stand-by status to process well development purge water..."*

Comment: Is this incorrect? Hasn't it been decommissioned, abandoned, and filled? If it is still in existence, provide its location on a map. This is necessary for planning purposes, since it would not be a good area for housing and sensitive receptor businesses. This would be a poor mixed-use business for receiving toxic chemicals for processing in a major arterial hub. What are the "foreseeable future" plans of this groundwater treatment system? Are more needed to be created for other areas?

Subject: 4.G-51

Comment 1: There is no mention of Pacific Lithograph's employees being exposed to high concentrations of solvents in "Plant 3." It is part of the early DTSC public record during the first remediation talks of 1989.

Comment 2: Please note that Pacific Lithograph also operated at this site, and probably contributed to the contamination.

Subject: 4.G-52ff, Soil/Groundwater Contamination in OU-2

Comment 1: Geosyntec (2012 HMSR OU1 and OU2, p. 34), states that a "chlorinated solvent investigation was conducted at OU2 in November 2000 and June 2001 to further delineate the extent of HVOC impact in the Southern Area [of OU2] [B&M, 2002b]. A total of 20 soil borings were completed to depths of 6 to 12 ft bgs... and groundwater samples were collected from six of the 20 borings for VOC analyses. The S-11 soil sample, obtained at 1 ft bgs, contained PCE at a concentration of 4,500 mg/kg and represented the highest HVOC detection in soil. Groundwater from boring S-9 contained TCE at 960 ug/L, PCE at 1,200 ug/L, cis-1,2-DCE at 44,000 ug/L, trans-1,2-DCE at 700 ug/L and vinyl chloride at 9,700 ug/L [B&M 2002b]."

There has been an attempt by the developer and even the regulators to underplay the level of contamination on the Baylands and it may be less than some other sites but it is still dangerous and it still is only partially investigated because so many chemicals were not tested for.

Comment 2: Table 4.G-5, as labeled in the DEIR “shows the highest reported concentrations of chemical compounds in groundwater.” However, there are no figures for VOCs and VOC concentrations in 2000-2001 were very high (see comment 1). The DEIR should report the latest VOC information.

In general, the DEIR needs to make its own analysis of the adequacy of investigations so far and the many areas where more information is needed. Instead, the DEIR’s Hazards and Hazardous Materials section essentially reproduces the 2012 Geosyntec summary reports and presents Geosyntec’s analysis as fact. An independent analysis is needed.

Subject: 4.G-52: *“contamination of soil with petroleum hydrocarbons and heavy metals within OU-2 is thought to have originated from the oil tank farm operations (Geosyntec , 2010)”*

Comment: This is a different way to describe the “Oil Tank Area” as an “oil tank farm operation?”

A better description should be required. An oil tank was removed but there may still be some unidentified fuel tanks underground, known as UST’s. Some of the heavy metals are from scraping residual ore from the cars and the historical use of arsenic- and PCB- laden oils for herbicides.

Subject: 4.G-52: *“Semi-annual groundwater and surface water sampling is conducted by the landowner and reported to...RWQCB... as part of ongoing remediation efforts.”*

Comment: Refer to comments in Biological Resources about the SWPPP reporting requirements. Due to the “voluntary nature” of the testing, they do not provide an accurate assessment of the contamination at first rain event of the year. Secondly, the reporting is later, at the landowner’s convenience. It is not the same as having an independent body required to carry out a responsive maintenance and operation of the clean-up(s). Refer to Dr. G.F. Lee’s recommendations for a third-party independent monitoring body.

Subject: 4.G-52: Soil/Groundwater Contamination in OU-2: *“Leachate seeps ... would be addressed ... to ensure that the Central Drainage Channel and Brisbane Lagoon are fully isolated from any leachate migration....”*

Comment: This section and elsewhere include references to the “South Disposal Area,” further identified as a former solid waste disposal area. What is known about what was disposed in this area and when it was used as a disposal area? Have the limits of the disposal area been identified? How large was the disposal area?

Subject: 4.G-53: *“The RWQCB provided a conditional Approval Letter dated May 9, 2002 with the following requirements: ... Close the existing drainage ditch ... addition of 7 to 10 feet of imported clean fill across the site....”*

Comment: In the same way that Table 4.G-4 is inadequate, this table seems to have missed a few wells, a few chemicals of concern, or confused them with another area. Their reference is to 2010 Geosyntec Reports, which are scattered and inaccurate. Barium was a constituent of concern at the landfill area, the southern railyard too? Check the accuracy of the maps in relationship to the information in these tables.

Subject: 4.G-53, OU-2 Remediation Measures: *“Use silica gel cleanup procedure on all Total Petroleum Hydrocarbons as gasoline samples.”*

Comment: What is meant by “total” petroleum hydrocarbons, with what frequency are the samples taken by an independent source and what independent source reviews the resultant data?

Subject: 4.G-54: *“ Remedial Action plans for OU-2 were originally proposed by the landowner... then revised in the 2004 Interim Remedial Measures (IRMs)”*

Comment: These are mere correspondences between the landowner and RWQCB, not regulatory approvals. The landowner had also proposed installing slurry walls underground to isolate the Bunker C Oil. They were not adopted. NO RAP for the railyard has been developed or approved, no CEQA public notice to responsible agencies have been circulated. Since alternative remedial activities are being considered, elaborate what they are.

Subject: 4.G-54: *“The Recology site is partly located over former landfill...”*

Comment: This is a fact that should aid in a conclusion that more studies of the groundwater are required in this area. There is no methane extraction system in place or consideration of the quality/compaction of the underground fill. This area may act differently than the deeper and more recently filled areas to the south.

Subject: 4.G-56, SF Household Hazardous Waste Facility

Comment: You are lacking details here. Namely, whether any violations or spills have been identified or reported.

If you are ever downwind from the shed that houses SF’s household hazardous materials on the Recology property, you are certain to inhale many solvents, VOC cocktails. Current conditions are not safe for residential communities so the consideration of expansion and the inclusion of housing in the northern end need to be discussed in the context of public health and safety, evacuation during accidents, etc. Mitigation measures will be required so site conditions need to be properly described. More studies are needed.

Subject: 4.G-58, Figure 4.G-7

Comment: This does not appear to be an accurate map. The power transmission lines that leave PG&E's Martin Substation that go over the mountain (and in some cases are underground,) are absent, the oil pipeline along the south end of the lagoon is missing, and the "A,B,C" list that corresponds to the sites is not present.

On the other hand, this is the first time that the National Wetland Inventory is posted and should show up in the appropriate Hydrological and Biological Resources sections.

Subject: 4.G-59

Comment: The detail that backs the NPL, CERCLIS, numbers and locations of the UST and LUST sites is needed. 12 out of 1,000+ listed hazardous waste sites or generators in the area is disconcerting. If there is overlap, disclose which ones show up in more than one database, more than one category.

Subject: 4.G-60

Comment: **Quicksilver** is no longer in operation. They had dumped mercury and fluorescent bulb waste materials into Guadalupe Creek behind their building. They removed materials in the creek west of Bayshore Boulevard but were never asked to test or clean-up east of Bayshore. Residual contamination may exist in the channel near the fire station to the alluvial fan pouring into the lagoon. This is another reason to test soils, waterways, and wildlife and an accurate project/site description is necessary.

VWR - Studies should be required to confirm they are leaving the area in a clean condition. Test-before-you-go policy should be in place. According to law, the polluter remains the responsible party if any contamination is found later on the property.

SFPP, et al. This is an inaccurate assessment of notices of violation for the Tank Farm. Fuel leaks have occurred and are reported over time. A flare was installed to burn off VOC gases, required by the Bay Area Regional Air Quality Control Board. A mitigation plan to reduce underground leak impacts has been approved by RWQCB. One Notice of Violation in 2005 is only one of many. Please accurately disclose the danger and hazardous conditions of aging steel tanks and mitigation measures that might be necessary for the protection of human and environmental health. This should be cross-referenced with the Kinder Morgan listing on page 4.G-64.

It should be noted that this project is also described on page 4.G-64 as "*Kinder Morgan/SFPP/Brisbane Terminal (also known as Kinder Morgan Tank Farm) (Map ID#S177-194, 950 Tunnel Avenue).*"

Subject: 4.G-61, Sierra Point Landfill

Comment: Cite the current status of tests and how frequent monitoring is done. In what ways is this landfill similar, what ways is it different than the Brisbane Baylands? While there are claims that they are monitoring for gas generation at the perimeter, there are no references to the supporting tests.

Subject: 4.G-61: “*open cases overseen by the Regional Water Quality Control Board...*”

Comment: San Mateo County Department of Environmental Health oversees LUST’s.

Subject: 4.G-63

Comment: Where are the Cal EPA “Superfund” sites west of Bayshore? The Levinson/ PG&E / Bayshore Childcare, Midway Village, and adjacent properties are all known to have PAH contamination. Natural attenuation is selected, but lampblack remains in the soil and may impact the project area. The technique takes time and assessment of the remediation technique needs current evaluation. More studies are required.

Subject: 4.G-64,65: Kinder Morgan tank farm

Comment: The 3/29/12 Notice of Violations brought by Northern California River Watch against Kinder Morgan for the discharge of pollutants into navigable waters from the 950 Tunnel Avenue location in Brisbane with subsequent notice to the court of no NPDES permit allowing for such discharge. This case was settled between NCRW and KM via court notice issued 12/10/2012 without announcing to the public or surrounding area of the settlement terms.

What criteria has the DEIR used to determine that the KM tank farm does not pollute and is at this time not entitled to continue polluting surrounding areas of both land, subsoil and bay?

Subject: 4.G-65, 2nd and 4th paragraphs: “*BTEX compounds, and MTBE were generally stable or decreasing Recent trends showing decreasing total petroleum hydrocarbons... and the overall decreasing plume size are largely the result of natural processes where the contaminants degrade into harmless elements.*”

Comment 1: This is far too simplistic. It fails to mention that the “natural processes” produce toxic, volatile, sometimes lethal gases (CO, H₂S) in the process of becoming “*harmless elements*”.

There is also no mention of the source of the plume (s), which was an unreported leak in 1999, (under a tank that needed to be repaired) and an October 2003 spill of “2400 gallons, but 1600 were contained in a second concrete basin.” (Correspondence Alec Naugle to Charles Ice 10/31, 2003 4:55 pm) Ten years later, they might be decreasing, yet the threat of insidious leaks in an aging system is not mentioned in this document.

