

## Appendix H.2

### HAZARDOUS MATERIALS SUMMARY REPORT – BRISBANE LANDFILL

Geosyntec 2012

Report (page, section)	Comments	Submitted By (
Page 1 Background	<i>“No waste has been disposed of at the Brisbane Landfill since 1967.”</i> This is incorrect. When the detention basins were dug for the Landfill, tires and other debris were imbedded in the matrix. No waste has been <u>legally</u> disposed of, but the new fill cannot be characterized as 100% clean.	DD
Page 2	Background does not include former uses like the Champion Raceway, metals recycling, etc.	DD
Page 4 Regulatory Oversight	IDC is more appropriately named Visitacion Creek.	DD
Page 5  Applicable Regulatory Criteria	BCDC’s jurisdiction also includes the tidally influenced Visitacion Creek, (AKA the interior drainage channel.)  It is not certain whether these regulatory criteria documents are for interim or future uses. Some are over 12 years old and may not reflect current knowledge or approaches to landfill closures, knowledge about sea-level rise, etc. There are SWATs (Solid Waste Assessment Tests) and an interim leachate interception program along the Lagoon that don’t seem to be reflected here. Has a baseline Health Risk Assessment been done?	DD
Page 6 and 7 Regional Setting	It would be helpful to repeat the Fill, YBM, Colma Formation, OBMD, Merced Formation, and Franciscan bedrock designations utilized in the “Railyard Hazardous Materials Summary Report” for consistency. <i>“[bedrock] occurs at a depth of greater than 50 ft. beneath most of the landfill...”</i> This is a twenty-two year old document. Does it recognize the current fill heights and years of compaction? What is the current information on this? Where is the bedrock in relation to the City College Fault Line?	DD
Page 7	<i>“The refuse layer consists of relatively clean soil intermixed with household waste and rubble.”</i> Note that the landfill never required testing of the incoming fill and it oozes hazardous substances. <i>“Relatively clean”</i> is an incorrect characterization of the presumed-to-be-clean fill materials in the landfill.  <i>“There are no aquifers underlying the site.”</i> Aren’t the different sand zones aquifers? Perhaps the aquifers are not intended for use, but they exist. Alternatively, does the plane flatten out to the point it is negligible? Explain this comment.	DD
Page 8	Tidal influence is based on a few studies in a limited area. They were not done recognizing lunar cycles, negative tides, or seasonal rain conditions. Studies for the Kinder Morgan site concluded that there is tidal action on the groundwater wells near Visitacion Creek	DD

<p>Page 9</p>	<p>(IDC) and the “wood-covered” ditch, upstream. Tidal action/influence is observed as far west as the Levinson Marsh.</p> <p>Note that there are 22 stations for a 364-acre area. Are the interior leachate wells LW-1 and LW-2 deep enough given the continued surcharging, compacting the waste layer? Should a third and fourth well be required on the northern end of the project area? Do any of the testing wells occur in the current Beatty Subarea?</p>	
<p>Page 10</p>	<p>“<i>petroleum storage tanks, have been constructed on the fill.</i>” Few are “on” fill as most of the Kinder Morgan tanks are reported to be anchored on bedrock. The dangerous petroleum tanks are/were leaking underground storage tanks (UST) and if known, are represented in the UST/LUST lists.</p> <p>[Surcharging operation] “<i>to provide bearing capacity for future development.</i>” Are there studies identifying the load-bearing capacity of Old Bay Mud?</p>	<p>DD</p>
<p>Page 12</p>	<p>“<i>seven surface-water samples, obtained from the IDC...</i>” “<i>were ‘well below designated level to protect marine waters and should not be a concern’...</i>” This does not mention whether heavy metals and other chemicals of concern were tested, including unionize ammonia. (RWQCB required a program for interception of seeps along the Lagoon and if effective, the IDC.)</p> <p>There is no mention of the methods done and whether they utilized dilution factors of 10 for these readings. What are the assumptions made to come to the conclusion that seeps emanating from the landfill aren’t worthy of concern? Where is the benzene location? Did they consider copper and lead entering the food chain with studies of the native shellfish?</p>	<p>DD</p>
<p>Page 13-14 Final Closure</p>	<p>It should be noted that there is no Landfill Gas System in place south of Lagoon Way, nor west of Tunnel Road. There is no discussion whether any other vapor extraction or methane burners are planned, particularly with relationship to impacts from sea-level rise. These are impacts not considered in 2002.</p>	<p>DD</p>
<p>Page 15  Wetland Mitigation Plan</p>	<p>The Final Closure and Postclosure Maintenance Plan “<i>were conditionally approved by the CRWQCB...</i>” Note this is eleven years old and new regulations are in place, new conditions and knowledge of the site exists.</p> <p>Numerous objections to this plan have been previously stated. 1:1 mitigation does not meet Brisbane's General Plan or the state’s “success criterion” to include upland calculations. Greater protections, greater assurances should be included in the wetland mitigation plan in a public process. It is the citizens of Brisbane that get to decide the plan. The DEIR should not assume this earlier plan is adequate.</p>	<p>DD</p>

