

TO: Brisbane City Council

FROM: Clara Johnson

Contamination and Remediation on the Baylands

Public Hearing Comments

The issue that we all struggle with is to determine the degree of risk that those who: construct, live, work, shop or play near to or on the Baylands will take by being there. We are also trying to understand how development in the Baylands might negatively impact the environment.

Safeguards to avoid proposed developments creating a greater risk to human health and environmental quality should be paramount in the decision making process. Redundant systems or methods should be used to avoid exposure that cannot be undone.

By law, California cities must consider sea level rise when planning new developments. There are numerous dangers associated with sea level rise. There is a range of possible sea level changes which range from a meter to five meters. One study stated that salt water eats away at clay caps. Flooding and wave action threaten the mobility of sediment and it can contaminate ground water. It can cause scouring all of which can disturb contaminants and may cause them to become mobile. It may also disrupt remediation efforts. The more you read about sea level rise, the more convinced you are that local governments are reacting too slowly. Before any development is approved and built. There must be an assessment of the sea level rise' likely impacts on the specific locations and specific types contamination or type and age of landfill and the soil constituents and what the results of the assessment mean for human health and the threat to the environment.

The staff report for the public hearing of 11/17/16 states on page one, paragraph 3 line two, the issues of site management and remediation are "highly regulated at both the state and federal levels". It is true that they are regulated but the levels that are allowed any or may not protect human health effectively and the imposition of regulation on the more than 80,000 chemicals created by humans has not extended beyond a small fraction of that number. Some of the chemicals present on the Baylands may not have been studied. The reassuring wording in the report is intended to instill confidence in the reader but all it means is that they are doing their best with what may be inadequate data. The data will change as more research is done.

On page 4, full paragraph two, It states that more is known about the contamination at OU1 and OU2 than is known about the landfill. It is also true that the groundwater which is a carrier of contamination is better understood in OU1 than in OU2 because it has been studied more. The groundwater should be studied further to assure adequate protection of human health and environmental quality. The record shows that in two different instances contaminants showed up in testing but because they did not show up in later testing, they were ignored. I don't believe that this level of uncertainty is adequate protection for the public.

A Health Risk Assessment was conducted twenty years ago, there must be a new HHRA that addresses human health at a project level of detail. Please note that the soil in OU1 is not being remediated at this time.

On page 4, the last line, the statement is true but there are dozens of other known contaminants and metals of concern but their amounts are below the maximum contaminant level (MCL) and in the period studied they did not rise lower to the MCL. They are still dangerous and someday it may be determined that they are more toxic than previously understood.

On page 5, first full paragraph, the metals in OU2 should be identified in the staff report, not just called metals.

On page 5, full paragraph three, the figures given in this paragraph mean that there are 250,000 cubic yards of liquid waste ready to react to the intrusion of sea level rise salt water and as mentioned above salt water attacks the clay caps of landfills

On page 6, under DTSC and RWQCB responsibilities, the report says that both agencies will conduct CEQA level reviews of their remediation plans but RWQCB believes that they are not subject to CEQA unless the remediation exceeds \$2 million.

The EPA requires a five year review of the sites.

On page seven, first full paragraph, It states a low permeability landfill cap compliant with Title 27 is required. I wonder if a 360 acre cap placed on land that is highly likely to compact unevenly and will be subject to salt water intrusion with subsequent impacts on hydrogen sulphuric compounds and which will be subject to liquefaction in an earthquake, may not be the best idea to keep contamination in place.

On page 9, 3<sup>rd</sup> full paragraph, it is stated that the regulatory standards of the State of California are highly conservative and stringent. Who stated that and when and what were those standards compared to?

On page 9, 4<sup>th</sup> paragraph, since the synergistic and additive effects of contaminants of concern are not evaluated by the regulators then how could they risk be accurately determined? It is a fiction.

On page 10, bullets 4 and 6 and paragraphs 2 and 3, I object to the euphemism "impacted media". It obfuscates the fact that you are discussing soil, water and air.

On page 12, the exposure scenarios are not adequate predictors of risk because they do not include the synergistic impacts of the contaminants of concern and I question the idea that the summed risk can be adequately quantified. It might be called mumbo jumbo.

On page 13, paragraph 3, the idea that long term monitoring of dozens of contaminants of concern would not be long term is not protective of public health and not legal. The idea that property owner



associations would be responsible for public health issues seems completely irresponsible. There would have to be standards and review by someone knowledgeable. The results of what was done on Sierra Point aren't clear yet. It is too soon and that was an engineered and regulated landfill this one wasn't. This idea is irresponsible and a danger to public health. It appears that the report refers to OU2 as well and that would be a travesty without conditions, standards and responsible scientifically informed oversight.

On page 14, 2<sup>nd</sup> paragraph, I don't believe that the last statement in the paragraph is correct. It should be verified.

It would be more valuable if the staff took a critical view of the possibility of harm coming to the public rather than trying to give reassurances where none are due. It is useful to understand the limitations of the current state of regulation of harmful chemicals and metals and to look at how the recent past indicates that some of these constituents of concern are likely to be more toxic than is understood now not the other way round.

Please be skeptical and require adequate characterization, redundant protection, verification, specificity, standards, accountability by scientists and transparency and good records.

An oversight body is needed to represent the interests and health of the people of the City. It could be a special district or not but it should have access to paid staff, perhaps part-time who have the scientific and technical knowledge to understand the issues and who will keep abreast of changing data and ideas about the toxicity of chemicals, sea level rise, geology, human health. This body could also coordinate with DTSC, RWQCB, BCDC and San Mateo Environmental Health. The issues here cannot be handled by ball-parking or boiler plate responses.

I thank-you for your attention.

Clara Johnson