Comment 2: Cite independent source that considers toxic plume pollutants “harmless” and “naturally biodegradable,” explaining each process and the time frame for each to become “harmless.”

Subject: 4.G-68ff, Section 4.G.3 Regulatory Setting, State Regulations

Comment: When was the Landfill soil last tested for Chemicals of Concern? Numerous chemicals, perhaps 2000, are being added to the State of California’s list of Chemicals of Concern and will appear on it before this EIR is likely to be certified. The Baylands three areas should be

tested for those chemicals and if they are present, then a re-evaluation of the contamination of the land should take place and all regulatory decisions should take into account the additional evidence of contamination and what it will mean for land use and what additional mitigation will be needed. The DEIR is not complete without the inclusion of the newly regulated chemicals present and an investigation of how to prevent them from further endangering human health and the environment. This project should not be excused from compliance with a higher standard to protect us. This means that both the soil and groundwater will need to be tested for them.

Subject: 4.G-77, Impact Assessment Methodology, General Approach: *“The EDR database was used to identify hazards...” “Figure 4.G-2 shows the location of these sites.” and “...regardless of potential differences in cleanup levels...other hazards,... would be similar for all four development scenarios.”*

Comment: There is no Figure 4.G-2. Figure 4.G is now a -.2a and -.2b. You might be referring to Figure 4.G-7.

This is not correct. Lower commercial use densities, fewer industrial uses, fewer sensitive receptors, and reduced transportation of toxic or hazardous substances would make the Community desired plan have fewer impacts. More open space would mean fewer chances for exposure to toxins. Grouping all plans as equal means their differences are unrecognized and therefore not mitigated.

Subject: 4.G-77, Impact Assessment Methodology

Comment 1: The methodology described under “Impact Assessment Methodology” (p. 4G-77) results in an inaccurate portrayal of hazardous materials on the site. Section 4G relies heavily on Geosyntec’s two 2012 Summary Reports, often quoting whole sections word-for-word. No additional sampling or testing was performed, and hazardous materials outside the boundaries of OU1, OU2, and the landfill, were not investigated.

The DEIR’s purpose is providing information, and part of that task is explaining the extent to which information is lacking. Decision-makers need a thorough explanation of the limits of available information.

The available information on hazardous materials is incomplete. For example, Dr. G. Fred Lee (pp. 15-21) explains some inadequacies in the excerpts below:

“...typical hazardous chemical monitoring programs focus on 100 to 200 or so chemicals ... of the many thousands of chemicals that can be present in wastes. Every year new hazardous chemicals are found in wastes and the environment that have been there for many years but have not been detected by the limited-scope monitoring programs that have been and are continuing to be used today.

“An example of a group of unrecognized unregulated hazardous chemicals that has existed in wastes and in the environment for many decades is the polybrominated diphenyl ethers (PBDEs) which have characteristics similar to PCBs....PBDEs have been found in aquatic organisms in ... San Francisco Bay. Studies have shown that PBDEs have been bioaccumulating in archived hu-

man breast milk for several decades....Despite their widespread presence and accumulation in organism tissue, and the concern for their impacts on organisms, PBDEs are not subject to environmental regulation through water quality standards. The environmental pollution by PBDEs is but one example of the significant deficiencies in conventional water quality monitoring for detecting the wide range of hazardous chemicals that are in wastes and in their leachates.

“Perchlorate is another unregulated/unmonitored chemical that has long been, and continues to be a widespread environmental pollutant that is highly mobile in groundwaters....

“...hazardous chemical sites such as the Brisbane Baylands UPC property can contain a wide variety of hazardous and otherwise deleterious chemicals that are not necessarily regulated or monitored, that are not adequately regulated, and/or that are not presently known or recognized as potentially hazardous to public health or environmental quality.

“Factors other than cancer risk, such as the cost to remove a chemical from drinking water, are used to establish MCLs. An example of the implications of that approach is the MCL for arsenic....

“It is not uncommon for those with limited understanding of how water quality criteria and standards are developed to mechanically use them to judge if a waster is ‘safe’ or not; if none of the criteria is exceeded, the water is considered ‘safe.’ That approach can readily lead to both under- and over-protection of the beneficial uses of a water. First, water quality criteria have been developed for only a very few of the many thousands of chemicals that are present in wastes and that have the potential to be adverse to public health and the environment. Second, the current approach for developing water quality criteria does not consider even known additive and synergistic properties of mixtures of chemicals; the toxicity of a mixture of such chemicals is greater than the sum of toxicity caused by each chemical alone. Third, as noted above, some water quality standards, such as MCLs for drinking water, incorporate factors outside of the potential impacts on public health and environmental quality, such as treatment costs.

“.... It is important to understand that hazardous chemicals contained on a site will be a threat effectively forever; they do not necessarily become innocuous over time, and as the containment systems deteriorate, the containment diminishes. Therefore, a key to long-term protection of public health and environmental quality associated with ‘remediated’ sites will be the effectiveness and reliability of the implementation of the restrictions on land-use activities....

“As long as hazardous chemicals are present on the site, proper land-use restrictions, as well as systems and water quality maintenance and monitoring must be continued. All of these issues should be understood by those interested in the remediation/development of the UPC Brisbane Baylands area and addressed in formulating the plans for developing this area.”

Comment 2: The DEIR overlooks the portions of the project site that are not included in OU-1, OU-2, or the landfill.

Several areas need additional investigation:

(1) the police firing range on Icehouse Hill, which is contaminated with lead. Icehouse Hill is proposed to be a public recreation area. The myriad potential adverse health effects of lead poisoning, even in low doses, and especially poisoning of children, are only recently becoming well known in the US. It is essential that humans and other species sensitive to lead be protected from direct contact with lead or contact through contaminated water.

(2) the lagoon and its periphery; The DSPs propose increased recreational use of the lagoon, including kayaking and other activities which are likely to bring people into direct contact with contaminants.

Lagoon water quality has not been sufficiently investigated. At this time there has been no known sampling and analysis of the lagoon sediment, which would likely be stirred up by human activity on the surface of the lagoon. Investigating the lagoon water and sediment must be a requirement for development that brings more people to the lagoon area.

There have been no studies, such as those recommended by Dr. G. Fred Lee, to assess the health of aquatic life in the lagoon. Increased human activity near the lagoon, including fishing, would potentially increase the amount of contamination that reaches humans. Dr. Lee argues (p. 32):

“One of the issues of particular concern with regard to stormwater runoff from hazardous chemical sites/landfills is the potential for the transport of chemicals from the site to nearby waterbodies where the chemicals bioaccumulate in edible organisms....[landfill leachate and runoff] monitoring has not employed sufficiently sensitive analytical procedures to detect the chemicals at levels that could be of concern for bioaccumulation in edible organisms. As discussed by Lee and Jones-Lee (2010) in their report on stormwater runoff from hazardous chemical sites... the edible flesh of aquatic organisms in waters near ... landfills should be monitored for the chlorinated hydrocarbon legacy pesticides (such as DDT), PCBs, ...PBDEs, mercury, and other chemicals that tend to bioaccumulate in edible organisms.... If ... the concentrations of such chemicals in edible organisms are found in levels of concern to human health or to other aquatic life/terrestrial life that use aquatic life as food, then studies need to be done to determine if the hazardous chemical site is the source of those chemicals.”

(3) Sites on Industrial Way and in the vicinity of Icehouse Hill have not been investigated for contamination. Industrial operations such as Stauffer Chemicals and a bone rendering facility were sited here and are likely to have left contaminants in soil and/or water.

At least three other Stauffer Chemical Co. plants (Cold Creek, AL; Tarpon Springs, FL; Black Mountain Industrial Complex in Henderson, Nevada) are known to have been heavily contaminated, and the first two are Superfund sites.

Subject: 4.G-78, Approach to Analysis: *“The following impact analyses focus on whether the physical development of the Project Site would expose construction and maintenance workers, visitors, existing and future residents, employees, or ecological systems to hazards associated with identified contaminants throughout the life of proposed Project site uses.”*

Comment: There is no mention of dermal exposure to surface water and/or groundwater, such as in a wetland. It should be included as an exposure pathway in the public open space areas.

The Figures on p. 4.G-35ff, along with similar Figures prepared by Geosyntec in April 2011 show that there is widespread contamination of Dichloroethene, Trichloroethene and Tetrachloroethene in the ground water under the area proposed for medium density residential flats, and there is widespread lead and arsenic deposited from 1914-1960, and there are unnamed other volatile organic compounds in the soil under the proposed flats.

Subject: 4.G-78ff, Remedial Actions at the Project Site

Comment 1: The following description is from the February 2012 Geosyntec Summary Report on hazardous materials in the landfill: The Landfill is located in a discharge area which is generally characterized by upward groundwater vertical hydraulic gradient on Francisco complex, Old Bay Mud (OBM) and Young Bay Mud (YBM). Above YBM are located Zone A alluvial materials and the area below YBM contains Zone B as does the bedrock. Zone B represents gradients in discontinuous lenses of Aeolian/alluvial sand and OBM. The Zone A groundwater direction and flow is influenced by the SF Bay and the IDC. It flows from the north and west to IDC, Guadalupe lagoon and SF Bay. Zone B flows to north and south in the dry season away from a mound near MW35B and in the wet season it flows southeastward toward Lagoon and Bay.

Comment: Much is made of the artesian conditions under the landfill and it is used as a justification to believe that contaminants are not entering Zone B groundwater but no explanation is given for the presence of unionized ammonia in the Zone B deep wells in August 2011 (MW 38B). There should be an explanation or at least an admission that the reason for the presence of the unionized ammonia is unknown and if that is true then more investigation is needed to explain it. It also means that the EIR is not complete because of this data gap.

When unexpected contaminants appear without explanation, it means there is a lack of understanding of the contamination and the physical conditions. The Landfill and OU-2 need further study of the details of groundwater flow and the location of contaminants. A study and report that reconciles contradictory evidence and statements in past environmental reports is needed. It should also contain explanations of anomalous occurrences involving chemicals of concern.

Comment 2: Geosyntec's 2012 HMSR on the Landfill (Section 4.6.1) states that "A human health risk assessment [HHRA] has not been performed for the Brisbane Landfill. It is anticipated that once landfill redevelopment plans are finalized, the HHRA will be performed...."

This intention does not protect human health because it isn't clear what the phrase "development plans are finalized" means. In relation to the possibility of workers excavating before that time, the HHRA needs to be done before workers begin excavating, grading, etc.