<p>Page 16</p>	<p><i>Structural Fill and Retaining Wall Fill shall be compacted at 95% relative compaction. The top 5 ft (1.5m) of fill should be compacted to 95% ...”</i></p> <p>Only five feet of engineered foundation over a fifty-foot deep bowl of toxic sandy jelly? That sounds dangerous. Are these requirements adequate to mitigate impacts of anchoring buildings on land subject to liquefaction? The Bay Bridge had considered spiral pattern supports that could withstand earthquake impacts from any direction. Won’t the Baylands require special attention to how each building or Land Use weighs down the fill underneath? How many cars and trucks can the Baylands fill handle?</p> <p><a href="http://www.mtc.ca.gov/news/photos/saddle_fabrication.htm">http://www.mtc.ca.gov/news/photos/saddle_fabrication.htm</a>  <a href="http://www.mtc.ca.gov/news/current_topics/4-13/sfobb.htm">http://www.mtc.ca.gov/news/current_topics/4-13/sfobb.htm</a></p> <p>Shallow foundation, slab on grade – see comments above.</p>	<p>DD</p>
<p>Page 17</p>	<p><i>“the [Draft Leachate Management Plan] is to be provided to the regulatory agencies and the public and it is intended for this DLMP to remain in “draft” status until completion and certification of the EIR. At that time, any applicable mitigation measures from the EIR can be incorporated into the Final LMP.” ... “unless otherwise required by the agency.”</i></p> <p>Full studies need to be done to determine whether additional or deeper leachate wells are necessary. This DEIR does not go into the specificity necessary to make this judgment. Interception of the leachate seeps along Visitacion Creek still needs to be done, the measures mentioned are interim solutions, however there are no updates on the efficacy of the leachate interception program along the Lagoon. The City of Brisbane decides whether the DLMP is adequate.</p>	<p>DD</p>
<p>Page 18</p>	<p><i>“the DLMP anticipates that following construction of the final cover, no additional leachate management action will be required.”</i></p> <p>The technique of capping from above does not take into consideration the lateral movement of groundwater and where those impacts will show up. See comments about leachate management plan in Dr. G.F. Lee’s “Adequacy of the Investigation/Remediation of the Brisbane Baylands UPC Property.”</p> <p><i>“Results of the surface water monitoring in the Guadalupe Lagoon and IDC indicate low concentrations of the target chemicals.”</i></p> <p>Refer to prior comments about needing full panels of constituents and subsequent work and programs.</p>	<p>DD</p>
<p>Page 19 to 20 Contaminant Distribution</p>	<p>Are these figures for Kinder Morgan? If so, they need to be in the Railyard’s Hazardous Materials Summary Report.</p>	<p>DD</p>
<p>Page 22 Ecological Assessment</p>	<p><i>“did not support the conceptual model of the landfill significantly affecting surface water by flow through the seeps or upwelling into the lagoon.”</i></p>	<p>DD</p>

SLERA	<p>This conceptual model was proven true when video sequences of leachate percolation were provided to RWQCB.</p> <p>The Shoreline Seep Mitigation is not 100% effective; it has reduced seeps and upwelling, but upwelling is dependent upon groundwater levels. These festering seeps wheezing, toxic leachate sludge should be sealed and leachate extracted into perpetuity, not covered and called clean. These assessments, from 2005 cannot have considered sea-level rise and the multitude of, rather cumulative chemicals of concern.</p>	
Table 1 Maximum Concentrations of COC's	<p>This table is missing Barium, Beryllium, Cadmium, Copper, Arsenic... all on other Constituents of Concern that are present in the landfill. This again appears to be testing near the Kinder Morgan spill area. Are any recommendations made about building in these areas?</p>	DD