Comment 3: Screening Level Ecological Risk Assessments (SLERAs) were performed in 2003 and 2005 [see Geosyntec's 2012 HMSR on the Landfill (Sections 4.6.2.1 and 4.6.2.2)]. These SLERAs are out of date. August 2005 is nearly nine years ago. The screening should be done at known seeps and at suspected but yet unverified seep locations both in the IDC and the Lagoon. Screening should be done in the wet season after rain events. The screening is out of date and incomplete and more should be done to adequately understand extent and complete nature of seep contaminants. There should be testing of benthic organisms in the lagoon to check for con-

tamination by COC's that are known to be in groundwater in the Landfill (or for successor chemicals derived from those COC's).

Comment 4: The Remedial Action Objectives sadly reflect an attempt to balance the interest of those who would allow toxic contaminants to remain where they can harm human health and the environment in order to save profits for themselves against the interest of residents and workers whose health and environment is being sacrificed for those profits. The way the regulatory framework is designed allows that to happen. The BBCAG has objectives that are not compromised by the need to balance profits against health. The remedial action objectives should be guided by a precautionary principle that allows for some margin of error when it comes to exposing people and nature to contaminants and so the clean-up goals should be aggressive to the point that the clean-up is complete when conditions are as though the contamination never took place rather than to MCL's. The consequences of misguided regulatory policy are that we are surrounded by partially cleaned toxic areas and the environment is allowed to become more polluted as these projects multiply. There will be contamination that will take place in the future and all the remnant contamination will still be there.

Comment 5: Proposed remedial actions are inadequate and monitoring time line is inadequate. Contaminants will remain in place forever and monitoring and maintenance must continue as long as contaminants are in place.

This entire project is based on barely meeting regulatory levels that do not take into consideration the additive and synchronistic effect of harmful chemicals and only take into account a small fraction of the harmful chemicals that are a part of this environment. It is not advisable to expose thousands of people to risks that are not fully understood. There should be large margins of error and redundant systems to keep people safe. The project violates the precautionary principle and should not be built as proposed by the developer. Anything that is built here should be very small and very carefully planned to keep people separated from contaminants or only exposed for limited periods of time with warnings provided.

Subject: 4.G-78-82, Remedial Actions at the Former Brisbane Landfill

Comment: A Final Closure and Postclosure Maintenance Plan for the Landfill (completed in 2002) received Conditional Approval by RWQCB in 2003. The Final Closure plan should be redone to take into account changes in knowledge about the Landfill, the underlying soils, changes in technology and changes in the understanding of the degree of toxicity of chemicals of concern and priority metals that are present. Since this project won't be built for several years, the new list of Chemicals of Concern Section 69502 of the Health and Safety Code should be used and the additional chemicals should all be reviewed and evaluated for their impacts on human health and the environment.

Subject: 4.G-78, Remedial Actions on the Project Site: *“Remedial actions required for the former Brisbane Landfill, OU-1, and OU-2 would be completed prior to development... “*

Comment: Prior to ALL development? Would be or should be? The discussion of phasing cleanups needs to occur under “Approach to Analysis.” Phased development with phased remediation may put current and new workers at risk of several avenues of exposure.

Subject: 4.G-78, 3rd bullet: *“Hydrologic connectivity to groundwater and surface water (primarily the Central Drainage Canal),”*

Comment: Refer to G.F. Lee’s comments about the underlying groundwater issues. Failure to consider the impacts of the surcharging operation and lack of waste containment will continue to put the public and environment at risk.

Subject: 4.G-79, Remedial Actions at the Former Brisbane Landfill

Comment: In general, all of the monitoring and reporting should be accomplished with more thorough techniques actively looking for missed contamination and with frequency that is realistic at a time when great change is taking place, such as when all future construction is taking place, whether for remediation or development. The public should be informed regularly and in an appropriate fashion that they can comprehend what is happening and why.

Subject: 4.G-79-80: *“ These Final Closure and Post-Closure Plans would include: Operation and maintenance of the existing Leachate Seep Collection and Transmission System... [Continued] Operation and maintenance of the landfill Gas Collection and Control System.... ”*

“These actions ... have been generally described in the Final Closure and Post-Closure Maintenance Plan (Burns and McDonnell, 2002b).... ”

Comment: Just the continuation of the operation and maintenance of the **existing** measures is inadequate. This DEIR fails to recognize that improved, newly designed systems may be necessary or desirable. This utilizes a 12 year-old document, which has not had proper environmental review. All proposed plans should be carefully reviewed for environmental impacts, rather than be determined to be adequate on face value.

Subject: 4.G-79-80, Landfill Final Cover System: *“2-foot thick foundation layer using onsite cover material would be graded over the entire site... ” overall “without the need to excavate into the refuse material... ”*

Comment: The excavation and movement of a near ten million cubic yards (2010 estimate) of soil will have great impacts. There are no mitigation measures to reduce these impacts, such as a more modest approach. There is no recognition that the underground hydrology might need to be intercepted by the impacts of grading (as the surcharging operation has done on the landfill portion causing artesian effect); instead there is a mistaken assertion that the ground cover technique proposed will resolve a great percentage of groundwater issues. It will not. (Refer to GF Lee’s Report and experiences at Love Canal where the cover forces the groundwater and their contamination upwards.)

Subject: 4.G-80: *“Placement of the low-hydraulic-conductivity layer at depths as described in the Infrastructure Plan... ”*

Comment: The impacts of this and an additional 14 feet of fill [filling of current wetlands] needs to be reviewed for environmental impacts. Consideration of alternatives to this practice needs to be done.

The ability for natural attenuation remediation, phyto-, myco-, and hyper-accumulative plant remediation strategies are overlooked and should be considered an alternative to this proposed fill (cover-up) remedial action approach. For example, would the introduction of organic acid citrate to soils cause the heavy metals to be bound or released from the soil, which can then be removed through harvested plants? Is that more desirable than leaving the heavy metals in place and so-called trying to prevent future exposures?

Refer to and revise all parts of this document that claims the current regulatory process is adequate in protecting human health.

Subject: 4.G-80, Surface Water Management System: *“Leachate seeps in the Central Drainage Channel and Brisbane Lagoon.... reconstructing the channel and installing a layered lining system that includes a barrier membrane to ensure that the Central Drainage Channel and Brisbane Lagoon are fully isolated from any leachate migration as part of the ongoing remedial activities at the landfill, unrelated to the Project Site development.”*

Comment 1: While this is a required goal, it is not honoring any other laws and community goals of a functioning wetland system at water’s edge. It is disrespectful of the two creeks, Guadalupe and Visitacion that are impacted. It fails to understand that citizens, particularly involved with the BBCAG, would like there to be redundant systems to isolate the landfill. A mere “barrier membrane” is not an adequate response to the remedial actions required for this site.

Comment 2: Fully isolating the lagoon from leachate cannot occur unless underwater seeps are prevented. Please discuss mitigation measures for underwater seeps.

Subject: 4.G-80, Post-Closure Monitoring and Worker Safety: *“Per the Final Closure and Post-Closure Maintenance Plan, which received conditional approval from the RWQCB and the San Mateo County Environmental Health Division, the site specific safety plan would include, but not be limited to....”*

Comment: Refer to Dr. Lee’s comments on the need for an independent third-party body to review and determine the efficacy of proposed remediation plans and the recent reports determining inadequacy of the current regulatory process.

CalRecycle monitors Waste Discharge Requirements and the County Department of Environmental Health oversees landfill closures, not just the RWQCB. Since these plans impact the Bay, BCDC would have some input in this process as well. Limiting discussion of the regulatory setting will have impacts on regional plans and community goals. An independent, locally elected or appointed body should be involved in all aspects of mitigation compliance.

Subject: 4.G-81, Proposed Remedial Actions for OU-1

Comment: In OU1, residential units are to be built over podium and street level commercial uses. If the example of what DTSC allowed in San Francisco is followed then there won't be any monitoring of soil gas in the parking areas below the residential units or in the units themselves raising the possibility that people will be exposed in their homes without even knowing it. The plans that were approved by DTSC allow contamination just outside the building perimeter to seep under and cause inhalation of VOC's indoors without benefit of detectors in the building. It is not prudent to build residential units on contaminated, only partially cleaned land without soil gas detectors in the building.

Subject: 4.G-81, Proposed Remedial Actions for OU-1, data gaps

Comment 1: Burns and McDonnell performed soil sampling at OU1 in December 2005 and January 2006. Geosyntec's 2012 Hazardous Materials Summary Report OU-1 and OU-2 (p. 18) summarizes the soil sample results: "Soil samples from 25 borings were analyzed for metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.... The analytical results ... indicated the presence of metals, at concentrations exceeding screening levels or background across the site, in 15 (out of 25) borings."

Some of these metals are ignored other than in this report. Why does that happen? Isn't it important to follow up on the silver, selenium and cadmium which are not mentioned again or are barely mentioned. What happened to them? How will they impact human health?

The Geosyntec report continues (pp. 18-19) with a summary of a subsequent B&M investigation performed in August 2006. It involved soil and groundwater, 33 borings, 12 to 15 ft bgs and both types of samples taken. "Selected soil samples were analyzed for metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium and silver) and CVOCs, while groundwater samples were analyzed for CVOCs only. The laboratory results of 19 soil samples indicated that concentrations of a number of metals exceeded their respective background concentrations. Maximum concentrations of metals that exceeded their background concentrations were: 350 mg/kg (arsenic), 4,400 mg/kg (chromium), 8,000 mg/kg (lead), and 100 mg/kg (mercury). Eight out of 33 soil samples analyzed for VOCs indicated the presence of TCE (at the maximum concentration of 160 ug/kg), PCE (110 ug/kg), and toluene (11 ug/kg). Groundwater samples ... indicated the presence of nine VOCs in the A-Fill groundwater, including acetone, cis-1,2-DCE (6.9 to 1,300 ug/L), ethylbenzene, PCE (19 to 750 ug/L), TCE (6.9 to 1,100 ug/L), toluene, trans-1,2-dichloroethene (ND to 18 ug/L), vinyl chloride (0.61 to 160 ug/L) and xylenes. Additionally, [the five whose range is shown above] exceeded their respective MCLs."

This B&M 2006 investigation shows some very high values. Where is an explanation of what happened next when these results were evaluated? Look at the arsenic, lead and chromium and the VOC numbers!

Ibid, p. 19: "Generally, the investigation results indicated that impacts of CVOCs to groundwater were limited to the area near the northern boundary of OU1, related to the Schlage Lock site.... Copies of relevant analytical results summary tables and figures are included in Appendix A-13."

If CVOC's coming from Schlage are located only near the SF-San Mateo Border Area then where are the SVOC's referred to in the Appendix coming from?

Comment 2: Geosyntec's 2012 HMSR for OU1 and OU2 (p. 28) states that results of soil sample analyses "were not described in recent reports," referring to ten soil samples that were "submitted for chemical analysis" during a 1982 Harding Lawson Associates assessment of the Brisbane Railyard; similarly, 136 soil samples "collected and analyzed" during a 1984 Ecology and Environment, Inc. investigation of the Railyard, are also "not discussed in the recent reports."

There need to be studies done of OU1 and OU2 that will resolve and reconcile all of the other studies of contamination in soil and groundwater. The fact that studies were ignored in subsequent studies does not reassure the public that we know what the level of contamination actually is, not to mention the lack of consideration of additive and synergistic effects among the chemicals and metals present. There may be more harmful chemicals present than those that were tested for and the 2013 changes in the law should be reflected in future studies.

Comment 3: As reported in Geosyntec's 2012 HMSR OU1 and OU2, Burns & McDonnell found SVOCs in OU2 (p. 32), not only the HVOCs referred to elsewhere. Where are they originating?

B&M also found benzo(a)pyrene and purene in OU2 (p. 32). What is their level now?

In 1999, B&M found "Low levels (i.e., below 50 ug/kg) of PCBs were detected in three of the eight soil samples collected. However, since the detected concentrations were below the residential preliminary remediation goals, they were not considered a COC at this site." (Geosyntec, p. 33) Shouldn't they be considered a COC now? Are PCBs still present? Further investigation is needed.

Also in reference to the 1999 B&M study (p. 33) "analytical results for SVOCs did not exceed site-specific RAOs..." Were RAOs site specific to this area higher than the MCL in other areas? There is some hint of that. How is that justified to endanger some people more than others?

Subject: 4.G-81, Proposed Remedial Actions for OU-1: "*The Remedial Action Objectives for groundwater for the Schlage San Francisco OU are California maximum contamination levels (MCL's)*"

Comment: While this is a true statement, these levels have also been determined to not be attainable and therefore, are not being met by the proposed plans. This is not acceptable to the community. These techniques were primarily used in San Francisco and were not subject to Brisbane local authority approval.

Secondly, the description of the Feasibility Study for "*excavation and onsite treatment*" of VOC contaminated soils fails to mention the technique(s) used. They smeared the TCE-laden soils around until they off-gassed into the environment (prior techniques captured the TCE in carbon filters) until they tested lower than MCL detection levels. The Soil Gas Sampling report for Phase II (previously cited) seems to require only a one-time, below MCL test to indicate it is "clean." Refer to Dr. Lee's comments about how close to MCL and how multiple gasses, not just the tested one(s), increase the impact and exposure to human and environmental health.

The technique of “one-time-clean” testing is inadequate. It doesn’t recognize that the underground matrix is evolving and tests around “the castle” were never done. By not requiring frequent, then annual tests, as most State and Federal monitoring programs do, as build-out impacts to hydrology unfold, you won’t detect future gasses or substances that pass the matrix over time. A comprehensive soil-gas monitoring plan should be developed and not left to piecemealed future specific plans.

To imply that this level of (or lack of) oversight and chosen mitigation measure is acceptable to Brisbane’s citizens and local authority is incorrect.

Subject: 4.G-82

Comment: Discussion of the ERD and lack of concern for future “*beneficial uses of groundwater*” have been noted.

References to 2012 Hazardous Materials Summary Report(s) (Geosyntec) and now, non-disclosed e-mails are objectionable and have been noted.

Setting Community Health, Cancer Risk Levels is not the job of Geosyntec or the landowner. It is the jurisdiction of the local agency, the City of Brisbane, and its citizens.

“...*generally considered negligible and acceptable by the U. S. EPA and sufficiently small so further remediation is not required...*” This may be acceptable for an individual element or compound, but does not acknowledge the cumulative impacts of multiple toxins in gas and particulate form.

It doesn’t consider the additional burden of toxins, which aren’t tested or are unregulated. It doesn’t consider the exposure to environmental toxins considered by the state to be “Emerging Contaminants” http://dtsc.ca.gov/emerging_issues.cfm or PPCP’s (Pharmaceuticals and Personal Care Products <http://dtsc.ca.gov/AssessingRisk/PPCP/>.) It doesn’t include analysis of the trend cited (footnote 34.) It doesn’t include analysis of cumulative impacts of multiple toxin exposures to Public and Environmental Health in addition to the proposed light, noise and vibration impacts. Community Health Cancer Risk Level determination must consider all current and proposed conditions.

Subject: 4.G-83, Plasma Arc and Smoldering Treatments

Comment: Zap and Burn-- Plasma arc centrifugal and Smoking Bar-b-que Crud treatment systems are proposed remediation techniques, on-site, in Brisbane, without further discussion? Please disclose where these treatments are considered, what volume of what substances, what prior remediation techniques have been considered, how close to transportation?... etc.

Subject: 4.G-83, In Situ

Comment: Note earlier comments for IVO update.

Subject: 4.G-84, Vapor Intrusion Minimization

Comment: Vapor Intrusion Minimization is not proven to be safe in earthquake areas where landfill is subject to liquefaction and multiple toxins. Consideration of sub-slab, podium-style, passive and active vents are meaningless when systems shut down or are not understood by users. They put the Public and workers at risk. Articles have been submitted by Dana Dillworth which tell of recent failures where “Google workers at Superfund site exposed.” (<http://www.sfgate.com/business/article/Google-workers-at-Superfund-site-exposed-4368421.php>) Papers produced by Dr. G.F. Lee and observations by Lenny Seigel of CPEO all speak to inadequate technologies to ensure protection of human and environmental health.

Subject: 4.G-84, Capping: “*Contaminated soil can be consolidated and covered on site under buildings, roads, clean soil, or other areas approved by the regulatory agencies.*”

Comment: Again, more discussion is required in this document and the City of Brisbane and its citizens decide whether leaving, melting, burning, fracking, or covering contamination is acceptable.

Subject: 4.G-84, Inst. Controls

Comment: “*No first floor residences or daycare facilities*” should clearly be stated for all scenarios.

Subject: 4.G-85ff, Proposed Remedial Actions for OU-2, data gaps

Comment 1: There is still not a clear articulation of the extent of the risk for OU2. The precautionary principle should guide regulators especially since the site is surrounded by other plumes of contaminants. The communities surrounding this site deserve a rigorous current delineation of the contaminants, their physical location, the depth of their spread, how they threaten surface water, and all the pathways to exposure. Geosyntec states that “In general, the hydrogeology is better understood for OU1 due to recent, intensive clean up and remediation activities that have been implemented since 2008.” This observation was made in 2012. The hydrogeology for OU2 needs to be better refined and understood. UPC has stated in the past that the nature of the soil in OU2 differs from OU1 and therefore it is not appropriate to make assumptions based on OU1 observations as well as the not-well-understood hydrogeology. More detailed study of groundwater and soil conditions are needed for OU2.

YBM (young bay margin deposits) occur in OU1 but not generally in OU2 so the groundwater behaves differently. It occurs in unconfined conditions within the A fill, and the underlying A sand and the groundwater are in direct hydraulic communication.

The water table in OU2 is shallow groundwater over most of it; sand occurs from 1 to 10 ft below ground surface. Water table elevation range is 5-8 ft above mean sea level. The water table is nearly flat and drains toward the railyard drainage ditch (the north ditch which connects with the interior drainage channel through the landfill) to the south and southeast. There are very low seasonal water fluctuations and little change in water levels.

The groundwater here is quite different from the adjacent areas and note how close it is to the surface. Contaminants are within easy reach.

Comment 2: If the results of the investigations done in the mid 80's, including the 1982 study mentioned above, were used in current studies, how would it change their conclusions? It might make a big difference and therefore it should be re-examined to include those Kleinfelder mid-80's (1982 on) and any others. It may indicate further studies are needed.

There needs to be a Remedial Investigation Report done for OU2 like the one done for the groundwater in the Schlage OU and OU1. A master report should contain all the reports for groundwater in one place that will allow the nature and extent of the groundwater contamination to be evaluated.

A master report will allow an evaluation of the hydrogeology and geology of the sites as related to groundwater and contamination migration. It will compile all available groundwater data into a single document along with a representative summary of hydrogeological data and information. It will better characterize the nature and extent of the contamination of the site. It will allow the evaluation of transport routes of the chemicals present in groundwater at the site and develop a foundation of data for the health risk analysis and subsequent RAP such as COC's in A-fill, A-sand and B-sand, and should provide an outline of the objectives for any suggested remediation.

Comment 3: Geosyntec (2012, HMSR OU1 and OU2, p. 35) states a 2007 additional investigation in the area of the HVOC Plume was done on OU2 by B&M. "...six borings were advanced to approximately 6 to 12 ft bgs, and two soil samples and two grab groundwater samples were collected....Four HVOCs were detected in shallow boring samples collected from depths of 1/5 to 5 ft bgs, including cis-1,2-DCE (with a maximum concentration of 490 mg/kg), TCE (40 mg/kg), PCE (310 mg/kg) and vinyl chloride (2.3 mg/kg). The same four HVOCs were also identified at the highest concentrations in deep samples obtained from depths of 3.5 to 8.5 ft bgs, including cis-1,2-DCE (960 mg/kg), TCE (860 mg/kg), PCE (9,400 mg/kg) and vinyl chloride (3.1 mg/kg)."

These are high values. Where is there further investigation of these HVOCs?

In 2008 Weiss Associates conducted a soil and groundwater investigation at 250 and 350 Industrial Way (Geosyntec, 2012 HMSR OU1 and OU2, p. 35). High concentrations of total petroleum hydrocarbons were found. "... the extent of TPH and VOCs was found to be limited and the CRWQCB issued a "No Further Action" letter for the USTs.... However, the elevated concentrations of metals and Bunker C impacts may need to be evaluated depending on anticipated site grading and use." Groundwater and surface water monitoring in OU2 by B&M in 2011 showed high levels of TPH and metals (Ibid., p. 36).

There needs to be further investigation of the HVOCs, SVOCs and TPH in OU2. As stated elsewhere a reconciliation of all the reports is needed so that the contamination will be well understood and adequately remediated. The public is not served by taking a cavalier attitude toward the contamination.

Comment 4: Geosyntec (2012, HMSR OU1 and OU2, p. 36ff) reports Contaminants of Concern in soil in OU2 through 2008, more than five years ago. TPH, lead, arsenic, barium, chromium, copper and zinc were present. Lead levels were above the 2002 CUL. PCBs and VOCs were detected. The DEIR reproduces in Figures 4.G-6a through -6m, the distribution of COCs shown in Geosyntec's 2012 report. High CVOC concentrations are reported only through 2008.

What are the levels of these contaminants in these locations currently? The public has a right to better regulation of their environment than this haphazard disorganized puzzle. What is current condition of contamination?

Data for 2008 and later should be part of the DEIR in order for the public to understand current toxic contamination.

Comment 5: "Previous investigations indicate that the extent of Bunker C oil and lead in groundwater is limited to localized areas in the A-Fill groundwater. Although the lateral extent of CVOCs in groundwater in OU2 appears to be generally defined, the vertical extent of the CVOC plume will need to be evaluated." (Ibid., p. 37)

The extent of the CVOC, Bunker C and lead contamination in the groundwater should be studied and evaluated in the DEIR.

Comment 6: Geosyntec (Ibid., p. 37) reports that surface water samples from the drainage ditch "collected in February 2011 are below the laboratory reporting limits for TPH."

Current and historic sample results should be reported in the DEIR.

Subject: 4.G-85, DEIR OU2 "*Remedial Action Objectives established 2002 as per Revised RAP.*"

Comment: Updated Federal and State Code requirements have superseded 2002 RAP contents. "To be determined" is not a response and becomes its own issue.

Subject: 4.G-86, Project Impacts and Mitigation Measures

Comment: Please explain why compliance with regulations is considered to assure a less than significant impact. Please also explain why there is no discussion of the enforceability of mitigation measures, who will enforce these measures and who will pay for their enforcement.

Subject: 4.G-86ff, Impact 4.G-1: "*Project site construction activities for each of the four development scenarios would require the use and transportation of hazardous materials.*"

Comment: Not owned by the project but intruding into the project is a waste disposal operation that also is a transport handoff for hospital, medical and research waste. DEIR does not take into account possibility of emergency event at this adjacent facility.

Subject: 4.G-86, Significant Hazard to the Public or Environment

Comment: Human Health Risk Assessment (and Cancer Risk Levels as previously noted) standards are set by the City of Brisbane. RWQCB's oversight is to meet the standards set by the Local Agency. A 23-year old assessment by Levine-Fricke (1990) absent knowledge about Kinder Morgan spills, with different land uses, and absent a valid General Plan at the time is not relevant. Current, full-scope studies need to be done.

A statewide General Permit for Discharges, NPDES General Construction Permits, and Regional Stormwater Permits are not adequate for working on a site that will unearth contaminated soils. The stormwater system on the Baylands is crude and rudimentary. There are no barriers or modern filtration systems between the proposed construction area(s) and the Bay. Hundreds of cubic yards of multiple-contaminated soils may be carried off by rain and required dust mitigation techniques (spraying down the roads, trucks and tools.) This general permit mitigation measure strategy is not adequate. Mitigation Measures should require a plan that isolates, tests, and treats runoff; that monitors particulates; that tents and keeps contaminated dirt from leaving the area. Otherwise, contaminated runoff that enters and fills the Bay requires a permit from BCDC.

Subject: 4.G-86 to 87, Project Construction, *"Following remediation activities,"*

Comment: Proposed remediation activities need to be disclosed in greater detail than references to preliminarily approval letters. Environmental impacts need to be discussed in terms of phases, phasing, time-of-the-year, and Brisbane's General Plan goals and policies.

Subject: 4.G-86 to 87, Mitigation Measure 4.H-1a (Hydrology): *"However, the contractor's compliance with federal, state and local requirements..."*

Comment: There are numerous documents in the public record that speak to the failure of contractors and regional agencies to protect public and environmental health. Some are systemic issues, others are local leaks from Kinder Morgan, the Railyard, and along the lagoon, etc. The recent Love Canal experience of contractors causing greater exposure to multiple chemical compounds due to techniques used to flush a sewer clog [http://www.buffalonews.com/20130209/113_million_love_canal_lawsuit_is_history_repeating_itself.html] and discoveries of problems at Treasure Island, San Francisco are a few to mention. Staging and timing of clean-up remediations may put workers and migratory wildlife at risk. "Business as usual" is not an adequate mitigation measure. Bonds for performance, even redundant back-up systems should be considered and required.

Subject: 4.G-87, Project Operations: *"wide variety of commercial products formulated with hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides." ... "small quantities..." "typically handled..." "generally not as serious..."*

Comment: Such a casual way to describe an acceptable life of small quantity toxic generators but not all uses should be mixed. Auto-body paints are extremely noxious and can be detected coming from businesses along Industrial Way. This document should recognize that adjacent land uses, their scale of use, and types of hazardous chemicals used all have different impacts and should be measured or have protective restrictions in place. While a bakery and biotech fa-

cility may both use yeast, an accidental spill at one would require a different response than an accidental spill at the other.

Subject: 4.G-88: *“Industrial Uses” “difficult to predict because the specific businesses that would move to the Project Site are not known... however reasonably foreseeable that hazardous materials would be used routinely,”*

Comment: This is a dangerous assertion. Allowed industrial uses are minimal in Brisbane’s 1994 General Plan, just the Beatty subarea. Brisbane has ordinances that disallow certain types of hazardous materials users and infectious disease handling found in some research and development. The DEIR should include where industrial uses are planned, the potential impacts to or from adjacent uses, particularly from a wastewater facility (with PPCP’s) and various proposed remediation techniques. Are the existing flares considered industrial uses? They are not listed here or recognized as hazards elsewhere in the DEIR.

Subject: 4.G-89, Conclusion: *“is not anticipated to include the type of large-scale manufacturing or processing facilities that would use, store or transport use [sic] large quantities of hazardous materials that would present a substantial risk to people.” “The specific types and amounts of hazardous materials... cannot be quantified...”*

Comment: Without prohibition of certain practices, there is no protection of risk to the public and wildlife through *“periodic inspections.”* The conclusions that people will be properly trained and that the regulators will properly monitor, without recognition that liquefaction poses an extra risk to all future scenarios, means that adequate mitigation measures have not been considered. Any scenario could propose a waste-burner or certain medical experimentation under this laissez faire conclusion. A mitigation measure that prohibits certain hazardous uses and practices and that requires greater than average separation between those uses is necessary.

Subject: 4.G-90, Impact 4.G-2

Comment 1: The 2002 Revised RAP for OU2 proposed to cap soil containing metals and Bunker C oil in concentrations exceeding 46,000 mg/kg. Previous plans to excavate areas with high concentrations of Bunker C were changed “ due to additional analytical data that Bunker C was far more widespread in soil than thought previously, making soil excavation impractical.” (Geosyntec, 2012 HMSR OU1 and OU2, p. 34)

The danger of exposure to Bunker C oil caused by excavation and earthquake makes capping an unreliable solution. Dr. Lee has questioned the assumption that Bunker C oil would not move because he says that Bunker C is actually made up of compounds, some of which may move with groundwater. Mitigation for Impact 4.G-2 must be required accordingly.

Comment 2: Paragraph 3 contains another reference to “non-hazardous” waste. There is no basis for asserting that the waste is non-hazardous.

Subject: 4.G-90, Impact 4.G-2, “foreseeable upset”, Construction: *“soil movement or grading could take place in areas where the soil cover remains shallow...”*

Comment: The referenced RWQCB letter on page 4.G-53 indicates an overall 7 feet (or greater) of fill proposed on OU-2 (and other areas?). Documents have been provided that indicate that mere placing of a soil cover is not an adequate protective measure. Placing soil over un-engineered soils, such as the landfill surcharging operation on the Baylands, has been shown to consolidate the toxins below and force them to the surface, sometimes as visible seeps. In addition, the presumed protective surface barrier breaks as settlement occurs.

“While the remediation technologies that will ultimately be approved by DTSC and the RWQCB...”

As previously stated, the clean-up levels and technologies are to be approved by the City of Brisbane.

“Encountering contaminated soils or groundwater either during or following remediation...” misses the fact that exposures to pockets of toxic gases are possible.

There is no indication that mitigation measures are being required or tested for the lagoon, for those groundwater seeps that are not obvious to the visible eye, particularly when the groundwater table is lower.

Plans to lower the train bed and various over/under crossings have been circulated. Yet, there is no reference to these as possible foreseeable impacts. Some proposals, regional goals, and mitigation measures conflict with each other. RWQCB’s seven feet of fill would bury our Historic National Treasure, the Round House. Lowering the groundwater table to lower the rail bed may cause slumping throughout the Baylands. These items need to be considered and mitigation measures be considered as a whole, not piecemealed by investigations for individual projects.

Subject: 4.G-91: *“... final closure and remediation of the former landfill would require ... prevention of liquid percolation through to the underlying waste, and prevention of LFG emissions.”*

Comment: While a landfill cap is envisioned, reduction of liquid percolation and of LFG emissions is not the same as prevention. Liquid will continue to enter the waste layer of the landfill from the bay, the lagoon, and from OU1 and OU2. This assertion is misleading.

Subject: 4.G-91: *“Chronic exposure could result in systemic damage or damage to organs...”*

Comment: There is no mention of an acute exposure being potentially lethal, yet piercing a pocket of volatile gases or exposure to certain substances may be deadly. There is no mention of cumulative impacts from multiple toxins and the impacts that are most insidious such as endocrine, nervous, and reproductive system disruptions. Studies indicate that learning differences are associated with exposure to neurotoxins, the chemicals of concern are previously mentioned as ubiquitous on the Baylands.

Subject: 4.G-91: *“Markers contain information about the nearby pipeline...” “contact the Underground Service Alert center...”*

Comment: Since 9-11, the maps and public information for the Kinder Morgan Tank Farm underground pipes were considered classified National Security information. The required markers may be disallowed and/or in disrepair at the current time. Since there are potential abandoned USTs and connecting pipes and much of the information about underlying conditions at the Baylands is not available, radar and/or metal surveys should be required of all areas before penetration of surface soils. An assessment of actual conditions needs to be done, not reliance of a system that may not have up-to-date information.

Subject: 4.G-92, Conclusion: *“With compliance with federal, state and local regulations...”*

Comment: These mitigation measures, as stated, will not reduce impacts to less than significant, as stated earlier and below.

Subject: 4.G-92, 4.G-2a Confirm Achievement of Remediation Goals: *“the project applicant shall provide confirmation to the City that the [responsible agencies] have reviewed and are prepared to approve a Remedial Action Plan or final closure... upon certification of appropriate environmental documentation for that action.”*

Comment: Change the language. Confirmation of preparation to approve is not the same as achieving a goal. Success of a remediation measures should have guarantees or bonds to ensure performance. As stated earlier, preliminary approvals have not undergone a full CEQA process. There has been no consideration of remediation alternatives or impacts to groundwater from the “leave-in-place cover-and-fill” proposed remediation.

Subject: 4.G-93, 4.G-2b, Soil and Groundwater Management Plan: *“temporary dewatering activities...”*

Comment: Dewatering for the Sunnydale Sewer project caused a depression cone. It also required connection to a sewer system able to process the contaminants. This might require infrastructure to be completed before groundwater purging can commence.

As stated earlier, Dr. G.F. Lee recommends an independent body to assess and oversee design, performance, and maintenance of remediation systems.

Subject: 4.G-93, 4.G-2c, Master Deconstruction and Demolition Plan: *“Master Deconstruction and Demolition Plan shall be submitted by the project applicant to the City Building Official...and approved by the Building Official...”*

Comment: This mitigation measure, absent the review of the Planning Commission, Parks and Recreation Commission, or other third-party is not adequate for the protection of historical buildings. All environmental impacts need to be discussed and mitigated.

Subject: 4.G-93, 4.G-2d, NPDES Permit: *“...industry standard spill prevention and protection procedure plan...”*

Comment: Review comments regarding redundant systems, necessity for independent review and concern about liquefaction during an earthquake.

Subject: 4.G-94, Operation: *“Businesses associated with industrial ...Industrial uses could include storage...”*

Comment: Note prior comment about Brisbane’s general plan not allowing many industrial uses.

Subject: 4.G-94, Kinder Morgan Bulk Terminal: *“Upset and accident conditions could result in the release of large quantities of gasoline...and any damage would result in leakage rather than an explosion.”*

Comment 1: While the potential for accidents are mentioned, no mitigation measures to require substantial set backs for protection of workers have been suggested.

Comment 2: DEIR should note container architecture, electronic safety equipment and operational compliance history of tank farm operations.

Subject: 4.G-95, Mitigation Measure 4.G-2e, Hazardous Materials Plan: *“...in the unlikely event of leakage including substantial damage from an earthquake, any released fuels would remain at the terminal within the containment areas.”*

Comment: This is incorrect. The secondary “bermed” containment system can only handle the contents of two fuel tanks; there are twenty-one tanks at the farm. Tank number 16 is not on bedrock. The hazmat foam truck is not always on site, so protection of human health is overstated. There is no mention of measures to mitigate releases from the burners.

A mitigation measure requiring redesign of the containment system(s) or requirement of protective safety “blast” setback zones should be developed.

Subject: 4.G-96: *“With implementation of Mitigation Measure 4.G-2b (Hazardous Materials Business Plan). the potential for accidental releases... would be minimized.... significant impacts ... will be reduced to a less-than-significant level.”*

Comment: This is not correct.

Subject: 4.G-96, Soil Gas and Vapor Intrusion: *“... the waste materials associated with the former Brisbane Landfill are still undergoing decomposition... which creates landfill gases.... Accumulation of landfill gases within confined spaces such as underground structures, basements, or utility vaults”*

Comment 1: This statement seems to imply that the only area that will require soil gas vapor intrusion measures are utility boxes on the former landfill. This is not the case. Degradation of certain chemicals will produce toxic gas byproducts and fuel leaks from Kinder Morgan need protective barriers or mitigation measures disallowing certain practices, such as subterranean garages.

Comment 2: The entire methane collection system must be rebuilt since there is evidence that it is not continuous. It should be monitored continuously and frequently tested for the presence of gases other than Methane. Mitigation required.

Subject: 4.G-97: *“Non-methane organic compounds such as TCE, benzene, and vinyl chloride are typically found in very low concentrations in landfill gases and only benzene has been identified at the Brisbane landfill....”*

Comment 1: This may indicate that VOC gases have not been fully tested, that the INTERIM measure of burning off the gases has required no further investigation.

Again, there is no mention of the location and impacts of the methane flare.

Comment 2: VOCs and hydrogen sulfide have been found in landfill gases, per Golder Associates, 2008, p. 5: “On November 4, 2008, a Golder technician obtained samples of landfill gas Six VOCs and hydrogen sulfide were detected in the landfill gas sample....”

Subject: 4.G-97: *“If the future final designs for the foundation systems require additional depths, the low-hydraulic-conductivity layer would be removed and replaced to accommodate deeper structures...”*

Comment: This provision doesn't recognize the hydro-geologic conditions of Bay fill. This action may pierce the presumed old bay mud barriers. Independent review of altering groundwater patterns should be required as part of an overall remediation strategy, not a project by project approval by RWQCB.

Subject: 4.G-98, Mitigation Measure 4.G-2f: *“proposed underground utilities and utility vaults located within 500 feet of the landfill footprint...”*

Comment: Vapor intrusion mitigation measures are unproven, guesstimates at best. If they are effective, they should be for ANY area that has degradation of chemicals underground, not just within 500 feet of the landfill footprint. Their efficacy should also be under the purview of an independent third-party body.

Subject: 4.G-98, Mitigation Measure 4.G-2h: *“shall incorporate sub-slab vapor barriers to minimize potential vapor intrusion...”*

Comment: Same comment about within 1,000 feet of the landfill footprint vs. any place in the Baylands with VOC's underground. Why is the “set-back” 1,000 feet for this measure and 500 feet for 4.G-2f?

A mitigation measure requiring workers to be trained in understanding and being responsive to the *“centralized sensor monitoring and recording system”* should be required.

Subject: 4.G-99, Impact 4.G-3, .25 miles of a school: *“within areas in the Icehouse District...”*

Comment: Is this a new planning area? These areas have not been adequately assessed for presence of toxins and while you skirt this issue by saying it's up to the Standards for School Site Construction guidelines to decide, it doesn't have a fallback position should a school need to be constructed off site.

Subject: 4.G-101, Conclusion, Impact 4.G-5

Comment 1: There does not appear to be any mitigation measure named 4.G-1a and 4.G-1b.

The Airport had concerns for building heights out at Sierra Point. While not within 2 miles of an airport, the proposed heights of buildings may need to be reviewed.

Comment 2: DEIR states the project site is located more than two miles from the nearest public airport and is not located within an airport land use plan. Since the tank farm is a major part of airport use and located within the project, this DEIR statement is incorrect or misleading.

Subject: 4.G-102, Impact 4.G-6, emergency plan

Comment: The discussion of at-grade rail crossings vs overpasses are required in this section to consider conditions in the event of an earthquake. Elevated, engineered roads need to be considered.

Subject: Section 4.H, stormwater runoff

Comment: Storm runoff has the potential to convey heavy metals, VOCs, hydrocarbons, and other contaminants into the lagoon and the bay. The DEIR states (p. 4H-5) that water quality is monitored for pH, total suspended solids, specific conductance, and oil and grease. The "Report on the Adequacy of the Investigation/Remediation of the Brisbane Baylands UPC Property Contamination Relative to Development of this Property" by Dr. G. Fred Lee and Dr. Anne Jones-Lee, dated November 1, 2010, concluded that "The water quality monitoring of stormwater runoff during the development of the Brisbane Baylands area should be significantly expanded to enable a reliable determination of the extent to which development activities result in the mobilization of hazardous chemicals into the runoff waters" (Lee, p. 3). "There is no monitoring of stormwater runoff for potentially hazardous chemicals associated with the concrete rubble recycling [specifically PCBs from caulk] or the landfill surface" (Lee, p. 29). Dr. Lee recommends the following changes to the stormwater monitoring program.

"We have found that the monitoring approach prescribed for stormwater runoff from landfill areas is often the same as that used for monitoring runoff from urban streets; collection of a single grab sample at some time during each of several storm water runoff events per year is typically required. That approach, however, is neither adequate nor in keeping with programs prescribed by the US EPA (1992) for monitoring stormwater runoff from industrial sites. Landfill areas are industrial areas and should be monitored as such. The US EPA recommended stormwater runoff monitoring program is described in

"U.S. Environmental Protection Agency (U.S. EPA). (1992). NPDES Stormwater Sampling Guidance Document (EPA/833/B-92/001) for implementing the Agency NPDES stormwater management program.

[<http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/SW+guidance+&+fact+sheets+-+Region+10/>]

“The monitoring program recommended by the US EPA for industrial sites involves collecting samples of true first-flush runoff as well as samples of runoff at several times during the runoff event. Further, a sufficient number of events must be so-monitored each year to properly characterize the hazardous chemical content of the stormwater runoff. The parameters that are to be monitored include a fairly comprehensive suite of chemicals that could potentially be present in stormwater runoff from the area. This is the type of monitoring that should be conducted at the Baylands Landfill area during and following the development of the property.”

Dr. Lee recommends “...sampling the first storm of the year and the outset and at several times during the runoff event, using appropriate analytical methods for a full range of potential pollutants in the runoff” (p. 36).

The DEIR cites LID strategies for treating stormwater, including infiltration. While it is clear that infiltration is not desired on the landfill, almost the entire site is built on fill, and contains dangerous contaminants. Water will come into contact with petrochemicals, lead and other heavy metals, and VOCs in OU1, OU2, and possibly other areas outside what is generally referred to as the landfill. Dr. Lee (p. 41) points out that the supposedly immobile Bunker C oil may contain components that are very mobile.

“There are several aspects of the waste containment approach that may not have been adequately addressed in the investigation of this site. One of the most important is that Bunker C oil and other petroleum products are complex mixtures of a variety of chemicals that are not identified in the study of the bulk product. While those properties of Bunker C oil that were measured are reported to be non-mobile, there can be components of that mixture that are mobile and pose a threat to public health and environmental quality. A much more comprehensive study/investigation program is needed to better-define whether this is an issue at the OU-2 site.”

The DEIR should note that the use of infiltration for stormwater treatment is not necessarily indicated in any portion of the Baylands beyond Ice House Hill, and then only the parts not contaminated with lead.

Subject: Section 4.H, Leachate

Comment 1: The DEIR repeats Geosyntec’s contention that leachate from the landfill will be greatly reduced with the installation of a clay cap. For several reasons, the DEIR should assume that significant amounts of leachate will continue to be generated. First, the contents of the landfill will be present on the site forever, and a cap has a limited life span. Second, the lagoon and the bay will provide additional sources of water to the landfill.

It is entirely possible that subsurface seeps are present or may develop, or may become more severe as a result of compaction of the surface of the landfill. Increased monitoring of water quality in the lagoon and the Creek, and particularly, of aquatic organisms residing in the lagoon, is required to determine the risks to human health and the environment from landfill leachate.

On page 48, Dr. Lee explains: "... the integrity of a landfill cap is critical to the prevention of leachate generation. Well-designed and installed clay caps (often combined with plastic sheeting in Subtitle D landfills as discussed below) for landfills can, especially at the time of construction, be effective in reducing the rate of infiltration of moisture through the cap and thereby serve to aid in the delay [of] leachate generation that would otherwise be promoted by moisture from infiltration. However, as discussed in Lee and Jones-Lee's 'Flawed Technology' review referenced elsewhere, many factors affect the integrity and hence functionality of even a well-designed and installed clay cap.

Comment 2: Dr. G. Fred Lee concluded that the waste was submerged in water since the landfill is not lined and the water infiltration takes place through the banks of the interior drainage channel and the shores of the Lagoon. There may be infiltration under Hwy 101 as well. Dr. Lee stated that it didn't make sense to place a cap over the Landfill since it is already sitting in water. Chemist Dr. Ron Oremland commented that the result of the decaying waste being in contact with sea water would create hydrogen sulfide and so it may be forming in the landfill and needs to be monitored and removed. The contradictory nature of the reports included in the DEIR indicates the need for further study of the waste. There needs to be a resolution to a number of issues and that requires a new study to reconcile the previous studies along with the detailed mapping of the groundwater in the Landfill and an explanation of what will be done with VOC's that are being ignored. The DEIR is not complete because it does not resolve these issues. How can you reduce the leachate when the waste rests partially in water? How does it make sense to think that leachate can be reduced? It appears that there is a strong need to re-grade the entire landfill area to make a surface that is uniform and to reach a level just above the waste so that fill above that level can be engineered and have an integrity that will be well understood by geotechnical engineers and regulators rather than the confused mish mosh it is now. A goal of the DLMP is to collect leachate from existing and future identified leachate seeps. If monitoring of the areas where seeps were not found previously only occurs during an annual or semi-annual walk by, how will future seeps be found? It sounds like a minimal effort to locate unknown seeps rather than a careful thorough effort. There needs to be a requirement for a more aggressive method to identify seeps at the IDC, on the shores and under the surface of shoreline lagoon water and on the east side of the Landfill by Hwy 101. The monitoring for seeps must occur during and after the wet season including after rain events and in the dry season. When a seep is found there must be prompt action to ID it and begin to divert it. None of these more prudent measures are being done or are planned for and that does not guard human health or the environment. It should be done.

The Landfill Leachate diversion system is deficient in the following ways: It rests on top of the ground and is therefore not secure and the possible underground (under water surface) seeps in the Lagoon have not been investigated despite the mention in the appendix that they probably exist. The characterization of the seeps won't be complete until that Lagoon investigation is done.

Geosyntec's 2012 Hazardous Materials Summary Report for the Landfill (p. 17) discusses the 2008 Draft Leachate Management Plan (DLMP) and states that final mitigation measures will be made final when the EIR is certified, but the final mitigation measures should appear in the Draft EIR so that they may be viewed and commented on by the public and other agencies.

Subject: 4.H

Comment: This document does not mention that there are several endangerment orders issued for ground and surface water contamination on/in the Project Site.

Subject: 4.H-1, Introduction, Environmental Setting

Comment: While “no groundwater use is proposed under Project Site development,” the intent of the Clean Water Act would require developers to identify any clean water resources and in good faith, remediate contaminated, unsafe surface and groundwater to drinking water standards. Water, groundwater is a public resource that should be carefully identified, protected and responsibly managed.

A more accurate description of the “large bowl straddling San Francisco and San Mateo Counties” is a former wetland marsh.

Subject: 4.H-2, last paragraph

Comment: It should be noted that “The Brisbane Storm Drainage Master Plan” has not been studied for environmental impacts. Studies have not been done to determine any impacts from off-site, up slope, up stream polluters, like PG&E.

Subject: 4.H-4, Figure 4.H-2

Comment: This figure renames Visitacion Creek as “tributary to open channel at Highway 101” and another segment as “area tributary to Brick Arch at Oil Channel” and renames the Levinson Marsh as “a detention basin northwest of Main”. It is also missing legends. It is insensitive to Brisbane’s General Plan Marsh and wetland designations.

Subject: 4.H-5, Surface Water Quality

Comment: “General Industrial Permit for Dischargers” regulatory programs are voluntary and results are only reflective of the limited information collected. Enforcement has been perfunctory.

Any mitigation measures to prevent discharges to the Bay have been interim and have reduced, not eradicated the problem areas. This information should be somewhere in the Introduction, Environmental Setting section of this document.

Subject: 4.H-7

Comment: The DEIR again, mistakenly calls the Levinson Marsh an “Overflow Area (the off-channel detention basin...)”

Subject: 4.H-8 to 10, Federal and State Regulations

Comment: This document does not recognize the flood plain, ever-present hydraulic conditions in portion(s) of the Baylands, which serves the community and environment. An accurate de-

scription of the seasonal and persistent wet conditions needs to be done, rather than assume a filling and re-grading of the entire area meets the regulatory safeguards listed here. The DEIR fails to note “*the actual and potential beneficial uses and water quality problems.*”

Subject: 4.H-11, NPDES Program

Comment: Follow-up and enforcement of water quality issues in the Brisbane Baylands have been, in some cases lax, others, long to come into compliance. Due to the length of time impacts are anticipated from this project, the number of types of discharges and discharger opportunities, a stronger oversight board, a third-party independent reviewer as Dr. G.F. Lee recommends should be considered a mitigation measure. Interpretation of the law sometimes comes into question, as has been the case for the interim use permits for the soil importation operations on the Baylands. It shouldn't be left up to chance or self-monitoring.

Subject: 4.H-12, General Permit Provisions

Comment: “*Likely*” project sediment risk fails to consider the sheer volume of particles that can be carried as sediment on this large an area, especially with one half of it with active earth moving and rock crushing operations.

Subject: 4.H-13, SWPPPs

Comment: Because “*the NPDES General Permit gives the owner the discretion to determine the most economical, effective, and innovative BMP's to achieve the performance-based goals...*” oversight is difficult and one caseworker of one division may not discuss the impacts of their project with another in another oversight agency. The use of natural attenuation and day-lighting creeks is not recognized as a BMP for stormwater pollution prevention here, but is in BCDC's Water Quality Policy 7. An independent, third-party oversight board is recommended to integrate the environmental regulation goals for this site.

Subject: 4.H-17, Brisbane General Plan Policies

Comment: Policy 228, program 228a refers to stormwater being “*collected in City facilities*” but fails to mention the use of cisterns or ponds, and if any planned, where they are in the plan.

Most issues in communities relate to the storage of water, or the ability to slow the flow of runoff, not the absence of water. Rain collecting cisterns under buildings or roads could serve as fire-suppression reserves, for landscaping purposes and dust suppression purposes. Ponds could be rest stops for migratory birds. There is no mention of any drainage studies or comprehensive plan for responsible stormwater protections other than to comply with Provision C.3 requirements.

A regional design competition or stormwater brainstorming event could produce amazing solutions to create uninterrupted natural drainage solutions.

Subject: 4.H- 19, Impact Assessment Methodology

Comment: To repeat earlier concerns about the use of the Brisbane Storm Drainage Master Plan, it has not had full environmental review utilizing conformance with all General Plan Policies and programs. The recommendations may be technically feasible, confirmed by BKF, but environmentally destructive. The Baylands may need wider and less uniform 20-foot wide channels as found in Appendix P, Infrastructure Plan. The City's 2003 master storm drainage plan does not reflect current regulatory requirements. The master storm drainage plan would not be adequate to address the changed conditions that would result from implementation of the DSPs or CPPs. In particular, raised and/or lowered roadways and drainage of train beds are not considered in the Brisbane Storm Drainage Master Plan, and therefore using this plan for impact analysis is inadequate.

Subject: 4.H-20: *"The proximity of the Project Site to the Bay reduces the chances that the pollutants in stormwater runoff...would be naturally attenuated prior to discharge to the Bay."*

Comment: Natural attenuation is a current remediation technique on/adjacent to the Project Site and should be noted somewhere in discussion of hydrology and water quality issues at the Baylands.

Subject: 4.H-20, Contaminated Groundwater Encountered During Construction: *"In addition, the Recology site and Schlage Lock site located north of the Project Site are also undergoing active groundwater remediation..."*

Comment: Describe the active groundwater remediation occurring at the Recology site. The DEIR does not address any active remediation activities out there. Is the Recology remediation related to an underground storage tank?

Groundwater levels vary seasonally and hundreds of acres are sometimes inundated by surface water in excess of thirty-day wetland criteria. The ponds serve for contaminant sequestration, filtering duties through plant remediation. All proposed digging or land alteration in the area may put workers or residents at risk.

The document seems to indicate that just shallow zones would encounter contaminated groundwater during construction, however deeper pylons, the supports needed for the building sizes, heights, and densities proposed, could cause cross-contamination between aquifers. The Bay Bridge and other recent construction in SF use multiple spiral pylons sunk into bedrock. If the proposed structures for the Baylands would have to penetrate the lower aquifer/water-bearing zone then the plans should be changed. Contamination of the lower aquifer should not be allowed.

Subject: 4.H-21, Mitigation Measures 4-H1a and 1b

Comment: A Statewide General SWPP Permit is not adequate for a site with seven State Superfund projects on, adjacent, or upstream of the Project Site with wetland qualities. The potential release of contaminated ground and storm water during and post construction makes this project **require an individual permit.**

BBCAG members recommend natural and engineered, duplicate and redundant containment and filtration systems because of the variety of pollutants that may be discharged from this site during and post construction.

Dewatering to the storm drain system was not allowed for the Sunnydale Sewer Project and for similar reasons, should not be suggested or allowed here.

Subject: 4.H-23

Comment: “*Activities that take place at industrial facilities within the Project Site...*” are limited and the increase of proposed industrial uses must be spelled out in this document. Only a small area along Beatty Way is designated for industrial uses in our current General Plan.

Subject: 4.H-24, Mitigation Measure 4.H-1c: “... *a Final Stormwater Management Plan (SMP) in accordance with the most recent NPDES C.3 requirements to be reviewed and approved by the City Engineer...*” and later ... “*The SMP shall be developed in conjunction with the Storm Drain Master Plan...*”

Comment: These are the kinds of plans that need to be reviewed by Environmental Engineers in addition to civil engineers. Input should come from BCDC and San Francisco Bay Estuary Project Scientists or the City’s own advisory groups, Open Space and Ecology Committee or association with a non-profit group. Using technological support from Bay conservation communities would improve the mitigations suggested.

Subject: 4.H-25, Depletion of Groundwater Supplies

Comment: “*The City does not have its own groundwater supplies*” and “*there are no downstream users of groundwater...*” are inaccurate statements. The City doesn’t utilize its authority to use groundwater in the public’s interest and fish, ducks, invertebrates living in the Bay where the groundwater meets the sea are all downstream users of groundwater passing through the Baylands.

Opportunities to recharge or chemically change groundwater have been used in remediation strategies on the northern, Schlage, UPC OU areas. They may be considered in several places in the Baylands Project Site and must get adequate environmental review rather than assume that any impacts “*may be a negligible effect.*”

Subject: 4.H-26, Changes to Existing Drainage Patterns: “... *a modified storm drainage system that would be constructed in accordance with the City’s requirements... [impacts] would be less than significant.*”

Comment: See comments on 4.H-1c SMP (pg -24) Changing drainage and groundwater patterns may drain valuable wetland areas and must be studied properly.

Subject: 4.H-28ff, Impact 4.H-4

Comment 1: With culverts and swales proposed what is proposed to mitigate West Nile Virus whose carriers live in this environment?

Comment 2: See comments on 4.H-1c SMP (pg -24) Changing drainage and groundwater patterns may drain valuable wetland areas and must be studied properly to meet CEQA compliance.

Subject: 4.H-29 to 30, Mitigation Measures 4.H-4a,-4b and -4c

Comment: These mitigation measures “*to hydraulically isolate existing drainage inlets fronting the Levinson Overflow Area and the PG&E property from the existing Brick Arch Sewer System*” and “*incorporating new storm drain facilities along Bayshore Boulevard*” don’t consider LID techniques of using cisterns and natural mitigation measures such as slow-moving creeks.

It understates the functionality of the Levinson Marsh located upstream. Alterations proposed may kill the remnant historical wetland by lowering the groundwater table and impacting wild-life dependent on water upstream. Some inhabitants include rare and endangered species.

A greater, regional environmental planning and review process is required for CEQA and NEPA requirements, rather than “*review and approval by the City engineer...*” If anything, bonds or assurances that wetlands will be improved and off-site impacts will be corrected if they occur, should be included in these mitigation measures. Performance standards and damages for non-compliance should also be considered to ensure that mitigations are carried out.

Subject: 4.H-31, middle page, BKF modeling on the “*Central Drainage Canal*”

Comment: Is this the BKF 2003 model? That was for interim measures and is over ten years old. The Brisbane Sewer Master Plan didn’t include a wastewater treatment plant, and has not been presented to nor reviewed by the community.

Subject: 4.H-33

Comment: There are no measures for improving the water quality of the Lagoon even though there is mention of “*conserv[ing] natural areas.*”

Subject: 4.H-35 to -36

Comment: The solution to flood dangers doesn’t mean you slap some soil on top of un-engineered fill and consider it no longer a danger. The underlying hydrology from being a floodplain and impacts from sea level rise will dictate what is safe.

Since this is ignored in the DEIR, a mitigation measure to add would require future occupants/users of the Baylands to indemnify the City from loss of property or use if these calculations are wrong or alternatively suggest the no project alternative.

Subject: 4.H-36ff, Impact 4.H-8

Comment: The issue of sea level rise is not considered seriously in the DEIR. It is completely inadequate. New projects adjacent to the S.F. Bay are required to consider what sea level rise

will mean to their project (BCDC). The presence of so many chemicals of concern and priority pollutant metals along with a municipal waste landfill located on bay mud in earthquake Zone 4 with a credible maximum earthquake of more than 8M makes it essential that this predicted occurrence be thoroughly investigated since it will have significant and unhealthy consequences for human health and the environment.

Subject: 4.H- 37, Flooding Due to Levee or Dam Failure

Comment: Does this say that ALL future buildings on the Baylands will have finished first floor elevations a few feet higher than the berm on Bayshore at Main? Buildings are one story (14 feet) off the ground along US Highway 101 too? Is there a visual model of this aesthetic in relation to surrounding landscapes? Are there other solutions like more comprehensive storm water control plans up stream? A simulation of this groundwater, high storm flooding-event, utilizing data about cumulative development impacts from upstream projects would be helpful.

Subject: 4.H-38 to -39, Mitigation Measure 4.H-8

Comment: The practice of “ *adding fill materials so that the site would be more resilient to flooding from sea level rise.* ” See comments on pages 4.H-35 to -36. This mitigation measure misses the need to plan for future wetlands as well. It only sees the presence of water as a detriment to the project, verses a gift for natural stewardship opportunities: to plan wetland nurseries of the future. These mitigation measures should be reconsidered and protection of the future watershed required.

Subject: 4.H-39, Impacts from Seiche

Comment: While the reports thinks risks to tsunami to be low because we are not along the coast, it fails to recognize impacts from seiche and current knowledge about earthquakes being preceded by supershear shock waves. Any earthquake occurrence in close proximity will render the Baylands into a bowl of toxic jelly. A few more truckloads of dirt will not change that and renders this mitigation measure inadequate.

Subject: 4.L-11,12, Regulatory Setting, State Regulations

Comment: Types of emergency evacuations should be defined and directly conform to the 2013 CalOES Multi-Hazard Mitigation Plan from the Governor’s Office of Emergency Services.

Subject: Proposal for residential uses in the Baylands

Comment: Residential uses should not be allowed in the Baylands for the following health reasons:

There is a lack of a reasonably complete understanding of the impact of exposure to toxic contamination that could take place through the air or dermal contact over time. It is particularly risky for children, those afflicted with respiratory problems and the elderly.

The noise from Hwy 101, the rail line, Bayshore Blvd and aircraft in this area will be very high and will cause physical and mental stress reactions especially when joined with the stress caused by greatly deteriorated traffic and air quality conditions. The climate change possibility of changes in the prevailing winds will further deteriorate air quality. The area is surrounded by air polluting industrial uses.

Subject: Infrastructure Plan, Section 7.2.2.2 Secondary Water Supply Sources, p. 51

Comment: Secondary water supplies “water wheeling” and/or bay water desalination would face significant regulatory hurdles and could be very costly when compared with other options. We tend not to think about things such as water rates skyrocketing because of the problems providing and maintaining infrastructure on the Baylands.

Subject: Infrastructure Plan, Section 4.3 Site Designs to Accommodate Anticipated Settlement, p. 17ff

Comment: HDPE fusion-welded pipe is recommended because it is flexible and reduces the likelihood of pipes shearing off. How much does it reduce that likelihood? Can't they compact the soil more effectively?

The DEIR should require modeling for the conditions that the pipes and vault connections will have to endure to see if they are going to last more than a short time.

Subject: Infrastructure Plan, Section 8.4 Phases for Wastewater System Construction, p. 69

Comment: It does not sound feasible to keep the existing wastewater system running over a long phased development. The wastewater system should be changed over relatively quickly. There is an inherent risk in setting up a temporary connection for so long a time and there is an increased possibility of an upset event like an earthquake. The DEIR should require timely construction and implementation of a new wastewater system.

Subject: Infrastructure Plan, Section 7.2 and 7.3, water pressure zones

Comment: The DEIR should require a peer review analysis of the proposed solutions to the water pressure zone problems that are expected and those that already exist and which might be exacerbated by the new uses, tanks (2) and pressure relief valves.

Subject: Infrastructure Plan, water and wastewater systems

Comment: The DEIR should require that all system elements, both water and wastewater, that have the potential to cause environmental damage, should be equipped with sensors to detect leaks.

Subject: Infrastructure Plan, 8.5, master utility system plan

Comment: It is not practical to create a master plan so late in the game, i.e., “during the development of the final design documents.” The DEIR should require more detailed plans from the landowner.

Subject: Infrastructure Plan, wastewater systems

Comment: The DEIR should contain an actual sanitary sewer plan. The conceptual plan is inadequate to base a decision on.

Subject: Infrastructure Plan, stormwater treatment, pp. 86-87

Comment: There doesn't seem to be any bioswale drainage area except for a reference to effluent. Please clarify.

Subject: Infrastructure Plan, stormwater treatment, pp. 86-87

Comment: The stormwater coming from Midway Village through the Levinson marsh may already contain contaminants from previous PG&E lampblack deposits. Please clarify in the DEIR how this stormwater will be monitored and treated.

Subject: Infrastructure Plan, p. 93, Conceptual Dry Utility System; and p. 217, Conceptual Storm Drainage System.

Comment: These plans are not adequate. They are described too generally to base an analysis on them. The DEIR should contain a more detailed description of the proposed utility system.

Subject: Draft Specific Plan, p. 249, section 8.3.7 Minor Administrative Permits

Comment: This suggested procedure from the applicant usurps City authority. The DEIR should make clear that tenant or successor occupants of the Baylands will be required to observe restrictions as imposed by the City of Brisbane.

Subject: Draft Specific Plan, p. 234, section 7.6 Emergency Service

Comment: The police and fire resources that will be needed are very vague and the cost could not be determined from the information here. There is no innovative disaster preparation described despite the tank farm, probably liquefaction in the event of an earthquake, and a train track down the middle of the site.

The DEIR should contain detailed plans for emergency services.

Subject: Draft Specific Plan, 5.4.3.12 Bay Trail Greenway

Comment: As shown in Figure 5.6, the Bay Trail Greenway/Sierra Point Parkway could flood U.S. 101. Figure 5.6 shows Sierra Point parkway 17 feet above 101.

Subject: Draft Specific Plan, 5.4.3.7 South Visitacion Park

Comment: Methane, VOCs and other contaminants may underlie this area. The DEIR should propose alternatives for open space in areas that are not contaminated.

Subject: Draft Specific Plan, 5.4.3.5 Visitacion Creek Park (West)

Comment 1: A community garden is identified on the map on p. 147. Why would you place a community garden in such close proximity to toxic contamination?

Comment 2: The proposed windrow trees will destroy the view corridor and will be blown over to one side by the prevailing winds. They are not a good idea.